A Study of Research Technical Professionals Working in Arts and Humanities Research in the UK

January 2023

UKRI Arts and Humanities Research Council

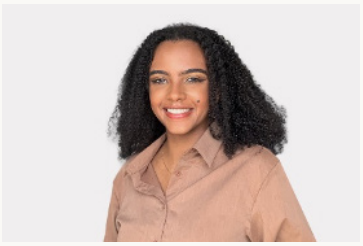
MELIAN DIALOGUE
RESEARCH REINVENTED

Authors

This report was jointly prepared and co-authored by:

Abdullah, Hiba

Perry, Hannah



Shallal, Dina

Head, Cerys

Lungescu, Dan

Mitchell, Kathryn

In line with some of the recommendations in this report, we make no distinction between the writers, researchers, data analysts, research assistants or graphic designers. In this report, every contribution, regardless of skill set, is valid and indistinguishable.

Suggested citation (Oxford):

Abdullah, H., Perry, H., Shallal, D., Head, C., Lungescu, D., Mitchell, K., et al. (2022). (rep.). *A Study of Research Technical Professionals Working in Arts and Humanities Research in the UK*, pp. 1–104. London, England: Melian Dialogue Research.

ISBN: 978-1-915979-00-1

Cover by Melian Dialogue Research.

MELIAN DIALOGUE
RESEARCH REINVENTED

www.meliandialogue.com

Table of contents

Executive Summary

MELIAN DIALOGUE
RESEARCH REINVENTED

Executive Summary

Aims and Objectives

The Arts and Humanities Research Council (AHRC) commissioned Melian Dialogue Research Ltd to conduct a study to better understand the Research Technical Professional (RTP) community's profile and contributions to arts and humanities research.

To achieve this, we examined RTP numbers, demographics and experiences throughout Higher Education Institutions (HEIs), the Galleries, Libraries, Archives and Museums (GLAM) sector and creative industries. In this report, we investigated the breadth of RTP roles and identified the contributions of RTPs to the arts and humanities research landscape. Their jobs/titles ranged from curator, archivist, User Experience (UX) or User Interface (UI) designer to technician, professor and head of department, to mention a few. Finally, we have provided recommendations for AHRC emphasising how RTPs' visibility, recognition, career development and sustainability can be supported within the arts and humanities sector.

AHRC will consider these recommendations to produce new web content and guidance which could contribute to delivering the four pillars of the Technicians Commitment by the sector and explore the viability of expanding the funding opportunities currently accessible to RTPs in the arts and humanities, such as the AHRC-RLUK Professional Practice Fellowships.

AHRC's working definition of a Research Technical Professional is:

> 'anyone who brings indispensable specialist technical skills, at an advanced level, to a research project, i.e., professional skills that are necessary for the development, delivery and completion of the project. Depending on the project, Research/Academic Library professionals, Information systems specialists, Sound engineers, Digital technicians, Conservators, Information systems and software engineers, Archivists, Animators, Illustrators, Graphic designers, Conservators, Curators, and others may qualify for inclusion. AHRC encourages a holistic approach to the research ecosystem.'

This definition has been developed as part of AHRC's engagement with UKRI's Action Plan as a signatory of the Technician Commitment.[1] UKRI has been a signatory since

[1]https://www.ukri.org/wp-content/uploads/2021/02/UKRI-040221-

2020 and published a Technician Commitment Action Plan in February 2021. In alignment with this Action Plan and with the AHRC 2022-2025 Strategic Delivery Plan[2], AHRC pledged to support a 'breadth of roles' as part of the 'world-class people and careers' objective, this commissioned study is part of AHRC's ambition to increase our understanding of the roles, skills, and career development needs of RTPs who contribute significantly to research in the arts and humanities.

Methodology

To deliver the study, we conducted a literature review to explore the findings of previous studies analysing the RTP community within and beyond the arts and humanities research landscape and review the policies and procedures of selected organisations that employ RTPs. The most significant component of this study was the community engagement programme to develop insights into the RTP community and their work contributing to the arts and humanities research landscape. The community engagement activities contributing to the evidence used in this report were:

- An online survey with 170 responses[3]
- Seven one-hour online focus group sessions[4]
- 13 one-hour in-depth interviews[5]

Main Findings and Insight

Survey

A survey was undertaken with 170 responses.[6] Questions covered equality, diversity and inclusion (EDI), demographics, perceptions as an RTP, recognition, career development and sustainability. The complete questionnaire can be found in Appendix F. One of the findings was the range of RTP job titles in use. A word cloud, see figure below, depicted the variety and frequency of RTP roles, and 'Curator' was the most typical RTP title represented. A complete list of participant profiles has been inserted in Appendix G.

[2] https://www.ukri.org/publications/ahrc-strategic-delivery-plan/
[3] The composition of the participants in the survey can be found in Fig 1. Titles of RTPs represented by word cloud
[4] Job titles, academic background and highest qualifications for the participants in the focus group can be found in Appendix G.
[5] Ibid
[6] The survey method was amended halfway through the data collection to increase the number and diversity of respondents. As a result, the initial survey comprised of 38 questions and 71 responses while the amended survey had 39 questions and 98 responses. Partial or incomplete responses have not been included in these figures.

Figure. 1 Titles of RTPs represented by word cloud

Identifying as an RTP or Technician

In the survey results, 54% of respondents identified as an RTP. However, the focus groups and in-depth interviews had a mixed response, with some identifying with the term but with caveats. Overall, focus group and in-depth interview participants did not immediately recognise the term but acknowledged that they identified with the full definition once they read it or it was read out to them. Notwithstanding, when the alternate term of 'Research Practitioner' was discussed, very few objected to that characterisation. Concerning the term 'Technician', quite a few respondents felt it generated an inferior status in academia and even suggested the arts and humanities community should move on from this terminology. The main findings and insights in the report are structured around the four key pillars of the Technician Commitment, namely, 1.) Visibility, 2.) Recognition, 3.) Career Development, and 4.) Sustainability.[7]

Technician Commitment Pillar One: Visibility

Most responses recognised the need for increased visibility for RTPs in the arts and humanities community. Some respondents used visibility and recognition interchangeably because the outcome was the same for their careers. Co-authorship and recognition for contributions was the most repeated concern raised by RTPs, with some notable examples listed for illustrative purposes.

Technician Commitment Pillar One: Recognition

Survey results indicated that two-thirds of respondents felt their contributions were recognised by their colleagues and peers, institutions and by students at the institutions they worked for. Such an acknowledgement dissipated when participants were asked about financial and professional recognition. Both areas appeared to have significant shortcomings, described in the main body of this report

[7] The Technician Commitment, published in May 2017[1], encourages research organisations to recognise, value, and include RTPs' contributions to research across sectors.

using quotes from participants. Participants felt that pay and compensation hampered recognition as RTPs and more could be done to improve both. However, professional recognition took many forms, and most participants suggested how this could be enhanced.

Technician Commitment Pillar One: Career Development

Findings from survey results, in-depth interviews and focus groups were consistent regarding career development. RTPs felt quite strongly that career development was severely limited within their specialism; the only opportunities were in academia or management. The need to 'credentialise'[8] was also a contentious issue because of the hurdles they had to overcome in obtaining a doctorate while pursuing their career. Some suggestions were made that AHRC should consider these hurdles, outlined in a separate Recommendations report. Some include developing co-authorship guidelines, creating specific awards and funding schemes for RTPs and making Principal Investigators (PIs) responsible for their team's professional progression.

Technician Commitment Pillar One: Career Development

Sustainability[9] was tied closely to job security, producing the same tone of responses as career development. RTPs felt they had little job security, and some accounts illustrated that point quite well. This pillar had a mixed response in that many participants felt insecure about the length of contracts they were often susceptible to as RTPs but, at the same time, acknowledged that academia offered the kind of employment stability that was hard to find in the arts-related sectors in the commercial space.

[8] The word 'credentialise' has various meanings but in the context of this report refers to the acquisition of academic credentials in order to establish validity or credibility amongst one's peers. From the interviews, it was clear that 'credentialising' referred to obtaining a doctorate of any description. An alternative way to view this term is the acquisition of more academically focused qualifications.

[9] Sustainability in this context refers to long term contractual job security of RTPs.

List of Figures

List of Tables

List of Abbreviations

BAME	Black and Minority Ethnic
CoI	Co-investigator
CPD	Continuous Professional Development
GLAM	Galleries, Libraries, Archives and Museums
GVA	Gross Value Added
HEI	Higher Education Institutions
HESA	Higher Education Statistics Agency
LFS	Labour Force Survey
HERA	Higher Education Role Analysis
ISC	Industry Strategy Council
Non-HEI	Organisations beyond the Higher Education sector
NTCD	National Technician Development Centre
OECD	Organisation for Economic Co-operation and Development
PI	Principal Investigator
R & D	Research and Development
REF	Research Exercise Framework
RLUK	Research Libraries UK
RTP	Research Technical Professional
UI	User Interface
UKRI	UK Research and Innovation
UX	User Experience

Who are research technical professionals in the arts and humanities?

MELIAN DIALOGUE
RESEARCH REINVENTED

1. Research Technical Professional Community Characteristics

1.1 Definitions

This report will refer to Research Technical Professionals (RTPs) and technicians using the terms interchangeably. Our starting point when undertaking the study was the AHRC's working definition of an RTP:

"Anyone who brings indispensable specialist technical skills, at an advanced level, to a research project, i.e., professional skills that are necessary for the development, delivery and completion of the project. Depending on the project, Research/Academic Library professionals, Information systems specialists, Sound engineers, Digital technicians, Conservators, Information systems and software engineers, Archivists, Animators, Illustrators, Graphic designers, Conservators, Curators, and others may qualify for inclusion. AHRC encourages a holistic approach to the research ecosystem."[10]

AHRC's working definition has been developed as part of AHRC's engagement with UKRI's Action Plan as a signatory of the Technician Commitment. The Technician Commitment is a university and research institution initiative aiming to ensure visibility, recognition, career development and sustainability for higher education and research technicians across all disciplines. UKRI has been a signatory since 2020 and published a Technician Commitment Action Plan in February 2021. In alignment with this Action Plan, this commissioned study is part of AHRC's ambition to increase their understanding of the roles, skills and career development needs of RTPs who contribute significantly to research in the arts and humanities.

1.2 An Overview of current research on Research Technical Professionals

Our literature review did not identify any report which would focus on the broad community of Research Technical Professionals in the arts and humanities in the UK. The RLUK study sheds light on just one of the sub-groups of this broad and diverse community. Research Technical Professionals (RTPs) in arts and humanities are essential members of the UK's Research and Development (R&D) community. They empower researchers across many disciplines, providing the technical expertise to conduct projects in the academic and private sectors. It is often a misconception not recognised by many in academia, but RTPs are or can be researchers. This

[10] https://www.ukri.org/wp-content/uploads/2022/07/AHRC-210722-ResearchFundingGuide.pdf, pg. 54

literature review aims to understand the arts and humanities RTP community and identifies issues recurrent across various job profiles. Several examples of RTPs careers are discussed below, with further insight into research libraries derived from focus group sessions and in-depth interviews with participants in this study.

Based on our study, technicians in the arts and humanities sector face limited career pathways and the inability to move quickly between academia and other sectors. Furthermore, findings from community engagement show that the work of RTPs suffers from a lack of investment in research facilities in the academic and private sectors. Recommendations from various reports are included in this review. They provide ways to address technicians' issues, such as professional recognition, limited career paths, lack of support, discrimination and inequalities in the workplace. Creating a more inclusive research culture is necessary for the UK to expand its potential as a country offering world-class education and strengthening its global reputation and presence in international markets.

The UK Higher Education technical research community consist of a highly skilled workforce with a varied range of expertise, supporting essential duties across universities and research institutes.[11] Defining the technical community in general, particularly as part of the arts and humanities research landscape, is challenging due to this diversity. Furthermore, technical community members working on arts and humanities research projects often do not identify themselves or are not recognised by their employers as RTPs. Examples include curators and research librarians who responded to the survey and gave feedback in the focus groups and in-depth interviews. Curators were the largest group of respondents in the survey conducted for this study.

In response to the issues that technicians across the research landscape face, the TALENT Commission produced a diagnostic report. It aimed to understand the community's needs better, extend across all disciplines, and provide case studies and recommendations for future improvement. The report surveyed 1766 responses from 90 UK universities and 16 research institutes, focus groups with UK technical managers and staff, and a survey of students and non-technical staff.[12] This data was used to understand the perception of the role and recognised value of technicians. Through this data, the Commission has identified that the technician community has a pivotal role in research success,

[11] UKRI. The TALENT Commission, Technical Skills, Roles And Careers In UK Higher Education And Research (MI TALENT, 2022), 31.
[12] UKRI, The TALENT Commission, 14.

but their contributions are not appropriately recognised. The report showed that the UK HE technical workforce numbers reported for 2018/19 was 15,840, with just 840 or 5.3% belonging to the arts and humanities sector. However, one must qualify this as it was not clear if these numbers were based on those with permanent contracts, given that many RTPs disclosed that their contractual arrangements were often relatively short, fixed-term contracts. The report was broad in scope and did not focus on the arts and humanities sector.

Most of the technical workforce who took part in the TALENT study felt undervalued and unrecognised by senior leadership and human resources (HR) within universities. The report showed that 66% of the 1766 respondents completed an academic degree at level 6 before employment. However, the TALENT Commission Report identified 'lack of support' and 'lack of funding' from their institutions as critical barriers to their success as a technician.[13] Technicians considering leaving their careers underlined inequalities, bias, discrimination, and bullying as key drivers. Furthermore, there is a lack of succession planning, which results in an increased workload for technician staff once a senior technician retires.

Regarding their abilities, the report identified the need to understand emerging areas of research and technology to encourage skills uptake. Many such professionals were also involved in teaching, giving them responsibilities beyond the technical aspect of their work.[14] Thus, one of the TALENT Commission Report's key recommendations is that employers should provide and encourage training and formal recognition. To support the work of RTPs, the report recommends increasing the visibility of their work and ensuring more significant opportunities (funding, networks, training, career paths) within and outside their disciplines and sectors. Finally, employers should promote equality, diversity and inclusion for professionals from all backgrounds.

Attracting these individuals is crucial for the success of research and innovation. As a result, the Technician Commitment, published in May 2017[15], encourages research organisations to recognise, value, and include RTPs' contributions to research across sectors. Moreover, the UKRI Technician Commitment Action Plan recognises that technicians play a crucial role in UKRI's funded infrastructure

[13] UKRI, The TALENT Commission, 76.
[14] UKRI, The TALENT Commission, 116.
[15] The Technician Commitment was launched with 36 founding signatories at the 2017 Higher Education Technicians Summit at the University of Warwick.

and research.[16] As an employer, UKRI expects its funded Centres, Institutes, and Units to ensure the visibility, recognition, and support of RTPs. As a policy organisation, UKRI aims to use its position to advocate for and represent RTPs by inspiring, developing, retaining, and supporting the most skilled RTPs across sectors. As part of UKRI, AHRC aims to support research in the arts and humanities in line with the UKRI Strategy and the UKRI Technician Commitment Action Plan.

A similar ambition for improving the experience of RTPs and generally creating the right conditions for people to work in research and innovation jobs is part of the UKRI Strategy 2022-2027.[17] This strategy aims to attract world-leading researchers and technicians to the UK. Proposed improvements include reforming career paths, eliminating the 'traditional' career path by redefining skills and talent and adopting the narrative CV format for researchers and innovators, labelled 'Résumé for Research and Innovation' to include a more comprehensive selection of skills and achievements.

Following the Technician Commitment, UKRI will facilitate shared RTP experiences and communities. As an employer, UKRI's Centres, Institutes, and Units (CIUs) will autonomously develop action plans better tailored to their RTP communities' needs. All Technician Commitment signatories must produce a 2-year action plan with goals and implementation measures, and UKRI published its Action Plan in 2021. To ensure a clear direction of work, UKRI has set out near-term (<2 years) and long-term (>2 years) frameworks for setting timeline-appropriate goals relating to progressive cultural research change, visibility, recognition, career development, and sustainability.[18] The working list of RTP activities in the UKRI Action Plan includes, but is not limited to:

- delivering goals of a research and innovation (R&I) project,
- maintaining and developing the R&I environment, standards, resources, materials, and facilities,
- teaching non-RTPs in the design, use, and analysis of research methods and techniques, and
- managing R&I budgets, procurement, and teams (e.g., equipment, instruments, resources).

Finally, the main points for the action plan include the

[16] UKRI. Technician Commitment: UKRI Action Plan (2021), https://www.ukri.org/wp-content/uploads/2021/02/UKRI-040221-TechnicianCommitmentActionPlan.pdf
[17] UKRI. Strategy 2022-2027: Transforming tomorrow together', https://www.ukri.org/wp-content/uploads/2022/03/UKRI-Strategy-Final.pdf
[18] https://www.ukri.org/wp-content/uploads/2021/02/UKRI-040221-TechnicianCommitmentActionPlan.pdf

following:

- leading and communicating,
- technician identity and community,
- technical careers,
- research and innovation culture, and
- rewarding and recognising UKRI's technicians.

1.2.1 AHRC current investments supporting RTPs

Another initiative to support RTPs comes from AHRC. Recently, it has funded the Capability for Collections Fund to renew and upgrade research facilities found in UK galleries, libraries, archives and museums (GLAMs). The investment targets conservation and heritage science facilities, digital capture equipment, specialist study spaces, and reading rooms.[19] This investment follows the guidance from Chapter 5 of UKRI's Opportunities To Grow our Capability report.[20] The report identified the value of the heritage economy, estimated a £29 billion Gross Valued Added (GVA), and encouraged continued investment in the industry for its success.[21] The AHRC fund thus aims to refresh/upgrade major facilities and replace/upgrade equipment and instruments. Another remarkable initiative supporting RTPs is AHRC's Professional Practice Fellowships, grants of up to £20,000 designed to encourage RTPs within libraries to have "a transformative impact on their professional practice, discipline, and institution, and also act as advocates for the value and benefits of arts and humanities research to communities beyond academia." (Research Libraries UK (RLUK), 2022). The scheme is open to colleagues working within any unit or department that sits within a research or academic library which belongs to a recognised UK Higher Education Institution (HEI), Independent Research Organisation (IRO), or is a member of Research Libraries UK (RLUK).[22]

1.2.2 Case studies: technical careers in the arts and humanities

A significant part of the programmes mentioned above is to understand the needs of these researchers and empower their work. Similarly, UKRI's 101 Jobs That Change the World initiative showcases the work of some Research Technical Professionals alongside other people and roles in the UK's research system.[23] The 101 Jobs project presents career pathways in science, engineering, arts and humanities. We

[19] UKRI. AHRC Capability for Collections Fund. Ukri.Org, (2021), https://www.ukri.org/opportunity/ahrc-capability-for-collections-fund/.
[20] https://www.ukri.org/wp-content/uploads/2020/10/UKRI-201020-UKinfrastructure-opportunities-to-grow-our-capacity-FINAL.pdf
[21] UKRI. The UK'S Research and Innovation Infrastructure: Opportunities to Grow Our Capability. (UK Research and Innovation, 2020), 83, https://www.ukri.org/wp-content/uploads/2020/10/UKRI-201020-UKinfrastructure-opportunities-to-grow-our-capacity-FINAL.pdf.
[22] https://www.rluk.ac.uk/prof-practice-fellowships/
[23] UKRI. 101 Jobs That Change the World (2022), https://www.ukri.org/news-and-events/101-jobs-that-change-the-world/

selected an example to illustrate the arts and humanities research technical specialist community, capturing some of the RTP experiences:

Gary Brannan

Gary Brannan is part of a team caring for a vast collection of historical material at the Borthwick Institute for Archives at the University of York. The oldest document in his care dates back to the 11th century, and more are being added. A significant part of Gary's work is helping people access the archive's collections: from senior international researchers working on an important book about history to York undergraduates preparing an essay or even locals researching their families. According to Gary, *"there is nothing nicer when you find that something that you have brought in or cared for or provided access to, or your team has provided access to, has informed major works. I think that is brilliant."*[24]

1.2.3 Focus on librarians in the arts and humanities research

Research libraries are some of the best-researched contributors to arts and humanities research endeavours. Recent reports aim to understand these institutions' role in the R&D sector. Research libraries, institutions, and archives have several valuable technical skills for driving new knowledge. However, their contribution is often unrecognised, and library staff are unaware of how the Technician Commitment can be applied to their careers and work. Thus, Research Libraries UK (RLUK) is committed to applying the objectives and principles of Technician Commitment to the research library community, which consists of four main pillars, including visibility, recognition, career development, and sustainability.[25]

The RLUK is dedicated to increasing the visibility of research libraries by continuing to publish case studies and original studies to show the importance of research libraries in producing new academic knowledge. RLUK is dedicated to recognising library staff in their roles as partners and leaders and enables model research. Through the new strategy, Transforming the Library, RLUK[26] will begin a series of enterprises to efficiently establish and measure the research library's role. Furthermore, RLUK will work with the AHRC and other partners to continue the recognition of the research library community to research. To fulfil the career development objective, RLUK will conduct skill reviews to determine how to improve skills and through cross-institutional initiatives,

[24] Ibid
[25] RLUK. Research libraries make it happen: RLUK statement of support for the Technician Commitment (2022), https://www.rluk.ac.uk/rluk-technician-commitment/.
[26] RLUK, The Library Transforming Strategy

including the RLUK-TNA Professional Fellowship scheme and the AHRC-RLUK Professional Practice fellowships. RLUK will work alongside AHRC and other stakeholders to continue the campaign to underline the importance of technical skills acquisition among research library staff. Moreover, the RLUK developed a strategy, the Digital Workforce development strategy, consisting of a series of methods that academic libraries can adopt to increase their set of technical skills as part of the sustainability objective. Lastly, RLUK will create and highlight resources to determine emerging skills for its members and enable benchmarking within institutions.[27]

The UKRI and AHRC report 'The Role of Academic and Research Libraries'[28] investigates the importance of academic research libraries as active participants and leaders in initiating, producing, and disseminating scholarly research. It explores the contribution of research and academic libraries from different professions and disciplines to creating and publishing scholarly research. Recommendations include the need for direct investment into academic libraries' research capabilities and capacity. Academic and research libraries actively play a critical role in arts and humanities research and scholarship. Therefore, this report investigates the potential value of libraries, archives, museums, galleries, and special collections to research funders.[29]

The report's definition of library staff encompasses all "staff working in academic and research libraries", including staff working in "archives, special collections, museums, and galleries."[30] To support library staff's research capacity and skills development, it suggests reiterating library staff eligibility for funding, nurturing and supporting research development programmes, encouraging greater diversity in peer review colleges, utilising the Technician Commitment as a guiding reference, and leveraging Collective Doctoral Programmes. On the other hand, to increase library staff engagement and advocacy, it suggests promoting and supporting the collection-holding community – through advocacy campaigns, case studies, spotlight features, and events–as well as research engagement programmes – through advocacy practice and cross-sector conversations. Finally, the Research Engagement Programme suggested institutional recognition for library staff through showcasing

[27] RLUK, Research libraries make it happen
[28] https://www.rluk.ac.uk/wp-content/uploads/2021/07/RLUK-Scoping-Study-Report.pdf
[29] UKRI & AHRC. The role of academic and research libraries as active participants and leaders in the production of scholarly research: A report on an RLUK scoping study (Evidence Base, 2021), https://www.rluk.ac.uk/wp-content/uploads/2021/07/RLUK-Scoping-Study-Report.pdf
[30] UKRI & AHRC, The role of academic and research libraries (Evidence Base, 2021), 5.

research expertise and capacity, supporting research skills and capacity, library representation and recognition, academic representation, engagement with library staff communities, and appropriate citing of library staff contributions in research.
Many studies across the UK, Europe, and North America highlighted infrastructural and cultural challenges within the research library. The RLUK surveyed to gather insights on digital scholarship facilities delivered and developed by RLUK member libraries. According to the survey, archivists and librarians provide a variety of services, particularly the creation of metadata (93%), the curation of digital collections (85%), and the digitation of analogue material (63%).

Furthermore, digital scholarship responsibilities are distributed across the library staff and different departments, increasing the workload for specific departments and leading to skill gaps. Survey responders underlined significant skill gaps related to technical duties, including visualisation (88%), statistical analysis and support (69%), and computational text analysis and support (85%).[31] In addition, digital scholarship services could be challenging to fund due to their dependency on project grants. Thus, survey responders suggested that the library should shift from being a service provider to an equal partnership with departments, researchers, and other institutions. The RLUK is committed to creating a centralised service and resource to reduce workload while providing the library with a primary role within the institution.

1.2.4 UX and Digital Humanities Technicians

One growing trend worth noting is the rise of the Digital Humanities Technician. A broad umbrella term covering many sectors, it sees the increasing tendency to use digital and computational approaches to the humanities teaching, research, and enterprise. The work at the Centre for Computing in Humanities at King's College London has highlighted some of the contributions in this domain. John Bradley's paper titled 'No Job for Techie' argues that in the UK, there is a need for a scholar/technician collaboration in digital humanities projects because both significantly enrich the results that come from the shared endeavour.[32] One example is the growing importance of user experience (UX) researchers and user interface (UI) designers.

UX researchers and UI designers are needed because the best presentation of research data comes from the blending of the materials being presented with an understanding of

[31] Greenhall, Matt. *Digital Scholarship*
[32] Bradley, John. "No Job for Techies: Technical contributions to research in the Digital Humanities." Collaborative research in the digital humanities (2012): 11-26.

how to exploit the technology to emphasise what is essential about them. UX researchers and UI designers are routinely employed to 'make sense' of the user and how they view anything digital. In itself, it has spawned a whole new career path that was not recognised barely twenty years ago. Forbes referred to it as the Rise of the UX Gold Rush,[33] and the Guardian newspaper did an explorative piece on the rise of the UX design career sector more than a decade ago.[34] The survey during this study revealed two respondents who identified themselves as an RTP but gave their job title as UX/UI designers, while five indicated that they were either software developers or analysts.

1.2.5 RTPs Significance Beyond the Arts and Humanities

It is evident that RTPs fulfil vital roles as part of a broader research community and are essential for the UK's economic development. The Industrial Strategy Council's (ISC) UK Skills Mismatch in 2030 report identifies an increase in future demand for skills in the workforce. It presents issues already evident in the current market using a table created based on data from the Organisation for Economic Co-operation and Development (OECD). The OECD Index table shows all disciplines' under-skilled in the arts and humanities sector.[35] History and Archaeology, Philosophy and Theology, Geography, and Sociology and Anthropology have an index of -0.06, thus indicating a shortage of skilled workers in the current market.[36]

The ISC report forecasts technological development driven by changes in production patterns and demand for products and services. Such a change foreshadows a future displacement of low-skilled jobs and increased demand for skilled labour, such as research, development, and innovation. Primary digital skills demand will likely increase by more than 30%. In turn, the demand can lead to a skills mismatch, which is projected to worsen significantly by 2030. Furthermore, the UK workforce will likely be required to continue learning throughout their lifetime to keep up with technological changes. Thus, technical expertise and the ability to teach and upskill others are fundamental skills in the current UK economy. Shortages of such experts are expected to generate a considerable bottleneck for future economic development.

[33] https://www.forbes.com/sites/propointgraphics/2017/07/15/the-rise-of-the-ux-goldrush/?sh=2c5e0c555829

[34] https://www.theguardian.com/careers/careers-blog/the-rise-of-the-user-experience-design-sector

[35] In the report, the skills bundle referred to eight separate skills spanning 3 skill types; knowledge, qualifications and workplace skills. The under skilling in the arts and humanities sector was in reference to only knowledge.

[36] Industrial Strategy Council. UK Skills Mismatch in 2030 (2019), 12, https://industrialstrategycouncil.org/sites/default/files/UK%20Skills%20Mismatch%202030%20-%20Research%20Paper.pdf.

The UK's ambition to strengthen its world-leading research and development sector is exemplified by the commitment to increasing investment in R&D to 2.4% by 2027 and public investment to 22 billion pounds per year by 2024/25.[37] Supporting talents is one of the UK government's key priorities in enabling innovation across areas and sectors. In particular, the lack of a clear career path for technicians and immobility across industries and research areas are critical constraints for the optimal utilisation of human capital. In the UK Research and Development Roadmap, the UK Government acknowledges that the technical workforce has long been undervalued and will support their roles in research and development via the UKRI. From non-governmental organisations, initiatives such as the Technician Commitment and the National Technician Development Centre (NTDC) are also actively changing the scene to gain acknowledgement and recognition for technicians. The report also emphasises the importance of fostering inclusive and diverse research environments since BAME managers, directors and senior officials in higher education only make up an estimated 7 percent.[38]

While these ambitions could positively impact technicians and the research and development sector more broadly, data from the Royal Society shows some of these targets might be hard to achieve based on current employment trends. The Royal Society report suggests that based on governmental estimates for the R&D public investment projected to rise to £22 billion per year by 2024/25, an estimated 150,000 additional researchers and a proportionate increase in technical staff would be required to utilise this funding efficiently. However, the current employment data shows that while the number of research roles has increased between 2017/18 and 2018/19, there is a significant decrease in the number of technical roles.[39] Demographic data also shows issues in the uptake of these roles.

Furthermore, the report presents a geographical distribution of researchers and technicians inside and outside academia. Among technical roles across all disciplines, around 44-56% female-to-male split consistently between 2013/14 and 2018/19.[40] As mentioned in the report, these statistics do not include all UK professionals in research and technical roles. They also do not focus on the arts and humanities but present an overall view across all disciplines, but this provides context for our study.

[37] UK Research and Development Roadmap, 2020, 15.
[38] UK Research and Development Roadmap, 2020, 15.
[39] The Royal Society. The Research and Technical Workforce in the UK (2021), 10. http://www.royalsociety.org/research-and-technical-workforce-uk
[40] The Royal Society. The Research and Technical Workforce in the UK, 25.

Russell Group's, Realising Our Potential report addresses issues in the UK Research Culture and Environment concentrating on the Russel Group universities.[41] The first subject discussed is the idea of a positive research culture and the issues encountered to achieve this. The report suggests that the academic environment should encourage excellent and safe employment conditions, offering opportunities for career development while providing clear guidance and adequate resources and fighting against inequality in the workplace. The report suggests that a diversity of research career pathways provides options for individuals and enriches the research ecosystem in and beyond universities. Promoting movement and supporting these careers enhances the research environment. Although the report does not relate directly to RTPs, it is worth including here because it encourages researchers' mobility into other sectors, including technicians' mobility into academia and lays clear pathways for such transitions.

1.2.6 UK Talent Strategy Context

There are some challenges to overcome before achieving the recommendations of the Russell Group report. Long-term contractual job security often depends on external funding, progression opportunities are sometimes lacking, and the evaluation system is not always even and unbiased. The report found that recognition and reward are inconsistent across the wide range of careers contributing to the research environment. To combat such issues, universities have pledged to be more transparent and provide further opportunities within academia. Many have signed the Technician Commitment, aimed to ensure technician career pathways. According to the report, this implementation provides opportunities for key staff members. Other programmes have been targeted at aiding cross-sectoral mobility.

The UK government's People and Culture Strategy suggest concrete initiatives that can be applied to technicians' personnel, such as:[42]

- a Good Practice Exchange that aims at testing and evaluating ideas to suppress bullying and harassment,
- use of the 'Résumé for Researchers' that allows a broader recognition of accomplishments, including technical career paths,
- increases the exchanges between research and public audiences,
- Open Access policy.

[41] https://russellgroup.ac.uk/media/5925/realising-our-potential-report_4-compressed.pdf

[42] UK Government Research and Development, Department for Business, Energy & Industrial Strategy. People and Culture Strategy (2021), https://www.gov.uk/government/publications/research-and-development-rd-people-and-culture-strategy

The measures are essentially about retaining talent, evaluating the gaps in UK's talent offers, and increasing the collaborations between the UK and international researchers. This could also include technicians. Topics of primary importance include filling skills gaps, creating more awareness about the links between disciplines and sectors, from research to business, for example, creating a more inclusive culture of leadership, working wider with society, and making the research world more inclusive.
The three pillars are People, Culture, and Talent. Two strategy sections are especially relevant to arts and humanities Research Technical Professionals: People and Culture.

- The People section includes a New Deal for Post-Graduate research students, addressing precarity, particularly for women and people from disadvantaged backgrounds. This could feed into the technical pipeline if some doctoral graduates chose such a direction.
- The Culture section involves faster levelling-up regarding the gender gap and more accounting for ethnic minorities and disabilities. Increasing the flexibility of career paths is also a priority. Harassment and bullying must be targeted. Community-led research and innovation must be organised, such as in Sciencewise, combining science and technology.

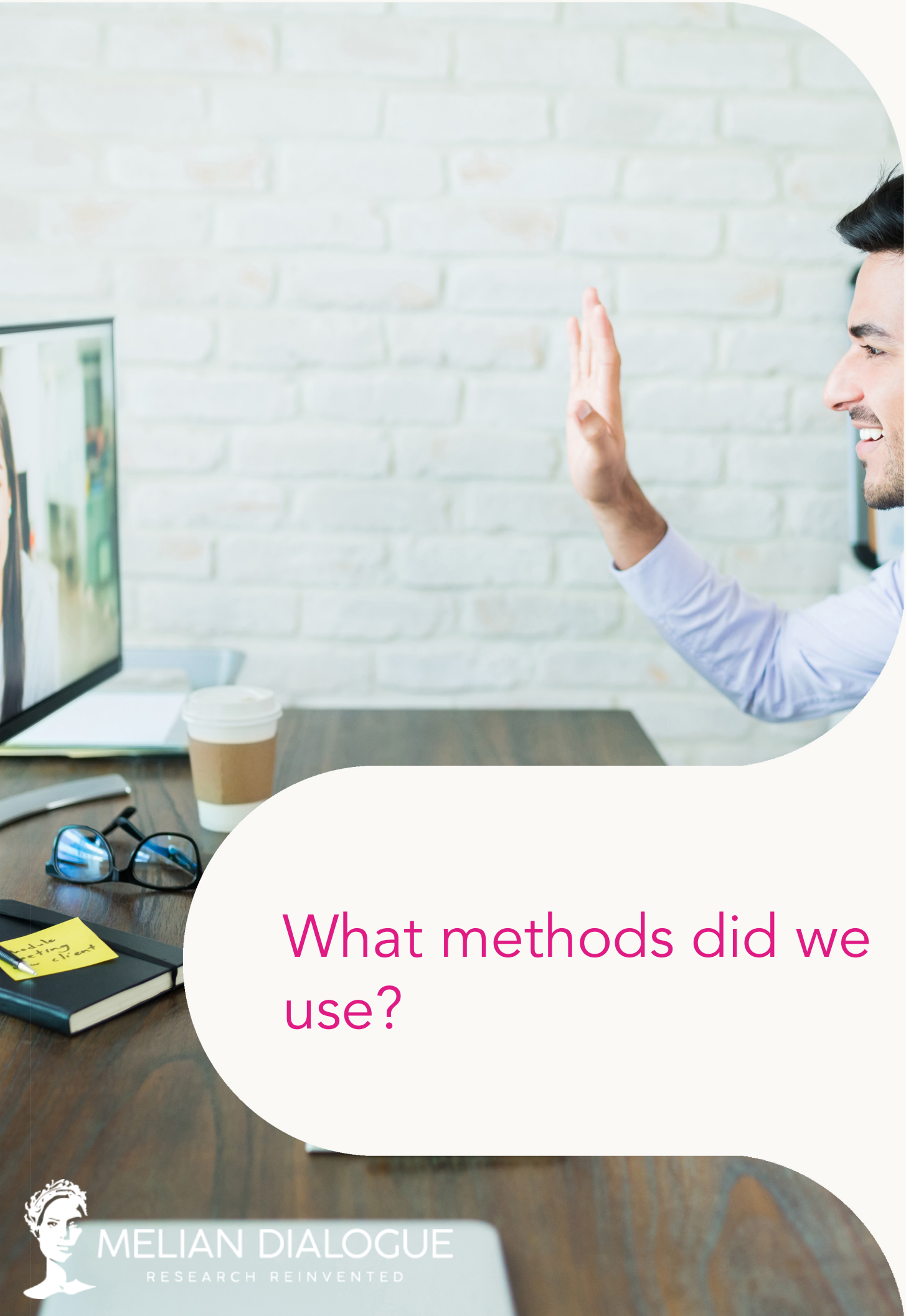
1.3 Concluding Remarks

As reiterated in the opening paragraphs of this section, the term RTP is a recent construct (since 2017), and UKRI has been a signatory to the Technician Commitment since 2020. Arguably, there is very little published literature on the subject, so most conclusions about this broad and diverse community are derived from the few available reports, guidance notes and published materials on websites. The diagnostic report from the TALENT Commission is the most notable and comprehensive of reports. Notwithstanding, the AHRC has taken great strides to support RTPs with initiatives such as the Capability for Collections Fund and the Professional Practice Fellowship.

In trying to comprehend this broad and diverse community, this section took a closer examination of librarians (particularly RLUK's publications) to illustrate the challenges faced by RTPs, particularly concerning the four pillars of the Technician Commitment. Also in the section was a brief introduction to a new breed of RTPs emerging from the Digital Humanities domain; UX researchers and UI designers. After that, the section explored the significance of RTPs in a wider economic setting by examining the skill shortage of technicians in OECD countries and its knock-on effect on the UK's research and development investment.

The section also examined supporting evidence from the Industrial Strategy Council and the Royal Society.

Finally, the section delved into the UK government's People and Culture Strategy exploring how some of the initiatives and recommendations could be used to support the RTP community. Although some efforts have been made to understand the RTP community from published data, more impactful insights on how this community is evolving were obtained from the primary collection data methods used for the study; online surveys, focus groups and in-depth interviews. Due to the wide-ranging backgrounds of the participants, their comments, suggestions, queries and challenges (mainly contained in section 4) were more poignant and provided rich context to this little-known community. The following section will look at the research methods used for this study.



What methods did we use?

MELIAN DIALOGUE
RESEARCH REINVENTED

2. Research Methods

2.1 Desktop Research

We began the literature review with the Technician Commitment and the TALENT Commission Report, which directly informed our study. These offered valuable insights about the position of RTPs within higher education and the research environment and their importance in supporting a national R&D improvement.

In our study, we used the following AHRC's working definition,

"Anyone who brings indispensable specialist technical skills, at an advanced level, to a research project, i.e., professional skills that are necessary for the development, delivery and completion of the project. Depending on the project, Research/Academic Library professionals, Information systems specialists, Sound engineers, Digital technicians, Conservators, Information systems and software engineers, Archivists, Animators, Illustrators, Graphic designers, Conservators, Curators, and others may qualify for inclusion. AHRC encourages a holistic approach to the research ecosystem."[43]

We reviewed relevant documents, articles in specialised journals, reports from the government and news articles. As mentioned earlier, we did not identify any study focusing on RTPs in the arts and humanities. Therefore, we drew on the information on RTPs in higher education and research institutes, the theatre and film industry, and the GLAM sector (galleries, libraries, archives and museums). We investigated the various disciplines, organisations and sectors where RTPs operate and have identified issues they face in their workplaces.

To better understand the context of specific institutions, we have conducted a desk-based review of universities engaging with the Technician Commitment. The research team reviewed universities' Technician Commitment websites and other relevant services that the universities provide to their technical staff. Therefore, the analysis only reflects publicly available information about the support provided by universities to RTPs. Sixty-six universities were investigated, excluding the research institutions that only research life and natural sciences. This number of screened university websites enabled us to review the commonalities of universities' approaches and where support is most lacking for technicians - case studies were conducted using six

[43] https://www.ukri.org/wp-content/uploads/2022/07/AHRC-210722-ResearchFundingGuide.pdf, pg. 54

universities that signed up to the Technician Commitment. The findings of this research are included in section 4 of the report.

Open data was collected, filtered and interpreted quantitatively using the Higher Education Statistics Agency (HESA) data. The results gave a broad demographic overview of technical staff in higher education. However, the further breakdown of technicians working in the arts and humanities departments was inaccessible due to data limitations; we had difficulty identifying data that looked explicitly at RTPs within the arts and humanities.

Subsequently, vital institutions and their studies were identified through the bibliographies of the reports mentioned above, including the Gatsby Charitable Foundation and the National Technician Development Centre. Through these, we have analysed the situation of the research sector to understand the political, economic and administrative contexts. For instance, this helped us understand the importance of digital skills and how their lack can impact the UK economy. Furthermore, we have researched the extent to which employees in the field have obtained these skills.

2.2 Community Engagement

Melian Dialogue research team engaged with RTPs and the broader arts and humanities sector, including Higher Education Institutions and non-HEI organisations from galleries, libraries, museums, media and creative industries. The community engagement phase followed the objectives set out by AHRC, namely, understanding:

- the roles of RTPs in the arts and humanities
- the skills required
- professional obstacles.

We published a call for evidence and conducted seven focus groups with 20 participants, a survey and 13 in-depth interviews. The first step in this process was contacting the RTPs and generating a list of potential participants. We contacted community members and identified participants by scoping relevant institutions. Following this, we inventoried all the contacts that might be useful for the forthcoming stages of the stakeholder engagement phase. The individuals were contacted by email to invite them to focus groups and interviews. Certain institutions were contacted by telephone and online, namely those contacts in the creative industries. We have maintained close communications with participants recruited through all channels ensuring they were provided with any required information. Based on their responses, we created an interest

list with the contacts who confirmed interest in participating in these focus groups[44] and in-depth interview sessions.

To complement the findings of our literature review, we sent out an Open Call for Evidence to better understand individuals' positions within their institutions. This call had essential ties with institutions that have signed the Technicians Commitment. Furthermore, this was tied back to the desk-based review of universities engaging with the Technician Commitment Initiative. Parallels will be insightful for institutions that both tasks have covered. Our focus groups were constructed to identify the contributions made by RTPs to the Arts and Humanities research landscape and highlight the skills requirements and professional development needs of RTPs in Arts and Humanities research. Interviews and a survey supplement these. The latter provides the most remarkable breadth of community engagement.

The participants could answer the EDI questions[45] while ensuring they understood that answering them would help us map the RTP community contributing to Arts and Humanities research. The specific questions were generated using the literature review. Furthermore, they follow the study's objectives, thus aiming to understand the roles of RTPs in their institutions and appreciate issues faced by RTPs and how the Arts and Humanities Research Council can support RTPs regarding visibility, recognition, career development and sustainability.

2.2.1 Surveys

The choice of research method for the substantive part of the investigation is critical. Below is a thorough justification for using the survey method — the technique needed to be affordable and straightforward to implement and enable a statistical analysis to determine that the results were 'significant' enough to be conclusive. Finally, it was imperative to use a research method that allowed participants to divulge information anonymously without disclosing sensitive personal information. Survey research was the most suitable because of the vast array of quantitative methods. Participant invitations were created using Typeform (https://research-surveys.typeform.com/AHRC-and-RTPs) and distributed to participants by AHRC stakeholders.[46]

2.2.2 In-depth Interviews

The semi-structured interview format was the most suitable for the reasons explained below. A Discussion Guide[47] was created for each user type to ensure the questions were

[44] We allocated participants to focus groups based on their job profiles and background but the limiting factor was matching availability and schedules.
[45] The EDI questions can be found in Appendix F.
[46] The survey questions can be found in Appendix F.
[47] The Discussion Guides can be found in Appendix C.

relevant to their respective experience and knowledge base. An essential checklist covered all the relevant topics and points necessary for the interview. Ethics-wise, each interviewee gave informed consent in writing or orally before each interview.

1. Each interviewee received the scope of the topic before each interview, so they were informed beforehand what to expect; there was a possibility that it could prejudice or influence the interviewer to give prepared answers. Consequently, the interviewees were not given specific questions in advance.
2. The direction of the study under consideration was the first topic before each interview.
3. Possible consequences of the research and any impact and implications for practitioners and policymakers followed initial discussions.
4. The benefits (and drawbacks) of taking part in the interview process were always conveyed to the interviewee orally.
5. All issues and options with confidentiality, anonymity, non-identifiability and non-traceability were explained to the interviewees, ensuring that they were comfortable with the privacy of the contents of the interviews if they wished to keep it confidential.[48]
6. Finally, the interviewees were informed of data access to interview transcripts, potential use, and the option to withdraw their consent.

Themes, insights and conclusions from the in-depth interviews have been inserted throughout the report to support and bolster many of the assertions and arguments made in the succeeding chapters.

2.2.3 Focus Groups

Focus groups help elicit views from a group of people rather than an individual, which was employed extensively in the community engagement phase of the study. A total of 20 participants were involved in the 13 focus group sessions. Like the in-depth interviews, focus group participants gave informed consent in writing or orally before each session.[49]

1. Each participant received the scope of the topic before each session, so they were informed beforehand what to expect; there was a possibility that it could prejudice or influence the session to give prepared answers. Consequently, participants were not given specific questions in advance.
2. The direction of the study under consideration was the first topic before each focus group session.
3. Possible consequences of the research and any impact and implications for practitioners and policymakers followed initial discussions.

[48] These can be found in the Information Sheets in Appendix D.
[49] Information Sheets and Consent Forms can be found in Appendix D.

4. The benefits (and drawbacks) of participating in the focus group session were always conveyed to participants orally.
5. All issues and options with confidentiality, anonymity, non-identifiability and non-traceability were explained to the group, ensuring that they were comfortable with the privacy of the contents of the session if they wished to keep it confidential.[50]
6. Finally, the participants were informed of data access to interview transcripts, potential use, and the option to withdraw their consent.

Again, themes, insights and conclusions from the focus group sessions have been inserted throughout the report.

2.3 Ethics, Validity and Reliability

Every research investigation must stand up to the twin pillars of validity and reliability; below is a set of steps to achieve both. The Cronbach's Alpha measure validated the internal reliability of the Likert scales used in the survey. This report established criterion validity by matching all 13 in-depth interviews and seven focus group sessions. Face validity was established, and data sources were triangulated to build a coherent narrative.

In reporting conclusions, detailed, thick descriptions were used to convey some results by employing personal and anecdotal evidence from some interviewees they experienced outside the recorded interviews. Despite best efforts, not all the data collected always coalesced or converged. Notwithstanding some data that may have contradicted themes or categories, they are discussed entirely (including limitations and disadvantages) and offer possible explanations or proffer alternatives where discrepant information occurs.

Every step in this report was fully documented to ensure reliability and replication. All coding was done using Dovetail, and simple procedural documentation was achieved using Microsoft Office programs such as Word. The report transcript was checked for apparent errors by a software called Grammarly. All codes used in this report were checked for consistency using Dovetail, which generated them based on some input from the Melian Dialogue researcher. Each participant completed an Information Sheet and a Consent Form, and a copy of the Consent Form was emailed to the participant.

[50] These can be found in the Information Sheets in Appendix D.

What did we find?

MELIAN DIALOGUE
RESEARCH REINVENTED

3. Literature Review

3.1 Desktop Research

The role of RTPs in arts and humanities research is under-researched. Many papers have assessed the importance of laboratory technicians in scientific research; however, according to our literature review, the development of the technician role within arts and humanities in the UK has not been explored. This literature review aims to map the existing academic landscape of the role of RTPs, beginning with the evolving definition of the term technician in arts and humanities, understanding these technical roles in different disciplines, and concluding with the academic working cultural view of the role of technicians.

Technicians and Scholars in Pursuit of the PhD by Christopher Pole explore how doctoral students viewed their experience in study, their opinions of a research-based qualification, and their views of the practical proficiencies they acquired. This is a qualitative study and thus compliments the research completed for AHRC by Melian Dialogue. Pole defines "technical skills" as skills developed from conducting research,[51] although it is felt that the definition lacks specificity.

In an interview with a doctoral student, Pole discovers that the technical skills gained from the PhD project were more important than academic knowledge. Placing this in the current context of the RTP role, it is evident that RTPs' expertise is an intrinsic element of research and doctoral candidates interviewed by Pole took pride in these skills over the more academic proficiencies acquired during their doctoral study. Another issue recognised by Pole is the emphasis placed on the doctoral qualification; many of the students interviewed by Pole highlighted their motivation for achieving a PhD being career progression. This not only places significance on the cultivation of specific knowledge but on the proficiencies of practical skills that can be transferred across institutions and sectors.[52] This text displays how technical skill appreciation has grown in academia.

Hunt and Melrose explore how the term technician has evolved in a theatre context. Though this paper focuses on the theatre sector, the overarching concepts of this article can translate to any area of arts and humanities. Hunt and Melrose explore the separation of technology and creativity

[51] Pole, Christopher. "Technicians and scholars in pursuit of the PhD: some reflections on doctoral study." Research papers in education 15, no. 1 (2000): 95-111.
[52] Ibid, pg. 106

in performance and the impact this has had on theatre technicians' facilitation of theatre productions. They argue that the term "technician" should be replaced with "master craftsperson," as this demonstrates the expertise and skill within their field, whereas cultural understanding and hierarchy within arts and humanities research have degraded the term "technician."

This observation continues to the Ancient Greek definition of technician, which meant art or craft and encompassed a more robust understanding of philosophical values.[53] In contrast, in the present knowledge of the role of RTPs in arts and humanities research, the change of the term technician has impacted the value placed upon these roles, and their contribution to the academic field has not been sufficiently recognised. Hunt and Melrose also observe the distinct difference between the roles of technicians in the sciences to those in arts and humanities; thus, "theatrical practitioners might well misrecognise themselves as 'non-theoretical'. We are concerned about the division of labour and ownership; they may also qualify their work as 'non-technical'. However, in our argument, the technical, in early-twentieth-century practices at least, like the theoretical, involves a level of abstraction that cannot be reduced to the level of the procedural operations."[54]

In conjunction with the social hierarchies, RTPs have been limited in their opportunity to contribute to arts and humanities research. This is confirmed by Hunt and Melrose using the example of the theatre: the theoretical (literature), the performance (the artist/actor), and the production (the technician). By separating these elements of theatricality, the technicians' involvement in the creative process has been reduced. The conclusions determined by Hunt and Melrose are that the technician has a more significant role in the creative process of theatre production that extends to aesthetic critiques, production technique, and theoretical development[55] in context; the role of the RTP is far more advanced than what Hunt and Melrose determine as the master-craftsperson, though they do admit that there is an evident dichotomy between the two areas of academics and practice, as technicians contribution is both physical fabrication and theoretical insight. As a solution to this imbalance, Hunt and Melrose follow Cilliers'[56] comments on value judgements; to change the gap between the technician

[53] Hunt, Nick, and Melrose, Susan. "Techne, technology, technician: the creative practices of the master craftsperson." Performance Research 10, no. 4 (2005): 70-82.
[54] Ibid pg. 71
[55] Ibid pg. 80
[56] *Cilliers, Paul. 1998. Complexity of Postmodernism: Understanding Complex Systems. London: Routledge.*

and the academic, they suggest the technician learn the theoretical and the academic learn the practical, and both appreciate the value of these contributions. However, what Hunt and Melrose fail to acknowledge are the sociocultural systems that have impacted the valuation or devaluation of RTPs. Though acknowledged, the technician's expertise in arts and humanities is generally not represented accurately or in context.

Another text that assesses the lack of research regarding technicians is a paper by Caitlin Donahue Wylie. 'The artist's piece is already in the stone': Constructing creativity in palaeontology laboratories aims to understand the disparity in working culture between palaeontology technicians and researchers.[57] Palaeontology is not an arts and humanities discipline, but the article offers universal insights applicable to the arts and humanities community. She states that "technicians largely have been overlooked in sociological studies and scientific publications. This omission results, in part, from a failure to realise that technicians often have principles and goals independent of those of researchers… [and] in the few studies that do mention technicians, they are portrayed as manual workers".5[8] This is a common thread in texts that this literature review has cited and supports the concept that there are hierarchical status markers within the institutions where RTPs operate. Furthermore, Wylie echoes Hunt and Melrose's observation of the disparities between practical technical and theoretical artistic work.[59] The judgements and contributions that RTPs make during the research process "highlight both the complexity and the significance" when preparing research materials.[60]

Regarding research, Wylie identifies the treatment of technicians in the palaeontological field as being "passive, uncreative, and unskilled, and assuming their goals are only monetary can justify deleting their work".[61] One must qualify that this is the researcher's view and not one held by the authors or supported by the evidence collected during the community engagement. This degrading of RTPs' contribution is key to understanding their role in arts and humanities. Participants in the focus groups and the in-depth interviews address this at some length in the community engagement, explained in the next section. Wylie emphasises the issue of 'invisibility', that "researchers can justify… leaving [technicians] work and names out of

[57] Wylie, Caitlin Donahue. "'The artist's piece is already in the stone': Constructing creativity in paleontology laboratories." Social studies of science 45, no. 1 (2015): 31-55.
[58] Ibid pg. 33
[59] Ibid pg. 34
[60] Ibid pg. 41
[61] Ibid pg. 43

publications."[62] The previous texts have not transparently mentioned this, but the subtext of RTPs feeling undervalued could be referred to as 'invisibility'.

The separation of the theoretical and the practical has also been mapped in the film industry by Luzi Marzola. Marzola's essay *The Early Years of the Society of Motion Picture Engineers* (2016) maps the development of film engineers' and technicians' roles within the industry. The purpose of this text in this literature review is to discuss the historical development of the role of RTPs. Here, Marzola highlights how the concealment of information between engineers in the early years of Hollywood filmmaking caused the technician's skills to be transactional instead of creative contributions to the filmmaking process.[63] Furthermore, Marzola identifies the cultural hierarchies between technicians themselves. Though her field of analysis is in the 1920s, these hierarchies are still present today, and many of the participants attested to this in their responses during the in-depth interviews. Inevitably, the prevailing views today have impacted the understanding of the role of RTPs and the development of RTP careers in all areas of arts and humanities.[64] Comments from participants cited in Section 4 also corroborate this view.

Missing Links in the History and Practice of Science: Teams, Technicians and Technical Work, although focused on technicians in science disciplines, is also relevant to our study as it illustrates broader trends and signs identified during our study. Russell, Tansey, and Lear explore the professional science field's institutional frameworks and social operation.[65] Though this article centres on science, the principles of the relationship between researcher and technician are similar; thus, conclusions relating to arts and humanities can be made. Such a relationship is precarious at best, and many participants in the focus group sessions and in-depth interviews alluded to that, detailed in section 4. The working culture exposed by the previous texts is also highlighted by Russell et al., whereby "the culture of individualism in science has led to consistent neglect of the role of collaboration and teamwork… there is a tendency for successful scientists to skate over the roles of their colleagues, students and technicians."[66] This exposes how technicians' work is not recorded or valued by the researchers that could

[62] Ibid pg. 52
[63] Marzola, Luci. "A society apart: the early years of the society of motion picture engineers." Film History 28, no. 4 (2016): 1-28.
[64] Ibid pg. 20
[65] Russell, Nathan C., Tansey, E. M. and Lear, P.V. "Missing links in the history and practice of science: teams, technicians and technical work." History of Science 38, no. 2 (2000): 237-241.
[66] Ibid pg. 237

not complete their research without the practical expertise of the technicians.

The authors claim that the value of technicians' work is rarely documented, "technicians, as a professional group, have left few conventional records of their lives and careers;"[67] technicians are not named in publications which is another piece of evidence backing up Wylie's comments on 'invisibility.'[68] Another issue echoed through this text is the operational research hierarchy within these institutions; the previous texts have also underlined this as a common concern. Russel et al. argue that the reasoning for this is the historical development of the role of technicians, as they were considered junior, subordinate, or assistant to the lead researcher.[69] Through this historical analysis, Russel et al. determined the development of the term 'technician'; this exploration exposed the lack of definition of the role, as the combination of both practical and theoretical work, without conventional publications, excludes technicians from evaluation processes. This is discussed further in the next section when participants comment on evaluating their roles within the Higher Education sector. Consequently, this cultural understanding (or misunderstanding) of the term 'technician' has continued to diminish the value and expertise of the RTP.[70]

This understanding and development of the role of RTPs are explored further in Culture Is Bad For You by Orian Brook, Dave O'Brien, and Mark Taylor. Culture Is Bad For You investigates the experiences of cultural workers, this meaning those that work in institutions that produce/develop arts and culture. They interviewed these cultural workers to determine the inequalities in the arts sector. This book briefly discusses the AHRC Cultural Value Project; Brook et al. acknowledge the issue with determining value; this can be translated to the value placed on the work completed by RTPs and the understanding of their role in the research process.[71] The previous texts in this literature

[67] Ibid pg. 238
[68] Wylie, Caitlin Donahue. "'The artist's piece is already in the stone': Constructing creativity in paleontology laboratories." Social Studies of Science 45, no. 1 (2015): 31-55.
6[9] Russell, Nathan C., Tansey, E. M. and Lear, P.V. "Missing links in the history and practice of science: teams, technicians and technical work." History of Science 38, no. 2 (2000): 239
[70] Ibid pg. 240
[71] Brook, Orian, O'Brien, David and Taylor, Mark. "Culture is bad for you." In Culture is bad for you. Manchester University Press, 2020.

review (Marzola,[72] Russell, Tansey, & Lear[73] and Wylie[74]) have considered this an issue for those working in arts and humanities. Still, the modernity of this text displays how this is a continued concern within the field. Furthermore, Brook, O'Brien, and Taylor highlight the importance of support for the role of cultural workers from institutions. Translating this to the context of RTPs, there is a need for support from institutions to develop careers of passionate and committed technicians, and this support must be sympathetic to personal circumstances and include a good understanding of these roles to ensure RTPs are represented in the overall research community.[75]

Helen Reddington briefly discusses the support for career growth in arts and humanities in *She's at the Controls: Sound Engineering, Production and Gender Ventriloquism in the 21st Century*.[76] The author explores women's experiences in music production through interviews and critical analysis.[77] The technical and creative skills needed in music production shares similarity with that of theatre, and both are essential to research projects in performing arts. Reddington identifies the route to a career in music production and the difficulty in cultivating career progression. Though this could be attributed to Reddington's focus on female music engineers and technicians, the emphasis on confusion for RTPs in career prospects is evident when linked to the previous texts. The avenues to gain knowledge and practical skill are vast, but Reddington also identifies individuals' personal drive and passion for the arts.[78] This individual passion and career progress confusion exhibited by RTPs were identified by Hunt and Melrose,[79] Marzola,[80] and Brook et al.,[81] which displays the perpetuity of the issues faced by RTPs.

We acknowledge that this review can only offer a simplified

[72] Marzola, Luci. "A society apart: the early years of the society of motion picture engineers." Film History 28, no. 4 (2016): 1-28.
[73] Russell, Nathan C., Tansey, E. M. and Lear, P.V. "Missing links in the history and practice of science: teams, technicians and technical work." History of Science 38, no. 2 (2000): 237-241.
[74] Wylie, Caitlin Donahue. "'The artist's piece is already in the stone': Constructing creativity in paleontology laboratories." Social studies of science 45, no. 1 (2015): 31-55.
[75] Brook, Orian, O'Brien, David and Taylor, Mark. "Culture is bad for you." In Culture is bad for you. Manchester University Press, 2020.
[76] Reddington, Helen. 2021. She's at the Controls: Sound Engineering, Production and Gender Ventriloquism in the 21st Century. Sheffield: Equinox.
[77] Ibid
[78] Ibid pg. 38
[79] Hunt, Nick, and Melrose, Susan. "Techne, technology, technician: the creative practices of the master craftsperson." Performance Research 10, no. 4 (2005): 70-82.
[80] Marzola, Luci. "A society apart: the early years of the society of motion picture engineers." Film History 28, no. 4 (2016): 1-28.
[81] Brook, Orian, O'Brien, David and Taylor, Mark. "Culture is bad for you." In Culture is bad for you. Manchester University Press, 2020

understanding of the role of RTPs as many factors (practical, sociocultural, and intersectional) influence and impact their roles. The challenges faced by Technical Professionals identified in this literature review are:

- hierarchical working culture,
- sociocultural understanding of technicians,
- the disparity between the practical and the theoretical,
- the value placed on technicians' contributions in the form of invisibility in publications and the working environment, and
- difficulties in accessing career progression opportunities.

Existing literature illustrates the complexity of the roles of RTPs. The texts we discussed span several decades and subject areas, which has allowed for an overview of the existing research into technical roles linked to the arts and humanities. However, the need for additional exploration is apparent, which is why our study involved community engagements with arts and humanities RTPs.

4. Findings and Insights

4.1 Findings From Surveys

4.4.1 Overall Summary

The survey garnered 170 responses.[82] Below is a statistical summary of the response rate.

Table 1. Summary of survey responses.

Views	Starts	Submissions	Completion Rate	Time to Complete
773	416	170	40.85%	59.97[83]

A total of 39 questions were posed to respondents ranging from EDI questions to those relating to the pillar commitments. Below is a detailed summary.

4.4.2 Summary of Responses

4.1.2.1 Equality, Diversity and Inclusion data

Figure 2. Male to female ratio

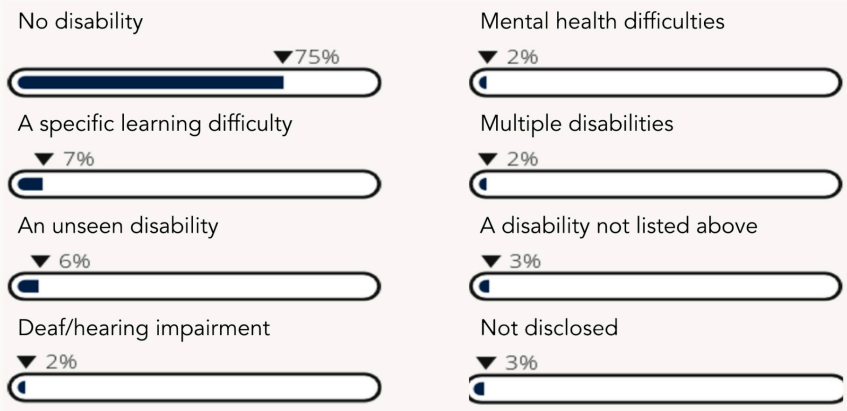


Figure 3. Disability status

[82] This includes both the initial survey and the amended survey combined. Although the survey was aimed at RTPs, responses from professionals in other sectors were noticed.

[83] This result appears to be an outlier and might have been affected by a respondent, or several, leaving the survey open for a considerable length of time.

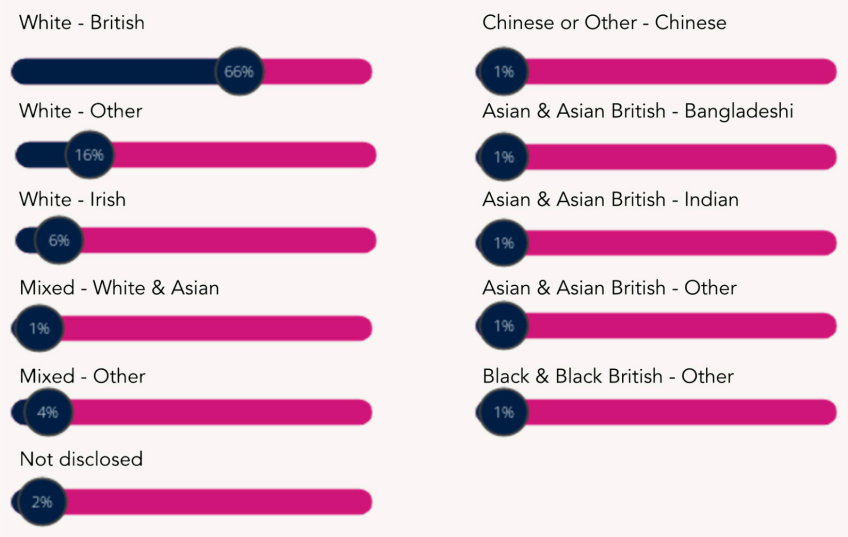


Figure 4. Ethnicity

Table 2. List of nationalities.

Nationality	#	Nationality	#
Australian	1	French	1
American (USA)	1	German	2
British	117	Irish	12
Danish	1	Italian	4
Polish	2	Panamanian	1
Canadian	3		

4.1.2.2 Years of Exeprience

The largest demographic of respondents had been in their current roles (within an organisation) for 10+ years (35%) and in research and development for 10+ years (46%). This speaks more to sustainability as an RTP than any other metric collected during the survey.

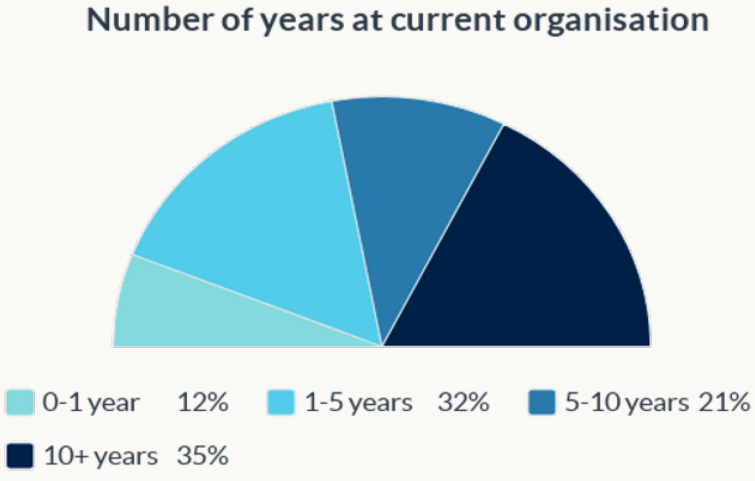


Figure 5. Number of years at an organization

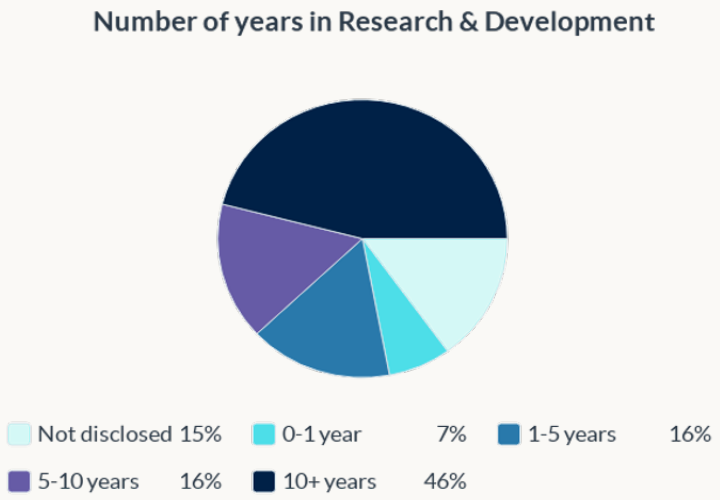


Figure 6. Number of years in research and development

4.1.2.3 HEI vs Non-HEI

There appeared to be an equal split between respondents that worked for Higher Education Institutions and institutions beyond the Higher Education sector.

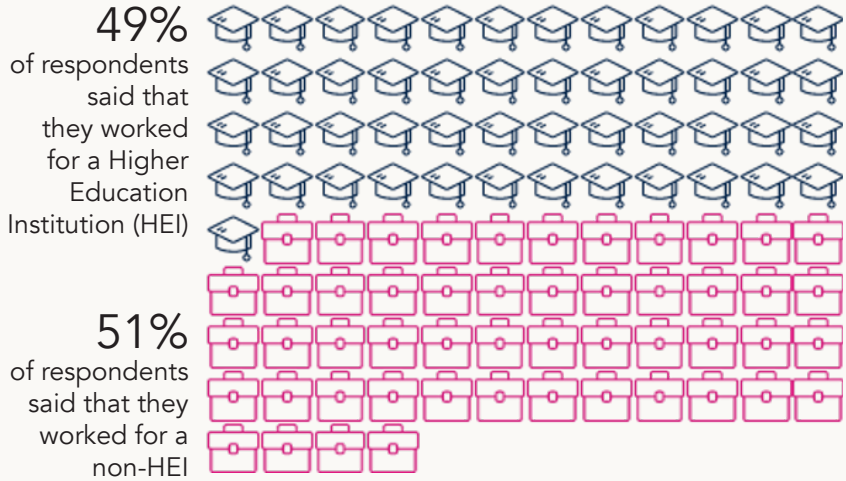


Figure 7. HEI vs non-HEI split

4.1.2.4 HEIs (Types of Institutions)

Respondents who answered the question on HEIs were further asked which institution they belonged to. The University of Oxford had the highest affiliations (14 out of 83). The table below shows a more comprehensive breakdown of the HEIs.

Table 3. Types of HEIs

Institution	Freq	Institution	Freq
Aberystwyth University	1	Open College for the Arts	1
Bangor University	2	Queen Mary University of London	1
Bournemouth University	1	Queen's University Belfast	3
Cardiff University	2	Royal College of Art	1

De Montfort University	1	SOAS, University of London	1
Durham University	1	The Open University	1
Edinburgh Napier University	1	The University of Aberdeen	1
Falmouth University	1	The University of Derby	1
King's College London	5	Ulster University	1
Leeds Trinity University	1	University College London	1
Loughborough University	2	University of Cambridge	4
Manchester Metropolitan University	7	University of Chester	2
Newcastle University	6	University of Derby	1
University of Glasgow	1	University of Oxford	14
University of Greenwich	1	University of South Wales	1
University of Leeds	3	University of Southampton	1
University of Leicester	1	University of the West of England (UWE)	1
University of Liverpool	1	York St John University	3
University of Manchester	1		

4.1.2.5 Non-HEIs (Types of Institutions)

The overwhelming majority of Non-HEIs were from the GLAM sector (Galleries, Libraries, Archives and Museums. A more comprehensive breakdown is shown below.

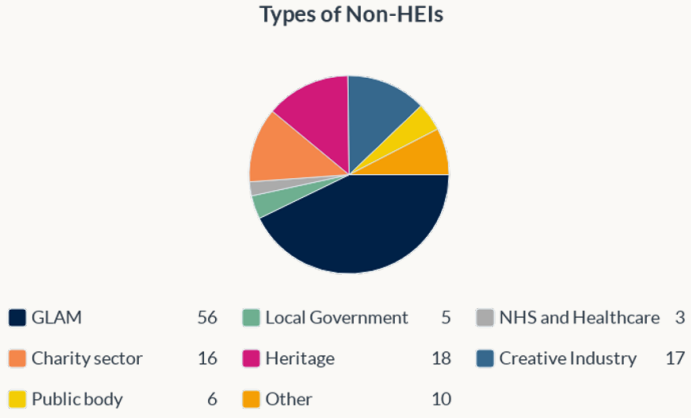


Figure 8. Types of non-HEIs

4.1.2.5 Non-HEIs (Types of Institutions)

RTP job titles appeared to be quite varied in the survey, but the title of curator seemed to dominate; as indicated in the world cloud below.

Figure 9. RTP job titles

A more comprehensive list of titles can be found in the table below.

Table 4. List of RTP titles from the survey

Title	Freq	Title	Freq
Acting Head of Natural Sciences	1	Curator of Regional Archaeology	1
Agile Delivery Manager	1	Curator, Illustrations & Artefacts	1
Antiquarian cataloguer	1	Curatorial and Programme Assistant	1
Archaeologist	1	Curatorial Assistant	1
Archivist	2	Digital Archaeological Illustrator & Graphic Designer	1
Art Gallery curator and manager	1	Digital Humanities Research Officer	1
Artist	4	Digital Media Technician	1
Artist curator	1	Director and Curator	1
Artist Educator / Facilitator	1	Director and Senior Research Software Analyst	1
Artist Researcher	2	Director of Strategic Development & Partnerships	1
Artist, jeweller and postgraduate researcher	1	Economist	1
Assistant Curator of Fine Art	1	Entomologist	1
Assistant Curator of Global Cultures	1	Environmental scientist	1
Assistant painting conservator	1	Executive Assistant	1
Assistant Technical Officer	1	Faculty Librarian	1
Assistant Technical Officer in the Studios and Galleries	1	Film & Creative Arts Practice Technician	1
Associate Artist	1	Fine Art lecturer	1

Associate Director Special Collections and Galleries	1	Head of Collections and Curatorial	1
Chair of Digital Economy	1	Head of Conservation	1
Collection Information Manager	1	Head of Conservation & Collections Policy	1
Collections Assistant	1	Head of Conservation and Collection Care;	1
Collections Manager	1	Head of Conservation and Scientific Research	1
Conservation Researcher	1	Head of Digital Special Collections and Services	1
Conservation Science Manager	1	Head of Library and Archives	1
Conservator	4	Head of Life Collections	2
Conservator and Collections Manager	1	Head of Preservation	2
Creative Director	2	Head of Production	1
Creative Industries Development Officer	1	Head of Research	2
Curator	4	Head of Research & Public History	1
Curator of Decorative Art	1	Health and wellbeing choir leader	1
Curator of International Fine Art	1	Heritage Advisor	1
IT Director	1	Reader	2
Keeper of Archaeology	1	Research Facilitator	1
Lead Music Technician	1	Research Manager	1
Lecturer	2	Research Officer	1
Librarian	1	Research Software Analyst	1
Librarian and Archivist	1	Research technician	1
Librarian and Heritage Collections Curator	1	Senior building services engineer	1
Library and Archives audit and barcode assistant	1	Senior Conservator	2
Literature and Drama development	1	Senior Curator	3
Loans Coordinator	1	Senior Laboratory Manager	2
Managing Director	1	Senior Manager: Archive & Library	2
Materials scientist	1	Senior Paintings conservator	1

Museum collections care	1	Senior Research Software Analyst	1
Museum Director	1	Senior Research Software Developer	1
Museum Engagement Assistant	1	Senior Research Software Engineer	1
Music Production Technical Specialist	1	Special collections curator	1
Music Technician	2	Subject assistant librarian	1
New Media Research Consultant	1	Tech Team Leader	1
Objects Conservator	1	Technical Advisor	1
Open Access Service Manager	1	Technical Assistant	1
Paper Conservator	1	Technical Demonstrator	1
Performance Administrator	1	Technical Director of Drama	1
Principal Conservator	1	Technical Instructor	1
Principal Curator	1	Technical Manager	5
Professional artist and facilitator *	1	Technical Officer	3
Professor of Creative Practice *	1	Technical Team Leader	1
Professor of Philosophy & Fine Art *	1	Technical/Demonstrator Digital Support	1
Professor of Literary Studies	1	Technician	5
Project Archivist	1	Textile Conservator	1
Public Engagement Assistant	1	Textile tutor	1
Rare Book Conservator / Director	1	UI/UX Designer	2

4.1.2.7 Employment Type

Nearly two-thirds of the respondents indicated that they worked full-time, with about a tenth working under fixed-term contracts.

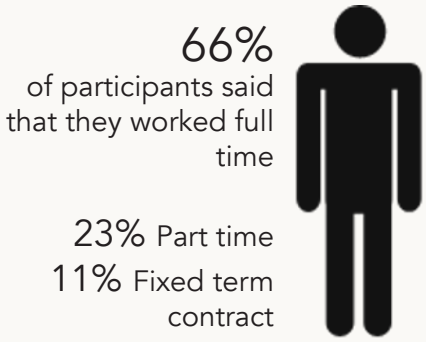


Figure 10. Employment Type

4.1.2.8 Highest Education Attainment of RTPs

Nearly 80% of RTPs had post-graduate qualifications.

4.2 General Observations From Focus Groups and Interviews

Seven Focus Groups and 13 individual In-depth Interviews were recorded, amounting to over 20 hours of video footage. Despite some variations, all the participants were asked to respond to the concept of an RTP in the arts and humanities (especially if they identified as one) and comment on the four pillars of the Technician Commitment, namely, 1.) Visibility, 2.) Recognition, 3.) Career Development, and 4.) Sustainability. The general trend of the responses appeared to be consistent amongst the participants in the focus group. One could argue that this could be explained by cognitive biases such as confirmation bias or groupthink. Participants in the in-depth interviews were more vocal about their personal experiences, concerns and frustrations of being an RTP. For ease and convenience, these are reported below in their respective headings. One point worth noting is that saturation was reached very quickly regarding insights and findings. Once the focus group sessions were transcribed and their findings inserted into this report, any discoveries from the in-depth interviews appeared to be variations of already documented insights.

4.3 Identifying As An RTP

The typical response from participants in both the focus groups and the in-depth interviews was that nobody recognised the term RTP or identified as one. Note that this is contrary to the responses received in the survey, where 54% of respondents identified with the definition.

It is pertinent to begin this subsection with those who found an affinity with the definition of RTP before delving into the

other nuanced responses.

For Speaker One in Focus Group Seven, a software analyst, immediately identified as an RTP even though, in her own words, referring to her as a technician would be inappropriate as she does not take care of any equipment. Participant Six was one of the exceptions to whom RTP had a natural resonance when she read the definition. In her mind, it was a welcome relief that her role could be conceptualised in a way recognised for the varied components and mix of research and practice. As she put it:

"Bang, someone finally gave it a name. Well done."

Participant Seven was proud to be identified as an RTP and even disclosed that he had been an early signatory to the Technician Commitment as far back as 2017.

Participant 13 never thought of herself as an RTP, but once she saw the descriptor, she could identify with it. Participant 11 did not directly identify with the RTP label but considered it intrinsic to her practice. Speaker Two in Focus Group Seven, a collections technician, thought the term technician was a:

"demeaning, lowly term in the academic scale of things and does not do her career any favours."

Her advice on the term 'technician' was that keeping the word and redefining the descriptor to the word will only be effective if everybody reads the new description. A more meaningful impact will come from creating a new name altogether. Participant Eight recognised the term but was concerned that many of his colleagues would ask basic questions such as:

"What is the point of it, what is being recognised, how does it help people?"

For him, as an RTP with a PhD, his question on the subject was more poignant:

"Unless we intend to go on to have research-focused careers of our own, what does the terminology do for technical specialists in the HE environment? I am keen to see what the point of it is. I like it. I like the terminology. It is a great descriptor, but I want to know what the intended effects from AHRC are in developing a descriptor such as RTP. I want to see this expressed in an impact statement."

At this juncture, it must be pointed out that the term

Research Technical Professional is not a term invented by AHRC, there appears to be a misconception that the AHRC should take ownership of the title.

Participant Eight wanted to highlight that many of his colleagues do not go to conferences and symposia because participating in other people's research does not directly improve their job prospects as technicians or technical specialists. In his opinion, only the RTP's technical skills count, not the academic research project they work on. Participant Four objected to the term 'Technical Professional', specifically 'technical'. She came from a filmmaking background and proffered the division of 'above the line' and 'below the line' as a better descriptor. When challenged on this descriptor and how it would be unrecognisable to those in the theatre arts, she conceded and agreed that the conciliatory term would be 'Research Practitioners', a term also proffered by another participant. In Focus Group One, one participant did not recognise herself in the definition because of the word 'technical'. However, after going through the definition, she agreed and felt included. Others in the same focus group concurred with her assessment, and this was a typical response from both focus groups and in-depth interviews. Speaker Two in Focus Group Six shared the same sentiment:

"It is not an immediate definition that I think many of my colleagues or many of the people I work with on a day-to-day basis would see themselves in, but with a bit of digging, I think it can be applicable."

Speaker Two in Focus Group Three queried if the term RTP was used as a 1.) career type, 2.) career track, or 3.) as a descriptor for a person. Speaker Two referred to career type and career track to denote the former as a noun descriptor and a way of identifying an individual while the latter as a career pathway to follow. Speaker Three in Focus Group Three has never seen himself as an RTP. In his own words:

"I have never described myself as a technical professional in any arts or any other field. No, I do not use that phrase. I tell people that my main role is to support researchers."

Speaker Four in Focus Group Two was not familiar with the term but identified with the description. As he puts it:

"I've never used the term technical research professional, but it sums up what I've contributed in various ways."

Speaker Two in Focus Group Two believes the term is entrenched in the perception of class:

"I'm not British. But I have a very acute sense of the classism in the sciences and indeed in the humanities about knowledge production."

Speaker Two of Focus Group Three also picked up the challenge related to the hierarchical perception of research-related roles:

"And I think there is a hierarchy issue because, with the best will in the world, I think research technical professional will be read in a particular way that suggests that that is a kind of support role, which may be the contrary, it may be an absolutely crucial role."

The common perception of the role of an RTP is well illustrated by the words of Speaker One of Focus Group Four:

"Within my particular context at the university, I'm not an academic, I do not have an academic contract. I'm not a university teaching officer. You know, I don't meet these kinds of categories that are associated with academic staff. So I'm very clear in what we call professional services, as opposed to academic staff, even though I occasionally do research. So I tend to describe myself more as being in a research facilitation role, which is probably the kind of language I am more likely to have used. I haven't generally described myself as a research technician. I've described myself as a facilitator."

The question posed by some researchers is that RTP is an outdated term, and the preoccupation should not be with what people in the community think of the term but what those outside the community perceive of those referred to as RTPs. Speaker Four in Focus Group Two argues that:

".....the question really should be flipped. It is not how we identify ourselves; the question should be how are we looked at and perceived by others."

Speaker Two in Focus Group Four seems to think that becoming a technician is more deeply rooted than we are prepared to acknowledge. For him:

"It's not like the old days where you could, you know, sit down at school, age 16 and say, I would like to support the digital humanities for the next 35 years. It's a very complex field with many people doing different things. I'd be very interested to find out if we do exist as one community or if it's a junction, a segway of lots of different communities."

Participant Three was more concerned about how outside the community would view the term RTP as it was more associated with the sciences than with the arts and humanities. Participant Three also raised a point none of the other interviewees considered: the different terms for the same job at different institutions make it extremely difficult for RTPs to unionise across the UK. Her example was comparing her job at a university with a colleague at another university in the same city; the jobs differed in titles, although the roles were identical.

Speaker Two in Focus Group Seven brings up an interesting perspective of the term RTP in that it does not encompass the totality of the role most RTPs find themselves in. She argues that RTPs do not just focus on their specialism, technical knowledge or specific methodology. Especially in her case, she has to juxtapose her specialism with project management and the different layers involved. So, the term RTP does not go far enough for her to capture the other facets of her role and all it entails.

In addition to this, she also raises a broader question of exclusion surrounding the RTP role. For example, she argues that the descriptor should not exclude people who want to build careers part-time. She asks if the RTP community is diverse enough or comprises mainly of 'middle-aged white men.' She wonders if the opportunity of being an RTP is offered to all in the same way and if anybody has bothered looking into that and the term. In her opinion, the makeup of the RTP community does not carry as much weight as the descriptor of an RTP.

4.4 Technician Commitment Pillar One: Visibility

"Ensure that all technicians within the organisation are identified and that the contribution of technicians is visible within and beyond the institution."

When asked about visibility, some interviewees gave real-life examples of the lack of it. Participant Two, in her interview, recounted a recent example of the lack of visibility afforded to technicians at the school she worked for. Her story was simple yet poignant; the academics at the school had their photographs taken and placed on the school website, but all the technicians were left out. Responses about visibility and recognition were often intermingled. For example, co-authorship of research outputs was mentioned as an issue when asked questions on visibility and recognition. It is worth reiterating some of the comments of one respondent who felt that enforcing co-authorship was a task for the academic publishing industry, not for Research Councils.

Participant One, in his interview, gave an example of good practice in ensuring visibility and recognition within his department. He set up a university's digital humanities website listing all the digital humanities research projects. He included an option to list projects by the developer, thus ensuring that visitors to the site could focus on a particular developer and see what they have accomplished. We recommend that such practices regarding research outputs on the web should be more widely adapted in the arts and humanities research community.

Speaker Two in Focus Group One noted that during the pandemic, the number of support staff was reduced by 25%, resulting in critical services being discontinued, suspended or amended. Thus, the key roles of certain practitioners were highlighted in ways that would not have happened but for the disruption. Speaker Three in Focus Group One pointed out that:

"technicians aren't promoted as a career because it's not seen as being quite as important as being an academic."

4.4.1 Research Exercise Framework (REF)

More than once, the Research Exercise Framework (REF) came under scrutiny and was identified as the main contributor to the lack of recognition of RTPs. For example, Participant Four was adamant that AHRC was not to blame for the lack of visibility of RTPs. As she put it:

"REF is the epitome of what is wrong with our research because people are more interested in publications, especially paper publications, even when talking about artistic practice and research."

What Participant Four is advocating is the practice in Canada and Australia because she believes these are the only two countries that consider the artistic practice as research without the further need for publications. For her, Canada's approach is that much research goes into making a film; therefore, if you make a film as an academic, it is considered artistic research. Speaker Three in Focus Group Six seemed to believe:

"And I don't even think it's the AHRC here. I think it's REF you know, I think it's REF I think it's the journal publishers. I think it's book publishers. The humanities publication industry looks askance at co-authorship in the way they don't in sciences. I think there's a prejudice against co-authorship in the arts and humanities that we need to address. I don't know what the AHRC can do with that, but that's a different kind of question."

These comments from participants on the REF highlight two challenges, namely the reluctance to engage in co-authorship, and also a focus on written research outputs. Participant Three recounts a story that illustrates how much work needs to be undertaken to give RTPs a stronger voice and opportunities to advocate for their rights based on their lived experience. She talks of a conference where the keynote speaker was invited to discuss the importance of technicians and their role. Participant Three noted that the keynote speaker was eloquent and passionate about the subject, but she was an academic. At no point during the speech was a technician invited to share the stage or even reiterate the importance of such roles. In her own words:

"An academic giving a keynote speech about the importance of technicians, but not a technician on the stage saying, or giving the speech or even just being there, representing her side of her contribution because only she can, or he can present contribution better than anybody else."

Participant Eight believed that *"verbal and public recognition does nothing for technical specialists."* He explained that 'industry' recognises their own for their technical skills, but only academia heavily emphasises verbal and public recognition. His suggestion was to create a structure that would measure the impact of RTPs in research and then recognise the impact on the research and not just throw an accolade to the RTP.

4.5 Technician Commitment Pillar Two: Recognition

"Support technicians to gain recognition through professional registration and external awards schemes"

It is worth noting that in the survey, 65.1% of the respondents felt that their colleagues recognised their contributions. Speaker Four in Focus Group Two lamented the lack of recognition of the skills-based training many RTPs receive. She believes they demonstrate a considerable variety of practical skills over shorter periods throughout their jobs or careers which do not result in publishing outputs and academic qualifications. As she put it, there:

".....only visible qualification is the academic intellectual text-based work [but they are in fact] sitting on a raft of other skills, which they depreciate and is depreciated by the Academy."

Speaker Four in Focus Group Five had similar feelings towards external recognition:
..... if there was some way of AHRC acknowledging good

practice when they see good practice, whether that is in terms of how people are acknowledged in publications or other AHRC connected projects or awards."

4.5.1 Financial Recognition

Pay and compensation were an aspect of recognition that received almost unanimous consensus – RTPs needed to be paid more. When Participant Four asked if her contributions were adequately compensated, she responded positively because, as she put it, "I am a professor, I earn enough." It must be qualified here that the participant explained that she held RTP roles before moving into academia. However, her response pivoted completely when she re-examined the question beyond her circumstances. She declared that the "arts are never properly compensated; the arts have always relied on patronage." Several speakers in Focus Group Two had this to say about RTP compensation:

"I am sick and tired of being the highest qualified, in experience and on paper of any of the partnerships or with the universities. And you know, I'm on half the pay or less because I work in a museum … there was something seriously wrong there."- Speaker One

"When you look at equivalent roles or people that could have equivalent experience in the university sector, I'd say that they are probably paid 50% on top of what I am paid, just to do the same sort of thing or equivalent sort of thing." – Speaker Two

"in the department that I work and with all the academics that I've worked with, I am the lowest paid member of the team. I'm also at the top of my pay grade" – Speaker Three

4.5.2 Professional Recognition

Professional recognition was another issue that repeatedly came up amongst the participants, especially those starting or early in their careers. Participant 13 was the only RTP participant who immediately responded positively to the question of receiving credit for her work. She cited several projects in her recent past where she had been credited for the technical contribution she made. However, she qualifies this by suggesting that it could be the university environment she is in and how it encourages collaboration. Participant 13 is aware that non-recognition of RTP's contribution is often the case and was particularly problematic for her in the distant past.

Participant 12 insists that recognition of team members needs to be encouraged a lot more as she hardly gets cited for any of her work in her role as a digital archaeological illustrator.

She notes a worrying trend when she explains how RTPs are not recognised for their skill sets. By way of an example, she talks about the two paths; the academic path and the research technical professional path. Her observation is that as an RTP, the more one does which is seen to align towards the academic path or to have an influence or impact on research, the more people want to move that individual out of their profession and into academia instead of just valuing that individual's role and for itself. For some people, and she counts herself in that cohort, the appeal of their job is being very good at the technical aspect of their work and rising in that field without being pulled or compelled into academia. However, it would appear that progression in a specialism is fraught with difficulties, particularly when it comes to promotions.

Applying for academic promotions is entirely different from applying for re-grading for RTPs like herself. Academic promotions are judged partly externally and partly on what has been achieved within a given year. At the same time, non-academic regrading is judged on a set of standardised criteria set by human resources, typically the Higher Education Role Analysis (HERA) scheme or some variation of it set by universities. HERA regrading is not based on the specific profession or colleagues an RTP has worked with. So, within universities, academic promotions are more subjective and related to the work while RTP regrading is more objective and less related to the work but to a fixed criterion. Participant 12 admits that although this might work for purely administrative roles, this becomes a lot more convoluted for a role like hers – a digital archaeological illustrator.

When Speaker One in Focus Group Seven was asked if she got any recognition for her work as an RTP, she admitted that she was recognised for the technical delivery of part of the technical solution, but it was in no way comparable to the same sort of recognition that a traditional researcher or academic would get. She also pointed out that her working environment was atypical of other RTPs in that she and her team allocated 10% of their time to personal and professional development. This allows them to research if desired and produce publications, thus increasing their recognition. Speaker One in Focus Group Seven admitted that this was not the case with other RTPs she knows of.

Participant Five was ambivalent about RTP recognition, but he did qualify his hesitation by looking at how recognition has improved for him. His example was from his career and academic filmmaking. He notes a recent trend to use film to publicise research. One example he uses is a recent

project where he filmed melting glaciers using virtual reality cameras. His film directly resulted from the need of an academic researcher who wanted to reinterpret his findings in a medium people would appreciate. So, he is witnessing increased recognition for his work as an RTP.

Participant Five sees his recognition increasing because he translates academic papers into exhibitions through short videos, long videos, feature-length videos and virtual reality experiences. Participant Five sees his contribution as an RTP increasing access to research in a way never seen before. Such is the growing trend for his work that he is now being written into AHRC funding proposals as part of the core research team. He sees this as a by-product of the pandemic. According to him, the pandemic meant conferences were conducted remotely, which produced savings allowing organisers to produce impactful films (or feature-length documentaries, virtual reality experiences or exhibitions). Participant Four also alluded to this as a filmmaker and suggested that recognising newer methods might be due to the age and awareness of those at the helm of research. She admitted that many of her fellow professors were not aware of what was technologically possible. One example mentioned by a participant was recognition in publications. Speaker Two in Focus Group Three noted that:

"… as a library, we would be acknowledged, but none of the lab members would be mentioned or be part of the publication."

Participant Seven believes that showcasing the works of RTPs is a good way for them to garner recognition which would invariably spark collaborations and interest across fields.

4.5.3 Practice vs Publication

One area that RTPs seem to draw parallels to is the divide between practice and publication; the main contentious point is that practice should be on the same equal footing as a publication. Participant Five uses the US educational system for illustration. He notes that films are an equal contribution on the same footing as a publication in the US. As he puts it:

"It is not a paper, a film, but it is of equal power and weight."

Looking at recognition, what is immediately noticeable is the difference in responses between survey respondents and focus group and in-depth interview respondents. Two-thirds of the former felt their colleagues recognised their contributions, while it would appear it was the reverse with

the latter. The examples and quotes above may provide richer context to explain why the two sets of responses differ significantly. One helpful suggestion concerning recognition is a review of the HERA regrading scheme – admittedly, a suggestion not within AHRC's scope of activity. Having examined all the responses, almost all the participants agreed that steps by all parties were being taken in the right direction and the recognition of RTPs was improving; positive examples and instances supported this.

4.6 Technician Commitment Pillar Three: Career Development

"Enable career progression opportunities for technicians through the provision of clear, documented career pathways"

When it came to career development, the sentiments were somewhat mixed. In the survey, 95.4% of the respondents felt that their employers were encouraging/facilitating continuous professional development (CPD). Similarly, 93.6% felt they were given the necessary support and recognition to do their job effectively, but when asked if they felt adequate career development opportunities with their current employer, 65.2% answered 'No'.

Some focus group participants declared that there were hardly any vacancies in their sector or organisation; therefore, it was challenging to achieve a promotion:

"We have a massive issue about lack of promotion at the moment. It's basically dead man's shoes. So the only way of being promoted in my museum at the moment, and I think this probably goes for most in the UK, is if somebody leaves and a vacancy becomes available, but there's no guarantee that if that vacancy becomes available, it will be offered at the same level." [Speaker Four in Focus Group Six]

The disappointment about the lack of vacancies hindering career development was echoed by Speaker Two in Focus Group One:

"we've recently had one job come up, and it's the first job in 18 years here in the technician's department, there is likely to be another next year, but then, there will not be another for 20 years."

"I'm not complaining entirely because I get paid a reasonable amount and enjoy my work. But yeah, the lack of career progression is, is disappointing. Just the fact that there is nowhere to go." – Speaker Four, Focus Group Five

Speaker Four in Focus Group Two speaks of the divide between academic and non-academic research staff limiting career development:

"I belong to a museum, and none of my team makes the cuts for that academic probation system, despite various people having 10, 20, 30 years' experience working in a research environment, actively gaining and sharing knowledge."

When the question of a clear career path was posed to respondents, the overwhelming reaction was one of uncertainty. Speaker One illustrated the lack of career paths for RTPs compared to academics:

"When I started working, I was working with a research assistant on a project who's progressed to being a junior lecturer and now a senior lecturer in the time I've been here. And, you know, I'm still exactly the same as I was 10 years ago."

Speaker Three in Focus Group 1 declared that career paths for RTPs were almost impossible to chart. In their words, there is a very diverse range of practitioners, and creating a "structured pathway" would be challenging, mainly when it attracts many freelancers.

Moreover, when it comes to career advancement in technical careers in the arts and humanities research landscape, the tried and trusted way seems to be to get more degrees. As Speaker Four in Focus Group Two put it:

"I did my PhD as a mature student. Why? Because it was apparent that it was the only way to open certain doors. It was as simple as that. I was doing fine, but if you want to move in different directions, it's the Academy that's rigid. It's not us."

In Focus Group Five, one of the participants remarked that there were some career pathways for RTPs, but the higher up you want to go, the further from 'on the ground' specialist technical work they get, because the emphasis is on project management and leading people:

"The only way up now is management. If you don't want to be in charge of people and running budgets, there's no way to go." – Speaker Three

Similarly, Participant Seven bemoans the fact that, as a music technician, he has been in the same grade at his university for nine years. He effectively remained on the same grade

he started with, and barring slight adjustments in pay and title, he is no further ahead than he was when he started. However, Participant Eight does offer a contrarian view and an explanation for why there is little career advancement for RTPs. He illustrates this by using himself as an example. Participant Eight is a technical demonstrator and the only lighting designer in his department. Given the amount of work required, there is no need for more than one except at peak periods like shows or festivals, where lighting designers are hired for short, fixed terms, usually over weeks or months. In Participant Eight's view, there is little career advancement expected of a lighting designer; there is no ladder for him to climb internally if he wishes to remain in that specialism. Fortunately, he has a PhD, which gives him options such as switching to an academic path with more career options for advancement. However, he is trying to convey that in some fields, you find RTPs, and there is no room for career advancement for practical reasons.

It is worth noting the warning given by Speaker Two in Focus Group Six, where he identifies the lack of specific pathways and criteria opens the ground for unequal treatment and discrimination:

"I think that's an important thing to say when we're talking about career progression, is that the vaguer it is, the more it creates possibilities for discriminatory treatment even without somebody being conscious of it."

So far, most of the commentary has been on those who want to advance their careers, but Participant Eight seems to think that the silent majority want to remain specialists within their field. As he puts it:

"The majority of my colleagues are in their forties and are not interested, particularly in pursuing an academic career. That is not what they are doing it for. They are specialists first and foremost and want to remain that way."

Participant Seven is a music technician who applied for a PhD and got accepted but decided he did not want to take the academic route. His reasons were explicit:

"I enjoy being a technician, and I do not enjoy teaching, which seems to be the main point of going down the academic route."

Participant Eight made an analogy when he talked about the progression of RTPs and how they could be structured like academia. His analogy was relatively simple in that he asked the rhetorical question of how a body like AHRC would sell

the idea of being a professor at an academic institution if there were no progression and lecturers remained as lecturers or inevitably became 'lecturer managers' who worked as lecturers and also managed people and departments. Such a flat 'two-tier' structure would be unappealing to any new entrant. In Participant Eight's mind, that is how the career structure of an RTP is portrayed, so offering recognition and accolades but keeping a flat 'two-tier' structure is merely appeasement but not appealing enough to encourage new entrants.

Therefore, according to Participant Eight, his field is losing good RTPs to Sony, Netflix and big companies because they are paying more and offering a better structure than the flat career structure in the Higher Education sector. Speaker Two in Focus Group Seven introduced another element to limiting the career development of RTPs. She talked of the fact that as she was a contractor and part-time (many people who are collections technicians tend to be), the day-to-day needs of curating a collection scupper any long-term professional development plans. So even though she would like to invest in career progression, time is the limiting factor in RTP roles that are highly technical and often subcontracted on a part-time basis.

4.7 Technician Commitment Pillar Four: Sustainability

"Ensure the future sustainability of technical skills across the organisation and that technical expertise is fully utilised"

In the survey, when asked if their current position provided long-term contractual job security, 65.5% acknowledged that it did. However, when the same question was posed, covering their career to date, the response rate was 44.7%. Participant Four believes that her career is sustainable because she moved into education. The context of her comment was based on the fact that she now held a chair and ran an entire department, the presumption being that she oversaw both RTPs and academic staff.

Participant Two believes sustainability is not a problem as RTPs can remain at the same level for years. However, any desire to want or earn more as an RTP means considering pivoting to management or teaching within the university. Participant One discusses the precarious nature of an RTP's employment status and how that could affect sustainability. He considers himself fortunate because he was contracted for 11 years before getting a permanent job. Ordinarily, that would seem surprising until one hears it from other participants. Speaker Six in Focus Group Two put it this way:

"I know so many people who are in their forties who

are still on temporary contracts and have never had an opportunity to have a steady job in their entire lives. We are all in a very precarious position. I think the concern here is that the workloads have increased, and the compensation structure has not been able to reflect the commitment of individuals to that work." – Speaker Six

Another speaker in the same focus group declared:

"…. this is literally the first job I've ever had that is a permanent contract, at least in the museum sector. So, I'm getting on in age, so that tells you something."

When speaking about their past, Speaker Three in Focus Group Three talks about having had no job security and going from 2-year to 1-year contracts for a length of time until managing to get core funding. Recalling that:

"I can remember when I was on contracts, everything we did was new and exciting, but I had no job security. And now I have job security and very few opportunities to do new and exciting things."

Having a plateau early in their career is something many RTPs mentioned. Speaker Five in Focus Group Five illustrated this with their own story of career progression, which points to sustainability:

"I spent my first 11 years in academia working on short-term contracts, sometimes as short as six months. So I was getting redundancy letters every few months really. And that was for 11 years. I've been in this role now for 10 years. I was doing a similar role elsewhere in the university for 11 years before that on short-term contracts. Before I landed this permanent role, I think for about the past 15 years, I've been on the same spine point. So, I am at the top of my grade; I was here when I started this job 10 years ago. There is no career progression. There is nowhere else for me to go in my job family."

Participant Eight is the only participant to raise an interesting juxtaposition between academics and RTPs concerning pay grade and career sustainability. For Participant Eight, at the department he works for, there is an equal weighting of PhD holders in the technical support team as there are in the academic team. He explains that the academic team are predominantly over 50 and acquired their positions in the 1990s. A majority did not have PhDs then but have since risen through the ranks. Then Participant Eight compares that to the technical support team in their 30s and under, with the majority of PhD holders in their 20s.

Participant Eight also speaks to the sustainability of the arts in the next 50 years as one of the last places to be heavily automated, so he still sees the demand for arts research and, by extension, RTPs. He believes "it is probably a good place to go and get a career because it is probably quite secure." However, he cites the closure of arts-related sectors in the commercial space (such as media production) and how they have declined in the last five years, unlike arts within higher education. He cites this to illustrate that students are often unaware that a commercial art career, in his opinion, is not as secure as an art career in academia.

4.8 Conclusion of Findings and Insights

Trying to sum up or conclude quite varying views is challenging, but it also loses sight of some of the more salient points made by the participants. However, what is overwhelmingly clear is the subtext of their responses – a lack of group identity of the research technical professionals in the arts and humanities. The term RTP was not immediately recognisable, nor could most of the RTPs we interacted with identify with the title. This does not belie that a few respondents identified themselves as an RTP and welcomed the term. When the alternate term of 'Research Practitioners' was floated, very few objected to that characterisation. We recommend that AHRC should consider using this term going forward. A possible alternative is a 'Research Facilitation Role.'

Almost all participants of the study recognised that more needed to be done to increase the visibility of RTPs in the arts and humanities. On this basis, we produced several recommendations for the AHRC. Some respondents used visibility and recognition interchangeably because the outcome was the same for their careers. Co-authorship of research outputs and recognition for contributions was the most repeated point RTPs raised. Many respondents acknowledged that the lack of recognition was entrenched in the divide between academics and 'support staff'. However, most admitted that this changed when they 'credentialised' i.e., acquired academically focused qualifications.

Regarding the pillar of recognition, survey results indicated that two-thirds of respondents felt their contributions were recognised. Such an acknowledgement dissipated when participants were asked about financial and professional recognition. Both areas appeared to have significant shortcomings, with room for improvement. Despite what might appear negative, almost all the participants agreed that recognition of RTPs has been improving, and it is possible to see visible steps being taken in that area. Some

suggestions were made on improving recognition, which has been filtered into the recommendation report. Findings from survey results, in-depth interviews and focus groups were consistent regarding career development. RTPs felt quite strongly that career development was severely limited within their specialism. They reported a lack of clear pathways and a lack of vacancies in arts and humanities research technical roles; the only opportunities were in academia or management.

The need to 'credentialise' was also a contentious issue because of the hurdles to obtaining a doctorate while pursuing their career. Possible ways of overcoming these hurdles include developing co-authorship guidelines, creating specific awards and funding schemes for RTPs and making Principal Investigators (PIs) responsible for their team's professional progression.

Finally, sustainability was tied closely to job security, producing the same tone of responses as career development. RTPs felt they had little job security, and some accounts illustrated that point quite well. This pillar had a mixed response in that many participants felt insecure about the length of contracts they were often susceptible to as RTPs but, at the same time, acknowledged that academia offered the kind of employment stability that was hard to find in the arts-related sectors in the commercial space.

Bibliography

An, Kyong-Sok, Seung-Hwan Gu, and Jun-Ho Yoo. 2012. "On Plans to Improve and Activate the Qualification System of Theatrical Art Technicians." The Journal of Korea Contents Association 12 (5): 163-174.

Ball, Stephen J. 1995. "Intellectuals of Technicians? The Urgent Role of Theory in Educational Studies." British Journal of Educational Studies 255-271.

Battentier, Andy. 2017. "We Should Not Forget Technicians: Towards a Study of Technical Intermediaries in Art Worlds." Conference of the European Sociological Association. Athens: University of Milan.

Battentier, Andy. 2021. "Creative Craft in Music: Careers and Roles of Sound Technicians." In Sociology of Sound Technicians. Musik und Gessellschaft, by Sarah Chaker and Michael Huber, 41-68. Wiesbaden: Springer VS.

Benneworth, Paul, Magnus Gulbrandsen, and Ellen Hazelkorn. 2016. The Impact and Future of Arts and Humanities Research. London: Palgrave Macmillan.

Brook, Orian, O'Brien, David and Taylor, Mark. 2020. Culture Is Bad For You. Manchester: Manchester University Press.

Cilliers, Paul. 1998. Complexity of Postmodernism: Understanding Complex Systems. London: Routledge.

Condee, William. 2016. "The Interdisciplinary Turn in the Arts and Humanities." Issues In Interdisciplinary Studies 12-29.

Crossick, Geoffrey, and Kaszynska, Patrycja. 2022. "Understanding the Value of arts & culture: The AHRC Cultural Value Project." UK Research and Innovation. January 7. Accessed August 22, 2022. https://www.ukri.org/wp-content/uploads/2021/11/AHRC-291121-UnderstandingTheValueOfArts-CulturalValueProjectReport.pdf.

Donahue Wylie, Caitlin. 2015. "'The artist's piece is already in the Stone': Constructing creativity in palaeontology laboratories." Social Studies of Science (Sage Publications) 45 (1): 31-55.

Dunn, Stuart. 2009. "Dealing with the Complexity Deluge: VREs in the Arts and Humanities." Library Hi Tech 27 (2): 205-216.

GOV.UK. UK Research and Development Roadmap, 2020. HM Government, 2020. https://www.gov.uk/government/publications/uk-research-and-development-roadmap

Griffin, Gabriele. 2012. "Writing About Research Methods in the Arts and Humanities." In Theories and Methodologies in Postgraduate Feminist Research, by Gabriele Griffin, Nina Lykke and Rosemarie Buikema. London: Taylor & Francis.

Harvey, Nicola. 2005. "The Art of Outsourcing [Many successful artists are working

with technicians who contribute skill, time and experience to the final work." Artlink 25 (1): 15-17.

Hunt, Nick, and Melrose, Susan. 2005. "Techne, Technology, Technician." Performance Research 10 (4): 70-82.

Iliffe, Rob. 2008. "Technicians." The Royal Society 3-16.

Industrial Strategy Council. UK Skills Mismatch in 2030. 2019. https://industrialstrategycouncil.org/sites/default/files/UK%20Skills%20Mismatch%202030%20-%20Research%20Paper.pdf.

Lewis, Paul A. 2019. "Technicians and Innovation: A Literature Review." Social Science Research Network.

Lyman W., Porter, Steers Richard M., Mowday Richard T., and Boulin Paul V. 1974. "Organisational Commitment, Job Satisfaction, and Turnover Among Psychiatric Technicians." Journal of Applied Psychology 59 (5): 603-609.

Marzola, Luci. 2016. "A Society Apart: The Early Years of the Society of Motion Picture Engineers." Film History (Trustees of Indiana University) 1-28.

Greenhall, Matt. 2019. Digital Scholarship and the Role of the Research Library. RLUK. *RLUK-Digital-Scholarship-report-July-2019.pdf

Moreton, Simon. 2014. "Rethinking 'knowledge exchange': new approaches to collaborative work in the arts and humanities." International Journal of Cultural Policy 100-115.

Pole, Christopher. 2000. "Technicians and scholars in pursuit of the PhD: some reflections on doctoral study." Research Papers in Education 15 (1): 95-111.

Reddington, Helen. 2021. She's at the Controls: Sound Engineering, Production and Gender Ventriloquism in the 21st Century. Sheffield: Equinox.

RLUK. Research libraries make it happen: RLUK statement of support for the Technician Commitment. Accessed 21 April 2022, https://www.rluk.ac.uk/rluk-technician-commitment/

Russell Group. Realising Our Potential. 2021. https://russellgroup.ac.uk/media/5925/realising-our-potential-report_4-compressed.pdf

Russell, N. C., Tansey, E. M. and Lear, P. V. 2000. "Missing Links In The History and Practice of Science: Teams, Technicians and Technical Work." History of Science 38 (2): 237-241.

Savage, Tim. 2018. "Creative Arts Technicians in Academia: To Transition or not to Transition?" Art, Design & Communication in Higher Education 17 (2): 237-253.

Schiuma, Giovanni, and Carlucci, Daniela. 2018. Big Data in the Arts and Humanities: Theory and Practice. Boca Raton: CRC Press.

Shon, Donald A. 1986. Speculative Pragmatism. Open Court: University of Massachusetts.

The Royal Society. The Research and Technical Workforce in the UK. 2021. http://www.royalsociety.org/research-and-technical-workforce-uk

UK Government Research and Development, Department for Business, Energy & Industrial Strategy. People and Culture Strategy. 2021. https://www.gov.uk/government/publications/research-and-development-rd-people-and-culture-strategy

UKRI & AHRC. The role of academic and research libraries as active participants and leaders in the production of scholarly research: A report on an RLUK scoping study. Evidence Base, 2021. https://www.rluk.ac.uk/wp-content/uploads/2021/07/RLUK-Scoping-Study-Report.pdf

UKRI. "AHRC Capability for Collections Fund". Ukri.Org. Last modified 4 March 2021. https://www.ukri.org/opportunity/ahrc-capability-for-collections-fund/.

UKRI. "101 Jobs That Change the World". Ukri.Org. Accessed 21 April 2022. https://www.ukri.org/news-and-events/101-jobs-that-change-the-world/

UKRI. Strategy 2022-2027: Transforming tomorrow together', Objective 1: World-class people and careers. 2022, p.13-18. https://www.ukri.org/wp-content/uploads/2022/03/UKRI-Strategy-Final.pdf

UKRI. Technician Commitment: UKRI Action Plan. 2021. https://www.ukri.org/wp-content/uploads/2021/02/UKRI-040221-TechnicianCommitmentActionPlan.pdf

UKRI. The TALENT Commission, Technical Skills, Roles and Careers in UK Higher Education And Research. MI TALENT, 2022. https://www.mitalent.ac.uk/theTALENTCommission.

UKRI. The UK'S Research and Innovation Infrastructure: Opportunities to Grow Our Capability. UK Research and Innovation, 2020. https://www.ukri.org/wp-content/uploads/2020/10/UKRI-201020-UKinfrastructure-opportunities-to-grow-our-capacity-FINAL.pdf.

Winiesdorffer, Carley. 2019. "Art in Production - The Use Technicians in Contemporary Art Making." Edinburgh Research Archive.

Appendix A

Appendix A

A1 Research Plan

Sign off

Prepared by:	Dr Kathryn Mitchell	20 July 2022
Reviewed by:	Dr Jim Coke	

What

Research study:	Research Technical Professionals (RTPs) in Arts and Humanities Research Council (AHRC)
Study aim:	Understand the role of RTPs in arts and humanities research and how AHRC can better support RTPs about the Technician Commitment.
Researcher:	Dr Kathryn Mitchell
Study context:	There are an estimated 30,000-50,000 RTPs in UK universities and research institutions. In 2017 the Technician Commitment was introduced to advance four pillars: visibility, recognition, career development and sustainability in UK higher education and research. However, there remains a gap in the profile of the RTP community within research. This study will improve the understanding of RTP in AHRC, the GLAM (galleries, libraries, archives and museums) sector and creative industries while also exploring how AHRC can support RTPs along the four pillars of the Technician Commitment.
Proposed research date:	27 July – 16 September 2022

Why

Research objective:	• Map RTP community contribution to AHRC • Develop an inclusive definition of RTP • Highlight skill requirements and professional development needs of RTPs • Provide recommendations • Increase response rate to surveys, interviews and focus groups
Research outcome/measures:	1. Improve participant response rate across all community engagement efforts 2. Provide a report with recommendations based on the findings to AHRC

How

Participant Recruitment Method:	• Provide monetary incentives to all levels of community engagement. • Research Associates conduct contact research for respondents. • Utilise AHRC contact list and promotion on Newsletter • Snowball survey respondents by inviting them to participate in an interview/focus group. • Snowball method for interviews and focus groups.
Research Methods:	• Literature Review • Community Engagement (interviews, focus groups and surveys)

Who

Participants:	RTPs in UK arts and humanities (higher education, GLAM sector and creative industries)
Number required:	12 interviews, 12 focus groups (4-6 participants in each group) and a minimum of 200 survey respondents
Incentives for participants:	• Focus Groups - £50 offered to each participant • Interviews - £50 offered to each participant • Survey - Raffle to win £100 provided as a monetary incentive to all participants with 20 winners.

Ethical Considerations

Consideration	Mitigation
Informed consent, anonymity and Confidentiality	• Participants will be advised at recruitment that they will not be required to disclose any such info and be reassured at the start of each community engagement activity. • Participants' full names and details are not shared with AHRC or other third parties. • All participants will sign an informed consent form before partaking in the research.
Participants may be concerned that their identity/data will be at risk once recorded and held by the researcher.	The researcher will remove any material that identifies a participant in research activity. All responses are treated with strict confidentiality. All recordings taken during any research activity are deleted from Melian Dialogue's shared drive and the recycle bin, once they have been reviewed.
Emotional wellbeing and state of researcher	To protect the researcher's well-being and mental state, no more than **4 research sessions will be booked in 1 day. Our researchers will avoid booking back-to-back sessions and allow breaks between sessions.**
Safeguarding considerations for the researcher	There are no immediate safeguarding concerns for the project.
COVID-19 reviews	The researcher will be mindful of the potential impact on participants due to the current Global Pandemic. If the impact of COVID-19 on a participant's business and/or personal life is discussed, our researchers are trained to be empathetic and direct them to guidance from the UK government. Consideration will always be given to circumstances that might affect the completion of any research activity such as; childcare needs, session interruptions, illness and technical difficulties. Mitigation of these circumstances will always involve rescheduling sessions or taking breaks if and when required.

Data Processing

Data origin/source	Type	Explicit IDs (Y/N)	Number of records	Impact if disclosed
Participants recruited for the study	Names, email addresses and contact numbers	Yes	Unknown	No
	Consent forms	The email address of participants will be used to send consent forms for completion and returned to the researcher's Melian Dialogue email account.	Unknown	Low
	Dataset	Yes	Unknown	Low
Anonymised notes made by researcher and observers from participant observation sessions	Notes	No	Unknown	Low

Data Risk Of Disclosure

Data	Process	Description	Additional information	Risk of disclosure
Names and email addresses	Collection & Transfer	The researcher(s) will email participants inviting them to participate in the research activity. Email addresses will be obtained from Melian Dialogue's secure databases.	Emails sent from meliandialogue.com	Low
	Storage	A participant's database will be created, password protected and stored until deletion.	Consent forms with personal data will be stored on the secure Melian Dialogue database.	Low
	Deletion	The database of participants will be deleted two months after the project due date.	Emails will be deleted from the inbox and deleted items folder. Excel and Word documents sent from the stakeholders will be deleted from files and trash.	Low
Consent Forms	Collection & Transfer	Verbal consent will be used for telephone discussions/ research where that is applicable or occurs. The main research activity will require a Consent form and will be emailed to participants by the Melian Dialogue researcher using the meliandialogue.com email address.		Low
	Storage	The Consent forms electronically signed by participants will be retained in a secure Melian Dialogue folder.		Low
	Deletion	The participant's email record will be deleted from the secure meliandialogue.com inbox once the Consent form is returned.		Low
Dataset	Collection & Transfer Storage	Participant metrics and any other data collected during the research activity will be retained in a secure meliandialogue.com folder.	Access to the folder is restricted to the researcher.	Low Low
	Deletion	Participant metrics and data will be deleted two months after the project due date.	Deleted from the inbox and deleted items folder within Outlook.	Low
Notes	Collection & Transfer	Notes/insights from participant observation will be recorded - handwritten and electronically. Anything which could identify a person/individual will not be registered.	Notes will be taken on a secure Melian Dialogue laptop where possible.	Low
	Transfer	Notes will be collected remotely. If handwritten notes are taken, they will be transferred to the Melian Dialogue office for destruction once it is safe to do so.		Low
	Storage	Notes will be stored within a secure Melian Dialogue folder. If handwritten notes are taken, they will be transferred to the Melian Dialogue office for destruction once it is safe to do so.	No personally identifiable data will be recorded as part of the notes or from the insights created.	Low
	Processing	Notes will be analysed and insights identified. No personal data will be recorded as part of the themes/ analysis.	All personal data in notes and insights will be anonymised.	Low
	Deletion	All notes will be deleted once they are no longer required for research purposes.	Electronic notes will be deleted from the Melian Dialogue secure folder. Any physical notes will be destroyed in a Melian Dialogue secure waste once it is safe.	Low

A2 Method Statement for Interviews

Research study	Research Technical Professionals (RTPs) in Arts and Humanities Research Council (AHRC)
Date of statement	21 July 2022
Duration of research fieldwork	28 July - 21 August 2022
Location of interview sites	Online
Method Statement written by	Dr Kathryn Mitchell
Researchers	Dr Kathryn Mitchell and Research Associates

Introduction

This Method Statement describes the specific safe working methods which will be used to carry out the research. It gives further details of how the research will be carried out and what health and safety issues and controls are involved. The content of this Method Statement reflects the findings of the relevant Risk Assessment(s).

Description of work for researcher

- The researcher will increase recruitment and conduct interviews and focus groups as part of the community engagement plan. Information Sheets and Consent Forms will be sent to participants.
- Increase participation with the online survey by offering monetary incentives.
- Research Associates will provide support through recruitment, conducting interviews/focus groups, and transcribing and coding the data.

Type and scope of work being carried out (including working hours)

- Type of work described above.
- Working hours will primarily remain within the working week from 9am-5pm, with some interview and focus group session options available in the evening and on Saturday afternoons to allow for weekday scheduling conflicts.

Sequence of operations involved in the work

Research Study - Sign-off

- From 21 July 2022 to 26 July 2022, the Senior Research Consultant will organise the Research Associates and formulate a new progress plan to present to AHRC.
- Research Associates will also be tasked with researching contact lists from relevant AHRC, GLAM and creative industries sectors for the survey, interviews and focus groups.
- Recruitment will be ongoing and incorporate a new monetary incentive for all participants (survey, focus group and interviews). This will include:
    - £100 prize draw for survey participants with 20 winners
    - £50 for focus group participants
    - £50 for interview participants

Research Study - Survey

- The survey will run from July 28 until 21 August 2022.
- The survey has been reduced from its original 40+ question format to improve the completion rate (questions have been integrated into the focus groups and interviews). This will refocus the survey to its original goal of collecting demographic information, exploring how participants self-identify as an RTP and their contributions to the AHRC community. A progress bar has also been introduced as studies have shown this increases completion rates.
- The information page for the survey will be edited to highlight the immediate (monetary) and long-term (systems change, recognition, etc.) benefits to the participants.
- The end of the survey will invite participants to join a focus group or interview to share more of their experience as an RTP. This will be facilitated through a doodle poll (focus group) and Calendly schedule (interviews).
- An analysis of the survey data will be completed from 22 August – 27 August.

Research Study - Interviews and Focus Groups

- Interview and focus group questionnaires will be rephrased as open-ended questions to minimise preparation time. Questions taken from the survey will also be integrated into the question sets.
- Information Sheets will be redrafted to highlight the immediate (monetary) and long-term (systems change, recognition, etc.) benefits to the participants.
- Consent forms will clearly detail if participation is anonymous or confidential.
- Calendly will be used for scheduling interviews and a Doodle poll will be used to organise focus groups. Both of these will be held on MS Teams.

Duration of work

- Community Engagement: 28 July – 21 August
- Analysis: 22 August – 27 August
- Final Report with Recommendations and Review Period: 30 August – 16 September 2022

Location work

Online

Completion criteria

- Total of 12 interviews, including the ones already conducted
- Total of 12 focus groups with 4-6 participants in each, including the ones already conducted
- Increase the survey response rate, primarily to a minimum of 200 participants

Final report presented to AHRC complete with recommendations.

Appendix B

Appendix B

B1 Software and Tools

B.1.1 Melian Dialogue Research Platform

Melian Dialogue uses a proprietary research platform (www.portal.meliandialogue.com) to allow the client to see the research creation in real time. Seven AHRC stakeholders could access the portal via a web browser or the Melian Dialogue app available for iOS and Android operating systems. As a native app, AHRC stakeholders could get notifications immediately after a research item was created, such as a researcher uploading a document, making changes to drafts, deleting sections or requesting changes or approvals. AHRC stakeholders and researchers could also communicate in real-time through a chat messaging system, ensuring that everyone was kept up to date with any and every aspect of the research project.

B.1.2 Calendly

The Calendly software (www.calendly.com) was used to remotely schedule the various in-depth interviews and focus groups. Participants were sent a link to an event on a calendar that allowed them to choose a time and day to be interviewed. 24hrs and 1hr prior to the scheduled interview, they received notifications advising them of the same. After an interview was concluded, the participant received a 'Thank you' email, reassuring them that their data would be held by the standards indicated in the Information Sheet they were given.

B.1.3 Dovetail

All recorded interviews were uploaded to the Dovetail software (www.dovetailapp.com), where they were transcribed and analysed using tags created by the researcher. Each tag was developed based on the critical points in the Discussion Guide approved by the client.

B.1.4 Typeform

Typeform was used to create and disseminate the surveys to participants (www.typeform.com). Typeform is distinctive in that the surveys it produces show questions that appear one at a time, thus maintaining the user's engagement. It allows researchers to include images, videos and GIFs as part of a survey or questionnaire and sub-questions based on "logic jumps". Typeform operates via a smartphone, tablet and web browser, and the link for the survey can quickly and effortlessly be disseminated through social media, making it easy to encourage users to participate in the survey.

B.1.5 PandaDoc

PandaDoc was used to send out Information Sheets and Consent Forms to participants electronically, duly completed online. PandaDoc allows users to sign documents electronically. Once signed, participants could download their copy, and a further copy was sent to a repository at rtpresearch@meliandialogue.com.

B.1.6 UXPressia

UXPressia (www.uxpressia.com) was used to design the persona maps, which

identify the needs and challenges of the main user groups. It was also used to create the customer journey maps.

B2 Study's Procedural documentation

B.2.1 Research Plan and Timeline

A research plan and timeline were created for the study, which are inserted in Appendix A.

B.2.2 Discussion Guides

Discussion Guides for the in-depth interviews and focus groups were also created at the beginning of the study, and these are inserted in Appendix B.

B.2.3 Information Sheet and Consent Forms

Information Sheets and Consent Forms were created for all interview and focus group participants, which were disseminated to participants via PandaDoc before each interview. A copy of the Information Sheets and Consent Forms for each user group can be found in Appendix C.

B.2.4 Risk Assessment

A risk assessment was carried out and conceptualised into a risk assessment plan. A copy of the plan can be found in Appendix D.

Appendix C

Appendix C

C1 Discussion Guide - In-depth Interviews

Hello, my name is [name], and I'm a researcher working for Melian Dialogue Research Limited. We want to understand the challenges and experiences of those who work as research technical professionals and how AHRC can better support professionals like yourself in line with the Technician Commitment. [EITHER: I'm also joined by my colleague [name], who will be taking notes during this session.] [OR: I'll be taking notes, so don't be put off if I go quiet, I'm just noting down key points!]

- All information gathered will be confidential. Anonymous quotes from the interview may be included in the research outputs, including the final report to AHRC.
- If at any point you feel uncomfortable or prefer not to answer a specific question, you can just say so.
- You are free to end the interview whenever you wish, and you have the right to withdraw from the study as a whole at any point.
- You will receive compensation for your time, which will be paid out by email on the 23rd of August

To improve our results, we would like to ask for your permission to record this session?
[START RECORDING]
Any questions?
[GET VERBAL CONSENT] Before we start, I just need to check that you've read the Information Sheet and you have signed the Consent Form we sent across:

*Check they have received and read the Information Sheet
*Check Consent Form is signed and received (if not, get verbal consent on Teams)

Primary objective	Purpose of section	Notes	Timing guide
1. Background	Explain the purpose and ground rules for the interview, e.g. the recording, the nature of the responses, follow-up questions etc. Reiterate critical points to the participant: • All information gathered will be confidential. Anonymous quotes from the interview may be included in the research outputs, including the final report to AHRC. • Remind the participant that the discussion will be video-recorded with their permission. • Remind the participant that third-party software will be used to transcribe the output of the session. • If at any point they feel uncomfortable or prefer not to answer a specific question, they can just say so. • They are free to end the interview whenever they wish, and they have the right to withdraw from the study as a whole at any point. • Check if they have any questions before starting. Recording: • Ensure verbal permission is obtained before the video recording begins. • Once consent has been given, start the video recorder in Teams.		
2. Ease in	**Structured Question:** Can you tell me a little bit about your career as a research technical professional? **Follow-Up Questions:** • How did you get started? What's your academic background? • What is your current role? What do you do? • How long have you been in this field? • Can you tell me a little about your research area/interests? • Are you aware of AHRC or have you ever received funding from them? • Challenges: • Do you identify as an RTP? Do you think others identify you as an RTP? • Why do/don't you feel connected to this term/community? • What do you think would be a better term?		
3. Pillar: Career Development	Enable career progression opportunities for technicians through the provision of clear, documented career pathways **Structured Question:** Can you explain a bit about how your career has progressed? Was there a clearly outlined path for you up until this point and after? **Follow Up Questions:** • Is there a clear career ladder for you currently? • What sort of career development opportunities does your current employer/institution/organisations offer? • What other sort of career development opportunities or skills training might you benefit from? (ask for specifics) **Barriers/Challenges:** • Were there any barriers or challenges to establishing your career early on? Later on? Current issues? • How has a lack of a clear career path affected your personal and professional life? • Was/is your career development affected by a lack of recognition from others in your field?		

Primary objective	Purpose of section	Notes	Timing guide
4. Pillar: Recognition	Support technicians to gain recognition through professional registration and external awards schemes **Structured Question:** In what ways do you contribute to arts and humanities research?/ Can you briefly explain how you contribute to arts and humanities research? (influence, leadership, impact) **Follow Up Questions:** • How are your contributions recognised/valued by others in your field (colleagues/employer)? (publications, visibility, influence, feeling of being valued, etc) • Do you feel your research contributions are adequately recognised (by those in field, arts council, government, public, etc)? Why or why not? • Do you feel you're adequately compensated (financially) for your contributions? Why or why not? **Barriers/Challenges:** • Do you think the Covid-19 pandemic impacted recognition of your work? Why/why not? • Has your recognition/contribution to a project ever been excluded? Can you say more about that?		
5. Pillar: Visibility	Ensure that all technicians within the organisation are identifiable and that the contributions of technicians is visible within and beyond the institution **Structured Question:** What do you think can be done to improve visibility of RTPs in arts and humanities? **Follow Up Questions:** • What is your university/institution, etc currently doing to improve visibility of RTPs? • How could you be better supported by others in your field (colleagues, current/previous employer, HR, etc)? (funding, technical training, networking) • Do you think people you work with/for know what you do? (colleagues, HR, students, audiences, etc) • Do you take part in any conferences, publications, exhibitions, etc? Are more needed to increase visibility? **Barriers/Challenges:** • Have you ever faced inequality, discrimination or bullying in your workplace? How did this impact your ability to do your job? • Has your job title ever been mistaken for another in your university? (asking to do something beyond job description) -misconceptions?		
6. Pillar: Sustainability	Ensure the future sustainability of technical skills across the organisation and that technical expertise is fully utilised. **Structured Question:** In terms of job security, how sustainable is a career as a RTP? **Follow Up Questions:** • [if no] How to improve? Any skills or development to improve? Funding? • Would you recommend someone take this career path? What advice would you offer someone starting out and why? • Do you think there's adequate funding and support to do your research? **Barriers/Challenges:** • How has a lack of [whatever they mention affects sustainability – ex: job security/low income] impacted you? • Have you ever thought of leaving this field for another? Why? … And a job as an RTP doesn't [state inverse of what they answer]?		
7. Close	Thank you and close. Reiterate key points to the participant: • Any final thoughts? Challenges to RTP work or ways to improve? • If any other questions arise would you mind if I contacted you? • Thank them for their time and reassure them of the confidentiality of the responses, as explained at the beginning of the interview. • SNOWBALL!! Network? FG participants??? • Payment in email on August 23rd		

C2 Discussion Guide - Focus Groups

Hello, my name is [name], and I'm a researcher working for Melian Dialogue Research Limited. We want to understand the challenges and experiences of those who work as research technical professionals and how AHRC can better support professionals like yourself in line with the Technician Commitment. [EITHER: I'm also joined by my colleague [name], who will be taking notes during this session.] [OR: I'll be taking notes, so don't be put off if I go quiet, I'm just noting down key points!]

- All information gathered will be confidential. Anonymous quotes from the interview may be included in the research outputs, including the final report to AHRC.
- If at any point you feel uncomfortable or prefer not to answer a specific question, you can just say so.
- You are free to end the interview whenever you wish, and you have the right to withdraw from the study as a whole at any point.
- You will receive compensation for your time, which will be paid out by email on the 23rd of August

To improve our results, we would like to ask for your permission to record this session?
[START RECORDING]
Any questions?
[GET VERBAL CONSENT] Before we start, I just need to check that you've read the Information Sheet and you have signed the Consent Form we sent across:

*Check they have received and read the Information Sheet
*Check Consent Form is signed and received (if not, get verbal consent on Teams)

Primary objective	Purpose of section	Notes	Timing guide
1. Background	Explain the purpose and ground rules for the interview, e.g. the recording, the nature of the responses, follow-up questions etc. Reiterate critical points to the participant: • All information gathered will be confidential. Anonymous quotes from the interview may be included in the research outputs, including the final report to AHRC. • Remind the participant that the discussion will be video-recorded with their permission. • Remind the participant that third-party software will be used to transcribe the output of the session. • If at any point they feel uncomfortable or prefer not to answer a specific question, they can just say so. • They are free to end the interview whenever they wish, and they have the right to withdraw from the study as a whole at any point. • Check if they have any questions before starting. Recording: • Ensure verbal permission is obtained before the video recording begins. • Once consent has been given, start the video recorder in Teams.	Skip – already done above	5 min
2. Ease in	**Question:** What area do you currently work in (GLAM, HEI, Research institute, creative sector) and how long have you been working as an RTP? **Prompts:** • How do you identify your role? Do you identify with the term RTP? - READ TERM • If you were in charge, could you think of a better term?		5-15 min
3. Visibitlity Pillar	Ensure that all technicians within the organisation are identifiable and that the contributions of technicians is visible within and beyond the institution **Question:** How can visibility of RTPs be improved in the arts and humanities? **Prompts:** • By your institution? By AHRC? • Improvements for networking? Online and in-person? • Benefits of establishing and providing funding for showcases/exhibitions? • Benefits of conferences? **Question:** Are there any discrepancies between your own views about your work and how your organisation or colleagues view your work? **Prompts:** • Excluded from work • Asked to do something you don't do		10 min

Primary objective	Purpose of section	Notes	Timing guide
4. Recognition Pillar	Support technicians to gain recognition through professional registration and external awards schemes **Question:** In what ways has your work as an RTP been recognised or rewarded? (publications, influence, leadership, impact) **Prompts:** • Research outputs: Publications? • Institutional recognition/annual review – beneficial? • How could your recognition be improved? • Are there any recognisable awards in your area of work? (What are they for? Could more awards help improve recognition?)		10 min
5. Career Development Pillar	Enable career progression opportunities for technicians through the provision of clear, documented career pathways **Question:** Would a clear career ladder for RTPs improve the field? (turnover, skill development, pay scale, etc) **Prompts:** • How has your employer supported your professional development? • What sort of skill training might you benefit from? • Would you benefit from skill training in: (business/marketing, tech/computer skills, communication skills) **Question:** Were there any barriers or challenges to establishing your career early on? Later on? **Prompts:** • Current issues? • Academia oversight: no self autonomy/creativity? • Short-term project based/ lack of stability • How lack of project funding affects career development • Funding for tech in projects		10 min
6. Funding	**Question:** Do you think there's adequate funding to do your research? **Prompts:** • Are you aware of AHRC or have you ever received funding from them? How could awareness be improved? – barriers to AHRC funding • Technology funding • Research/Project funding		10 min
7 Sustainability Pillar	Ensure the future sustainability of technical skills across the organisation and that technical expertise is fully utilised. **Question:** In terms of job security, how sustainable is a career as an RTP? **Prompts:** • Would you encourage others (early career researchers, youths, etc) to become an RTP? What would they need to know before entering the field? • How might people be encouraged to join an RTP role? Apprenticeships/ Mentorship? • Would additional encouragements to join improve visibility? • How do you think AHRC could improve job security?		10 min

Primary objective	Purpose of section	Notes	Timing guide
8. Close	Thank you and close. Reiterate key points to the participant: • Any final thoughts? Challenges to RTP work or ways to improve? • If any other questions arise would you mind if I contacted you? • Thank them for their time and reassure them of the confidentiality of the responses, as explained at the beginning of the interview. • SNOWBALL!! Network? FG participants??? • Payment in email on August 23rd		5 min

Appendix D

Appendix D

D1 Participant Information Sheet

Research Project Title
AHRC RTP Research

Invitation
You are being invited to take part in a research project. Before you decide to do so, it is important you understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

What is the project's purpose?
On behalf of AHRC Melian Dialogue is carrying out a scoping study to explore the role of Research Technical Professionals who contribute to arts and humanities research. We would like to discuss your experiences in the role of Research Technical Professional, in particular covering your institution's commitment to the Technician Commitment.

Do I have to take part?
It is up to you to decide whether or not to take part. If you do decide to take part you will be able to keep a copy of this information sheet and you should indicate your agreement to the online consent form. You can still withdraw at any time. You do not have to give a reason.

What will happen to me if I take part?
You will be asked to participate in a focus group, interview or both with our researchers.

What are the possible disadvantages and risks of taking part?
Participating in the research is not anticipated to cause you any disadvantages or discomfort. The potential physical and/or psychological harm or distress will be the same as any experienced while speaking to somebody about your role.

What are the possible benefits of taking part?
We are not incentivising anyone to take part.

What happens if the session stops earlier than expected?
Should the session stop earlier than planned and you are affected in any way we will tell you and explain why.

What if something goes wrong?
If you have any complaints about the session in the first instance you can contact any member of the research team. If you feel your complaint has not been handled to your satisfaction you can contact Melian Dialogue's head of research or the AHRC point of contact to take your complaint further (see below).

Will my taking part in this session be kept confidential?

All the information that we collect about you during the course of the research will be kept strictly confidential. You will not be able to be identified or identifiable in any reports or publications unless you have consented to do so in a case study. Any data collected about you will be stored online in a form protected by passwords and other relevant security processes and technologies. Data collected may be shared in an anonymised form to allow reuse by the research team and other third parties. These anonymised data will not allow any individuals to be identified or identifiable.

Will I be recorded, and how will the recorded media be used?

You will be recorded only if you give your consent. Any recordings will be stored and used for research purposes. The storage and disposal will be according to the GDPR.

What will happen to the results of the research project?

Results of the research project will contribute to an external facing report for AHRC. You will not be identified in any report or publication unless you consent to be used as a case study.

Who is organising and funding the research project?

The project is organised and funded by AHRC.

Contacts for further information

The research team can be contacted by email, rtpresearch@meliandialogue.com. Melian Dialogue head of research Dr James Mullen, Tel: +44 (0)774390 7776, email: james@meliandialogue.com. The AHRC points of contact are Lucie Connors, Lucie.Connors@ahrc.ukri.org and James Phillips, james.phillips@ahrc.ukri.org. Thank you for taking part in this research project.

D2 Consent Form

PARTICIPATION IN THIS RESEARCH STUDY IS VOLUNTARY

I have read and understood the participant Information Sheet or it has been read to me. I have been able to ask questions about the research project and my questions have been answered to my satisfaction.	
I consent voluntarily to participate in this research project and understand that I can refuse and withdraw from the study at any time without having to give a reason.	
I agree with the in-depth interviews being audio and video recorded.	
I understand that the information I provide will be used to improve the AHRC's understanding of the role of Research Technical Professionals and that the information will be anonymised unless I consent to be used as a case study.	
If you want to use quotes for the research output of the in-depth interviews, I agree that my (anonymised) information can be quoted in research outputs unless I consent to be used as a case study.	
I understand that any personal information that can identify me – such as my name, address, will be kept confidential and not shared with anyone beyond the study team.	
I give permission for the (anonymised) information I provide to be deposited in a data archive so that it may be used for future research.	

Participant's name:

Signature: _____ Date:

Researcher's name: Dr. Kathryn Mitchell

Signature:_____ Date:

Appendix E

MELIAN DIALOGUE
RESEARCH REINVENTED

Appendix E

E1 Risk Assessment plan

Description of research activity	Understand the role of RTPs in arts and humanities research and how AHRC can better support RTPs in relation to the Technician Commitment.
Date of assessment	20 August 2022
Duration of the research project	23 April 2022 - 23 September 2022
Location of interview sites	Completed remotely
Risk Assessment was written by	Dr Jim Coke

Training and individual needs of the researcher

Training has already been provided to the researcher on the methods and equipment used in the research project to help manage demanding situations (e.g., a participant becoming aggressive or agitated) and ensure that any necessary equipment is used correctly. The health risks of the researcher have also been addressed, i.e. vulnerabilities and pre-existing health conditions. The following measures will be taken prior to the commencement of any in-depth interview or focus group session:

1. The researcher is advised to be in a comfortable and undisturbed environment for the duration of the session. The researcher must follow all health and safety advice for the location chosen.
2. All research has been scheduled to be conducted during daylight and working hours between 9 am – 5 pm GMT.
3. Given that the remote research activity presents minimal risk, the activity will be conducted by a single researcher.
4. All confidential materials will be uploaded into the cloud as soon as it is collected from the participant e.g., video and consent forms.

#	Research, health and safety risks	Possible effects/harm	Risk rating	Existing controls	Risk reduction	Revised risk rating
1	Social risk	Disclosures that could affect participants standing in the community, in their families, and in their jobs.	L	Information about participants and the researcher is known only to Melian Dialogue and AHRC	Melian Dialogue has specific confidentiality/non-disclosure clauses in its technical submission to AHRC which forms part of its contractual agreement.	L
2	Legal risk	Activities that could result in the participant, researchers or Melian Dialogue committing an offence while undertaking the research; activities that might lead to a participant disclosing criminal activity to a Melian Dialogue researcher which would necessitate reporting to enforcement authorities; activities that could result in a civil claim for compensation.	M	Melian Dialogue is a member and holds company status at the Market Research Society (MRS). Melian Dialogue follows the society's ethical approval standards. Any of its researchers who has direct contact with participants are advised to report any suspicious activities or concerns during the study.	The lead researcher will train all junior researchers to detect and report any suspicious activities or concerns during the study. Melian Dialogue has also retained the Peninsula Group for additional legal advice.	L
3	Economic risk	Financial harm to the participant, researcher, Melian Dialogue or AHRC through disclosures or other events.	L	There is nothing proprietary emanating from the research study except the data collected which is covered by data procedures and the risk of disclosure statement outlined in the research plan. Any financial costs to AHRC and the participants will be compensated.	The research study is entirely funded by Melian Dialogue Research Ltd. Therefore, any financial harm to the researcher or AHRC is covered under the following business insurance: Melian Dialogue's level of insurance for 2022 is as follows: Professional Indemnity Insurance- Cover up to £5,000,000 Public Liability Insurance - Cover up to £5,000,000 Employer's Liability Insurance - Cover up to £10,000,000	L
4	Reputational risk	Damage to AHRC's public perception or the researchers' reputation in the eyes of the research community and/or the general public.	L	The study will be undertaken after contracts between AHRC and Melian Dialogue are signed accompanied by an approved Method Statement and Risk Assessment. AHRC's management team, for this specific study, will assist the Melian Dialogue to help mitigate any reputation risk.	To further mitigate any reputational risk, all social media engagement will only be undertaken with approval and consent from AHRC.	L

#	Research, health and safety risks	Possible effects/harm	Risk rating	Existing controls	Risk reduction	Revised risk rating
5	Safeguarding	Risk to participants, vulnerable adults and/or the researcher from improper behaviour, abuse or exploitation. Risk to the researcher of being in a comprising situation, in which there might be accusations of improper behaviour.	L	All contact will be recorded and uploaded to Melian Dialogue's research portal thus any improper behaviour will be on record. This acts as a first-tier deterrent. Other mitigation strategies include interview training conducted for all Melian Dialogue researchers.	Participants are advised of Melian Dialogue's obligations before the session and are aware that they can stop the interview/ focus group at any time and for any reason without offering an explanation.	L
6	Location harzard	Risks are associated with where the research is carried out. For example, fire; visiting or working in participant's homes; working in remote locations and in high crime areas; overseas travel; hot, cold or extreme weather conditions; working on or by water.	L	None are applicable as all the research is conducted remotely. There is a minimal risk of location hazards at the researcher or participant's home or where the interviews/focus groups are conducted.	Melian Dialogue advises researchers to discontinue interviews or focus groups as soon as they become aware of any health and safety issues either at the participant's or researcher's location.	L
7	Activity harzards	Risks associated with the tasks carried out. For example: potentially mentally harmful activities; distressing and stressful work and content; driving; tripping, or slipping; falling from height; physically demanding work; lifting, carrying, pushing and pulling loads; night-time and weekend working.	L	There are no activity hazards associated with this research study		L
8	Dangerous animals/pets during research	Cuts/bruises and infection from bites by animals	L	There is very unlikely to be any contact with dangerous animals/ pets during the research study.		L
9	Exposure to infectious diseases emanating from potentially contaminated materials or infected individuals	Infection	M		Follow the UK government guidance on COVID-19 and any up-to-date alerts of outbreaks or infections.	L
10	Machinery and equipment	Ergonomic hazards, including computer workstations and equipment; contact with electricity; contact with moving, rotating, ejecting or cutting parts in machinery and instruments; accidental release of energy from machines and instruments.	L	There is very unlikely to be any ergonomic hazards during this study based on the Method Statement.		L
11	Chemical and other hazardous substances	The use, production, storage, waste, transportation and accidental release of chemicals and hazardous substances; flammable, dangerous and explosive substances; asphyxiating gases; allergens; biological agents, blood and blood products.	L	There is very unlikely to be any contact with chemical and other hazardous substances during this study based on the Method Statement.		L
12	Physical agent harzards	Excessive noise exposure, hand-arm vibration and whole-body vibration; ionising radiation; lasers; artificial optical radiation and electromagnetic fields.	L	There is very unlikely to be any physical agent hazards during this study based on the Method Statement.		L

Risk Rating

Evaluation of the potential impact and likelihood of harm occurring.

Risk rating	Action required
High Fatality possible to one or more individuals however infrequent Major injury to few individuals occurring frequently Likelihood of long term physiological or muscular-skeletal problems affecting significant numbers of researchers/participants	Immediate action required
Medium Major injury to one/few individuals occurring infrequently Likelihood of long term physiological or muscular-skeletal problems affecting some researchers/ participants	Requires attention as soon as possible
Low Minor injury occurring infrequently to a few researchers/participants	Not a priority, may need attention if not as low as reasonably practicable.

Appendix F

Appendix F

F1 Survey Questions

The Arts and Humanities Research Council (AHRC) has commissioned Melian Dialogue Research Limited to carry out a scoping study to explore the role of Research Technical Professionals (RTPs) in Arts and Humanities research. The study will help AHRC deliver on its Technician Commitment by understanding the roles, skills, and career development needs of RTPs who contribute to Arts and Humanities research in a technical capacity. Participating in this study will help AHRC understand how to better support RTPs like yourself.

We would appreciate your time in completing a survey that will allow us to map the breadth of the RTP community contributing to the Arts and Humanities research. Participants can opt into a £50 voucher prize draw at the end of the survey. Twenty winners will be selected. The prize draw will take place at noon on 30 August, and the winners will be notified by email on the day. Further, £50 vouchers for each participant will be offered at the end of the survey to join a focus group or interview with the Melian Dialogue researchers. The first ten to sign up will receive a £100 voucher.

AHRC Research Technical Professional Study and Survey

Only data necessary for the completion of this study will be collected by Melian Dialogue. It will be used by them to draft a report for AHRC. The subsequent report and raw data collected to inform this report will be passed to AHRC. For more information about how UKRI processes data please follow this link to the UKRI privacy policy https://www.ukri.org/about-us/privacy-notice/. We thank you in advance: your time and input will make a valuable contribution in helping to develop an understanding of the important contribution RTPs make to Arts and Humanities Research.

Consent Form

I have read and understood the participant information sheet, or it has been read to me. I have been able to ask questions about the survey, and my questions have been answered to my satisfaction.

I consent voluntarily to participate in this survey and understand that I can refuse and withdraw from it at any time without having to give a reason.

I understand that my responses will be given anonymously, and I will not be required to divulge any personal information that can identify me – such as my name or address. Any survey response will be confidential and not shared with anyone beyond the study team or AHRC.

I permit the (anonymised) information I provide to be deposited in a data archive so that it may be used for future research.

Questions

1. Please indicate the type of organisation you currently work for:
    A. Higher Education Institution (HEI)
    B. Non-Higher Education Institution (Non-HEI)

2. What Higher Education Institute do you currently work for?

_____

3. Non-HEI (Higher Education Institute) organisation:
Galleries, Libraries, Archives and Museums
    A. Local government
    B. NHS and healthcare
    C. Charity sector
    D. Heritage
    E. Creative industries
    F. Policy bodies and NGOs
    G. Other

4.Which country in the UK is the organisation you currently work for based in?
    A. England
    B. Wales
    C. Scotland
    D. Northern Ireland

5. Which town or city is your organisation based in?

_____

6. What is your current job title and role?

Knowing your job title and role will help this study understand the spectrum of Research Technical Professional roles working in the arts and humanities. If you do not wish to be identified through actual wording of your job title, please consider using a more general description to contribute to the study.

_____

7. Employment type:
    A. Full-time
    B. Part-time
    C. Fixed-term contract
    D. Training paid
    E. Training unpaid
    F. Volunteer
    G. Not disclosed

8. How long have you been working for your current organisation?
    A. 0-1 year

B. 1-5 years
C. 5-10 years
D. 10 years and over
E. Not disclosed

9. How long have you been working in the Research and Development industry?
A. 0-1 year
B. 1-5 years
C. 5-10 years
D. 10 years and over
E. Not disclosed

10. What is the highest education qualification you have studied for?
A. Doctoral degree
B. Master's degree
C. Bachelor's degree
D. Higher National Diploma
E. Higher National Certificate
F. A-level, National Diploma
G. GCSE
H. Skills for Life

11. What is your professional background?

_____

12. What sector/s do you affiliate with?

_____

AHRC's working definition of a Research Technical Professional is:

'anyone who brings indispensable specialist technical skills, at an advanced level, to a research project, i.e. professional skills that are necessary for the development, delivery and completion of the project. Depending on the project, Research/Academic Library professionals, Information systems specialists, Sound engineers, Digital technicians, Conservators, Information systems and software engineers, Archivists, Animators, Illustrators, Graphic designers, Conservators, Curators, and others may qualify for inclusion. AHRC encourages a holistic approach to the research ecosystem.'

13. Which one of the below do you identify yourself as?
A. Research Technical Professional (please see AHRC definition above)
B. Independent Researcher
C. University Researcher
D. Technical Services (please indicate which service in the next window)
E. University Services (please indicate which service in the next window)
F. Other (please state in the next window)

14. In the light of the above definition, are there examples of technical roles in the arts and humanities which should be added to the AHRC list quoted above?

A. Yes
B. No

15. If yes, please list them here:

_____

16. Do you identify as a Research Technical Professional in line with the below definition?

AHRC's working definition of a Research Technical Professional is: 'anyone who brings indispensable specialist technical skills, at an advanced level, to a research project, i.e. professional skills that are necessary for the development, delivery and completion of the project. Depending on the project, Research/Academic Library professionals, Information systems specialists, Sound engineers, Digital technicians, Conservators, Information systems and software engineers, Archivists, Animators, Illustrators, Graphic designers, Conservators, Curators, and others may qualify for inclusion. AHRC encourages a holistic approach to the research ecosystem.'

A. Yes
B. No
C. Don't know

17. Please briefly explain your answer to the previous question

_____

18. Do you contribute to the creation of research outputs/publications?
A. Often
B. Sometimes
C. Never
D. Prefer Not to Say

19. Do you contribute to the creation of research outputs/publications?
A. Often
B. Sometimes
C. Never
D. Prefer Not to Say

20. Do you feel you possess the knowledge and skills to contribute to emerging research in your field using new technologies?
A. Strongly agree
B. Agree
C. Disagree
D. Strongly disagree
E. Unsure

21. Do you feel your contributions are recognised by your colleagues?
A. Strongly agree

B. Agree
C. Disagree
D. Strongly disagree
E. Unsure

22. Do you feel valued by your current employer/within your organisation?
A. Yes
B. No

23. Is your current employer facilitating/encouraging continuous professional development in your role?
A. Often
B. Sometimes
C. Never
D. Prefer Not to Say

24. Do you qualify for/are you eligible for AHRC funding?
A. Yes
B. No
C. Don't Know
D. Prefer Not to Say

25. Have you previously received funding from AHRC or other funding organisations?
A. Yes
B. No
C. Don't Know
D. Prefer Not to Say

26. If you have received funding from another organisation, please state which organisation/s.

_____

27. Do you feel you are given the necessary support and recognition to do your job effectively?
A. Often
B. Sometimes
C. Never
D. Prefer Not to Say

28. Does your current position provide long-term contractual job security?
A. Yes
B. No
C. Don't Know
D. Prefer Not to Say

29. Throughout your career as a Research Technical Professional, how secure have you felt in your job?
A. Very secure
B. Somewhat secure

C. Neutral
D. Somewhat insecure
E. Not secure

30. Do you feel there is adequate career development opportunities within your present institution/organisation?

A. Yes
B. No

31. Would you like to talk to us in a one-to-one setting and earn £50 for your time?

A. Yes
B. No

32. Please choose a date and time that suits you

_____

33. You have completed the main part of the survey. Now we invite you to answer some questions on Equality, Diversity and Inclusion and enter into the prize draw. You are free to opt out of this section.

The information we're asking for is:

- Your date of birth
- Your ethnic origin
- Your country of nationality
- Your gender identification
- Any disability (ref: Equality Act 2010, at https://www.gov.uk/definition-of-disability-under-equality-act-2010)

Melian Dialogue will collect only data necessary for the completion of this study. Melian Dialogue will use it to draft a report for AHRC. The subsequent report and raw data collected to inform this report will be passed to AHRC.

The data (in aggregate and anonymised form) collected as part of this study will contribute to an externally-facing report which AHRC wishes to use to engage external stakeholders with UKRI's ambition of developing a positive research and innovation culture which acknowledges the diverse workforce of practitioners who contribute to developing and delivering research.

For more information about how UKRI process data please follow this link to the UKRI privacy policy https://www.ukri.org/about-us/privacy-notice/

If you have any queries with regard to the processing of your personal data, please contact our Data Protection Officer using dataprotection@ukri.org

A. I accept
B. I don't accept

In line with good practice and legal requirements, AHRC - as part of UKRI - collect

data on protected characteristics from all applicants for grants, awards and other opportunities, such as survey participants of this Research Technical Professional study.

In doing this, UK Research and Innovation (UKRI) continually assess how effective our policies and procedures are in eliminating unlawful discrimination and promoting equal opportunities. We may use this information anonymously for statistical purposes.

34. Please provide your date of birth.

_____

35. Please provide your gender.
    A. Male
    B. Female

36. Please provide your nationality.

_____

37. Please provide your ethnic origin.
    A. Asian & Asian British – Indian
    B. Asian & Asian British – Pakistani
    C. Asian & Asian British – Bangladeshi
    D. Asian & Asian British – Other
    E. Black & Black British – Caribbean
    F. Black & Black British – African
    G. Black & Black British – Other
    H. Chinese or Other – Chinese
    I. Chinese or Other – Other
    J. Mixed – White & Asian
    K. Mixed – White & Black African
    L. Mixed – White & Black Caribbean
    M. Mixed – Other
    N. White – British
    O. White – Irish
    P. White – Other
    Q. Not disclosed

38. Please provide your disability status.
    A. No disability
    B. A specific learning difficulty, e.g. dyslexia
    C. Blind/partially sighted
    D. Deaf/hearing impairment
    E. Wheelchair user/mobility difficulties
    F. Mental health difficulties
    G. Autistic Spectrum Disorder
    H. An unseen disability, e.g. diabetes, epilepsy, asthma
    I. Multiple disabilities
    J. A disability not listed above

K. Not disclosed

Thank you for completing this survey!

For more information about the AHRC RTPs project, please email the Melian Dialogue research team at rtpresearch@meliandialogue.com. If you have any concerns or would like to raise a query or complaint about this research project, please contact Dr Jim Coke, Tel: +44 (0)744 292 3578, email: jim.coke@meliandialogue.com

Appendix G

Appendix G

G1 Participant's Profiles

Current Title	Background
Director of Strategic Development and Partnerships	Master's in Social Research
Head of Conservation and Collection Account	No information given
University technician working with sound and music	No information given
Archaeological Conservator	No information given
Museum Curator	No information given
Conservator at a museum	No information given
Head of Collections and Curatorial	No information given
Research lead for museums and special collections a	No information given
Head of Research in Public History for a museum	No information given
Head of Research Support at a library	No information given
Head of Digital Content Unit at a library	No information given
Tech team leader	No information given
Digital archaeological illustrator and graphic designer	No information given
Professor of an arts and humanities subject	No information given
Digital Humanities Research Officer	No information given
Director of a Research Institute	No information given
An academic (currently a reader) and the head of a theatre school	No information given
A technician within a Geography department	No information given
Director and senior software analyst	Studied Communication Sciences with a specialisation in Computational Linguistics. Has a PhD in Manuscript Studies.
Collections technician	Degree in Environmental Biology and Anthropology. Master's and PhD in Zoo Archaeology
Digital Humanities Research Officer	Arts and Humanities undergraduate degree, postgraduate degree in Information Technology
Technical Officer in Bookbinding and Letterpress	First degree in Photography and Master's in Book Arts
Assistant Technical Officer	Studied in Germany; qualifications not disclosed.
Professor of Creative Practice and Head of a Research Centre	Studied in Germany; qualifications not disclosed.
Independent academic film maker, director of own film company	Obtained a first degree in Film and Television Production.
Independent filmmaker, joint director of a film production company	Undergraduate degree in languages
Music technician	Undergraduate degree in Jazz and Contemporary Music and a Master's in contemporary Composition
Technical demonstrator	Has a PhD in Theatre Studies

Current Title	Background
Technical director	Spent 40 years as a technician doing various roles, details largely inaudible.
Independent researcher, fine artist, painter & graphic designer	Graphic designer with a PhD, now an independent researcher.
Director of Digital Technology	Master's degree in contemporary music
Digital archaeological illustrator and graphic designer	Master's degree in contemporary music
Research Associate and Objects Conservator	Undergraduate degree in Archaeology and Classics and a Master's degree in Object Conservation

MELIAN DIALOGUE

RESEARCH REINVENTED

14/2E Docklands Business Centre | 10-16 Tiller Road
Canary Wharf | London E14 8PX
Company Registration: 11709728
D-U-N-S® Number: 224560530 | VAT Registration: 366892836
www.meliandialogue.com | research@meliandialogue.com