E-learning as apprenticeship for large numbers

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The Challenge

Using e-learning to teach Qualitative Data Analysis (QDA) is a challenge

- Skill
- No facts
- Traditional, intensive teaching methods
- Abstract
- Creative
RLOs (= Resusable Learning Objects) usually found in:

- Concrete, factual based, non-contested topics
  - Chemical properties and reactions
  - Beams in engineering

- **BUT** QDA more like
  - Physical skill (gymnastics)
  - Creativity (textile design)
  - Contested (philosophy)
How is QDA taught?

Hammersley, 2004, three approaches
1. The craft approach
2. The professional approach
3. Bricoleur
   All reject
4. The procedural approach
Craft approach

➢ Learning ‘at Nellie’s knee’
➢ Form of apprenticeship with senior researcher
➢ Small numbers
➢ Focus on practical skills
➢ Skills caught not taught (Leonard, 2000)
Professional approach

- Qual. Res. seen as non-partisan, neutral
- Focus on practical tasks
- Do professional job
- Meet criteria of soundness
- Meet ethical guidelines
Bricoleur

- Post-modern/constructivist approach
- Qual. Res. seen as an art
- Creativity and montage
- Use any methods & learn by doing
- Res. not neutral
- Self-taught, questions all assumptions
Procedural

What students and Govt. want

- Steps or stages
- Reduces anxiety
- Not creative, thus problem dealing with the abstract
- Good for govt. regulation (learning outcomes etc.)
Response to massification

- Procedural approach easier to teach and manage
- Craft approach etc. cannot deal with large numbers (Qual. Res. very popular)
- Plus, diversification of approaches.
- New text books esp. on QDA
- BUT learners want to see fine detail of real cases
REQUALLO to the rescue!

- HEA funded
- 6 exemplars based on real researchers
- Across disciplines and methods
- Produce RLOs - reusable learning objects
- Addresses Hammersley approaches in 5 ways:
Elicitation of accounts

- Researchers talk about thinking and creativity involved in actual analysis
- Use text, video and audio. Learners get experience like apprentices
- Making suggestions not possible (unlike senior researcher) but does include commentary
- E.g. Frances on medical-based perspective.
- Frances on initial template
Promotes comparison

- Case by case and subject by subject.
- Students see how explanations are created
- Like apprenticeship. Teacher explains how this example is like or unlike novice’s example.
- A kind of reverse construct elicitation
- **King on template analysis** vs. **Frances**
Includes procedures

- Steps to go through, moderated by how researchers modify them
- Exemplars, rather than explicit stages
- Steps illustrate thinking and creativity
- Learners must come up with own ideas
- E.g. Frances on revising her codes
Feedback

- Each exemplar contains assessments/tests/exercises/notes
- Provide frequent feedback
- Repeatable at student demand
- Builds confidence, reduces anxiety
- E.g. test on getting the idea.
Granularity

- Units, exemplars, assets, examples can be used in different pedagogic/methodological contexts
- Role of metadata and guides e.g. learning outcomes.
- Still working on best solution to give flexibility and adaptability
- E.g. Template analysis video
Conclusions

- Teaching QDA means teaching creativity
  - RLOs can support this
- RLOs can give information and feedback close to what experts give
- Procedures - not infallible steps, rather they illustrate thinking and creativity
- RLO not perfect, BUT usable with large numbers & anyway cannot assume that experts in apprenticeship model are always supportive.