Technician Commitment

Guidance for Completing the Self-Assessment & Action Plan

The Technician Commitment is a university and research institution initiative, led by a steering group of sector bodies, with support from the Science Council and the Gatsby Charitable Foundation’s Technicians Make It Happen campaign. The Commitment aims to ensure visibility, recognition, career development and sustainability for technicians working in higher education and research, across all disciplines. Universities and research institutes are invited to become signatories of the Technician Commitment and pledge action against the key challenges affecting their technical staff.

The themes of the Technician Commitment are: Visibility, Recognition, Career Development, Sustainability and Evaluating Impact. The fifth theme of Evaluating Impact takes the form of a self-assessment process, to be undertaken one year after an organisation becomes a signatory and biennially thereafter.

The self-assessment process enables the Technician Commitment Steering Group to gain an understanding of the position of each signatory organisation and the measures to be put in place to ensure that signatories are making progress against the themes outlined in the Commitment. The self-assessment process asks for contextual information, progress to date and a detailed 24-month future action plan.

The Technician Commitment Steering Group does not seek to dictate how organisations promote a positive culture for the technician community. This is a matter for autonomous institutions and the technician, research and academic community to agree. It is expected that as a minimum, signatories publicly state their Technician Commitment signatory status and institutional action plan on a dedicated and discoverable webpage, along with their named point of contact. The Steering Group would like signatories to evidence that the ‘technician voice’ is present in the development and formation of institutional action plans. The Technician Commitment is a collaborative endeavour and the Steering Group will support and facilitate the establishment and sharing of best practice demonstrated in the self-assessments and action plans. A vibrant community of Institutional Leads tasked with implementing the Technician Commitment is emerging and the Steering Group aims to ensure a range of forums are available to enable peers to share expertise, good practice and experiences.

To support institutional action planning, please see Appendix A for examples of activities and initiatives that have been successfully implemented in a range of universities and research institutes. Additional details are available on the Technician Commitment’s dedicated online resource, available at http://technicians.org.uk/techniciancommitment/. Cross referencing to other sector institutional reviews relevant to technicians is welcomed; for example, institutions may wish to reference Athena SWAN applications, Teaching Excellence Framework (TEF) submissions and Research Excellence Framework (REF) environment statements where technicians have been explicitly mentioned.

Please note that finalised Action Plans should be signed off at an institutional leadership level (e.g. Vice-Chancellor/President/Director level).

For any additional queries, please contact k.vere@sciencecouncil.org or tracey.dickens@gatsby.org.uk.
Technician Commitment

Evaluating Impact through Self-Assessment & Future Action Planning

Organisation: University of York
Name of Institutional Lead: Professor Brian Fulton, Dean of the Faculty of Sciences
E-mail: brian.fulton@york.ac.uk
Contact Number: 01904 32 4241

To provide some context, please provide a brief profile of your organisation (up to 250 words):

The University of York was founded on principles of excellence, equality and opportunity for all and opened in 1963 with just 230 students. Since then we have become one of the world's leading universities, carving out a reputation as an academic powerhouse where a clear focus on excellence has secured national and international recognition alongside established institutions.

A member of the Russell Group of universities, we are a dynamic, research-intensive university committed to the development of life-saving discoveries and new technologies to tackle some of the most pressing global challenges.

The UK 2014 Research Excellence Framework ranked the University 14th overall for research quality and 10th for research impact. We are committed to strengthening our position as one of the world’s premier academic institutions for inspirational and life-changing research. The seven pillars of our new research strategy align our research strengths with global challenges for maximum impact.

We are now home to over 16,000 students and employ over 4,500 staff. In 2015 the University introduced a faculty structure and each of the three faculties is led by a Dean, who are members of the University Executive Board.
In 2017 the University's turnover was £346m and we achieved our highest research income on record - £66m. In 2017 2,981 staff took part in our staff survey - representing a response rate of 73% - with 85% of respondents indicating they are proud to work at the university and 90% like the kind of work they do.

Please tell us how your organisation defines its technicians:

A technician enables research and teaching activities by application of their specialist practical skills and knowledge.

How many technicians are there in your organisation? Please provide some information on where they are based and/or how they are structured (in terms of subject/discipline/department):

The University of York employs around 500 technicians with c300 within academic departments and c200 in professional support services. Those within professional support services are predominantly located in the Directorate of Estates and Campus Services (DECS c100) and IT Services (c90). The remainder are spread across a number of services but primarily associated with data input and analysis.

The technicians located in professional support services are clearly a significant staffing grouping but it was felt premature to include these staff in this initiative at this time and so we are focusing on technicians in academic departments initially. Although Hull–York Medical School is formally part of the Science Faculty, it has independent management and governance structures and so will similarly be engaged in stage two of the programme.
Of the 300 technicians within academic departments, 22 staff are located in the Faculty of Arts and Humanities; predominantly in Archaeology (11) and Theatre, Film and Television (6) as well as Music, History and Language & Linguistic Science. There are 7 technicians in the Faculty of Social Sciences, who are mostly associated with specialist IT support. The majority of technicians (c250) are in the Science Departments with the largest groups being Biology (109) and Chemistry (53) with Physics, Electronic Engineering and Computer Science having similar numbers at 17, 15 and 13 respectively with Environment and Psychology having 8 each.

The detailed classification of technicians varies over the institution, but the broad classifications are:

- Departmental Support Technicians
- Departmental Research Technicians
- Departmental Teaching Technicians
- Project Technicians (managed by research PI; often on fixed term contracts/funding)

So, for example, Chemistry has:

- 20 Departmental Support Technicians who deliver services such as stores (3), analytical services (9), mechanical/electronic/glass blowing workshops (5) and, to a reducing extent IT support, as this is being relocated to professional support services.
- 13 Departmental Research Technicians based in identified labs but supporting a number of different research groups within the lab
- 5 Departmental Teaching Technicians based exclusively in the undergraduate teaching laboratory
- 15 Project Technicians (based in specific PI’s labs delivering a particular research project)

The functions and classifications of technicians in Biology are broadly similar to Chemistry with the split being Departmental Support Technicians (19), Departmental Research Technicians (12), Departmental Teaching Technicians (9) and Project Technicians (69). Due to the smaller numbers in other departments some of the functions are combined and so the lines are a little blurred but the broad headings above still apply albeit with very few project technicians.
Please provide details of initiatives/programmes/activities that were already in place for the technical community within your organisation prior to becoming a signatory of the Technician Commitment:

**A Network for Technicians: #techyork**

TechYork, initiated in 2006 by the Science Departmental Operations Managers, brings together all technicians on campus to learn about each other’s work and encourage a supportive network. Ten annual, self-funded conferences have been held on campus, open to all University of York technicians from academic and professional support departments. Each year a different department hosts a one-day event with external and University of York speakers, and workshops around a theme. For example, 2009 – Sustainability, 2010 – Lab to Life, 2015 – Keep Calm and Let the Technical Specialist Handle It. TechYork is always well received by our technicians and we achieve a good turnout of around 40% of technicians across all departments.

TechYork has become an established group and after listening to feedback it was decided to hand over the event to a group of volunteer technicians to push forward and develop as a network for technicians by technicians. Their first meeting in December 2017, entitled ‘Chemistry at Christmas’ was presented by Prof. Sir John Holman, President of the Royal Society of Chemistry, a senior advisor in education at the Wellcome Trust and the Gatsby Foundation, founding director of the National Science Learning Centre and passionate supporter of technicians and the Technician Commitment.

The strong bond between Sir John and technicians at York was demonstrated by the making of a stunning model of a train by our talented technical colleagues; Abby Mortimer, Tim Ayers and Mark Roper. This idea was suggested by the students as a tribute to one of his memorable demonstrations and was presented to John on the occasion of his final lecture to second year undergraduates after over 50 years of teaching.

**Institutional CPD for Technicians**

For more than 10 years the University Learning and Development department has hosted an extensive range of courses to both develop new managers and give an insight to management for those thinking about it. This suite of courses is specifically focussed on developing existing staff to gain skills and knowledge to develop their career opportunities. The University of York has equality at the heart of everything we do and one particular
aspect of this is the parity of esteem that technicians have with other professional staff here at York; this parity ensures that all training courses and development opportunities are available to all professional support staff including technicians. So, for example, 15 technicians have completed the “Management in Action” course and 10 technicians have completed the “Leadership in Action” course. The Learning and Development Team have many other courses available to support individuals in developing their personal and professional effectiveness and once again all courses are open to technicians and engagement has been very good.

The University hosts an annual Professional@York conference bringing all professional support staff together from across the University to listen to speakers, attend and engage in activities and to celebrate our staff with nominations and presentations of the Professional@York awards. Technicians have not yet fully engaged with this and so we are making adjustments to the positioning and format of the initiative to try and increase buy-in across all staff categories. The working group that drives this initiative has asked a technical manager to join and we are actively engaging with all staff, including technicians to hone the offering. This year we will be trying ‘In a Nutshell’; short, themed presentations on strategic objectives of the University, targeted at professional support staff/technicians, as well as expanding the awards to include technician categories specifically for the first time.

Faculties

With the establishment of faculties in 2015 came the formation of a Faculty Technical Support Group (FTSG), which reports to the Faculty Board. The membership of this group, which previously met informally, includes departmental operations and technical managers and the Dean of the Faculty of Sciences. FTSG gives an established route for technicians from across the institution to raise issues directly with the Faculty and a direct line of sight to the very senior management of the University to ensure the technician voice is heard at the highest levels. Similarly, the senior management have a direct line of communication to technicians.

Sub groups have been established with widened membership of technicians to tackle issues such as sharing workshop resources across campus and looking in depth at new policies. The success has been demonstrated by increased communication and support across departments.

Academic Departments

Each science department has a departmental operations/technical manager who line manages the departmental research, support and teaching technicians. Although project technicians are managed by the Principal Investigators, the operations managers play a support and mentor role with an open door policy for all technicians. This technical team type approach within departments has shown itself to work effectively in terms of knowledge exchange as it provides a forum where more experienced technicians can help mentor and advise colleagues earlier in their career on accepted best practice, while at the same time those same less experienced colleagues can challenge the status quo.
Keeping technicians informed of development and progress on departmental and institutional strategies is crucial to successful delivery of those strategies and so communication is key. Although details vary somewhat from department to department, each holds regular all-staff meetings alongside technical team meetings to ensure technicians are informed and can feed into current departmental and institutional priorities and activities. In addition to these regular meetings, there are smaller service team meetings and one-to-one meetings with line managers. All technicians have an annual performance review with their line manager at which technicians discuss their role, development aspirations and needs, and jointly set objectives for the forthcoming year with their reviewer.

One of the outputs of this review is a CPD programme for the coming year, delivered through independent learning, internal Learning and Development courses and external training providers. The mechanism for funding these external courses is devolved to departments and the detailed process for each is slightly different but there is an acknowledgment that to keep technicians at the forefront of their field they need to have external training allied to opportunities to network with other experts in the field.

**Parity of Esteem**

The University of York prides itself on equality and diversity and is “A place where we can ALL be ourselves #EqualityatYork” and as such, there are a number of initiatives which, whilst not directly targeted at technicians that, given the parity of esteem that they are held in, have significantly improved the working environment for technicians. For example, the Athena SWAN initiative has ensured that our recruitment and selection processes are among the very best in the sector and these processes are also applied to recruitment of technicians. Similarly, while at some other institutions the support staff family is further subdivided into different pay/grading structures, with technician posts limited to lower grades, at York we have a single grading structure for all categories of staff. There is also significant harmonisation within the terms and conditions of employment offered to staff in York with Technicians receiving the same benefits (e.g. annual leave, sick pay, maternity leave, etc.) as other Professional and Support and Academic staff. This parity of esteem is prevalent and embedded throughout the institution and is somewhat perversely shown by the first challenge of the Technician Commitment in that identification of technicians within the institution was initially non-trivial.

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*The Technician Commitment aims to ensure visibility, recognition, career development and sustainability for technical staff across higher education and research. Please tell us of any initiatives your organisation has put in place to address these themes since becoming a signatory of the Technician Commitment:*

As a founding signatory of the Technician Commitment the document was formally signed by Professor Brian Fulton, Dean of the Faculty of Sciences, on 7th April 2017 but like all large...
organisations it took some time for the initiative to really gather some traction and then momentum. We should also note that York was already in a relatively good place for support staff. Therefore, this self-assessment came at an excellent time and gave us a framework to formulate our delivery plan for the next two years. We have made progress since the formal signature but there is much more to come.

Visibility:

The parity of esteem that is embedded for technicians at York gave us the very first challenge of identifying technicians, particularly with so many and varied job titles. We have now completed this piece of work and have mechanisms in place to identify technicians more easily within University systems going forward.

As mentioned previously, TechYork has been in existence since 2006 and is a recognised strong brand, but it was felt it would benefit from being a technician-led initiative. TechYork was handed over to a group of technicians from across the academic departments in late 2017 and they have already organised one event in December and another, ‘Science and Technology on the Big Screen’, is due in late June. They have also engaged with the Technicians Make it Happen campaign.

The Technician Commitment initiative has also been used to reinforce to technicians the active encouragement in internal and external CPD activities including attendance at conferences, such as the yearly IST conference. Individual departments can cover fees and travel.

Feedback from our technicians clearly indicated that although there was felt to be good visibility of technicians at departmental level, they felt institutionally invisible and that the senior management of the University do not understand what technicians do. Brian Fulton is passionate to educate the senior management team on the importance of technicians in achieving the strategic objectives of the institution. In order to raise the profile, recognition and understanding of our technical teams across the whole University, we are progressing a skills survey of technicians. This will give visibility of what technicians do, where we have any potential skills gaps and inform succession planning at an institutional level.

It has been noted that there could be a greater web or social media presence for the technical community. We have started work on this but there is significant work still to do.

Recognition:

Professional@York is an existing initiative which aims to support and highlight the value of support staff within the University. This is demonstrated through ongoing events and development opportunities, designed to both celebrate and help advance the careers of support staff. Despite being for and about support staff, technicians have shown limited interest in this initiative. Operations and technical managers are currently seeking feedback on to why this may be, and how best to encourage technicians to get involved in the future; very much a work in progress.
Professional registration is another area that technicians have been slow to engage with and the Technician Voice heard in this initiative has clearly stated that currently they see little benefit in registration. To try to encourage the professionalisation of technicians, the technical/operations managers have re-promoted this within their departments and figures are gradually increasing. The use of “Registration Champions” has been identified as a successful approach and so we will use those already registered to promote this. For example, Abby Mortimer stated that “Professional registration has not only given me recognition for my technical skills and achievements, but also opened up a wide range of networking and personal development opportunities which are equally valuable”. Similarly, Graeme McAllister stated “I have found that registration has given me greater awareness of my own professional development, and encouraged me to think more to the future. I think technicians can often fall into the trap of seeing themselves as behind-the-scenes, when we are in fact, crucial to the successful running of our research group/department/university/company. I decided to apply for professional registration as I felt it was a good way of conveying my skills and experience when I tell people “I’m a Technician”. This is exactly the message that needs to be promoted and these messages from technician to technician are hugely powerful and need to be harnessed.

Career Development:

Career development is at the heart of this initiative at York; not least because in a recent staff survey only 10% of technicians saw a career path for them at York. This is a huge opportunity to really make an impact, as demonstrated in the 24-month action plan, but we have already started this journey. As stated above, identifying technicians was initially a challenge but, once identified, developing a career path for each technician is even more difficult. A particular problem is the hugely wide and varied roles that technicians have and so it has been identified that having nationally recognised generic role descriptors, based more on level of operation and behaviours as against tasks, would enable a career pathway to be identified. These role descriptors are in the draft stage and we are actively aligning them with nationally recognised standards.

In addition to this, the University has become an affiliate partner of the National Technician Development Centre to access sector wide tools and expertise to assess the existing institutional technical skills and identify skill gaps. From this we can develop succession plans for sometimes very specific skills sets.

Sustainability:

The University has acknowledged that it has not always fully supported, recognised and developed technicians and has been working hard to create and implement actions to improve this. The work that has been carried out so far on developing the skills survey and standardising technical job descriptions provides the foundations for ensuring the future sustainability of technicians. The currently anecdotal evidence of an aging group of technicians is also noted and, whilst this will be explored further based on evidence collected from the skills survey, small but significant steps have been taken such as engaging with the apprentice levy as a lever to recruit apprentices into technical posts in academic
departments. There is also HR support for utilising the apprentice levy for the upskilling of existing technicians, although the details of this have yet to be finalised.

Overall, since signing the Technician Commitment a number of disparate strands of activities aimed at improving the lot of technicians at York have been reinvigorated and given a focus. The parity of esteem that exists for technicians has also meant that we have excellent foundations on which to build career pathways for technicians at York.

Please provide a 24-month action plan, detailing future plans to ensure your organisation addresses the themes of the Technician Commitment and details of how impact will be evidenced: (this may be detailed here or attached to this document as an appendix):

There are several options for producing an action plan and many options were considered by the working group but it was felt best to produce a useful, living document that can be embedded on the webpage that technicians at York and stakeholders from across the sector could interrogate and monitor. Equally, it was felt that if this document was too large and cumbersome, engagement would be made significantly more difficult. To that end it was decided that the action plan should take the form of a Google Sheet that could be live-published to the website, and furthermore that if it were to be printed it would fit on two sides of A4. This is attached as an Excel workbook but will be published on the web (Google sheet) when feedback from the self-assessment process is complete. We then hope to be challenged on progress by our technicians.

Given these criteria, the action plan should hopefully be self-explanatory, but a small narrative under each group is below to give some context and background thinking:

Evaluating Impact

The Technician Commitment needs to be embedded into the culture of the organisation and it will take some time, but also the Technician Commitment Delivery group need to reflect back to stakeholders the positive benefits of the commitment to retain buy-in. This first section is about using this self-assessment form (and subsequent iterations) to ensure we are both having a positive impact and communicating this to all stakeholders.

Visibility

Visibility is very much around the communications workstream. Initially a defined web and social media presence is required and we are already well into that process with a view to launching around the submission of this self-assessment. We will then look to use these communication channels to create a buzz around the Technician Commitment and TechYork to ensure that institutional, and sector wide visibility is achieved.
Recognition
Within the Technician Commitment recognition is very much about professional registration and this is reflected in this aspect of the action plan, although we must be cognisant of the fact that the “technician voice” at York tells us that as a group they still need to be convinced of the benefits. We must first get buy-in at that level before we start pushing too hard; embedding in the recruitment process is a good start. Internal and external recognition by awards and prizes is also important to celebrate success.

Career Development
This is core to both the Technician Commitment and a particular problem that we are addressing within the technical staff grouping at York and so a great deal of effort and time is devoted to this aspect. Initially we need to develop consistent role descriptors to enable technicians to identify career stepping stones across the institution and beyond, then we can then begin to map out career pathways. Agility between technician roles will be fundamental to any career pathway; this will be something relatively new within this staff group and so creating a culture where agility is normalised, be that through job swap, shadowing, secondment etc. is crucial to success.

Sustainability
This relates very much to the sustainability of the skills currently within the technician staff grouping and is therefore intimately involved with succession planning. At York, we need to understand the institutional skills within the workforce and concurrently identify skills gaps and single person dependencies and identify strategies to address these. The mechanism to achieve this understanding is through use of the skills survey developed out of the NTDC in Sheffield. Engagement of technicians and allaying any concerns they have around this will determine the success of this survey; communication of the driver for this survey is crucial.

Evaluating Impact
As stated above, evaluating both institutional and personal impact of this initiative is crucial to embedding it within the culture of the organisation. The precise mechanism and measures that will be used to evaluate impact are currently unclear, beyond self-assessment such as this, but we would look to engage with the sector to develop metrics that would allow both intra and inter-institutional comparisons to be made.
Please evidence how the ‘technician voice’ was present in the development and formation of the institutional action plan:

The technician voice has been encouraged and heard throughout the development of the institutional action plan, and indeed much wider on the overall delivery of the Technician Commitment. Very early on, it was identified that a technician representative in this initiative was crucial so technicians did not feel this was being done ‘to’ them, but ‘for’ them. Abby Mortimer, Chief Scientific Glassblower, Chemistry, agreed to provide that representation and she has been instrumental in delivering this piece of work. Also on the working groups associated with delivery of the Technician Commitment are technical/operation managers of Biology (Lucy Hudson), Chemistry (Simon Breeden) and Computer Science (David Hull) ensuring that technicians are very much in the driving seat of this initiative. Institutional support is provided through the Faculty Office, Human Resources, Learning and Development, Marketing and IT with academic staff having representation on the steering group.

Brian Fulton, Dean of the Faculty of Sciences, presented the technician commitment at the inaugural technician-led TechYork event and solicited feedback, which he will be reflecting back by presentation of this action plan to the next TechYork meeting on 28 June. The Draft plan has also been presented to, and shared with, the Faculty Technical Support Group who have been tasked with taking it back to their technicians to solicit feedback. The wider technician community was consulted in detail on the challenges around the technician commitment through facilitated whole team meetings in Chemistry and Biology. Similar approaches will be used in departments at the start of the 24-month action plan.

We have asked TechYork that this be a standing item on the programme for all meetings so we can retain the engagement of technicians across the entire institution.

Please confirm that your Technician Commitment status and action plan is published on your organisation’s website and provide the relevant URL here:

Confirmed: please see https://www.york.ac.uk/staff/working/tech-york

Signed………………………………………………(Technician Commitment Nominated Institutional Lead)
Date:

Signed………………………………………………(Technician Commitment Signatory – Leader of Institution)
Date:
Appendix A: Examples of activities and initiatives to address the themes of the Technician Commitment

Please note that this is not an exhaustive list, it intends to demonstrate example activities to support institutions in action planning.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Example Activities</th>
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| Visibility          | • Organisations can identify how many technicians they employ  
• Technician roles have clear job descriptions  
• A consistent policy that where technicians have contributed to research outputs and grants, they are named as authors  
• Technicians to feature in organisation prospectuses and marketing materials  
• Technicians to sit on decision making committees where appropriate  
• Technicians visible in costing mechanisms for research grants  
• A mechanism for celebrating technician achievements across the organisation  
• Organisation strategy documents to include technicians where appropriate  
• A vibrant ‘Technician Network’ |
| Recognition         | • Organisation communicates the opportunity to become professionally registered to technical staff (Science Council, Engineering Council, BCS). Conferral of the organisational level Science Council Employer Champion award in recognition of the support given to technical staff to gain professional registration and engage in continued professional development  
• Recognition and support of the teaching aspect of many technician roles through the accreditation of teaching practice through the Higher Education Academy  
• Internal award schemes recognise the contribution of technical staff  
• Nominations to external award schemes that recognise the contribution of technical staff |
| Career Development  | • Technician specific professional career paths/frameworks which clearly document progression opportunities  
• Professional development opportunities, signposted to technicians and aligned to career pathways  
• A dedicated webpage showcasing case studies of technician careers  
• Expansion of technician specific job families in recognition of high level technical specialisms |
| Sustainability      | • Appropriate succession planning for technical roles including the analysis of technician profiles to ensure future sustainability of skills within the organisation  
• Secondment/placement programmes for technical staff to develop new skills  
• A technician trainee/apprenticeship programme  
• Utilisation of the Apprenticeship Levy to train and upskill existing staff |