

# BIG IDEAS IN STATISTICS

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# THE REAL WORLD

# VARIABILITY

# DESIGN

For sheer delight, see  
[http://www.york.ac.uk/depts/maths/histstat/images/latin\\_square.gif](http://www.york.ac.uk/depts/maths/histstat/images/latin_square.gif)

# SAMPLING

Sample and population

# “BIAS”

# GRAPHS AND DIAGRAMS

*The Good, the Bad and the Ugly ....*

## EXCELLENT PRACTICE

See Tufte, *The Visual Display of Quantitative Information*  
Could even see <http://www.rss.org.uk/pdf/Graphs%20and%20diagrams.pdf>

## AWFUL PRACTICE

Tufte tells you all about it, with examples!  
OCR's "Uplink" spring 2006  
UCAS et al "What do graduates do?" for 2007

*And others too numerous to mention ...*

Get a feel for it at <http://www.math.yorku.ca/SCS/Gallery/>

# "MODELLING"

# INFERENCE

# INTERPRETATION

# REAL PROBLEMS

# STATISTICAL LITERACY

## GAISE

Guidelines for Assessment and Instruction in  
Statistics Education

<http://www.amstat.org/education/gaise/>

## NEW ZEALAND MATHS CURRICULUM

[http://www.tki.org.nz/r/maths/curriculum/  
statement/p8\\_e.php](http://www.tki.org.nz/r/maths/curriculum/statement/p8_e.php)