# Translating analytic tasks into software tools: example in **MAX**QDA

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ESRC RESEARCH METHODS FESTIVAL

# 5LQDA: Analytic Planning Worksheet
## (Silver & Woolf, 2015; Woolf & Silver, 2018)

- **Level 1.** Objectives

- **Level 2.** Analytic plan

- **Level 3.** Translation

- **Level 4.** Selected tool

- **Level 5.** Constructed tool

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# Level 1(a)

**A**ssessing **U**ndergraduate **R**esearch **A**ssistants' **L**earning through the use of participatory methods (AURAL)

## Objectives

- *Pre-established*: To identify the learning gains of student researchers participating in research placements through a participatory approach.

- *Emerging*: To distinguish the learning experience of student researchers vis-à-vis discipline-specific research models.

# Level 1(b)

- Participatory planning sessions

- Participants: 18 student researchers

- Data sources:
  - 270 diary entries
  - 6 Interviews

# Level 1(c)

Date: Tuesday 12ᵗʰ July

Hours worked: 9am- 5pm (7.5 hours)

**What, why and how?**

Today was another good day. I came in and did a bit of interest areas first, then we had another demo guy in showing another type of remote eye tracking device. This was interesting because I got to compare it to the one we saw yesterday. In terms of tech, today's kit from _____ was a bit more advanced as it had a higher resolution and slightly faster processing in the hardware. Also, the wireless device in the glasses had a longer range than yesterday's which meant we could live stream walking all the way around the building. It also looked more slick and was slightly lighter to wear. The main difference however was the software to run it. This is a bit more complex because this device is made for more complex things, which is fair enough. For our purposes, yesterday's option from SMI was more suited really. But anyway, the study now uses screen based tracking, not remote so the comparison with the screen based SMI machine and the current Eyelink we use was more interesting. The guy yesterday let us keep the kit to try with our study over the week which was good. Today I managed to set up and run my own experiment – which sounds pretty simple but there is NO WAY I would have been able to code in my own experiment using the Eyelink system as it is SO complicated. The good thing about the old system is it can do super complicated things, and this new one from SMI is a bit more basic (still super clever though), but it has some new features which would be really time saving in terms of making it really easy to set up and run new trials, and also it would mean students could design their own experiments relatively easily and without too much assistance. On the old system even masters level couldn't program their own studies – a technician would have to do it. So for that reason I think we should definitely get one! It would mean I have a head start getting used to the new kit before I use it for my project next year!!

**Any challenges?**

Not really – practicing with data viewer (eyelink software) is challenging, but using the new software was fun. It was much more like the programs I am used to running on mac like imovie which aims to be simple and easy to use.

**Learning:**

This new technology is really good and I basically taught myself how to set up and experiment in about two hours which is amazing!

- **Solicited diaries** produced through a pre-defined template.

- **Frequency** of measurement points determined by the **event** of **working on the project**, at **daily intervals**.

- Participants were asked to produce a minimum of **300-words per entry** and email them weekly to a dedicated account.

- **Semi-structured interviews** to accommodate students' preferences.

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# Level 2. Overall Analytic Plan

## (a) Current conceptual framework

- The 'Students as researchers' pedagogy (Walkington, 2015) has been typically studied from a researcher-led perspective (Hunter et al., 2007; Linn et al., 2015; Shah et al., 2012).

- Initial contribution: participatory approach through continuous self-monitoring and reflection on learning gains.

- Emerging contribution: comparison of three discipline-based research models.

# Level 2(b)

- **Prior completed**
  - Preliminary coding
  - Review and refinement of codes
  - Preliminary generation of themes
- **Current**
  - *Identify patterns of transferable skills reported in relation to discipline specific-research models*
- **Next anticipated**
  - As above, in relation to personal qualities.

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# Level 2(c). Analytic tasks

*Ascertain transferable skills typically reported by students in each discipline-specific research model.*

# Level 3. Translation (Alternative A)

1. UNITS
   - Groups of participants (unit of analysis)
   - Transferable skills (unit of meaning, concept)

2. PURPOSE: To **verify** and **document** the similarities and differences in the expression of transferable skills reported by individual student researchers engaged in discipline-specific projects.

3. POSSIBLE COMPONENTS
   - Groups of participants
   - Transferable skills
     ☞ *See handout*

4. CHOSEN COMPONENTS
   - Groups of participants: VARIABLE VALUE
   - Transferable skills: CODE

   Additional components for 'documenting'
   - Interpretation and recording = MEMOS

5. EXPLANATION on screen

# Level 3. Translation (Alternative B)

1. UNITS
   - Groups of participants (unit of analysis)
   - Transferable skills (unit of meaning, concept)

2. PURPOSE: To **verify** and **document** the similarities and differences in the expression of transferable skills reported by individual student researchers engaged in discipline-specific projects.

3. POSSIBLE COMPONENTS
   - Groups of participants
   - Transferable skills
     ☞*See handout*

4. CHOSEN COMPONENTS
   - Groups of participants: DOCUMENT SETS
   - Transferable skills: CODE

   Additional components for 'documenting'
   - Interpretation and recording = MEMOS

5. EXPLANATION on screen

# Levels 4 & 5. On-screen demo

**A.** Constructed tool

- Crosstab
- Interactive quote matrix
- Free Memo

**B.** Constructed tool

- Compare groups, quantitative
- Compare groups, qualitative
- Free Memo

# Reflections

*Summaries would have been a suitable selected tool (Level 4), had the task focused on individual documents (diary entries, interviews) as the unit of analysis.*

# Final user tips

- Remember that your Level 1 is unlikely to change.

- The Conceptual framework (Level 2) is likely to vary *slightly*.

- The information on other levels depends on a **finite** number of elements.

- While 5LQDA is conceptually sophisticated, (generally) there is no right and wrong procedure…

- And you can always press the 'delete' key and 'undo' button!

# And yet...

*"Some researchers…use [MAXQDA] for the first stages of a project, before the more subtle aspects of the analysis emerge. They then continue the project on paper, or with yellow stickies…just when MAXQDA could be helping the most".* (Woolf & Silver, 2018: 3).
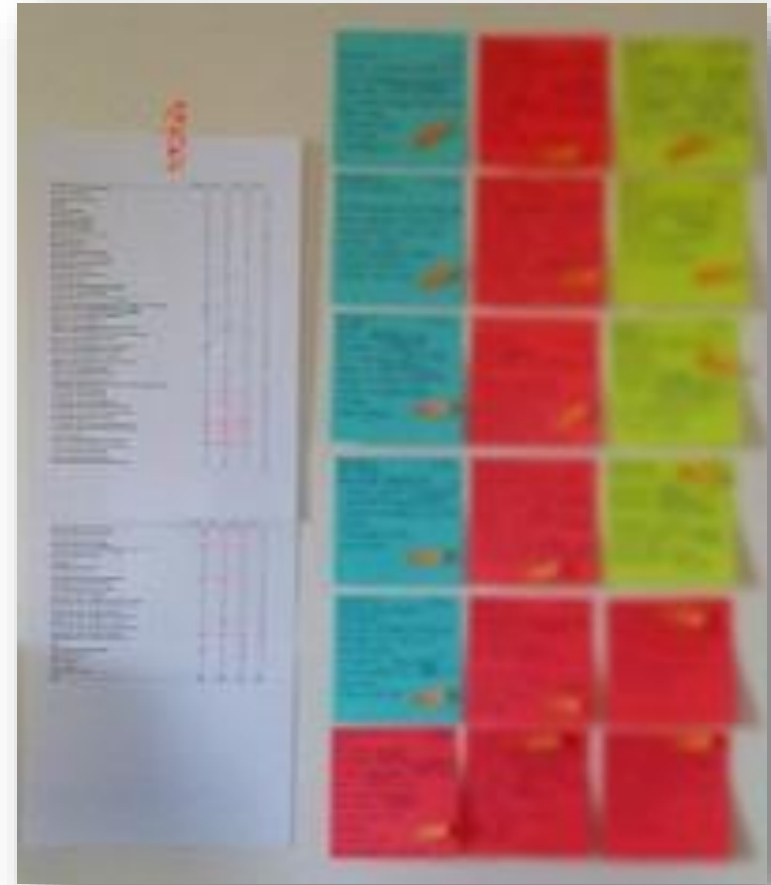
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# Thank you

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