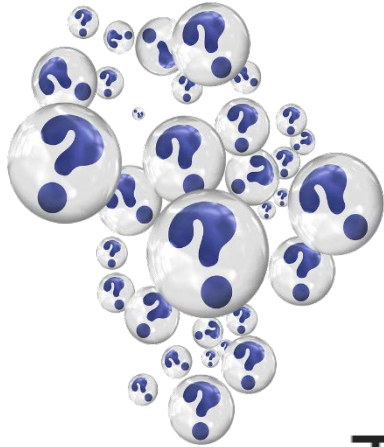# The teaching & learning of quantitative social research methods (SRM) online

Debbie Collins

National Centre for Research Methods, University of Southampton, UK

The teaching & learning of social research methods in online spaces

What's being taught?

How is it being taught?

What's the role of the digital technology?

THE PEDAGOGY OF METHODOLOGICAL LEARNING

How are advanced social science research methods taught and learned?

news / about us / people / research / publications / training and events

http://pedagogy.ncrm.ac.uk/

Methods & data

2 case studies

+ 7 interviews with online SRM teachers

advanced quantitative analysis short course

Masters SRM module

20 interviews/ conversations/ focus group discussions

11 types of observation

100+ documents

Challenges of teaching & learning quantitative research methods

Subject complexity

Diverse learner groups

Connecting theory, methods & practice

Motivations & attitudes

Structuring & sequencing content

Nind & Lewthwaite's typology of research methods pedagogy

Approaches	The teacher's guiding theory, values, principles, identity
Strategy	The grand plan for achieving pedagogic goals
Tactics	What the teacher does in-situ to implement the strategy
Tasks	Actions that learners (& teacher) have to do

Nind, M., Lewthwaite, S. (2019)

Learning from those who teach quantitative research methods online

Design for diverse learner groups…in advance of the course starting

Be explicit about aims, requirements, commitment

Find out about prospective students

Provide introductory and more advanced material

Check and promote the accessibility of materials

Design for diverse learner groups…during the course

Get to know your students - encourage them to get to know each other

Create opportunities for peer learning

Adopt strategies and tactics to identify learners that need more help/ tailoring of material

Structure and sequence course material…in advance

Give time to planning structure and content

Highly structure content to manage learners' linear progression

Chunking material can help manage cognitive load

Consider mix of text and video and different formats of each

Consider use of asynchronous & synchronous elements, developing strategies for each

Structure and sequence course material…during the course

Sequence course content to keep learners' engaged, mixing up formats

Provide learners with feedback

Introducing activities early helps to engage learners

Online forums can be used to get learners to reflect and develop their understanding but their use may need to be encouraged

Learning through data…in advance

Plan learners' access to software tools & datasets

Provide step-by step instructions for software installation & undertaking tasks

Follow along videos with code can build learner confidence & understanding

Learning through data…during the course

Provide technical support to learners

Include tasks that test learner understanding and provide feedback

Encourage peer learning through discussion/ group work

In summary

- Teaching through data is a cornerstone of SRM teaching & learning

- Plan your online course with challenges to learning in mind

- Understand & make use of EdTech affordances: educational technologists can help

- Create/ develop quantitative SRM pedagogic culture

dlc2g15@soton.ac.uk

@109deb

Laurillard's Conversation Framework

Teacher communication cycle (extrinsic feedback)
- Allows each learner to transform their understanding by giving them access to the teacher's understanding of the concept/idea under study
- Motivates each learner to ask questions or to articulate their understanding of the concept/idea or their experience of putting it into practice because by doing so the learner will get extrinsic feedback from the teacher

Teacher practice cycle (extrinsic feedback)
- Motivates individual learners to transform their practice through producing actions that elicit feedback from the teacher

Teacher modelling cycle (intrinsic feedback)
- Motivates individual learners to transform their practice through producing actions that elicit intrinsic feedback from the modelling environment

Peer communication cycle (extrinsic feedback)

- Enables individual learners to transform their understanding by giving them access to each other's understanding
- Motivates each learner to articulate their understanding so that they can receive feedback from their peers

Peer modelling cycle

- Motivates each learner to undertake actions in the practice environment by sharing the output with their peers
- Facilitates individual learners to transform their practice 'by using the model of their peer's output' [p94] and discussing what they might do with peer feedback to develop their own practice

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