The social life of Learning Analytics

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1   The main idea

This paper contends that methods used for online education differentiation and measurements are not neutral and objective, but are involved in the creation of the educational realities they purport to measure and it also employs material semiotics to investigate cluster analysis as a 'performative device' that, to a large extent, creates the educational entities that it claims to objectively represent via the emerging body of knowledge of Learning Analytics.

2   The methodology

The goal is to provide both a broad critical examination of the 'algorithmic assemblage' that is learning analytics - where we define an algorithmic assemblage as the interlocking programming practices, assumptions, economic logics, and algorithmic functioning - and a detailed 'mechanological' investigation of the technical and mathematical processes of cluster analysis as a specific algorithmic technique featured in learning analytics.

3   The results

Evaluating the paper reveals that they are not only involved in the objective representation of the world, but also in its reproduction. This is especially evident when different groups within the network mobilize the 'objective' representational discourse based on different assumptions, interests, and agendas. In this sense, this paper investigated the issue of expert knowledge defining its own uses and ontologies. The trend that we sought to challenge is the use of data science to define "forms of learning," only to assume in a circular manner that expert knowledge of data science is required to support those same forms of learning.

4   Recommendation

The analysis presented here shows that socio-technical networks, no matter how large and influential they are, are never monolithic entities with 'pure' instruments in the hands of 'pure' agents, but are always open to negotiations and re-interpretations.