**Steps in statistical analysis of Capstone data**

Questions asked of the data:

Can I count something interesting?

* What were application numbers at MMU and Salford, 2006 to 2016?

Reshaping the data to MMU\_Salf\_App\_Numbers\_5 showed the data as one year per column just for the two institutions being compared: application numbers to MMU look to be consistently larger than those for Salford for each year. Application numbers to MMU looked to be more than double those to Salford, but in some years the difference was larger than others.

Reshaping the data to MMU\_Salf\_App\_Numbers\_6 showed the data as one institution per column just for the two institutions being compared, allowing me to sum applications across the 11 years: total application numbers to MMU were 522,190, while those to Salford were 217,580.

Can I find some trends (high, low, increase, decrease, anomalies)

* How have application number changed over time at MMU and Salford?

Salford’s share of applications has hovered between 27% and 32% over the period 2006-2016. Salford’s share looks to have increased fairly steadily between 2013 and 2016, and was at just over 31% in 2016.

There seems to be far more variability in MMU’s applications than Salford’s year-on-year, but it would be good to look at the variance and standard deviation to check this.

Can I make a bar plot or histogram?

Creating a histogram comparing the percentage of applications to each institution showed a relatively stable balance of applications, that nonetheless fluctuated slightly year-on-year.

Can I compare two related quantitites?

* How does the spread of subject groups applied for at MMU and Salford compare?
* How does the spread of subjects applied for UK-wide compare to the spread at MMU and Salford?
* How has that changed over time?
* How does the spread of applicant domiciles at MMU compare with that at Salford?
* How has that changed over time?

Can I make a scatterplot?

Creating a scatterplot comparing the percentages of applications to different subject areas for MMU, UoS and UCAS overall

Can I make a time-series plot?