Predictors of successful learning outcomes in e-learning courses

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Abstract

Understanding the intent and individual expectations of an e-learning participant can help to define a successful outcome for that participant. This can enable a provider to better facilitate success for their intended audience and leads to better design (Wagner, 1997). Our research suggests that traditional teaching materials can be more effective in achieving successful learning outcomes than newer, more expensive materials such as videos.

Research from the field suggests the following factors can predict success (Castaño-Muñoz, Duart, & Sancho-Vinuesa, 2014; Garrison & Cleveland-Innes, 2005; Morris, Finnegan, & Wu, 2005; Ramos & Yudko, 2008):

- 1. Quantity The number of interactions with content.
- 2. Quality The duration and breadth of interaction.
- 3. Type Content type interacted with, e.g. video.

Analysis of the 2012/13 Harvard/MIT online course dataset (MITx and HarvardX, 2014) revealed that quantity and quality were related to a successful outcome but had defined boundaries for optimal success. Type of interaction showed book chapters being correlated more strongly with success than videos but again there was a plateauing effect for all analysed media.

Contrary to previous research, this work suggests that traditional resources for education content (such as book chapters) are still effective in an elearning context, and that focus on excessive interactions does not result in greater success.

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