Research Proposal Review

Which of the methods described in this week's reading would you think would suit your purpose?

I believe that conclusive research is the best way forward for my research. Given that I want to look at the specific outcomes for a specific problem (curriculum and revision planning in secondary education) by using a set tool within computing (machine learning algorithms), it allows me to focus on the data that can be gathered from this and analyse those results.It wouldn't be necessary to complete exploratory research with this as there is already a defined problem.

Which data collection methods would you consider using?

Ideally, the data collected would be mostly quantitative in nature. It is my intention to use data provided by an educational setting that highlights different topics within a wider subject and the scores that students have gained for this, which would in turn be used to train a machine learning model. For example, a school would provide a Excel table or database with student names on one axis, the sub-topics on the other axis and the scores each student gained for these being given in the relevant cell. This data would be collected on a regular basis to identify whether the model is providing any benefit to the students. I would use this data for statistical analysis, and would consider interviewing class teachers for qualitative data on whether they have seen an impact on this.

Which required skills will you need to have or develop for the chosen project?

I will need to ensure that I develop robust statistical and data analytics skills to be able to accurately interpret the results of my research. I also need to ensure that my ability to analyse pre-existing resources and research for useful information remains high. Because I intend on working with real word subjects for my research, my ability

to communicate effectively with them regarding the mutual benefits we can take from this will be essential to success.