

Statistics First – Software Later.

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Every so often I am asked:

“Could you teach our students some SPSS?”

If I pursue this I (nearly) invariably find that:

- There are some students doing a course that involves statistics in some shape or form
- they hope that I, or someone like me can, teach them this
- they tend to think that statistics and SPSS are the same thing.

- For the last the last several years in Wolverhampton I have given the occasional one day “Statistics for Postgrads” course.
- In Galway I gave several six day “Statistics for Postgrads” courses.
- In the former I teach in a classroom with no computers.
- In the latter I did teach in a computer lab, but I “banned” the use of computers in the morning session.

Why?

- It is my firm belief that if you try and teach statistics and a statistical package simultaneously people see the object of the exercise as learning which buttons to click on the package.
- Also if you teach statistics and a statistical package simultaneously you are giving people two things to be simultaneously anxious about.

I am *not* . . .

- Please note that I am *not* saying that you should not teach statistical software as part of a statistics course
- I am *not* saying that people should know how to “do it by hand” before they do it on a computer
- I would encourage the incorporation of software output into course material

Chris Stride

“Very much agree, having tried both ways. Stats and software are different skills... it’s hard for students to learn both at once (as it is for anyone to learn two things at once). You need the former to understand the latter anyway. So whilst my beginner/intermediate level students see SPSS/Mplus/R output when learning stats, they don’t get to press buttons / run code until they’ve finished their stats course. The other issue is that when they are taught together, data management skills in the software tend to be rushed through/glossed over, and best practice use of the software (e.g. documentation/coding) completely ignored. Teaching the software after the stats allows for such issues within the software to be covered in detail.”

Chris Stride, discussion

Interesting points here also.

- Stats and software are different skills
- it's hard for students to learn both at once (as it is for anyone to learn two things at once).
- **You need the former to understand the latter anyway.**
- The other issue is that when they are taught together, data management skills in the software tend to be rushed through/glossed over, and best practice use of the software (e.g. documentation/coding) completely ignored. Teaching the software after the stats allows for such issues within the software to be covered in detail.”

The third point is (I think) the key to the whole thing, and the last is very interesting.

Thank You!! Lets Discuss