Students as Co-Producers in Undergraduate Research
The Undergraduate Research Scholarship Scheme

A Co-Created Approach to Transforming Research

Przemek Komarnicki
URSS Student

Dr Ruth Ayres
Dean of Learning Enhancement
URSS Chair
Learning Enhancement

Chris Wilson
Learning Experience Manager
URSS Coordinator
Learning Enhancement
WELCOME to #URSS2017

- UG research in Higher Education
- What is URSS and how does this operate?
- Benefits to staff and students
- The URSS experience
- EXERCISE: Design your own UG Research Scheme
Undergraduate research in HE

• Is research hierarchical?
  – Do Undergraduate students do Coursework whilst Postgrad’s and Academics do Research? (Bowers & Parameswaran 2013)
Undergraduate research in HE

• Is research hierarchical?
  – Do Undergraduate students do Coursework whilst Postgrad’s and Academics do Research? (Bowers & Parameswaran 2013)

• Is empirical study of UG research rigorous enough?
  – Too much focus on self-report surveys and not enough on measurable gains in research skills and capabilities? (Linn et al. 2015)

• What is undergraduate research for?
  – Is UG research for knowledge, communication, teamwork, leadership? (Carter et al. 2015)

• Why do research skills matter?
  – Experiential study through Undergraduate research creates high impact learning (Zimbardi & Myatt, 2012)
Typologies of research-based pedagogy*


**Typologies of research-based pedagogy**

<table>
<thead>
<tr>
<th>Research Active</th>
<th>Research Informed</th>
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<tbody>
<tr>
<td>Research-Orientated</td>
<td>Development of inquiry and imagination, research techniques and abilities</td>
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<tr>
<td>Research-Based</td>
<td>Applied and student-led research activity</td>
</tr>
<tr>
<td>Research-Informed</td>
<td>Pedagogy and curriculum underpinned and informed by research</td>
</tr>
<tr>
<td>Research-Led</td>
<td>Close connection to current disciplinary research and the teacher's disciplinary practice</td>
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**Research Informed**
### Research-orientated
Learning and teaching activities focused on **development of research techniques and skills of enquiry**

### Research-informed
Learning and teaching strategies **underpinned and informed by relevant pedagogic research** and curriculum mapped directly connected to relevant disciplinary research and professional benchmarks

### Research-based
Learning activity centred on **applied and immersive student-led research activity**

### Research-led
Curriculum and pedagogy **derived from or closely connected to current research in the subject** and/or with the teacher’s disciplinary research/practice. **Curriculum designed to support research**
Why URSS?: Undergraduate research in HE

Complex problem solving, Critical Thinking and Creativity identified as the top 3 skills for employment by 2020 (2016)

“Businesses look first and foremost for graduates with the right attitudes and aptitudes to enable them to be effective in the workplace” (2015)

“Half of employers say new employees struggle with teamwork and problem solving” (2017)

Gold TEF award dependent on students being “frequently engaged with developments from the forefront of research, scholarship or practice” (2017)
What is URSS and how does this operate?
URSS 2013-2017

- “Live” Research Brief
- 6-10 weeks’ FT (or PT equivalent)
- HEAR / CV / Derby’s Futures Award
- Dissemination opportunity – University’s Learning & Teaching Conference

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Student Led Applications</th>
<th>Staff Led Applications</th>
<th>Staff-Student Joint Applications</th>
<th>Scheme Total</th>
<th>Number of awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-14</td>
<td>0</td>
<td>32</td>
<td>4</td>
<td>36</td>
<td>27</td>
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<tr>
<td>2014-15</td>
<td>2</td>
<td>49</td>
<td>0</td>
<td>51</td>
<td>39</td>
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<tr>
<td>2015-16</td>
<td>17</td>
<td>42</td>
<td>3</td>
<td>62</td>
<td>38</td>
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<tr>
<td>2016-17</td>
<td>31</td>
<td>28</td>
<td>n/a</td>
<td>59</td>
<td>40</td>
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<tr>
<td>Scheme Total</td>
<td>50</td>
<td>151</td>
<td>7</td>
<td>208</td>
<td>144</td>
</tr>
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</table>
URSS projects and timeline

1. URSS Call for Proposals
   - Open to students and staff
   - Cross-college review panel
   - January

2. URSS Panel Review
   - Triggers funding release
   - March

3. Ethical approval
   - Fieldwork, lab work, desk-based
   - April

4. Research activity
   - Triggers funding release
   - June

5. Progress report
   - Annual Learning & Teaching Conference
   - July

6. Conference presentation

7. Future publication
   - Student Research Journal
   -

Cross-country review panel
Benefits of URSS

95% - Would actively recommend URSS to other students

Developing research proposals

Experience life as a researcher

Developing specialist knowledge and research skills

Fresh research perspectives

Extending research capacity

Opportunity to present and publish research

Transferable skills and Employability

100% “Helped prepare me for final year Independent Study”

78% - Directly influenced subsequent studies...

66% - Have active plans to publish research

Pipeline for PGR and PGT

Extended collaboration

Aligning research and the curriculum

Staff led

Student led

STAFF

STUDENTS
Project insights - Przemek Komarnicki

- Getting involved with URSS
- Working with academic staff
- Managing the research
- Key research findings
- Preparing to present
- Impact on studies
**The student experience**

“I learnt how to work within a team, designate roles and collaborate to get things done in a short amount of time. Also how to articulate language to discuss our project with people.”

“It was a great experience that gave an insight into the world of research. Up to this point my university career has been very theoretical and classroom based, with the exception of internships, so it was good to step away and use the theory in an applied manner.”

“I gained skills within researching, writing and presenting work in correct formats, how to convert data into a visual aid and how to present work to other scholars.”

“Great experience to work on real research with a professional research team, great feeling to get financial acknowledgement in addition to the research experience and acknowledgement for one’s efforts by the team.”

“I feel I have more confidence in my ability to design an appropriate experiment, this has helped me with my IS project, and also calms my nerves about having to conduct research at postgraduate level, which is where I aim to go next.”

“Insightful and exceptional.”

“The URSS is a fantastic opportunity for students to research a topic of interest, resulting in the acquisition of a vast array of skills, some of which include: critical thinking, problem-solving and decision-making.”

“Doesn’t have to become an experience that influences your approach to your study and career - but probably will.”
Exercise

1. Select scheme approaches
   - Select an approach or devise an original approach using the cards

2. Discuss and refine scheme
   - Think carefully about the institutional context

3. Devise a name for the scheme
   - Think about identity

4. Share your scheme!

Design your own scheme

Aims

- To explore the distinctiveness of funded research in different HE contexts;
- To explore different ways of working with students;
- To devise an original UG research scheme.
Exercise
Design your own scheme

15 mins discussion

1. Who is involved?
   - All UG students?
   - Stage 1, 2 or 3 only?
   - Students only?
   - Students and staff?
   - External stakeholders?
   - Other?

2. How is the scheme funded & launched?
   - Central scheme?
   - Devolved scheme (College/Faculty level)?
   - Launched by staff for students?
   - Launched by students for staff?
   - Collaborative?
   - Budget?
   - Other?

3. Application process
   - Paper-based application?
   - Competitive pitching event?
   - Central applications?
   - By nomination/as prize?
   - Devolved applications (to funded staff projects)?
   - How much funding?
   - Other?

4. Research activity
   - In the field?
   - In the lab?
   - Live projects?
   - Discipline-based, interdisciplinary or extradisciplinary?
   - External projects?
   - When in the teaching year?
   - Short/intensive or longer term?
   - Other?

5. Sharing research insights
   - External conferences?
   - Internal conference?
   - Student-led conference?
   - Collaboratively between HEIs?
   - Journal publication?
   - Other?
If you want to build a ship, don't drum up people together to collect wood and don't assign them tasks and work, but rather teach them to long for the endless immensity of the sea.”

- Antoine de Saint-Exupéry

THANK YOU
Any Questions?

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E: URSS@derby.ac.uk | W: www.derby.ac.uk/urss
Bibliography


