Student “research culture” session

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Research culture session

• What is research?
• Approaches to research
  – Quantitative
  – Qualitative
• Doing scientific/social scientific research
  – Theory testing
  – Literature review
• Developing a research proposal
• Activity
What is research?

• “the systematic study of materials and sources in order to establish facts and reach new conclusions”  
  Oxford dictionary
• “attempt to find out in a systematic and scientific manner”
• “organised common sense”  
  Punch 1998
Approaches to research

• Quantitative
  – Empirical (data in the form of numbers)

• Qualitative
  – Non-empirical
What is scientific research?

• Uses real-world data
  – Against which ideas are tested

• Adopts the use of explanatory theory
Science/social science

• Science
  – Adopts real-world data
  – Explain (not just describe)
    *Explanatory theory about its data*

• Social science
  – Scientific study of human behaviour
    *Explanatory theory about people and their behaviour*
Scientific approach

1. Collect data
2. Build theories to explain
3. Collect more data
4. Test theories
Probable tourist impact resilience:

- Low resiliency
- Low to medium
- Medium
- Medium to high
- High

Walking tracks and roads are marked on the map.
Attractiveness maps

Attractiveness code

1
2
3
4

Rivers
Roads
Waterfalls
Walking tracks
Scenic
Picnic
Other

0.6 0 0.6 1.2 Kilometres
Typology 2 (the international couple)
(total count = 27)
Testing theories

• Hypothesis testing
  – “a predicted answer to a research question”
  – made before conducting research (a priori)
  – Predicated on previous research or theory
We often see what we expect to see
Observations → Question → Hypothesis → Prediction

Test \textit{does not support} hypothesis: revise hypothesis or pose new one

Test \textit{supports} hypothesis: make additional predictions and test them

Test: experiment or additional observation
Literature review

• An account of what has previously been published

At the planning stage (input into the analysis) and/or
Brought in later as further data for the analysis
Research proposal

• What?
  – What is the purpose of this research?
  – What are we trying to find out?

• Why?
  – Why is this research worth doing (or funding)?

• How?
  – How will the proposed research answer these questions?
Research

Originates with a question
Research
Demands a clear articulation of a goal
WHAT?

• What is the aim of the research?
WHY?

• Rationale or purpose for the research
HOW?

• How are you going to go about your research?
HOW?

- Sometimes referred to as methodology
- Break down into manageable tasks
- Assign dates to these tasks
- What approach is to be adopted?
- Critical path analysis
  - When should tasks commence/overlap
- Thesis outline (headings).
Activity

- Move into groups (of about 4 people)
- Now do the following:
  - Introduce yourself
  - 1. Write down your thesis title as a single question (aim or aims)
  - 2. Write down your key research questions
  - 3. Write down your method (quantitative/qualitative/both)
  - 4. Does your research have a Social science/science/both basis?
  - Discuss 1 to 4 with your group members (did you have any problems identifying the aim(s), research questions or approach) – why do you think this was the case? What are the problems with identifying the research aim(s).