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*Mapping our Support:*

*A Collaborative Project for all Edinburgh Technicians*

**Recommendations and Report**

*December 2021*

PROUD SUPPORTER OF THE  
Technician Commitment

## Contents

<b>1. Executive Summary</b> .....	2
<b>2. Project Context and Overview</b> .....	3
<b>3. Insights from Our Technicians</b> .....	5
<b>4. Examples of Good Practice</b> .....	10
<b>5. Conclusion and Recommendations</b> .....	11
<b>6. Appendix I – Map of Institutional Support</b> .....	13
<b>7. Appendix II – Discussion Prompts/Survey Questions and Glossary</b> .....	13
<b>8. Appendix III – Data Protection Impact Assessment</b> .....	15
<b>9. Appendix IV – Survey Responses</b> .....	15
<b>10. Appendix V – Example of Cross-HEI ‘Resource Hub’</b> .....	15

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# 1. Executive Summary

## Technical Staff and their Career Development

In a recent survey conducted across four Edinburgh-based HEIs, 87% of respondents from technical communities agreed that they would support an initiative that provides cross-institutional job shadowing and mentoring opportunities.<sup>1</sup> Elsewhere in the same survey, members of technical staff reported that they find it challenging to access the career development support offered by their respective HEIs, and in turn to utilise the resources that align with their own career aspirations.<sup>2</sup>

### *Mapping Our Support*

The *Mapping Our Support* project addresses the above issues, conducting research and data gathering around how HEIs can better support the career development of their technical communities. The collaborative nature of the project – combining insights from Heriot-Watt University, Napier University, Queen Margaret University, and the University of Edinburgh – resulted in a rich data set that illuminates the career development needs of technicians across Edinburgh.

## Recommendations

Based on quantitative and qualitative research from across four Edinburgh-based HEIs, and good practice from a national perspective, the following recommendations are made:

1. Creation of a collaborative, accessible, cross-HEI networking ‘Resource Hub’ that provides technicians with opportunities for knowledge exchange and networking.
2. Develop an Annotated Resource Map that specifically identifies training courses that meet the needs and requirements of technical staff across the higher education sector. Possibly incorporating Vitae’s [Researcher Development Framework - Technicians Lens](#) and explicitly showcasing the institutional support available to technical staff.
3. Reflecting the expectations of our technical communities, incorporate the above initiatives to promote job shadowing and mentoring opportunities for all technical staff.

The following report provides the context and an overview of the *Mapping Our Support* project, along with further details and evidence to support its recommendations. What is demonstrably clear is that many technicians across Edinburgh express similar experiences and wants when it comes to their ongoing career development opportunities.

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<sup>1</sup> ‘*Mapping Our Support: Project Survey*’ – Results, November 2021.

<sup>2</sup> Ibid.

## 2. Project Context and Overview

After securing funding from the [Technician Commitment Collaboration Fund](#), Human Resources and the Institute for Academic Development at the University of Edinburgh applied for funding to initiate a collaborative project called *Mapping our Support: A Collaborative Project for all Edinburgh Technicians*.

The purpose of this collaborative project is to gather information from technical staff members across four Edinburgh-based HEIs, namely: the University of Edinburgh, Heriot-Watt University, Napier University and Queen Margaret University. The four HEIs involved continue to work in collaboration to enhance institutional support for our technical communities.

The project's core aims are to:

1. Conduct an initial scoping exercise and mapping institutional support at each Higher Education Institution (HEI). Highlighting existing support at each HEI and identifying the development needs of technicians and their managers.
2. Identify opportunities to create job shadowing and mentoring opportunities at each HEI, allowing technicians to gain further insights into various career paths and opportunities available across Edinburgh.
3. Generate ideas to showcase institutional support and how this can be shared across HEIs.
4. Develop and build resources, from information gathered, with the aim of helping technicians understand the different options available.
5. Liaise with contacts across the institutions to identify career development available to technicians that will be applicable to the project.
6. Conduct interviews with technicians, managers and HEI departments, as appropriate.
7. Use an online system/platform to build engaging and user-friendly resources for technicians.

The initial scoping exercise carried out at the outset of this project revealed a broad range of resources that are available to support our technical communities (see [Appendix I](#)). Despite the wealth and breadth of these resources, it was found that they are spread across a large variety of platforms and institutions, making them challenging to negotiate. Furthermore, there is a lack of focus around which resources pertain to which technical area. For instance, aside from generic resources such as 'Effective Communications and

Networking’ ([HEaTED](#)), specialist professional development resources are often unannotated and therefore difficult to identify. A suggested antidote to the problem of specificity within available resources is presented in the forthcoming [Recommendations](#) section. Enhancing support for our technical communities is a timely endeavour, with the National Technician Development Centre (NTDC) planning to release a report focusing specifically on training and development in 2022.<sup>3</sup>

The *Mapping Our Support* project is also an important step forward in terms of Technician Commitment ([Technician Commitment](#)) activities. A central tenet of the Technician Commitment is to ‘enable career progression opportunities for technicians through the provision of clear, documented career pathways’. To do this, it is important to understand how our technical communities view the opportunities available to them. The second phase of the project therefore saw us approach colleagues within our technical communities to gain insights into how their respective institutions support their career development. The result was a rich sample of how our technicians understand and use the support available to them, and how such support might be improved at an institutional level across the HEIs involved in our project. After a Data Protection Impact Assessment and approval from the Data Protection Officer (see [Appendix III](#)), we created a series of discussion prompts and an online survey (see [Appendix II](#)) to capture technicians’ experiences and perspectives. Common themes across the four HEIs involved were found to be a sense of isolation within their roles and a lack of a clearly defined career pathway, echoing the aspirations of the Technician Commitment cited above. The common themes and desideratum are presented in more detail in the [Qualitative Analysis – Insights from Our Technicians](#) section below.

Overall, the collaborative nature of this project has highlighted commonalities among the technical communities across the four HEIs involved. When it comes to institutional support and career development opportunities, we found that irrespective of the size of the technical community, many technicians reported a disparity between academic career pathways and the pathways available to technical staff. Again, the ‘Recognition’ tenet of the Technician Commitment reflects the desire of technical staff for a ‘development culture’, where senior leadership take responsibility for the implementation of robust, transparent career development frameworks specifically geared towards technical roles. For instance, Heriot-Watt’s *Review of Technical Service Provision* (2021) report recommended that they ‘establish a mandatory and specialist training programme covering external (HEaTED, Technician Commitment and other relevant specialist training) and internal training sources and develop a forward plan for this across all locations with associated budget’.<sup>4</sup>

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<sup>3</sup> [NTDC Technicians Survey Report \(2021\)](#)

<sup>4</sup> *Review of Technical Service Provision: Final Report from the Review Working Group* (Waldron and Rowsby, 2021).

### 3. Insights from Our Technicians

This section presents evidence from the technical communities across the four HEIs involved in this project to develop our points from the previous section. In a survey of technicians' view on their career development – carried out at the University of Edinburgh in 2018 – 54% of respondents reported that they have undertaken no training when it comes to their professional development.<sup>5</sup> In a similar survey – carried out at Heriot-Watt University in 2021 – 55% of staff responded that they either do not seek or are indifferent towards gaining professional registration/accreditation.<sup>6</sup> To understand these statistics, the *Mapping our Support* project gathered qualitative data from members of our technical communities, excerpts of which are presented below.

One member of technical staff reported that, in terms of utilising resources such as HEaTED:

***“It does tend to be me that makes these suggestions as opposed to being offered them”.***

Elsewhere, we are told that:

***“HEaTED and the Tech Commitment web sites can be accessed [but] they might as well not be there [because] relevance to myself and my colleagues is very low. This is one of the main problems with this system”.***

Commenting on resources such as HEaTED and NTDC, another technician points out that they use:

***“None of those. When I checked their resources, I found them to be of little importance to my role. I typically find training courses myself”.***

Similarly in terms of applicability to their role:

***“Everything available but found it to be of limited use”.***<sup>7</sup>

What these responses demonstrate is that members of our technical communities feel that the support offered by external resources, such as HEaTED and the NTDC, is hampered by a perceived lack of relevance to individuals and their roles. To address this lack, the project's recommendations propose an enhanced career support initiative that targets technicians' disciplinary environments, allowing groups and individuals clearer visibility of the training and development that is relevant to them.

For example, in our associated online survey ([Appendix IV](#)) we asked if we created an online space where you could search for technical skills, ask questions and seek advice, would you be interested in being part of

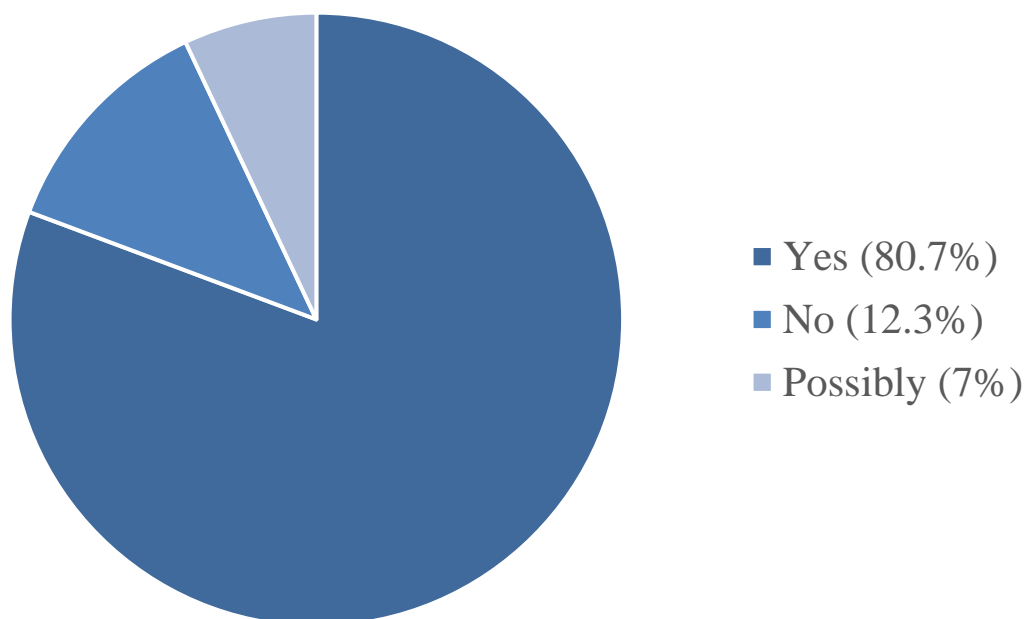
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<sup>5</sup> ‘Technician Career Progression Survey’ – University of Edinburgh, 2018.

<sup>6</sup> ‘Technical Services Training Survey’ – Heriot-Watt University, 2021.

<sup>7</sup> All quotations drawn from ‘*Mapping Our Support: Project Survey*’ – Results, November 2021.

this? Over 80% of technicians from across our four HEIs responded positively to the concept of an online space where users could search for technical skills, ask questions and seek advice:<sup>8</sup>



With access to suitable budget and resources, the *Mapping Our Support* project proposes the creation of a new, practical, user-driven online space where members of our technical communities can easily access developmental support that is relevant to them. For example, one respondent to our survey suggested:

***“Access to full range of IAD [the Institute for Academic Development, University of Edinburgh] resources - clearly signposted that they are available for all researchers not just academics”.***

An online space dedicated to technical communities would include such access, clearly signposted in the same way that the IAD currently delineates the disciplinary environment that courses are designed for (e.g., ‘Humanities and Social Science’, or ‘Medicine and Veterinary Medicine’). Further evidence for the desire for disciplinary environment specific courses comes from one technician who felt that:

***“Being a technician in the arts, it really feels like there is no support for career development”.***

A similar sentiment was expressed in these terms:

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<sup>8</sup> ‘*Mapping Our Support: Project Survey*’ – Results, November 2021.

***“Opportunity to broaden my technical skills. Presentation skills, career management skills, etc. specifically targeting technical staff because our needs are different from other staff”.***

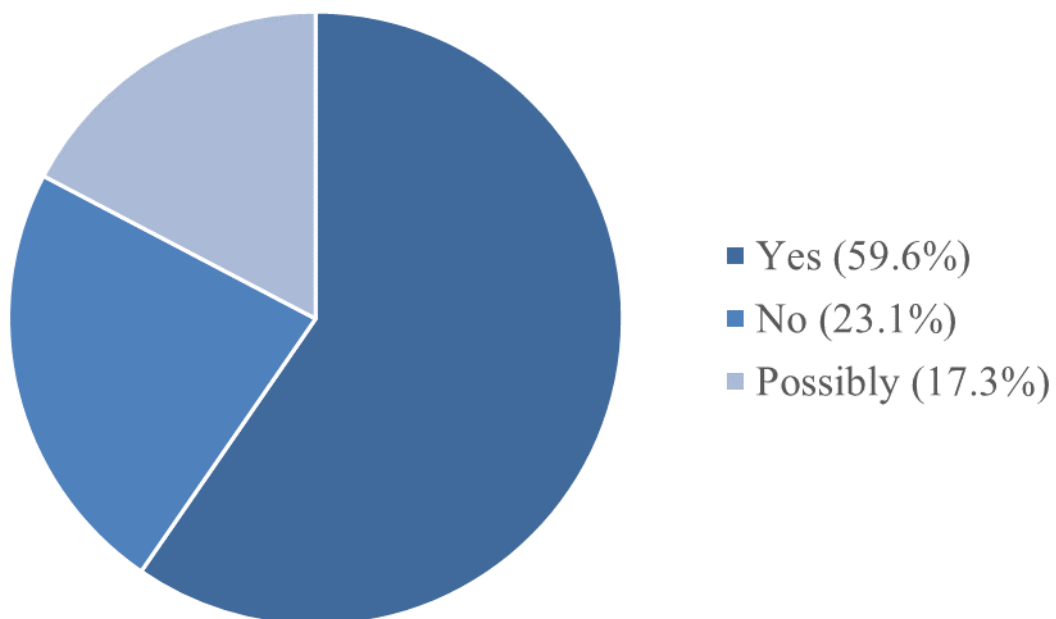
Another respondent to our survey suggests:

***“[An] exchange programme to see how other institutes operate”.***

In a similar vein, a separate respondent calls for:

***“A network that enables other technical staff to discuss, share and vent if needed”.***

In a separate survey question, we asked, if the facility were available, would you as technical staff be interested in using a cross-HEI directory/online space for professional networking. 77% of respondents expressed a positive response, or an interest in using such a facility:<sup>9</sup>



During the project’s group discussions with members of our technical communities, further qualitative evidence of technicians’ experiences of career development opportunities was gathered. During one discussion, the project was told:

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<sup>9</sup> Ibid.



***“In the past 10 years, I’ve not come across any proper structure [or] format or any formal document, meeting, presentations, talks [explaining] how a technician can progress”.<sup>10</sup>***

The perceived lack of access to structured career pathways was a sentiment similarly expressed in a separate discussion:

***“We have processes of PDR [Performance & Development Review] where certain courses are discussed directly with your line manager, but I was missing more a framework of that [...] there’s even support there that I’m not quite aware of because the day job keeps us all busy”.<sup>11</sup>***

One respondent in a separate discussion articulates the problem technicians face when they begin their career:

***“The big problem for technicians is the middle of your career. It’s quite easy to get into technical roles, there’s a lot of support [...] but then you advance your career to a certain point where there aren’t necessarily clear pathways, there isn’t necessarily anywhere obvious to go”.<sup>12</sup>***

The above quotation goes a long way to encapsulate the findings of the *Mapping Our Support* project: many technicians experience getting to a certain point then are finding it difficult to know where or how to develop. The same respondent goes on:

***“Short-term contracts can be quite problematic in terms of advancement. You tend to find yourself coming in at the same point as you left. There isn’t progression [...] career pathway advice would be really useful”.<sup>13</sup>***

A lived example of this experience comes from a separate respondent, who reports:

***“I really feel in a rut with my career – I’ve developed a lot of very specialised skills, which are useful where I am, and not necessarily always recognised as such [...] I’ve been doing basically the same job since 2012”.<sup>14</sup>***

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<sup>10</sup> ‘Mapping Our Support – Project Discussion’ – 13 October 2021.

<sup>11</sup> ‘Mapping Our Support – Project Discussion’ – 20 October 2021.

<sup>12</sup> ‘Mapping Our Support – Project Discussion’ – 27 October 2021.

<sup>13</sup> Ibid.

<sup>14</sup> Ibid.

The overarching finding here is that, across a diverse range of HEI settings and disciplines, technical staff report that their career aspirations are being impacted by the lack of clearly defined pathways. Additionally, the research conducted during the *Mapping Our Research* project revealed that many members of our technical communities are unaware of the career progression opportunities available to them.

One antidote to this perceived lack of career development opportunities was suggested in these terms:

***“There needs to be a protected space for training and it needs to become an integral part of the job rather than an afterthought”.***<sup>15</sup>

Another common theme expressed by respondents from our technical communities during discussions was the utility of a networking space where colleagues could exchange knowledge and share opportunities. The qualitative

***“Some sort of message board where you could put opportunities and requests of things you would like to brush-up on, or shadow for, to enhance your career”.***<sup>16</sup>

In the same vein, one respondent during our discussions suggested ‘technician-to-technician’ training that could be accomplished with a dedicated cross-HEI networking space. Discussing knowledge exchange when it comes to new equipment or software, we hear:

***“The engineer comes, shows you how to do something and then leaves. It would be useful to be able to go and find someone who has something similar and learn the nuances”.***<sup>17</sup>

A separate respondent concurs, noting that when it comes to specialist equipment:

***“You might be a bit stuck; you could spend a lot of time Googling [...] but I think having a slightly easier forum to find that information, or having a messaging platform, would be really helpful”.***<sup>18</sup>

Overall, our evidence demonstrates the desire among our technical communities for more pointed access to resources that are not only disciplinarily specific but also specifically tailored to the needs of technical staff. Furthermore, our evidence suggests a strong desire for a cross-HEI programme whereby technicians could access job shadowing and mentoring opportunities.

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<sup>15</sup> ‘*Mapping Our Support* – Project Discussion’ – 20 October 2021.

<sup>16</sup> Ibid.

<sup>17</sup> Ibid.

<sup>18</sup> Ibid.

Aside from concerns around pay scales and natural attrition, these findings, taken together, amount to a relatively straightforward initiative that would improve the career development of technical communities across the four HEIs involved in the collaborative *Mapping Our Support* project.

## 4. Examples of Good Practice

During the initial research for the *Mapping Our Support* project, several examples of good practice, when it comes to the career development support for our technicians, were identified.

Perhaps the most striking example is the [GW4 Alliance](#) initiative. The GW4 Alliance (GW4) is a consortium of four of the most research-intensive and innovative universities in the UK: Bath, Bristol, Cardiff and Exeter. One part of GW4's initiative – named 'GW4WARD' – is designed to drive forward the professional development of technical staff. The consortium's collaborative underpinning enables such resources as:

**Technical staff registration scheme:** This competitive scheme provides first year membership dues and guidance on professional registration with the aim to enhance the visibility of technical staff by enabling them to gain recognition for their knowledge, experience and leadership skills within and across partner institutions.

**Technical staff travel bursaries:** GW4 offers a travel bursary scheme for technical staff at GW4 Universities to visit other GW4 institutions to share best practice, gain experience with equipment or resources, or to develop technical skills through work shadowing.

**GW4 Technical Staff Webinar Series:** GW4 aims to encourage collaboration and sharing of best practice across the region by bringing together technical staff and external speakers to discuss key topics in a webinar format.<sup>19</sup>

Elsewhere, the [Midlands Innovation](#) initiative brings together eight research intensive universities in the Midlands (UK), with partners including the University of Birmingham and Loughborough University. Midlands Innovation operate a Technical Skills Training Programme that seeks to 'provide technicians with an opportunity to work with technicians at other universities on a short placement, to develop and share their skills, best practice and experiences and make new contacts that can provide support and advice to help them in their future technical careers'.<sup>20</sup>

The University of Edinburgh has its own dedicated website for its technical communities, [Support for Technicians](#), which could be expanded to emulate the collaborative framework of sites such as GW4 and

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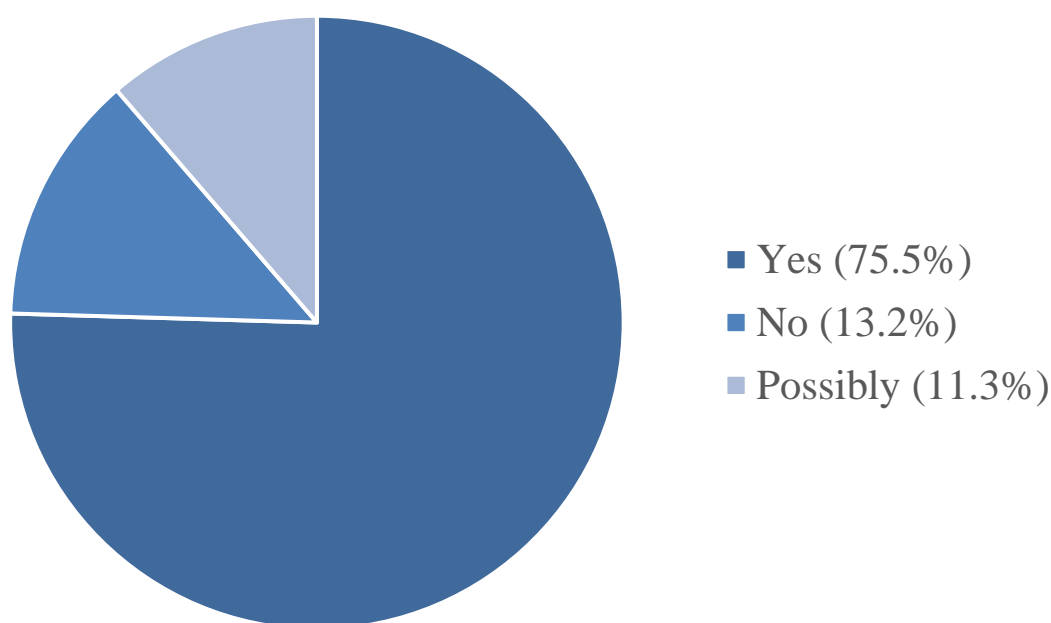
<sup>19</sup> [GW4 Alliance](#)

<sup>20</sup> <https://midlandsinnovation.org.uk/Placement-Programme>

Midlands Innovation. Heriot-Watt and Napier have internal sites that cater to Rewards and Wellbeing among technical staff, and access to funding for professional training purposes.

A collaborative effort to share knowledge, skills and best practice between the four HEIs involved in the current project would satisfy one of our core aims, as cited on page 2 above. Specifically, identifying opportunities to create job shadowing and mentoring opportunities at each HEI, allowing technicians to gain further insights into various career paths and opportunities available across Edinburgh.

Reflecting the qualitative data from our discussions with technicians, cited above, enthusiasm was expressed when we asked technical staff if they would be interested in accessing cross-institutional mentoring and job shadowing opportunities. 87% of our respondents reported either positively, or as being open to the possibility, of such a programme:<sup>21</sup>



## 5. Conclusion and Recommendations

Although work has been done in this area before – enhancing technicians’ institutional support and career development –<sup>22</sup> the unique collaborative nature of the current project is what sets its recommendations apart. Based on the evidence and research presented above, the *Mapping Our Support* project makes the following recommendations (in order of perceived priority and aligned to our stated core aims):

<sup>21</sup> ‘*Mapping Our Support: Project Survey*’ – Results, November 2021.

<sup>22</sup> For example, the ‘*Technician Commitment Action Plan: October 2018 –October 2020*’ (University of Edinburgh), the *Review of Technical Service Provision: Final Report from the Review Working Group* (Heriot-Watt University) or the ‘*Evaluating Impact through Self-Assessment & Future Action Planning*’ (University of Edinburgh).

1. **CORE AIMS 2, 3 & 7:** Creation of a collaborative, accessible, cross-HEI networking ‘Resource Hub’ that provides technicians with opportunities for knowledge exchange and networking.
2. **CORE AIMS 1, 4 & 7:** Creation of an Annotated Resource Map that specifically identifies training courses that meet the needs and requirements of technical staff across the higher education sector. Possibly incorporating Vitae’s [Researcher Development Framework - Technicians Lens](#) and explicitly showcasing the institutional support available to technical staff.
3. **CORE AIM 2:** Reflecting the expectations of our technical communities, incorporate the above initiatives to promote job shadowing and mentoring opportunities for all technical staff.

Key to the ongoing success of these recommendations is the spirit of collaboration that underpins the current project. As was suggested through the examples of the GW4 Alliance and Midlands Innovation initiatives, collaborative efforts between Edinburgh-based HEIs are an important step forward in not only increasing the visibility of our technical communities but allowing for more productive and accessible career development opportunities.

Moreover, the *Mapping Our Support* project’s recommendations represent a meaningful step forward in terms of Technician Commitment ([Technician Commitment](#)) activities. For instance, our recommendations reflect the aspirations of the Technician Commitment’s ‘key areas’:

1. **Career Development:** our Annotated Resource Map and collaborative ‘Resource Hub’ recommendations aim to showcase cross-institutional support, thereby promoting career progression opportunities for technicians.
2. **Sustainability:** similarly, our recommendations will help ensure the future sustainability of technical skills across our partner HEIs and contribute to technical expertise being fully utilised.
3. **Recognition:** user-friendly access to a variety of training and professional registration provides support to our technicians, helping them gain recognition through professional registration and external awards schemes.

A **critical insight** from the *Mapping Our Support* project is that the Technician Commitment’s ‘key areas’ should not be viewed or enacted in isolation. Instead, barriers to meaningful career development can be addressed by collaborative initiatives that recognise the crucial roles that our technicians continue to play in the day-to-day successes of educational institutions.

[Appendix V](#) below provides an example of what a cross-HEI ‘Resource Hub’ for technicians might resemble. Included here is suggested content based on the evidence presented above and the conversations had with our technical communities throughout the *Mapping Our Support* project.

## 6. Appendix I – Map of Institutional Support



Mapping our  
Support (2021)

## 7. Appendix II – Discussion Prompts/Survey Questions and Glossary

The below table contains a few suggestions that aim to stimulate our discussions. Please read over these before our talk and come prepared with reflections and anything further that you may wish to add:

\* a glossary of terms is available on the next page.

<p>What support is currently available to you, as technical staff, to support you in achieving your career aspirations?</p>	<p><i>The Higher Education and Technician Educational Development (<a href="#">HEaTED</a>), The Technician Commitment <a href="#">Technician Commitment</a> or the National Technician Development Centre (<a href="#">NTDC</a>)</i></p>
<p>What workshops and online resources to support your career aspirations would you find helpful?</p>	<p><i>Such as self-directed learning through online learning and toolkits, attending courses or training programmes.</i></p>
<p>Would you be interested in accessing cross institutional mentoring and job shadowing opportunities?</p>	<p><i>For example, development networks wider than your institution where there would be opportunities for gaining skills from other technical staff.</i></p>
<p>If the facility were available, would you be interested in using a cross-HEI directory/online space for professional networking?</p>	<p><i>This might resemble LinkedIn or online spaces that show professional development available from your own institution and nationally.</i></p>
<p>Is there any other support that will help you achieve your career aspirations?</p>	<p><i>And in what ways would this support you?</i></p>
<p>Are there any barriers you face to achieving your career aspirations?</p>	<p><i>For example, not knowing other technical staff, being isolated in the role, not knowing what support is available.</i></p>
<p>We have an idea around sharing skills between technicians, we think this could be valuable to support technicians who are isolated or who have similar questions or needs. If we created an online space where you could search for</p>	<p><i>What would this look like? What kind of space could this be? What would you find useful?</i></p>

technical skills, and ask for advice or questions, would you be interested in being part of this and supporting other technicians if they requested it and would you use it?

## Glossary of Terms

<b>Career development</b>	the opportunities and support available to help you achieve your career aspirations.
<b>Formal learning</b>	learning in an education or training institution with structured learning objectives, learning time and support which leads to certification. Formal learning is intentional from the learner's perspective.
<b>HEI</b>	Higher Education Institution, such as a university.
<b>Job shadowing</b>	social / informal learning practice where you gain knowledge and experience from colleagues 'on the job'.
<b>Mentoring</b>	social / informal learning practice where this is support from someone over an extended period of time in relation to your career progress and aspirations.
<b>Networking</b>	social / informal learning practice of interacting with others to exchange information and develop professional or social contacts.
<b>Professional registration</b>	a means of demonstrating your professionalism and involves being held to account by your peers for your abilities and adherence to ethical standards.
<b>Social / informal learning</b>	day-to-day activities related to work that are not usually structured and typically do not lead to certification. Social / informal learning may be intentional but in most cases it is non-intentional.

**Specialist skills training**

formal learning where accreditation or certification is the goal.

## 8. Appendix III – Data Protection Impact Assessment



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## 9. Appendix IV – Survey Responses



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## 10. Appendix V – Example of Cross-HEI ‘Resource Hub’



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