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Online Social Context Does Not Imply Social Constructivism: A Case for Clear Operationalization

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In the focal article, Kraiger (2008) argues that a third generation of instructional models is emerging and that in these models, socially constructed knowledge is the defining feature. Social constructivism is differentiated from cognitive constructivism by placing learning in an unstable context of social and cultural change. This focus on social context seems to create some confusion; however, and often, the discussion shifts freely between the ideological position of social constructivism and the instructional design component of social interaction. Below, I will argue that this line should be drawn quite solidly and that by doing so, many of the differences between cognitive and social constructivism as specified in the focal article break down. Finally, I suggest a potential path for exploration of social constructivism as it is currently defined.

The focal article states that cognitive constructivism "proposes that the goal of instruction should not be to define a content domain but to enable individual understanding of that domain," whereas social constructivism's goal is "to create interactive learning environments in which training participants learn from instructors, participants learn from each other, and the instructor learns from participants" (Kraiger, p. 461). This distinction thus falls at a very high conceptual level; it is the *purpose* of instruction that differentiates the two approaches and not a feature of the instruction itself. It seems a bit confusing, then, that the two examples given shortly thereafter when discussing learner–learner interaction are not necessarily themselves in the social constructivist tradition. The first example is that of think-alouds, a method of instruction in which the expert/instructor speaks his thoughts while engaging in problem-solving strategies. This allows the instructor to verbalize implicit processes in the task that might not otherwise be obvious. Although a valuable approach to instruction, this form of instruction is still simply a type of cognitive constructivism, in that the goal is not to define the task in terms of the implicit strategies revealed by the think-aloud but instead to enable individual understanding by allowing the learner to integrate those strategies into her own understanding as she sees fit. A social context is present, but this context does not make the overall approach to instruction any different. The second example, verbal probed protocol analyses, in which experts constantly query novices engaging in a task, is of the same type. Despite the social context—that communication between the instructor and the learner is flowing in both directions—this could

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quite accurately be described as a situation in which the goal is to maximize individual understanding. Instructional components themselves cannot be used to differentiate the two approaches.

The focal article's extended discussion of socially mediated/learner–learner interaction in Web-based instruction exacerbates this confusion. All features discussed could fit equally well in a cognitive constructivist or social constructivist paradigm. Peer learning groups and asynchronous communication through whiteboards, wikis, chat rooms, and discussion boards all could be used in either tradition. They are simply means for social interaction. They do not, by their simple presence, mean that the training is social constructivist in nature. The ideological approach must be differentiated from the tools that support that approach.

The advantages listed for social constructivism above and beyond cognitive constructivism are similarly difficult to identify. One listed weakness for cognitive constructivist models, especially for training programs in that tradition that are online with high learner control, is that learners have difficulty identifying what they need to learn and the pace at which they should learn it. However, this has not changed with social constructivist approaches as operationalized here. The training program still has the same overall goals, and the learner still may have much control over how to go about achieving them. The only difference as described in the focal article is the addition of social interaction, which could be present using a cognitive constructivist approach as well.

When this distinction is drawn, however, it becomes difficult to operationalize social constructivism. Although there is plenty of evidence to suggest that social interaction is beneficial to learning, especially in situations where what needs to be learned is itself social (e.g., supervisor–supervisee interaction training), there is little evidence suggesting that social constructivism as an approach is very different from or preferable to cognitive constructivism. First, the focal article concludes from third-generation instruction models that "knowledge is socially constructed," (Kraiger, p. 463), but this is never denied in cognitive constructivism. Knowledge is constructed in whatever way maximizes learner understanding. Second, it concludes that "the role of instructional design is to define broad content areas and create tools … to enable collaborative learning," but an identical goal might be present in a cognitive constructivist approach. If social interaction better enabled individual understanding on a training topic, then social interaction would be used. Third, the article concludes that "learning through socially mediated ways not only results in knowledge that can be transferred … but also may result in social skills," but again, this is as true for training created in a cognitive constructivist approach with the addition of social interaction as a tool for understanding. Finally, the article concludes that "although socially mediated interactions are not limited to online courses … such interactions [may be] more common or easier in online formats." Although this may be true, it has little to do with third-generation instructional models and more to do with the specific instructional design used.

Sometimes, training content is embedded in an interpersonal domain, and sometimes, it is not. The focal article states that "the notion that much of the knowledge contributing to effective job performance is socially defined is [perhaps] at odds … with second-generation cognitive constructivist models" (Kraiger, p. 461), but this is a peculiar statement. If the goal of cognitive constructivist models is to "enable individual understanding," then this can occur whether the content domain is fluid or not. It can occur whether the social context is salient or hidden. These features simply add to the complexity of meeting instructional goals and are in no way at odds with the approach itself. If a social context is part of the knowledge, skills, or perceptions that need to be taught, then training in the cognitive constructivist approach can and should integrate that social context into training. Perhaps social constructivism as operationalized by Kraiger is simply "cognitive constructivism done right."

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We cannot define objectivism, cognitive constructivism, or social constructivism by the methods employed within. There may be methods commonly used in each, but we cannot define the approach itself by these methods. For example, repetition and memorization may be most commonly used within the objectivist approach, but this does not imply that it is exclusive to this approach. If a training designer using the social constructivist approach believed repetition to be the best way to meet a particular training objective, then using it would not instantly convert their approach to an objectivist one. Online discussion forums may be most commonly used in a constructivist approach, but a training designer using the objectivist approach might also use them, for example, if the training objective was to teach techniques for employees to respond to customers in online discussion forums.

If social constructivism is a different *ideological approach* to instructional design, then a similarly dramatic shift must occur in instructional design itself in order to operationalize it, which will in turn allow us to see if it truly exists and what differences in outcomes it might make. There is conceptual promise in social constructivism, but it must be clearly operationalized before we can learn anything about its value. A fundamental change in our general approach to training may be occurring, but our operationalizations are so muddled at this point that it is impossible to tell. By approaching social constructivism as a new way to learn instead of as social interaction tacked onto a standard training program, perhaps we can finally explore the true implications of this kind of shift in instructional ideology. Some organizations, like IBM, have already begun exploring what is likely to be in a true social constructivist paradigm, placing some training programs in Second Life, and allowing their employees to create three-dimensional avatars that serve as online representations of themselves (Reuters, 2006). These avatars then represent the employees in online training programs, sales meetings, and other such interactions. Although the research is sparse, by embedding all training into a unique social context, this theoretically carries with it all the advantages of online interaction listed in the focal article as well as all the benefits of a social constructivist approach. This way, social constructivism is not operationalized simply by using online tools with a social context but instead by constructing a unique social world in which learning can occur. But there are still many unknowns. Unfortunately, as always, the technology evolves faster than the research, and it is only getting faster.

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