HUDK 4051: Learning Analytics: Process and Theory  
Spring 2014  
Professor Ryan Baker

**FINAL**

This exam is due, by email, to Professor Baker, at 1230pm Eastern time, Monday, May 12, 2014.  
   
This exam is open-book, open-resource, and open-web. You can use any static resource as you prepare your responses for this exam. However, plagiarism (direct copying or paraphrase copying, without citation) is not allowed. In addition, collaborating on the exam with other students or anyone else at all is NOT ALLOWED.

For each question, give a complete and thorough answer, including citation where/if appropriate. That said, it is not expected or desired to be verbose solely for the sake of verbosity.

You must answer 5 of the following 6 questions:

1. Provide a broad-based (e.g. multi-criterion or type of validity) assessment of the validity of the analyses in

<http://oro.open.ac.uk/36936/1/LAK%20-%20OU%20camera%20ready.pdf>

Assume that the feature discussed in section 4.3 of that article is race.

1. What are the relative benefits and drawbacks of automated intervention and teacher-driven intervention?
2. What are the relative benefits and drawbacks of knowledge engineering and data mining/analytics?
3. What is the difference between statistics and data mining? When should one use statistical methods versus data mining methods?
4. What are the core benefits and dangers of discovery with models?
5. Do we live in Phil Pavlik’s world or Seymour Papert’s? (Or neither?)