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Anna Wilson, Terrie Lynn Thompson, Cate Watson, Valerie Drew and Sarah Doyle: Big data and learning analytics: Singular or plural?

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Recent critiques of both the uses of and discourse surrounding big data have raised important questions as to the extent to which big data and big data techniques should be embraced. However, while the context-dependence of data has been recognized, there remains a tendency among social theorists and other commentators to treat certain aspects of the big data phenomenon, including not only the data but also the methods and tools used to move from data as database to data that can be interpreted and assigned meaning, in a homogenizing way. In this paper, we seek to challenge this tendency, and to explore the ways in which explicit consideration of the plurality of big data might inform particular instances of its exploitation. We compare one currently popular big data-inspired innovation - learning analytics - with three other big data contexts - the physical sciences, business intelligence and public health. Through these comparisons, we highlight some dangers of learning analytics implemented without substantial theoretical, ethical and design effort. In so doing, we also highlight just how plural data, analytical approaches and intentions are, and suggest that each new big data context needs to be recognized in its own singularity.

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