Training research output checkers

Presentation by
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Date
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 developing users

• All based on group discussion
  ○ very little formal instruction
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

Note to SAS team
These results are from the Survey of Charities Finance. I've used the subset of charities who have accounts for at least 4 years in the period 2003/2005, split between charities who survive and those which closed down. The outputs consist of
• The graphs below:
  o A close log file “small, midsize, big” with summaries statistics. There are no disclosure risks in the data as the rows are based on all the observations.
  o The data are on file “CharityAnalysis.dta” so you can check the results if needed.

<table>
<thead>
<tr>
<th>Costs and assets as share of income</th>
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<tbody>
<tr>
<td>Number of months income cover represented by assets</td>
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Assets as a share of total income over time

Assets as % of total income
Developing interpersonal skills

- Groups identify ‘top ten’ user problems
  - 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
  - possible risk vs meaningful risk
  - not utilising ‘safe statistics’ tool
  - ‘chain of events’ reasoning important

- Better at suggesting solutions to researchers

- Test results:
  - still default-closed for linear/descriptive stats
  - 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 ✓  x
2. Understanding subjectivity ✓  x
3. Dealing with the unknown  ❓
4. Developing interpersonal skills ✓  x
Next steps

• Material in class works

• 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?

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