Understandings and expectations of First Year Undergraduates’ research and inquiry

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EYFE Conference Utrecht 26 June 2018
Our Graduate Attributes refer to ‘Learning and Research skills’

Q1 Does your university say similar things?
‘Time and time again tutors and I have been told “We are in the 2nd year now, why wasn’t I taught this in the 1st year… why weren’t we told how to do this, why weren’t we taught how to research?"

Well, they were in induction but something isn’t quite right there. I am not sure what it is … ‘

(Senior academic School of Humanities)
‘A lot of people want passivity, they want to sit there and take notes ... we have got to challenge that a bit earlier on. I am going to revamp the 1st year module next year ... I’ve got to change the learner’s view of education because a lot of them - it is like they still think they are at school.’

(Senior academic School of Life and Medical Sciences)
Turning visions into reality – a curriculum model

London: UCL Press
Turning visions into reality – a teaching model

Students are participants

Research-tutored
- Engaging in research discussions

Research-based
- Undertaking research and inquiry

Research-led
- Learning about current research in the discipline

Research-oriented
- Developing research and inquiry skills and techniques

Emphasis on research content

Students frequently are an audience
‘The extent to which, and how, \textit{inquiry-based learning} and \textit{undergraduate research} are conceptually and operationally linked is contentious. We suggest that, even if not identical or to be casually confused, they are certainly complementary and mutually reinforcing.’

(Healey and Jenkins 2009: 92)
AIM?
More Y1 UGs learning through research & inquiry

Why is research important in Y1 of a degree?

Research confidence, knowledge & skills

Non-university research experience

How can students be helped to learn about research?

What do students find difficult about research?

What do we mean by research or inquiry?
APPROACH TO THE STUDY

Data collection

- Student interview (n=1)
- Student questionnaires (n=16)
- Student experience team interviews (n=4)
- Student work (n=16)
- Student interviews (n=3)
- Student questionnaires (n=7)
- Student focus group (n=1)
- Student generated images (n=5)
- Student work (n=11)
- Lecturer interviews (n=2)
Q2 In your language and/or experience, are there any clear distinctions between research and inquiry?
Any clear distinctions between RESEARCH & INQUIRY?

This educator had been a mature undergraduate on a degree on which she now worked:

‘For students that struggle … adding another word would make it even more difficult. What do you mean by inquiry? It would be even more complicated … without clear explanation, I don't think they will associate both …When students think about research it can be quite complicated for them to understand the step from researching for learning because they want to know more; research for an assignment, so there's a purpose; and research for a big research project.’
This 1st year photography student was asked during interview for any differences he saw between research and inquiry:

‘I think with research you can see what has come before but with inquiry, it is more of a personal in-depth look where you can actually, for example go to a museum maybe there’s a certain event going on. You say ask around about the work. Research? I would say it’s more, I think of it as more theoretical because it is more like researching into how and what.’
Three months later:

‘One way I do research, is when I go to an exhibition or gallery I try to gather any leaflets, tickets, and other bits of information on the exhibition. I do this as a way of saying I’ve been to it and I have proof.’ (Creative Arts student)
These aspects of their responses suggest that inquiry was linked to asking, questions and knowledge.

**RESEARCH**
- 0 mentions of *asking*
- 1 mention of *question*
- 2 mentions of *knowledge*

**INQUIRY**
- 14 mentions of *ask* or *asking*
- 12 mentions of *questions*
- 6 mentions of *knowledge*
These aspects of responses suggest that *research* was more linked than *inquiry* to specifics, independence and arguments.

<table>
<thead>
<tr>
<th>RESEARCH</th>
<th>INQUIRY</th>
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<tr>
<td>9 mentions of <em>finding out</em> specifics</td>
<td>3 mentions of <em>finding out</em> specifics</td>
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<tr>
<td>6 mentions of <em>finding out</em> independently</td>
<td>0 mentions of <em>finding out</em> independently</td>
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<tr>
<td>6 mentions of <em>backing up</em> arguments</td>
<td>1 mention of <em>backing up</em> arguments</td>
</tr>
<tr>
<td>7 mentions of finding information</td>
<td>7 mentions of asking for information</td>
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Q3: what challenges do your students face in relation to research and inquiry?

- Personal and individual characteristics: n=21
- Skills associated with research: n=46
- Student expectations of research: n=15
“Research is complicated like a twine of metal. Hard to catch either end of it without hurting your head.”
“They don’t have a grasp of what research really, really means. Even though they have been research in the sense of looking for material for their assignments, looking for material to develop their learning, but they don’t quite associate that word, that big word research.”

*Creative Arts Lecturer*

“I think, to start with, they’re a bit scared by the word research.”

*Education Lecturer*
“I always do work in bed, which isn’t good. I get distracted easily and end up doing something different and unrelated.”
“I find that the students come to university sometimes a bit too serious. The idea there is a right way to do things.”

*Creative Arts Lecturer*

“I still, I’m not sure that they still believe that they could be knowledge creators.”

*Education Lecturer*
CHALLENGES: skills associated with research and inquiry

SKILLS ASSOCIATED WITH RESEARCH AND INQUIRY

- Other: 4
- Research skills: 15
- Generic skills: 2
- Academic literacy: 7
- Digital literacy: 3
- Information literacy: 15

INFORMATION LITERACY

- Access: 3
- Limited range: 2
- Evaluating sources: 2
- Searching: 8

University of Hertfordshire
“It’s just an overwhelming amount of information that they don’t have the tools to navigate”

Librarian

“I don’t know, maybe finding all of the amazing websites without having to go through all the rubbish ones?”

Creative Arts student, interview
STUDENTS

“I’m not very good with the online thing”

*Creative Arts student, focus group*

“The thing I kind of struggle with research is the referencing thing”

*Creative Arts student, interview*

STAFF

“I think … probably a common thread is that all of them find it difficult to penetrate academic writing”

*Librarian*

The written stuff is really quite a challenge

*Creative Arts lecturer*

I get more and more people who don’t want to talk about their work in front of people.

*Creative Arts Lecturer*
Headline strategies for developing RESEARCH and INQUIRY

- Understanding where students are in terms of experience and expertise when they start at university;
- Embedding research-like activities throughout the curriculum;
- Modelling research skills with students;
- Emphasising the relevance of research and research skills to students;
- Encouraging the development of researcher attributes.
Q.4 What strategies work well in your setting?
Q5. Might this model help?

RESEARCH AS THEORETICAL PRACTICE
- e.g. questions, problems, methods, creating and analysing data, hypotheses

RESEARCH AS NEW INFO/IDEAS
- e.g. finding, reading, analysing, questioning, arguing

RESEARCH AS THEORY
- e.g. conceptual understanding, critical thinking, theorising
Back to you – questions?

1. Does your university have Graduate Attributes that mention research?
2. In your language and/or experience, are there any clear distinctions between research and inquiry?
3. What challenges do your students face in relation to research and inquiry?
4. What strategies work well in your setting?
5. How useful might the model on the last slide be?