Beyond the curriculum – in search of authentic settings to disseminate undergraduate research.
The case of departmental, school and national undergraduate research conferences

Dr Helen Walkington
1. Why disseminate Undergraduate Research?

2. ‘Authentic’ settings *beyond the curriculum*

3. Presenting at a conference – the benefits for students (GA’s)

4. Implications for the curriculum

5. Key Questions

‘Understanding research and participation in the research process, are central to the needs of undergraduate students in HE’ (Jenkins and Healey, 2007)

BROOKES Institutional commitment to embed undergraduate research pathways through all degree programmes (Huggins et al., 2007)

3.4.4 A research-informed curriculum will enable learners to benefit from collaboration in a research community as producers of knowledge through research-based learning
School of Social Sciences and Law

The Undergraduate Research Experience

• Research cycle
• Mind the gap!
1. Why disseminate UG research?
Could the dissemination process complete the research cycle?

3.7.3 “Learners will have the opportunity to engage in formal and informal learning environments which support students’ autonomy and flexibility in managing their personal learning and promote their ability to engage actively and creatively in learning, research and professional communities both within and beyond the institution.”
**Theoretical framework**

- Undergraduate research is for *all* students
  
  (Walkington & Jenkins, 2008)

- “Every university graduate should understand that no idea is fully formed until it can be communicated, and that the organisation required for writing and speaking is part of the thought process that enables one to understand material fully. *Dissemination of results is an essential and integral part of the research process.*”
  
  (Boyer Commission, 1998: 24)

- In a social constructivist approach students ‘co-construct’ knowledge via **dialogue** with each other and their teacher as part of an academic ‘community of practice’.
  
  (Vygotsky 1978, Lave & Wenger 1991)
2. ‘Authentic’ settings beyond the curriculum to disseminate research

- Exhibitions / Shows
- Consultancy projects (presentation to clients)
- RADAR (podcasts, video)
- Wikipedia pages
- Journal articles
BCUR brings together undergraduate students from across the UK (and beyond) to share research through poster presentations, spoken papers and workshops.

BRITISH CONFERENCE OF UNDERGRADUATE RESEARCH

19th-20th APRIL 2011
University of Central Lancashire, Preston
The right to asylum: a critical analysis of policy & practice

A map of Headington according to the 3 Gunas

The Evolution of Sabkas

Should we buy Organic?

Revealing Culture & History through Art

Human-environment interactions on Exmoor

Adaptations in Dry Land Ecosystem

Impacts of the Gaia Theory on the Western World

What is the Nature of the Plant Species Coposition Growing on the Roman Wall in Silchester?
3. Benefits for students (codes)

• Fun, informal, repetition allowed refinement, depth of discussion
• Critical thinking through discussion
• Feedback – positive, instant
• Sharing work (deep)
• Employability
• Confidence boost
• Critical reflection
• Recognition as researcher
3. Benefits for students

(Graduate Attributes)

- How to create and present an academic poster (*B - research literacy*)
- Confidence – recognition as a disciplinary researcher (*A - academic literacy*)
- Critical thinking and reflection through dialogue, immediate in-depth feedback (*C - critical self awareness & personal literacy*)
- Employability (*SESE overall attribute*)
How to create and present an academic poster *(B - research literacy)*

- ... concise writing, filtering, clarifying the message, empathy for the reader, structure, design, signposting ...

**Expectations:**
- Students researched how to produce academic posters
- Some met as a group to critique and give feedback on each other’s posters before the event

‘I found making the poster rewarding as I could summarise my dissertation in a few hundred words which brought the project into focus’
‘negotiating rigour and academic conventions with an eye catching and powerful message’

‘Learning the right style’ (poster as an academic writing style)

‘I've done a poster presentation before in the undergraduate programme, but it was to an audience that I knew really well, in a controlled environment that I was completely familiar with, with an academic that I knew, it was very much routine, whereas here every time I spoke to somebody I gave a slightly different approach to it, like I explained it a different way, depending on the knowledge they already had’
‘I haven’t done a conference before, when people were coming up I wasn't really sure if they were going to look and like admire the posters and then walk off, or whether the were going to stand and want an in-depth discussion. **Nine times out of ten they wanted an in-depth discussion** and it was nice to be able to show off your research as well, instead of people just going up and saying 'oh that's nice' and you're thinking 'I've just spent four months on that', it was quite nice that **somebody actually wanted to know more about it**, so that you really got to sort of tell them exactly what it is you did.’
Confidence – recognition as a disciplinary researcher
(A - academic literacy)

"that conference was fantastic … staff in the department recognised me as a researcher, as a result I was a guest speaker in one of the geography modules, I met with a photo-journalist, I’ve gained a lot of key skills which are important for work as well."

"it has been nice just talking to people in a non-lecturer/student capacity, everyone was very much on equal terms, yeah that was the first time that has happened."
‘the conference enabled me to be recognised as a student researcher who is interacting with their subject in a positive way’

‘being able to talk with academics from different disciplines meant I felt that the research of undergraduate students was being well recognised’
Critical thinking and reflection through dialogue, immediate in-depth feedback (C - critical self awareness & personal literacy)

‘I think it allows some sort of self-criticality, you are able to see what other people have produced, and you compare yourself to other people … It has opened up areas of thought for me that I wouldn’t have considered otherwise.’

‘It enabled you to become objective, to analyse your own work, to re-read your work.’
‘Normally only two or three people see your dissertation, so being able to share your research in this way makes all the hard work worthwhile.’

‘It’s amazing to see other people’s work presented like this.’

‘It’s a dual feedback system, the students coming to the conference get ideas about what they want to produce, and also as someone presenting it is important for me to see how people studying for the same course as me interact with my topics’
‘the unknown audience enhanced employability skills like dealing with people you don’t know’

‘I saw it as something that would be good for my CV. The job I'm going into I'm going to be doing a lot of presentations and meeting a lot of unfamiliar people and to a certain extent selling my ideas and my research, so it was sort of good experience for me.’

‘One of the lecturers said you could suggest this to local councils - I hadn’t thought about its real implications, I made this idea that people could take on but I didn’t really think about them being taken on by councils until that conversation.’
• ‘I know one of the jobs I’m going for they want you to be able to advertise events within the local community so being able to make, you can make handouts that way, a poster that way- I wouldn’t have known how to do it before this, I would have automatically gone to publisher, but this way I’ve learnt a completely different way of using power point.’ (Digital literacy)

• ‘when you are studying, you are doing your work, you are very narrow minded and quite focused on what you are doing and so you can easily lose track of the bigger picture’
4. Implications for the curriculum

- Conferences provide a ‘real world’ / authentic research dissemination opportunity for undergraduates
- Timing can provide dialogic feed-forward

“Students need more things like this, especially before their dissertation. More students should come. This should be in all schools.”

- Scaffolding within the curriculum (e.g. how to write an academic poster, in-class poster sessions / presentations) can prepare students for research dissemination beyond the curriculum
School of Social Sciences and Law

GA: Research literacy – curriculum implications

Year 3
S2 – CUR
S1 - Individual journal articles written for GEOverse

Year 2
S2 - Student teams present preliminary findings for “feedforward.”
S1 - Students frame own questions for group data collection in the field

Year 1
Desktop research to try to answer provided research questions
Key finding

Students require structured experiences to ‘scaffold’ their learning, so that they have the confidence to share their research findings.

- CLOSE THE RESEARCH GAP through ‘dissemination’
- If we are committed to embedding undergraduate research we must also commit to embedding the teaching of dissemination skills in our curricula.
- Strong student desire for dialogic feedforward
- Conference presentation is an efficient way of achieving dialogic objectives (module /school / faculty / BCUR)
- CUR can develop multiple GA’s
- GA require a different approach to pedagogy which gives greater responsibility for learning to students.
5. Key Questions

• Qu 1: Should we adopt URC as a model across the university? [are there barriers?]

• Qu2: Should conferences include postgraduate students (and be run by them) or dedicated for UR? [GA / postgrad A]

• Qu3: Are student conferences most effective at departmental, faculty, university or national level? [selective / for all]

• Qu 4: Could conferences be part of our community engagement strategy? [who should we invite?]
Acknowledgements

Funding:

• Journal GEOverse (Brookes Teaching Fellowship, HEA GEES Subject Centre, Reinvention Centre Fellowship)

• URC (BSLES, Reinvention Centre).

• Undergraduate researchers, postgraduate reviewers, Web & Wiki team
References


