

Assignment 1. Project Proposal
Big Data, Education, and Society
Spring 2020

Post due 2/21 9am

Response to Other Students' Posts due 2/25 1159pm

This class will have one primary project with multiple sub-assignments. In this project, you will propose a learning analytics application. You can do this assignment alone, or in a group of two or three. There is no reward or penalty for choosing to do the assignment alone or in a group. However, if you choose to work with a group for the first assignment, you must continue to work with that group throughout the rest of the semester (and the same is true if you decide to pursue the first assignment alone).

In the first sub-project, due on February 21, you will propose your learning analytics application. In specific, you must propose an application of learning analytics – how learning analytics will be used to address some existing or upcoming challenge in the context of learning, human development, or education. Learning/human development/education can be broadly construed, but your application must still involve one of these domains in a recognizable fashion. In other words, lifelong career learning, kindergarten programs, and personal fitness are all valid domains, but using analytics in a financial services business is not a valid assignment for this class. (But using analytics to study the personal or career development of bankers **is** a valid assignment!). This application must have the goal of real people learning real content in the real world. In other words, cognitive science research projects involving learning paired associates in a laboratory setting do not qualify, and anything that is basic research with no real-world learning goal does not qualify. If you are uncertain about your project idea's fit, please feel welcome to check in with me in advance.

Similarly, your assignment must involve an application that genuinely involves analytics as it is construed by the writers we study in this class. And, although futuristic applications are welcome, being **too** futuristic may make it difficult to do the later assignments in this class – i.e. envisioning a world where more devices are internet-connected is fine, and envisioning a world where micro-credentialing plays a more prominent role is fine, but envisioning a world where all humans are wirelessly neurally connected to a network such that telepathy is commonplace will make the assignments of the rest of the semester quite difficult.

The goal of this assignment is to propose your application and discuss your proposals with your classmates. You will provide constructive feedback to your peers about their proposed projects, the quality of which will be assessed and contribute to the final mark. They will provide you feedback as well.

A project proposal will be written by each student or group, which will be shared in the Canvas discussion forum for peer feedback. There are no specific length limits insofar as you achieve the assignment's goals; however, posts that are too brief to provide appropriate detail will be graded down, and posts that are painfully long to read may not receive useful feedback. All students will be expected both to provide feedback, and to respond constructively to feedback from others. The participation in

the discussions about peers' proposals will constitute 20% of the assessment weighting for Assignment 2.

There are two main tasks for this assignment:

- Application proposal (80% of the Assignment 1 grade)
- Responses to the posts of your peers on your plan and participation in the discussions of your peers' plans (20% of the Assignment 1 grade)

Each student is expected to submit their project proposal in the form of a message submitted to the course discussion forum. Do not email this assignment directly to the instructor.

Proposal content

Your post is expected to have the following elements.

1) *Title.*

2) *Problem.* What is the problem under study? Are there other relevant solutions, and how do they fail to address the problem fully (i.e., what is the motivation to study this problem)?

3) *Approach.* What is your proposed approach to the problem under study? How will your approach work (technical details are not required, but a general vision for how it works will help your classmates critique your approach)? What are the hoped-for results and contributions of your project?

Where to Submit

Submit your proposal to the Assignment 1 discussion forum. Each student/group is expected to submit their plan in a new thread of the forum where the title of the thread is the title of your assignment.

Grading criteria

Proposal submission (80% of the Assignment 1 grade)

Your proposal will be graded in terms of plausibility and technical soundness, importance/relevance of problem selected, quality of explanation, completeness of explanation, and justification of your approach. Proposals may also be graded down for lack of clarity, comprehensibility in writing, or failure to conform to the assignment's goals.

Responses to the posts of your peers on your plan and participation in the discussions of your peer submissions (20% of the Assignment 1 grade).

You are expected to participate actively in the posts made by your peers and provide feedback or otherwise contribute to the discussions of **at least five other proposals**. In particular, your participation must provide detailed and constructive feedback and not just a general and non-actionable comment (e.g., "Wow! This is great."). Please try to distribute your responses across your classmates, so that all projects receive feedback.

All students are expected to provide prompt answers to posts from their peers, and to moderate the discussions initiated by their proposal posts.

Late Submissions. Owing to the interactive nature of this assignment and the feedback process, late submissions are not permitted and extensions will be made in exceptional circumstances only (e.g., health related problems).