

[Keynote Talk]: Caught in the Tractorbeam of Larger Influences: The Filtration of Innovation in Education Technology Design

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Abstract : The history of education technology--and designing, adapting, and adopting technologies for use in educational spaces--is nuanced, complex, and dynamic. Yet, despite a range of continually emerging technologies, the design and development process often yields results that appear quite similar in terms of affordances and interactions. Through this study we (1) verify the extent to which designs have been constrained, (2) consider what might account for it, and (3) offer a way forward in terms of how we might identify and strategically sidestep these influences--thereby increasing the diversity of our designs with a given technology or within a particular learning domain. We begin our inquiry from the perspective that a host of co-influencing elements, fields, and meta narratives converge on the education technology design process to exert a tangible, often homogenizing effect on the resultant designs. We identify several elements that influence design in often implicit or unquestioned ways (e.g. curriculum, learning theory, economics, learning context, pedagogy), we describe our methodology for identifying the elemental positionality embedded in a design, we direct our analysis to a particular subset of technologies in the field of literacy, and unpack our findings. Our early analysis suggests that the majority of education technologies designed for use/used in US public schools are heavily influenced by a handful of mainstream theories and meta narratives. These findings have implications for how we approach the education technology design process--which we use to suggest alternative methods for designing/ developing with emerging technologies. Our analytical process and re conceptualized design process hold the potential to diversify the ways emerging and established technologies get incorporated into our designs.

Keywords : curriculum, design, innovation, meta narratives

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