Naming every contribution: Sheffield's approach to enabling fair(er) attribution practices

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What is CRediT?



The Contributor Role Taxonomy (CRediT) is a controlled vocabulary of types of contributions to a research project.

It is used by scholarly journals to provide an indication of what each contributor did - either in an author list or in a Contributor Statement.

It currently comprises 14 separate roles.

https://credit.niso.org/

https://niso.org/publications/z39104-2022-credit

CRediT roles

Conceptualization

Data curation

Formal analysis

Funding acquisition

Investigation

Methodology

Project administration

Resources

Software

Supervision

Validation

Visualization

Writing - original draft

Writing - review and editing

https://credit.niso.org/

Context/ framing

- Fair attribution practices are a concern for those invested in research integrity, open research, and equity in HE

- Levers:
  - Technician Commitment
  - REF PCE/ SPRE
  - New UKRI research data policy mandate:



Providing acknowledgement and recognition

To support recognition, visibility and citation, the contributions of those involved in generating, processing, analysing and curating data and research-relevant digital objects must be appropriately acknowledged and recorded in dataset metadata, research publications and other research outputs.

Clear and permanent references to contributions should be provided in publications, for example using a recognised taxonomy such as the Contributor Roles Taxonomy (CRediT).

Developing fair attribution at Sheffield

2019-2021

- High-level aspirations to create an ‘open research culture that values a diverse range of contributions’ were included in both the University’s strategic plan to deliver ‘Research Excellence’ and the University Statement on Open Research.

2023/2024

- Technician Commitment Action Plan and Research Culture Action Plan include a commitment to ‘Promote the use of CRediT for agreeing authorship and contributions to research papers’ (TC Action Plan 2.4).
- Implemented functionality to record CRediT roles (self-deposit) in institutional publications repository (Symplectic Elements).

2025

- Published new University-level guidance on CRediT: https://sheffield.ac.uk/openresearch/home/contributor-role-taxonomy-credit
- The Good Research & Innovation Practices Policy (2025) states that staff should receive fair credit for contributions and that contributions should be stated explicitly e.g., using CRediT.

Developing fair attribution at Sheffield

- However, while the University now had a strong strategic alignment around fair attribution practices, this had not been accompanied by communication and engagement activities to raise awareness and/or socialise good practice.

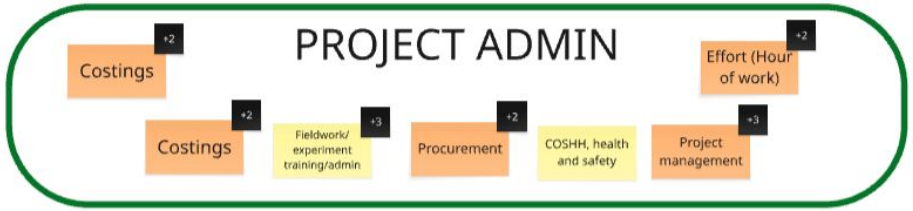
- Two-year programme of activities led by the Library aimed to:
    1) increase the recognition and attribution of the contributions of research professionals, including Technicians, data stewards, and librarians;
    2) increase the diversity of CRediT contributor roles recorded in the institutional publications repository; and, in the longer term,
    3) increase the visibility and dissemination of diverse research outputs (DOTs) such as workflows, software, datasets, data visualisations, and other research artefacts authored or co-authored by Research Technical Professionals.

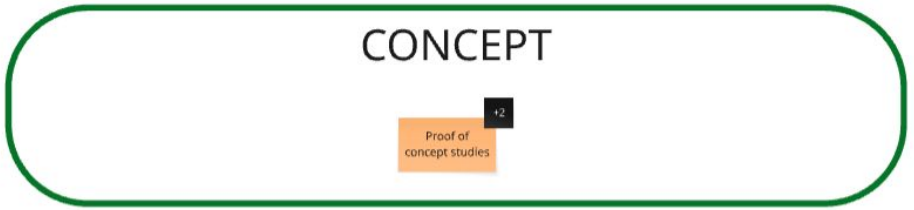
- This was ambitious! 🫠

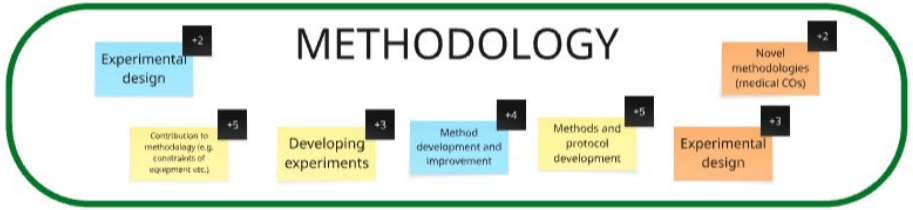
Co-production workshops (2025)

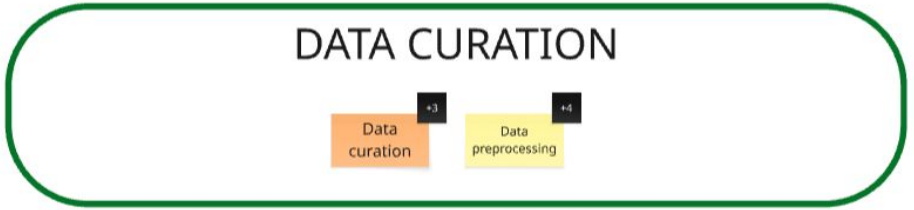
- Two co-production workshops explored Technicians' experiences of attribution and recognition practices, and tested the utility of CRediT for recognising Technical contributions to research.
    - Designed and facilitated by MoreBrains Cooperative Ltd
- Pilot with Technicians ("clearest ask and the greatest need") > plan extend later across other communities of Research Technical Professionals
- Aims:
    - discuss how and/or whether Technicians are currently recognised for their contributions to research
    - identify types of Technical contributions to research (for attribution as an 'author' and/or 'contributor');
    - map these contributions to the 14 CRediT roles (to enhance our new webpage guidance on using CRediT with 'real life' examples of Technicians' contributions to research at Sheffield);
    - identify Technical contributions to research that do *not* map to the CRediT roles.

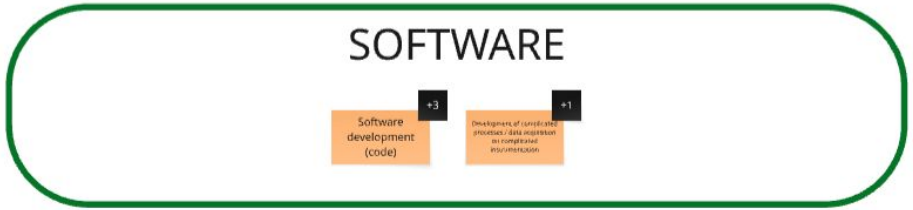
Technical contributions to research

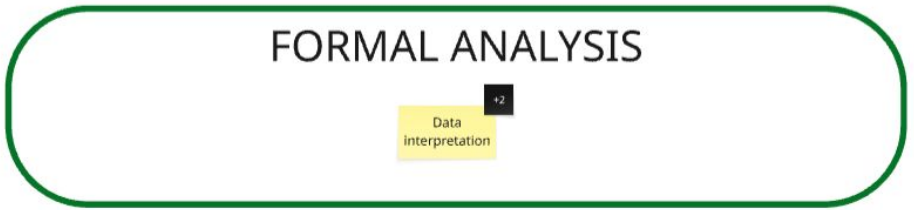




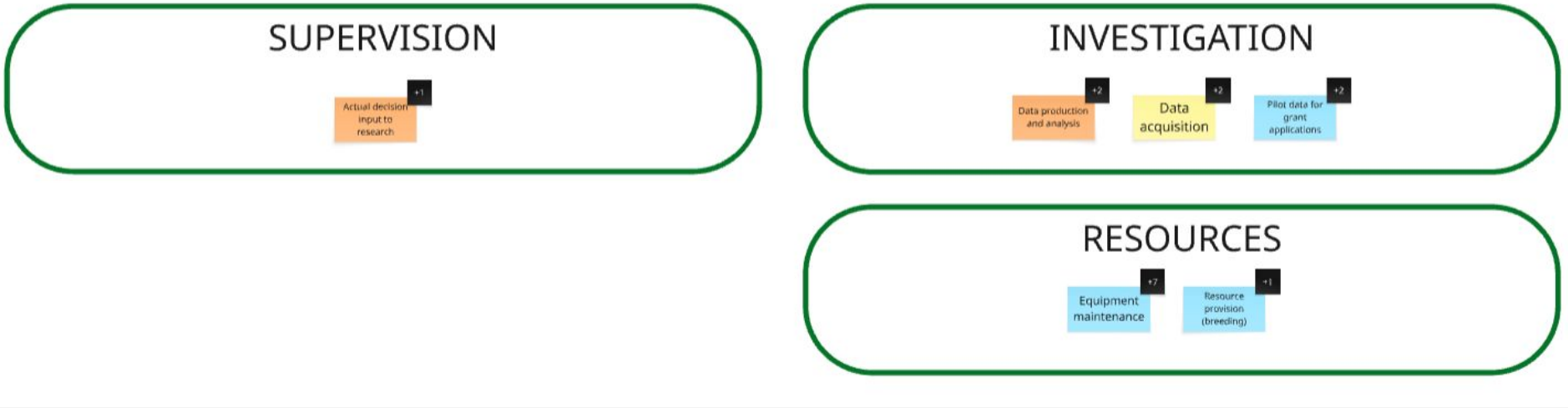




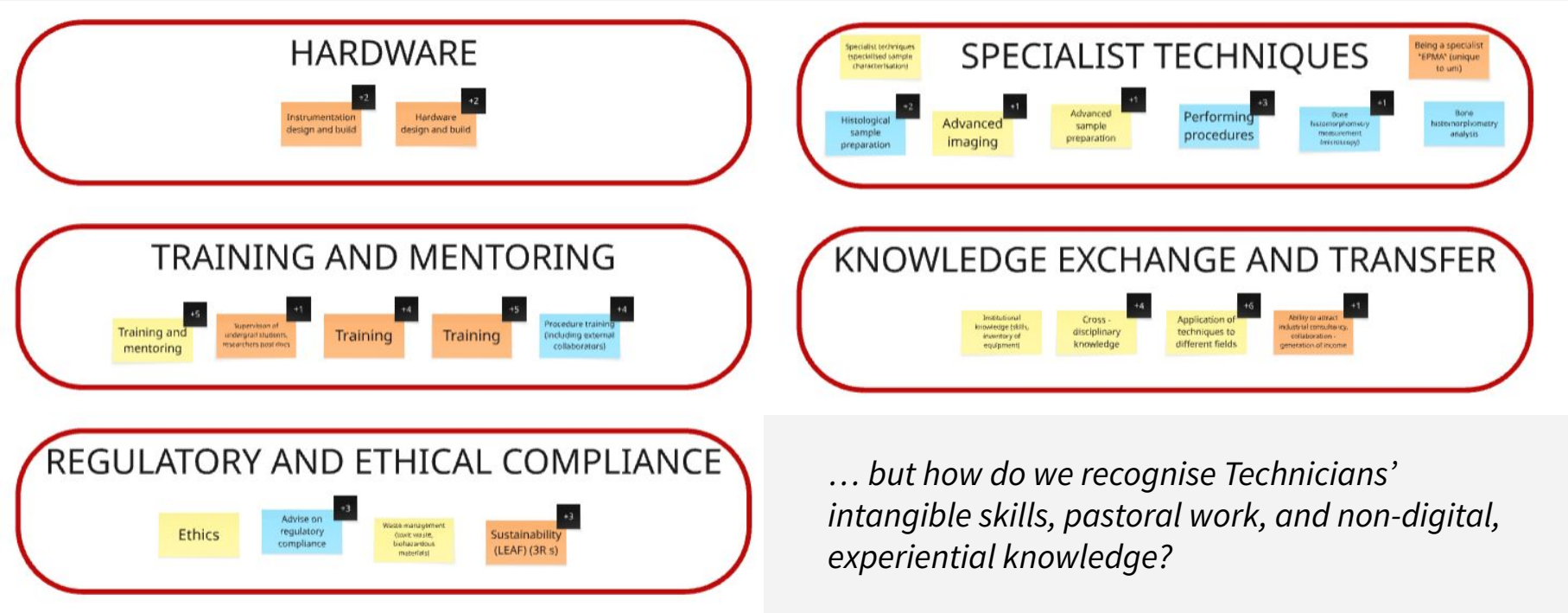




Technical contributions to research



Technical contributions to research



… but how do we recognise Technicians' intangible skills, pastoral work, and non-digital, experiential knowledge?

Stakeholder interviews (2026)

- Commissioned Research Consulting Ltd to conduct 17 interviews in May 2026:
  - 7 Technical staff (Science, Engineering, and Social Sciences)
  - 14 academic staff - Senior Lecturer to Professor (all 5 Faculties and AMRC)

- Participants were asked about:
  - their experience of working with different types of contributors on research projects and outputs;
  - their experience of formal acknowledgement of research contributors/ contributions in research outputs, and how this has been approached;
  - their familiarity with CRediT and its perceived utility in their disciplinary context;
  - contributions to research that regularly go unrecognised;
  - disciplinary, cultural, or structural factors that might make broader adoption of fairer attribution practices challenging; and
  - what better practice might look like at Sheffield and what would help bring it about.

Findings

- While Sheffield has good strategic alignment on CRediT, awareness and practice varies on the ground > socialisation still needs work.
- Technical and academic staff broadly agree on the definition of an ‘intellectual contribution’, but can diverge when discussing who warrants authorship on a paper (academics tended to focus more narrowly on contributions to the written output rather than the research project/ process).
    - *“most people think that they’re correct in what they think authorship means and includes, but most people wouldn’t agree with each other.”*
- Conversations about authorship, contributorship, and acknowledgement happen late in the process; Technical contributions are not recorded in a timely way, or are forgotten.
- Recognition varies across Schools and is very dependent on senior leaders.
    - Formal recognition of Technical contributions more the norm in EU.
- Academics are being asked by journals to complete CRediT information as part of manuscript submission workflows, but journals are not always clear how CRediT should be used.

Findings

- There's a lack of understanding about Technical job titles, career pathways, and how publications can be meaningful to Technical colleagues.
    - However, academic colleagues were keen to change practice if it was meaningful and beneficial to Technicians > *make it personal*
- CRediT roles are broadly not suitable for A&H, BUT:
    - there's a clear use case for advocacy, training, and wider adoption in the Faculties of Health, Engineering, and Science, and some schools in SS;
    - A&H and SS colleagues still want and need conversations about contributorship (many are concerned about power imbalances entrenched in habitual/ normative/ unspoken authorship conventions);
    - A&H have models of distributed and collaborative creation that are useful to think with (esp. Diverse Output Types [DOTs]/ non-text outputs where there is no 'author' per se).
- Research is changing, and becoming more interdisciplinary, international and collaborative; this brings risks as well as opportunities. CRediT can offer clarity and provide a jumping-off point for conversations around authorship, contributorship, recognition, and attribution.

Recommendations

- Clear, University framework for conversations around authorship and contributorship:
  - Create an environment where conversations around attribution are normalised and happen early;
  - When Technicians/ RTPs are recruited to projects, set out how their contributions will be recognised.
- More School-specific, bespoke training and guidance on fair attribution, CRediT, Contributor Statements, and Acknowledgements (authorship norms and kinds of contributions vary between disciplines).
- Disseminate/ scale-up good practice:
  - Showcase research groups where Technical attribution is the norm;
  - Create relevant, School-specific case studies, including examples of generous leadership.
- Always have a conversation; don't assume:
  - Respect Technicians' agency and judgement;
  - Close the loop: if you CRediT a Technician, let them know!

Scale up good practice!

Credit: **Hannah Briers** (Deputy Operations Manager) and **Graeme McAllister** (Head of Technical Operations) - Department of Chemistry & Technician Commitment Delivery Group, University of York

> Royal Microscopical Society (RMS) Core Facilities Publication Policy and Imaging Facility Publication Guidelines: https://www.rms.org.uk/resources/publication-policies-and-guidelines.html

ACTION: Workshop these guidelines locally and draw up bespoke facility/ lab guidelines for crediting contributions to research.

Example scenarios with baseline recommendations:

Sample Preparation	Fast, routine sample preparation with standard protocol.	Simple acknowledgement
	Development of new sample preparation protocols. Optimisation of existing protocols for specific samples.	Inclusion of specific facility member on author list
Image Acquisition	Training of users to acquire images themselves. Simple acquisition of raw data.	Simple acknowledgement
	Operational image acquisition with input and decisions dependent on expertise. Design or re-design of experimental conditions.	Inclusion of specific facility member on author list
Image Analysis	Recommendation of analysis software and tools. Basic data analysis help and advice.	Simple acknowledgement
	Constructive data analysis and interpretation. Creation of complex custom image analysis tools.	Inclusion of specific facility member on author list

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“Thank you” to the Technicians of the University of Sheffield



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