

# Education Leadership Data Analytics (ELDA): Application of Data Science Analytics to School Leadership Research, Policy, and Practice

## Dr Alex J. Bowers

Associate Professor of Education Leadership  
Teachers College, Columbia University

January 23, 2019 (Wednesday)

12:45 – 14:15

Room 205, Runme Shaw Building, HKU

Chair: Dr C Y Tan

### Abstract:

Education leadership data analytics is an emerging domain that merges data science, education statistics and data mining, with data visualization to help school and district leaders, teachers and policymakers make better use of the data that we already collect in schools. Schools and schooling systems face an ever increasing amount of data, yet traditionally education leaders have lacked access and useful tools and findings that can help them leverage school and system data to help inform decisions and organizational improvement. In this presentation, Alex J. Bowers will discuss the emerging domain of what he terms “Education Leadership Data Analytics”, in which data science and big data analytic strategies can help inform organization and leadership decision making through evidence-based improvement cycles and early warning systems. This presentation will focus on two issues in applying these techniques to: 1) issues of preparing school leaders to use data analytics and data science in their practice to inform evidence-based improvement cycles, and 2) issues of visualizing and understanding the leadership preparation pipeline, pinpointing bottlenecks and challenges in school leadership preparation, job placement, and turnover.

### About the speaker:



**Alex J. Bowers** is an Associate Professor of Education Leadership at Teachers College, Columbia University, where he works to help school leaders use the data that they already collect in schools in more effective ways to help direct the limited resources of schools and districts to specific student needs. His research focuses on the intersection of effective school and district leadership, organization and HR, data driven decision making, student grades and test scores, student persistence and dropouts. His work also considers the influence of school finance, facilities, and technology on student achievement.

Dr Bowers is the recipient of multiple awards, including being the first person to win both the AERA Emerging Scholar Award for Division A (Administration, Organization and Leadership), and the UCEA Jack A. Culbertson Award for outstanding early faculty research, both in 2012. He was named an Outstanding Reviewer of the Year for the journals *American Educational Research Journal* (2009), *Educational Administration Quarterly* (2012 & 2016) and the *Journal of Educational Administration* (2018).