

Scenario based training of statistics support tutors

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Statistics support

Evident demand for stats support is growing rapidly

Additional challenges for stats support:

- ▶ Individual project based queries
- ▶ Understanding the research context
- ▶ Translating into statistical language
- ▶ How to use SPSS
- ▶ There's not always a right answer!
- ▶ Potential to be asked about a vast range of statistical methods



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Current available training for tutors

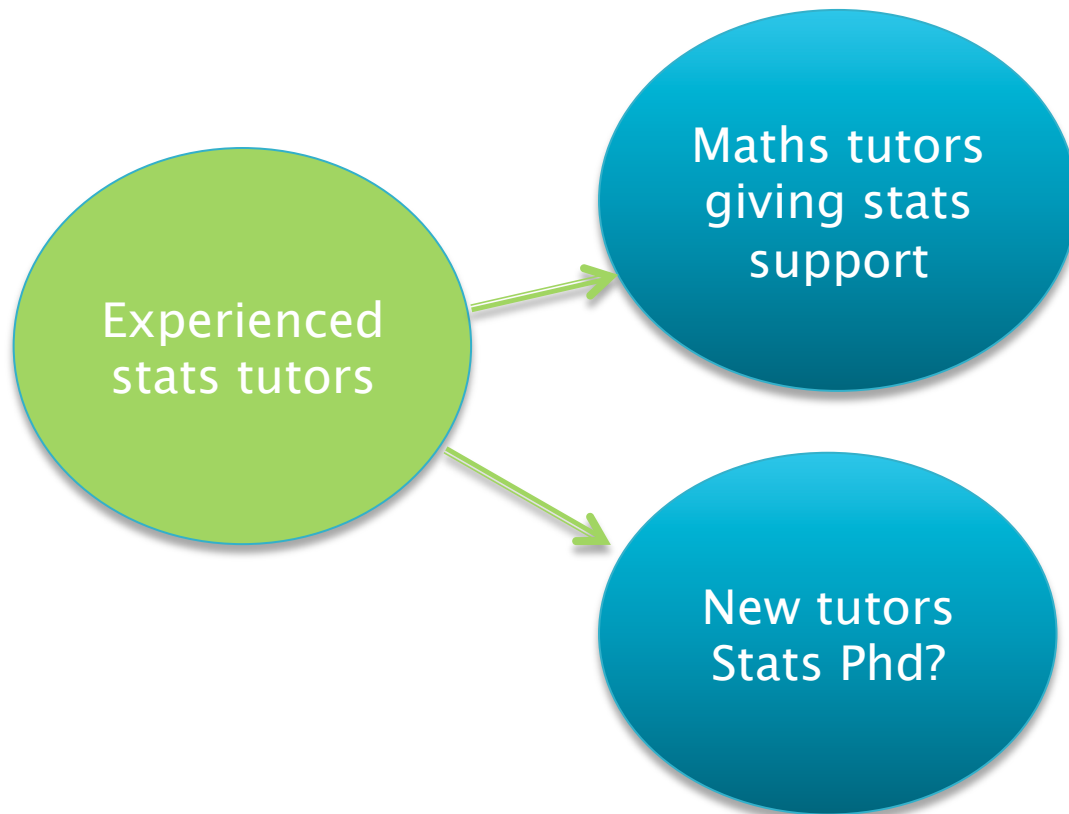
- ▶ Sigma tutor training
 - Tutoring in a maths support centre guide
 - <http://www.sigma-network.ac.uk/wp-content/uploads/2012/11/46836-Tutoring-in-MS-C-Web.pdf>
 - Generic to mathematics and not statistics specific
- ▶ SPSS bootcamp
- ▶ Statstutor resources
- ▶ Shadowing experienced tutors



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Training needed



Introduction/Revision
to key techniques

SPSS

Listening & decision
making skills – what
analysis does the
student need to do?

Teaching & learning
skills
(without maths!)



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Proposal: Develop workshop & materials

Intended Learning Outcomes

Attendees should:

1. Be aware of some of the issues relating to the provision of statistics support
2. Have improved their ability to recall and describe some basic applied statistical methods
3. Have used SPSS to apply some of these methods
4. Have ideas for explaining statistical concepts to students
5. Feel more confident about providing statistics support with the topics covered



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Funding and pilot workshop

Funded through the Sigma network

Funding for Scott Smith to develop video based resources

Ran a pilot training day at Sheffield in August



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Morning: Introduction/revision of basic statistical concepts, methods and SPSS

Two Sessions:

Optional Session 1:

Concept of hypothesis testing, chi-squared tests and regression

Ideas for explaining these concepts to students

Session 2:

Intro to SPSS

Example using SPSS to compare means

Tutors guide on tests and assumptions



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Afternoon: Scenario training

Top tip videos

and

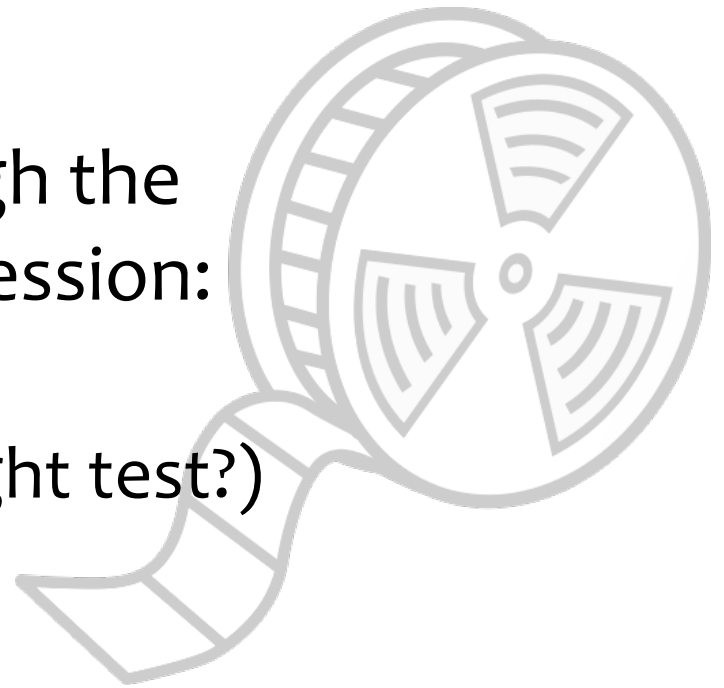
Scenario videos: going through the steps of a statistics support session:

Listening & Thinking

Decision making (Choosing right test?)

Explaining, Facilitating

etc.....



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Afternoon: Scenario training

Scenario Videos used in an interactive manner:

- Stop/start video(s)

- Discuss an issue in groups

- Groups report back

- View what the tutor did next and discuss their approach

- Do some of the analysis steps themselves using SPSS

Applying skills and knowledge gained in morning sessions



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“Top Tip” Video example

Statistics Tutor Do's & Don'ts

Brought to you by statstutor.ac.uk



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Scenario training example:

Mass Customization

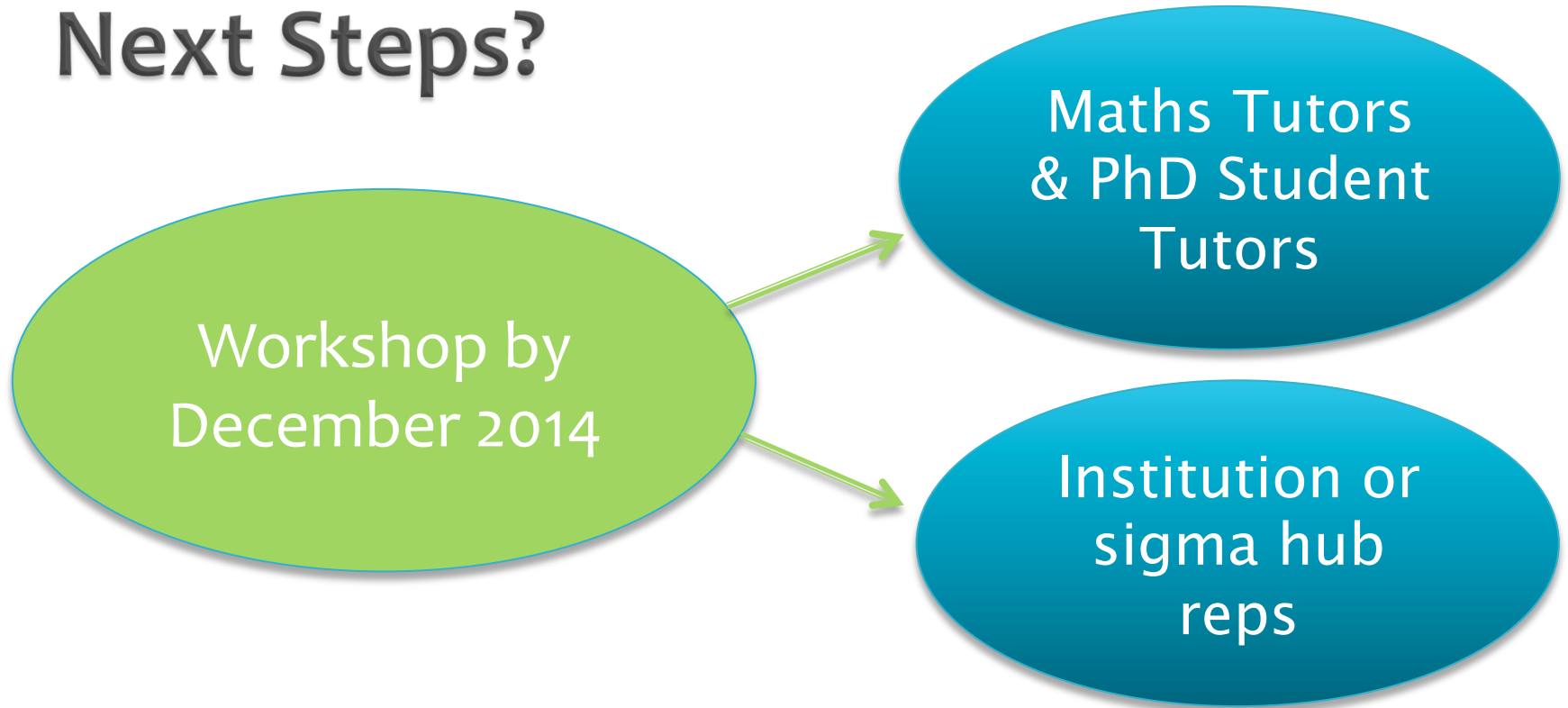
	A	B	C	D	E	F
1	Importance rating of criteria (feature) of a mass customization toolkit					
2	Criteria	Visual Feedback	Price Update	Virtual use of Product	Guidance	Technical Information
3	Participant 1	5	4	3	5	2
4	Participant 2	5	5	1	3	4
5	Participant 3	3	2	1	5	4
6	Participant 4	4	1	5	5	2
7	Participant 5	5	2	3	5	1
8	Participant 6	2	5	3	4	1
9	Participant 7	3	5	4	5	5
10	Participant 8	5	5	1	4	2
11	participant 9	5	5	1	4	2
12	participant 10	1	5	5	5	4
13						
14	Mean	3.80	3.90	2.70	4.50	2.70
15						



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Next Steps?



Materials available via statstutor for anyone else wishing to undertake self-development

Via **statstutor community project** (creative commons license)



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