CASE STUDY 10 - SUMMARY

NAME
Simon Hull

LEVEL
Undergraduate

COURSE
APG2041S - Applied Surveying & GISC

CATEGORY
Expanding, enhancing or adapting

FACULTY
Engineering and the Built Environment

One sentence summary
Created simulated data as a substitute for surveying practicals that required students to analyse and report on this project.

Context

In previous years, the surveying practicals in the geomatics courses required the students to go out in the field and collect data using total stations, levels, GPS and so on. We applied for PACA status initially so that our students could come back in September, with the intention of doing our practicals as in previous years. But, as things unfolded and the calendar changed again, it looked less feasible to squeeze everything in. So, for the second-year course, we made the decision to come up with some way of fabricating the data they would have collected, so students would not be required to come back.

Purpose:

The purpose of the surveying practicals is to give students experience with using the instruments. That fell away entirely. Once students have collected their measurements, they then need to process this data, analyse it, and then convert it into a communicable form. This aspect was kept, but the actual using of the instruments will need to be picked up next year somehow.

Process

We create some data that is typical of what students might have collected for their measurements. I got hold of a survey that I had done back in 2012 or 2013 of a play park in Gugulethu. The scenario was that “you lost your foot in a shark cage diving accident, so you couldn’t go and collect the data yourself. And so you’ve sent your assistant out to collect the data for you, and they’ve brought it back, and here’s the data”. Creating this new assignment was done over three weeks, involving writing the assignment, tidying up that data, creating the Vula site, and adding a quiz. Creating different data for every student was not feasible in the time available. Hence, they were told everyone was getting the same data and they needed to work independently

Outcomes/ Lessons learned

The geomatics practicals could no longer assess both the practical data collection and analysis aspects. Nevertheless, we could generate data similar to that which students might have collected and focus the assessment on the analysis. This was successful and there wasn’t any evidence of plagiarism. The practical data collection skills will be assessed in later years.

Recommendation

Providing students with data, rather than students collecting it, allowed us to retain the practicals in the course. This did involve considerable effort and the practical data collection skills will still need to be assessed in later years.