Good Afternoon Everyone. My name is Jonathan and the stakeholder I am targeting are Year 12 high school students who are contemplating their next step in life. Most will undertake full time tertiary studies, enter the workforce or do both at the same time. It is essential that students make the best choice for their future prospects.

The dataset was collected in 2018 by the University of Sydney, department of Institutional Analytics and Planning and contains data about student details and grades. It is quite interesting to note that the department submits regular data reports to the Australian Department of Education and Training to fulfil the University’s statutory reporting requirements. Hence, the dataset provided by a reputable institution is highly reliable.

So, I was looking through research articles and found one done by the Australasian Association for Institutional Research back in 1998 which found that students who did undertake full time studies produced the best proportionate results in terms of subject passes. Another study released more recently in 2018 by Grattan Institute found that reducing study load, or studying part time, was the major cause of students failing to complete their studies. This led me to formulate my research question which is “Are students who do full time studies more likely to pass their Junior Mathematics units?”

In this table, it reflects how many students are enrolled. The 3 students of unknown status were omitted as they are assumed to have not selected a mode of study during enrolment. The dataset was filtered to account for domestic students only and further separated into two categories, pass or fail.

The null hypothesis would be there is no association between passing and the mode of study, while the alternative hypothesis is there is an association between the two.

Given the high Chi squared value and small p value, there is an association. This suggests that domestic students who choose to do a university degree full time have a higher chance of passing their junior mathematics unit which corroborates with the two research articles.