How does acting as a research participant impact undergraduate students’ experience(s) as researchers?

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3rd year: BA(Hons) Education Studies

Special Study - design and pursue a self-selected programme of original research – 10,000 word dissertation

2nd year: Enquiring about Education – pilot a research method in a placement setting – 5,000 word research report

The transition between researching and the “messy, frustrating and unpredictable” (Wellington, 2015:3) nature of educational research had been experienced as problematic ...

How do 3rd year Education Studies students view research and themselves as researchers?
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<th>Session</th>
<th>Sept</th>
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<td>E (Faculty Librarian)</td>
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<td>A: Research Information Sheet &amp; Informed Consent</td>
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<td>C: Collaborative analysis of “3 word” data</td>
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<td>H: Undergraduate Research Conference</td>
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<td>I: Action Learning Set</td>
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Research question: How does acting as a research participant impact undergraduate students’ experience(s) as researchers?

My involvement:
- 6 x 3 hour ‘taught sessions’
- Supervisor (5 hours ea) for 15 students
- Facilitator of (optional) Action Learning Sets

Size:
- Population: 54
- Sample: 43

Research frame:
- interpretive research, adopting a thematic analytical approach to qualitative data, designed to identify emerging ‘units of meaning’ (Wellington, 2015).
- geared to explore a research problem rather than to be generalisable, to identify potential opportunities for transferability & relatability (Lincoln & Guba, 1985) and begin to consider implications for practice.
Student involvement (Astin, 1999)

  - Apprenticing [traditional in STEM]

Discovery pedagogies: participatory (Taylor & Wilding, 2009; Kinkead, 2003)
  - Improved by mentoring
  - Year-long (versus <3 months): potentially portable (Lopatto, 2010)
Involving undergraduates in research results in “connected learning” (Kinkead, 2003:8)

...some continua [relationships between opposites (Wenger, 1998)]:

<table>
<thead>
<tr>
<th>Teaching</th>
<th>Scholarship</th>
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<tr>
<td>Participatory pedagogies lend themselves to knowledge creation</td>
<td>Thiry &amp; Laursen (2011)</td>
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<td>Research supervisors</td>
<td>Research mentors</td>
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<td>[support academic development]</td>
<td>[support STEM students in mastering procedures]</td>
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<td>“chaos”</td>
<td>“cosmos”</td>
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<tr>
<td>[the frustration &amp; disorientation of research]</td>
<td>[the structures constructed by student researchers]</td>
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Silén & Uhlin (2008: 463)
A sense of **community participation** is important to those **new to the culture of research**

[STEM] Researcher identities develop within **apprenticing** models

Legitimate peripheral participation (Wenger, 1998)...**Communities of Practice**

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`participation` 'Practice’ is an *interacting duality* (Wenger, 1998); participation & reification *require and enable each other.*

`reification`
1. A Post-it note™ activity repeated twice, once in the second group session, and again in the fifth: “Thinking of yourself as a researcher, list 3 words which describe how you feel”. [October & February]

2. Mid-module evaluation undertaken in the fourth group session – written open questions, based on an overarching focus: “As a novice researcher, what have you found useful?” [January]

3. Three action-learning set meetings, offered to students in addition to taught sessions, and made available on a self-selection basis. [November, February & March]
Three-words…. “gut feelings”

- **Session 2** [October]
  - Top 3 words: Nervous (~16%), Excited (~7%), Worried (~5%)
  - 1:1:1 negative:positive: neutral (or ambiguous) ratio

- **Session 5** [February]
  - Top 3 words: Nervous (~9%), Anxious (~7%), Worried (~6%)
  - 2:1 negative:positive ratio
  - New words: able, confident, content

- Indicative of affective states.
- Emotions can become “sticky” (Ahmed, 2014:11).
- It’s common to feel “stuck” (Todd, Smith & Bannister, 2006; Todd, Bannister & Clegg, 2004)
- **Treated uncritically, the impressions created by emotions could underpin students’ “towardness” or “awayness”** (Ahmed, 2014) in relation to their identities as researchers.
Mid-module evaluation

• Reflecting on [gaps in] own progress
• Emerging [researcher] criticality

Mediated through

• Tutorials – talked in-depth about research proposal and discussed the most appropriate/reliable way ... to conduct the research
• Collaborating with others in the group to discuss dissertations and at which stages we are at. This often helps us to clarify things that may have caused a problem later on.
• Working through my ideas with a 'buddy' doing a similar topic allows in depth discussion and builds confidence with my ideas and research.
• Talk mediates teaching:scholarship relationship(s) in social science-based undergraduate connected learning.

• Peer mentoring is powerful in undergraduate social science research. This is a different mode of apprenticing since the peers are similarly peripheral to the community of SS research practice but, arguably, firmly situated within, and actively creating a beginning researchers community of practice.
Action learning sets (sample = 5)
[November, February & March]

Talk enabled “towardness”
Literature review and methodology are under control but I’m scared about the research...worried it’s too small...worried it found what I want it [expect] to find...daunting...

I have sulked with my research problem because of feedback on another module. I don’t know how to use the feedback constructively. I’ve attempted various sections of the dissertation, none is fully completed... I don’t know how to move on.

I’m going to find people I can be accountable to, and who won’t be nice to me! I’ll share my targets/timescales...[and] negotiate a date with my supervisor for submission of a draft and formative feedback.

I need to get over it [laughs]...revisit the feedback and use it to help me finish my literature review.
Our first actions were very practical and target-oriented; the second focus on “leaving something behind” or “letting go”, we are more adaptive and more protective of what we’ve done. At first we spoke about things we think we believe, in the second set we spoke about things that are actually happening.

It was helpful with self-reflection, just saying things out loud orders things. It was helpful to verbalise “this is what I feel” rather than “just feeling it”. The discussion is like “dissertation therapy”.
• The active participation of students in scholarship-driven authentic learning experiences can facilitate Astin’s (1990) notion of **student involvement**.

• It can also create structure(s) for beginning social science researchers that enable them to **both** enter communities of practice (peripherally) **and also** **create** beginning researchers communities of practice.

• Peer mentoring in undergraduate social science research is a **distinct mode of apprenticeship**; it is powerfully improving.

• **Treated critically, talk** can mediate a deliberative ‘towardness’ in relation to social science undergraduates’ identities as researchers.
Questions/comments to stimulate discussion

• Do colleagues have similar experiences?

• Are there national (& international) comparative opportunities? [j.rand@yorksj.ac.uk]

• Is there an appetite to hear the voices of social science undergraduate researchers?
References


