Supporting Practice, Integrating Research in Immersive Technologies into Educational Designs (SPIRITED): Teachers as designers

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how might teachers plan to incorporate immersive, interactive projection into their designs?

- teachers struggle to think like designers (Reiser et al., 2000)
- authenticity and iteration help (Koehler & Mishra, 2005a, 2005b; Koehler et al., 2004)
- design principles help (Bybee, 1997; Edelson, 2001; Schwarz & Gwekwerere, 2007)
- providing curricula to adapt + PD can help (Ball & Cohen, 1996; Connelly & Clandinin, 1988; Davis & Krajcik, 2005; Fishman, Marx, Best, & Tal, 2003; Schneider & Krajcik, 2002).

Design Dimension	*Components*
Design occurs under constraints.	Cost Regulations
Design involves form and function. A customer may select a design based on form, even if function is inferior.	Materials Style Ambiguity
Designs address diverse customer or client needs, some of which may be implicit.	**Roles** **Needs** **Implicit/False**
Design is an iterative process that requires evaluation and optimization across tradeoffs.	Tradeoffs Improvement Coevolution

interdisciplinary project-based learning course, in-service teachers (n=9)

design tools: VOC, ideation, evaluation, prototyping

data: reflections, artifacts, pre/post tests