HUDK 4051: Learning Analytics: Process and Theory

Spring 2014

Professor Ryan Baker

**THEORETICAL PAPER**

In the theoretical paper, you will select a topic (in consultation with the instructor), and argue for a specific position for how the field of learning analytics must change to meet the needs of 21st century education or learning sciences, or how the field of learning analytics can change 21st century education or learning sciences.

In this paper, you will argue for a clear perspective (whatever it is), and support your argument with evidence that can be accessed by the instructor. That is to say, you should support your argument with empirical evidence or theoretical argument, drawing from published scientific papers, books, websites, systems, and news articles. While it is acceptable to draw from your own personal experience or that of others transmitted by personal communication, the majority of evidence presented must be from publicly available sources.

**Part One: Prospectus**

**Due Date:** Monday, February 24, 10:55am USA Eastern time

In the prospectus, you will turn in a 1-page paper prospectus for the theoretical paper. In this prospectus, you will propose a topic, which the instructor will review and give you feedback on the suitability of your topic.

Your prospectus should clearly state a thesis, ideally in one sentence, along the lines of
“Learning analytics will demonstrate that educational theory is useless.”
or
“By using analytics on homework performance, teaching can become more formative.”

or
“Learning analytics will increase the specificity of educational theory on disengagement, by allowing concrete operationalization of a range of disengaged behaviors.”

(Note that I agree with 2 of these 3 theses. For this assignment, it doesn’t matter whether I agree or disagree with your thesis.)

Your prospectus should then state what evidence you intend to marshal for your claim. Typically, this will take the form of a list of papers (or other evidence) you intend to draw from, and a brief explanation of how the evidence or argumentation in these papers supports this claim. You don’t need to list every source of evidence you’ll eventually use, a representative sample would be fine.

You have the option of including a brief outline of your argument, but this is not required.

**Part Two: Paper**

**Due Date:** Monday, April 21, 10:55am USA Eastern time

Your theoretical paper must be at least four pages long, 12 point, double-spaced Times New Roman. It can be longer than this, with no upper limit (but be reasonable, don’t submit a book). If it is longer than this, any reasonable font choice, size, and spacing is acceptable.

For other details on the paper, see above.

**Grading:**

The Prospectus counts for 10% of your class grade.

The Paper counts for 20% of your class grade.

The Prospectus will be graded in terms of completeness and representing an honest effort to submit a reasonable-quality prospectus. In other words, you’ll get graded down if your topic is obviously outside the scope of the class (“My favorite food is pizza”) or if you say your evidence is TBD, your grandmother’s (unpublished) experiences as a teacher, or from a science fiction novel you read (although Diamond Age by Neil Stephenson is \*great\*). Note that these are just examples, you can get graded down for being creative, and coming up with a bad/out-of-scope prospectus in other ways too.

The Paper will be graded upon how strong a case you make for your argument, including the quality of your evidence and argumentation. You will also receive credit for the degree of insight your paper represents. There is a trade-off in choice of topic: proving the claim that “learning analytics good, bubonic plague bad” will not represent a high degree of insight, but the claim that “learning analytics is better than antibiotics” may be somewhat difficult to prove.