

Five Aspirations for Educational Data Mining

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In this talk we present our disciplinary, methodological, and social aspirations for Educational Data Mining. These aspirations are based on broad conceptualizations of the nature of education and data analysis as social endeavors. These aspirations fall into five categories which begin with the statement that “We hope that Educational Data Mining will...” 1) Consider the broad range of the social and organizational aspects of education and its administration, including informal and ubiquitous learning; 2) Consider the broad range of inputs of digital artifacts that feed into the design of learning systems (not just the outcomes of system interactions); 3) Consider data mining as a human endeavor which is itself a proper topic of psychological, sociological and other academic disciplines; 4) Remember the fundamentals of quality data analysis regardless of computational techniques (with special fondness for John Tukey’s insights); 5) Provide information that celebrates the diversity of effective pedagogies and supports learning by the outliers, hidden clusters, and otherwise missed special groups of people that are lost in the averages or other insensitive aggregations. We have high expectations for the field of Educational Data Mining to evolve broadly and contribute broadly to education and society.