

HumAn Learning: Transforming Patterns in the Cultures of College with Learning Analytics and SOTL

J. M. Robinson, *Indiana University*

ABSTRACT: “HumAn Learning: Transforming Patterns in the Cultures of College with Learning Analytics and SOTL” presents research that uses learning analytics to triangulate on student success in multi-section, general education course. It uses “big data” collected in the regular business of contemporary higher education to inform teaching by faculty members, aiding them in shifting their perceptions from *what seems to be* happening with student success to *what is* (Hutchings; Huber). Informed with such verifiable patterns in student success, course faculty can make constructive changes that are also consistent with disciplinary and course priorities. In the large courses that are increasingly common at residential universities in the U.S. and globally available in the form of Massive Open Online Courses (MOOCs), significant investments are made by the sponsoring departments, their schools, the graduate-student section leaders, and the undergraduate students who hope they auger a successful college career. Initial phases of this project (2014-2016) used multivariate analysis to uncover important demographic trends in success among 800 students enrolled per year in a single introductory course in the US (trends based on, e.g., race, gender, generational status, and national status) (Robinson). Since 2016, the project has expanded to three courses in different disciplines (chemistry, anthropology, and English), which together enroll 5000 students per year (Robinson, Arthos, & Robinson). This presentation will report on the opportunities and challenges in using big data; the student success patterns revealed using big data in the case of a large, first-year anthropology course; the discipline-based intervention instituted to disrupt undesirable patterns; and the initial outcomes of the multi-disciplinary study. Important findings include the following: first, students encounter first-year courses in diverse ways making standardized reforms difficult; second, in large courses, data patterns may mirror larger campus achievement trends, making course-based success difficult to assess and improve; and third, a hybrid model combining big data analytics and discipline-based interventions consistent with SOTL, including the Cultures of College intervention used in this project, offers “spreadable” (Jenkins) interventions that keep faculty expertise and student learning at the heart of educational reform. Funded by an Indiana University Student Learning Analytics Fellowship.

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