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Maximizing research and development resources: identifying and testing “load-bearing conditions” for educational technology innovations.

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Summary: Education innovations often have a complicated set of assumptions about the contexts in which they are implemented, which may not be explicit. Education technology innovations in particular may have additional technical and cultural assumptions. As a result, education technology research and development efforts as well as scaling efforts can be slowed or made less efficacious because some of these basic assumptions (called load bearing conditions) about the match and prerequisites for the innovation are not met. The assumptions-based planning model is adapted as a methodology to help identify the load-bearing conditions for innovations. The process and impact of its use with two cases of education technology-oriented research and development efforts is reported. The work demonstrates the potential value of this LBC process for recruiting, selecting, and supporting research sites, for innovation designers to target efforts that strengthen implementation and support of scaling. Recommendations are made for others engaged in partnerships with education providers around developing, implementing and testing new education technology based innovations in more effective ways.

Classification: D20 U70 U60 D40 M60

Keywords: research and development; implementation; assumptions-based planning; scalability; education technology; innovations; formative evaluation

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