Training research output checkers
Background
Motivation

• increasing demand for output checking in research facilities
  o very few fully rules-based => subjective judgment needed

• checker training mostly by ‘grandfathering’

• guidance mostly from SDC literature
  o little on people management

⇒ can we train checkers more formally?
Research outputs compared to NSI outputs

• research outputs
  o have much wider range of types
  o are transformed and subsetted in idiosyncratic ways
  o do not have the same requirements for consistency

• produced by individuals
  o to their own purposes
  o to their own standards of explanation
  o with limited training in SDC
  o with a different perspective on risk

• In summary: low risk but complicated
Structure
Learning objectives

1. Building confidence
2. Understanding subjectivity
3. Dealing with the unknown
4. Developing interpersonal skills

• (Developing output checking community)
Structure

• 60% of time: statistical skills
• 40%: understanding and managing users

• All based on group discussion
  o very little formal instruction

• Pre-reading (tested)
  o post-course reading (for reference)
Developing statistical skills

• Show groups a sample output
• Get them to
  o review
  o decide
  o draft points to be made to the researcher
• repeat with increasing complexity
• But: add pressure to make decisions
Developing interpersonal skills

• Groups identify ‘top ten’ user problems
  o and solutions

• Review types of users
Assessment

- 70% four outputs
- 30% for 400-word essay
  - Round 1: pros and cons of defining scatter plots as ‘safe statistics’
Lessons learned
Statistical skills

• Very hard to break default-closed conditioning
  o possible risk vs meaningful risk
  o not utilising ‘safe statistics’ tool
  o ‘chain of events’ reasoning important

• Better at suggesting solutions to researchers

• Test results:
  o still default-closed for linear/descriptive stats
  o models: better but not using key lessons

• Unknown: is this still seen as an exercise?
Interpersonal skills

• Initially needed much more work
  o first pilot repetitive and unclear
  o ‘top ten’ developed on the fly in discussions

• Partially assessed
  o shows more guidance needed on how to draft emails
Learning objectives, post-pilot

1. Building confidence  ✔️ ✗
2. Understanding subjectivity  ✔️ ✗
3. Dealing with the unknown  ❓
4. Developing interpersonal skills  ✔️ ✗
Next steps

• Material seems to work in class
• Exam shows possible ongoing problems with
  o taking responsibility
  o having confidence in guidance for models
  o default perspective?
⇒ redesign facilitation to directly challenge
⇒ review assessment
  ⇒ reflective diary better?

• Looking for further input from other NSIs
Questions?

- felix.ritchie@uwe.ac.uk