Midterm Review
APSTA.GE-2017 (Educational Data Science Practicum)
Project - College Expansion in China
Author – Junyan Yao
Reviewer – Jemar Bather
Reviewer Score – Yellow

The question you are posing is a proven economic theory (that investments to human capital, rather than solely physical capital allow for sustainable long-run economic growth.) Maybe rephrasing the question to say you are testing this proven theory in a certain country that is newly investing in human capital can aid in your narrative.

What are the standards for which you will determine whether the development is long-term or short-term? What are your exact pillars of economic development? Are you only relating this to human capital, (the effect on the unemployment rate)—and how will you assure that if there is an effect on the unemployment rate, that the students from campus are becoming high-skilled laborers? Or will this also mean economic development of the community like infrastructure and other community investments? I think the second question is a bit redundant seeing as though if you determine the growth is sustainable in the long-term then it will have been worthwhile—if not, the opposite is true. Do these questions account for individuals?

For your plots, error bars are unnecessary because you are graphing counts.

Your variables are not easily recognizable. Perhaps you can provide a description of your variables or make them more common.

The title of your first series of analysis is "*Primary Analysis*", but the coding is the R package PLM which is linear models for panel data. I've seen that a lot of economic researchers use this package in their analysis, so I agree that this aligns with your project objective. As you have it now, it says "Primary Analysis" but I think that you mean it in the sense that this is the first analysis you are conducting. Adjusting the wording will make the project a bit more clear. Thus I suggest labelling it "*Linear Models for Panel Data*" and giving a brief description on how this package and your project align.

I give this project a yellow, mostly on the point that some of your questions need to be reconsidered and a bit more detailed. I believe once this is done, there will possibly be more variables you will want to add, and more tests to run that will align well with the objective for this project. By semester's end, I envision that you will have researched a few relevant articles pertaining to your research and applied methods that have worked for previous economic researchers to see if it works for your dataset.