

Technician Commitment

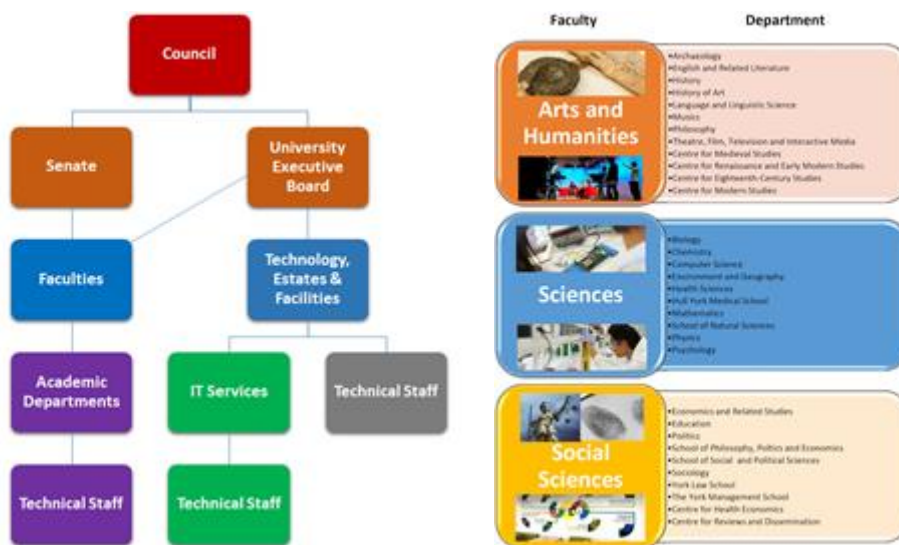
Stage Two Self-Assessment & Action Plan



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Please provide an overview of technical staff structures in your organisation.

At the very highest level the technical structures at the University of York have not changed since signing the Technician Commitment; the University is split into three academic faculties: Arts and Humanities, Social Sciences and Sciences, as well as Professional Services. There are an additional significant number of technicians (~230) within Professional Services, almost exclusively within the Estates and IT services teams.



The vast majority of technicians in the academic departments, (~240) are within the Faculty of Sciences, with the largest groups being Biology and Chemistry, making up about 2/3 of technicians with an approximately equal split between Physics, Electronic Engineering, Computer Science, Environment & Geography and Psychology. There are also technicians (~25) in the Faculty of Arts and Humanities and a small number (<10) within the Faculty of Social Sciences.



Interestingly through the Technician Commitment, and primarily through the activities of TechYork to ensure visibility of technicians, we have identified a small number of technicians that we did not know we had. For example we have a printing press technician in English and the Vice Chancellor, when visiting the Humanities Research Centre, identified a couple of technicians in our Centre for Christianity and Culture who are doing extraordinary work in developing digital/interactive reconstructions of medieval Christian buildings.

Through the visibility piece we have also been able to demonstrate the breadth and depth of technicians within the University of York to the senior management of the University, including members of the University Executive

Board, the Operations Group (heads of services) and the University Council that provides governance, and to the Vice Chancellor. We also contributed, although unfortunately not in a very formal way, to the development of the Vision for the University as *A University for Public Good: A Strategic Vision for the University of York to 2030*.

Please tell us about your institution's approach to the Technician Commitment since becoming a signatory. Comments on governance and reporting lines, resources and wider community engagement are welcomed.

Governance

We divided our action plan into work streams: Self-Assessment, Communications, Role Descriptors, Skills Survey and Steering, each with a working group; group members included technicians and technical managers from across the academic departments, faculty, academic, union representatives, professional organisational development and human resources staff.

These groups all had specific targets set out by the action plan, and as these actions progressed we found that some of the groups changed. For example, the primary focus of the Communications group was to set up a web presence for the Technician Commitment. As TechYork was already well established and recognised by technicians, we chose to promote the Technician Commitment through TechYork. All Technician Commitment information and updates, along with professional registration information and events are now consolidated on one [site](#). Two representatives of the TechYork group were invited onto the communications group to ensure a common goal. All website updates are now done through the UoY Marketing department.

The Dean of Faculty of Sciences sits on the steering group and is therefore at the forefront of progress, which is reported to the University Executive Board. Professor Charlie Jeffery became Vice-Chancellor (VC) and President at the University of York in September 2019 and recently had a tour around three of our science departments, and met with technicians who had an opportunity to show off 'just what we do'! In addition, a small team representing the steering group and technician champions met with the University Council to discuss career pathways for technical staff and a background to the Technician Commitment at York.



Resources

The TechYork committee (currently 8 technicians from across the Science Faculty) organise all events, are responsible for a budget and are very resourceful when it comes to gaining supplier sponsors for events (Summer TechYork event 2019 raised ~£4k). Additional funds for the technician commitment are held within the Science Faculty, with an agreement that funds can be requested if needed. So far all additional funding requests have been met, including funding for partnership with the NTDC and the IST conference at York, now rescheduled for September 2021.

TechYork have also built up a good range of branded merchandise, such as roller banners, mugs, pens, lanyards and water bottles, to increase our general visibility around the university and specifically for use during TechYork events.

Our ability to communicate with UoY technicians has been aided by HR's development and continuous updating of departmental email lists for technical staff. Another major resource used by TechYork is [Twitter](#). This is proving to be a fantastic way to communicate news, events and opportunities, not only internally but also from the wider technical community (see demographic later).

Wider community

Initially aimed at academic departments, we recently extended our membership to include colleagues in IT Services (~200), with 70 technical staff in our Estates & Campus Services due to be added soon. Technicians from York St John University, the National STEM Learning Centre and the Biorenewables Development Centre are invited to TechYork events, forging links with external universities and university partners.

Members of the TechYork team attend HR-run Central Induction events (and created a [video](#) for virtual inductions), aimed at new staff starters. These are an opportunity to increase technician visibility to both new technicians and other staff groups.

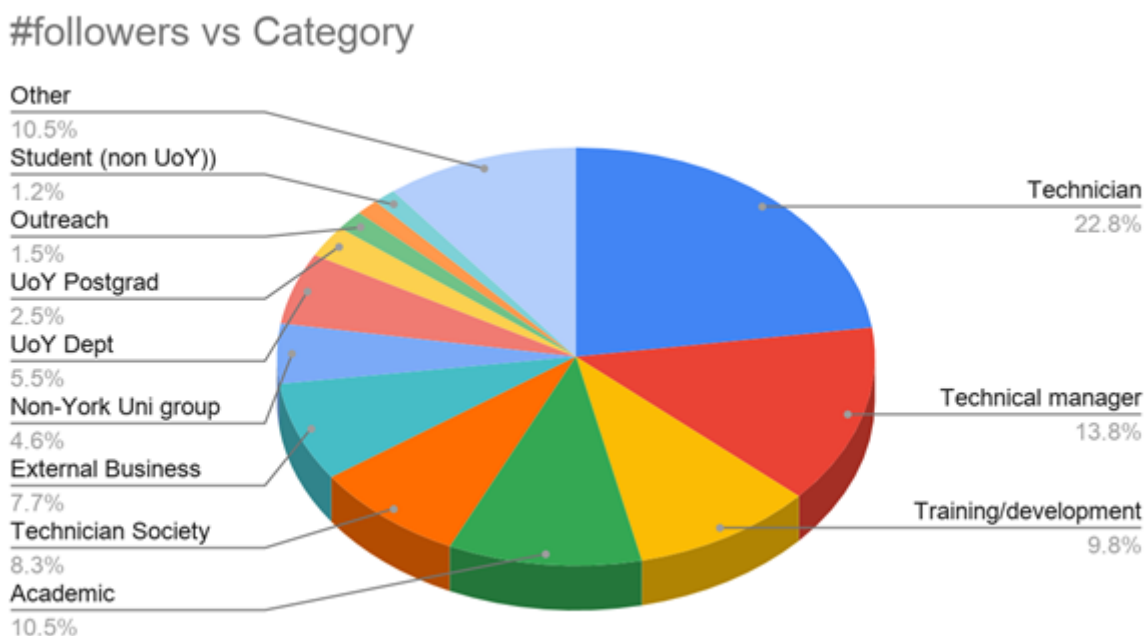
The University of York is a founding signatory of the Technician Commitment and the first signatory event was attended by technical managers only. Subsequently, technicians involved in delivering the commitment at York are given the opportunity to attend (and speak at) signatory events. In December 2019, the technician-led [HEaTED Networking Regional Meeting](#) was held in the Chemistry department. Delegates from Liverpool, Hull, Manchester and



York attended, and several York technicians gave short talks and posters. As well as attendance at [IST](#) and [HETS](#) conferences, York technicians have participated in the [NTDC photo competition](#) (3rd place winner) and the [‘I’m An Engineer’](#) outreach scheme (runner up).

Simon Breeden (Technical Operations Manager, Chemistry) and Lucy Hudson (Technical Operations Manager, Biology) presented the background to and progress towards the Technician Commitment as part of Professional@York’s In a Nutshell staff information series. This event was open to all members of the institution and supported by TechYork. Lucy Hudson is a National Technician Development Centre Specialist Adviser and jointly with Simon Breeden recently contributed a [case study](#) on successful technician engagement. In June, Graeme Mcallister (Technician in Chemistry) was the first contributor to the #TechsCommit [blog](#).

Like many technician networks, TechYork’s [Twitter](#) presence continues to grow, with a wide demographic, including an increasing student following. During COVID-19, Twitter was used to highlight technicians supporting both the Institute and the wider community effort (using #technicianskeepithappening), and was useful in establishing new contacts.



Engagement with external companies is increasing. Sales reps and workshop tutors actively enquire about running (and sponsoring) events - so much so, we now have several in the pipeline. As more companies become interested, we can expand the range of events we run, thus appealing to a wider audience. This external collaboration means our technicians are learning about the very latest technologies.

The TechYork web page is a public site with a wealth of information about the TechYork network and the Technician Commitment, advice and information about career progression and professional registration. It also features upcoming TechYork events and case studies of some of our technicians. As well as appearing on the dedicated Technician Commitment page, news and updates are circulated by email and social media.

Particularly in this challenging year of 2020, many meetings and conferences have become virtual, and networking with other technicians and Technician Commitment partners in the wider community has taken on even greater importance. UoY technicians have been involved in the IST and NTDC forums / TechMeets, and virtually attended many other events to maintain contact and facilitate sharing of ideas, best-practice etc. Virtual meetings have allowed us to attend meetings more easily without the need for travel and added the ability to “dip in-and-out” of longer sessions as time-commitments/emergencies have arisen. Many meetings are now recorded so can also be viewed later or by a wider audience.

Lucy Hudson ([NTDC Specialist advisor](#)) and Ian Tidmarsh (Manchester Metropolitan University and NTDC Specialist advisor) have met with Imperial College London, University of Birmingham, Manchester Metropolitan University, University of Kent and Glasgow University, and most recently the Senior Talent Managers from the UKRI (October 2020) to introduce the [NTDC Career Pathways Tool](#). The meeting identified how York used this framework to develop consistent role descriptors to enable technicians to identify career stepping stones across the University of York and beyond. York’s technician grade descriptors have been shared with a number of other universities including Birmingham, Bradford, Coventry, Essex, Glasgow, Imperial, Kent and Queens Belfast.

Simon Breeden was appointed as the [Associate Lead for the Technician Commitment](#) in May 2020 through formal part time secondment to the Science Council. Simon works alongside Kelly Vere on the Technician Commitment, ensuring visibility, recognition, career development and sustainability for technical skills and roles in higher education. Simon said of his appointment:

“I am really excited to be working with the Technician Commitment at the Science Council and supporting Kelly and the team in driving forward the visibility and recognition of technicians. Development of career pathways and role models for technicians will highlight a technical career as a viable option for the new generation of technicians that will be required to drive forward the high skill and knowledge based UK economy. It is a really exciting time to be a technician!”

Please provide a RAG - Red Amber Green analysis on your institution's 24-month action plan indicating which activities you have undertaken and completed (green), which are in progress (amber) and which still to be carried out (red). Please provide an explanation for those categorised as red.

This may be detailed here or attached as a document as an appendix.

[RAG report](#)

Completed (Green) areas

Evaluating Impact:

Initial workshops/information sessions were held in early 2018 then, prior to the Skills Survey, six roadshows were hosted by our technician champions, inviting technicians from all faculties (see below). [The initial survey findings](#) (completion rates, demographics) were presented at the summer TechYork event (June 2019). Attendance varied, but discussions were useful and fed into development of the survey. [A mid-term progress report](#) was prepared in June 2019, shared with UEB and wider staff, and publicised by email and social media.

Visibility:

Our initial demographic was those technicians working in faculty/academic departments. In Oct 2019, it was agreed that colleagues in IT Services would be included in future TC/TechYork events, and discussions to include Estates Services staff are ongoing.

The generic role descriptors were completed in Dec 2018 and have been used in recruitment of technicians since April 2019, and have included the requirement for holding or working towards professional registration.

TechYork and the TC have expanded their web presence with e.g. personal career pathways and TC/professional registration information. TechYork (and by extension, the TC group) have regular networking and development events (e.g. one-day conference, technique workshops), as well as attendance and active participation at national meetings e.g. IST Annual meetings, HEaTED regional meetings, TC Signatory events.



Recognition:

TechYork and the TC group aligned with [Professional@York](#), an initiative to recognise the contribution of support staff within the Institute. Simon Breeden sits on the steering group of Professional@York as technical representative.

Several nominations to award schemes have been made, with Ian Helliwell (Physics) winning Institute of Physics Technician of the Year, and the team from Theatre, Film, television and Interactive Media nominated for a York Student Union Excellence Award. Professional registration information is available on the [TechYork website](#), and workshops were held in March 2019 to provide information on applications. TechYork encourages and offers support for Professional Registration with committee members taking up Science Council registrant champion and approved assessor roles in addition to hosting a Science Council Professional Registration workshop at York in 2019 and promoting the virtual workshops in 2020.

Sustainability:

At the heart of our work around sustainability was a skills survey of our technicians to better understand the makeup of the technical workforce. Key messages for the skills survey were distributed to technicians, heads of academic departments and department/technical managers in Feb 2019. Six technician-led roadshows covered the background/aims of the TC, the survey and the new grade descriptors. The roadshows were also presented to Faculty technical and admin groups. Survey Q&A sessions were held and FAQ's were available online. Survey questions were compiled by working groups in several departments, then the survey piloted and feedback sent to NTDC. The survey launched in May 2019 for 3 weeks. The rich data that we obtained from this survey was disseminated to academic departments to help them better understand their workforce and use it as part of their planning in the medium to long term.

On Target (Amber) areas

Career Development:

The results of the skills survey and the full implementation of the grade descriptors was our baseline for development of a career pathway at York, whilst this hasn't been achieved formally, there are some strong examples across the campus where technicians have started to think about their career, ask or taken opportunities that have arisen as technical managers have begun to think more creatively how to recruit to roles.

Examples are:

- a secondment for a senior technician from the Art and Humanities Faculty to a technical manager role in Biology - *“My secondment opportunity to Biology from Archaeology has been an invaluable learning experience. It has allowed me to bring about and develop both interdepartmental but notably interfaculty working relationships. This has been particularly poignant during the last few months as we have prepared the Departments for return of staff and students post lockdown. It has given me a great insight into working practices of a larger more complex Department that I am able to take away and build into operations within my own role. Crucially, I have also felt empowered to bring something to the role I am seconded to; discussing and developing ideas of my own where I see an opportunity exists”.*
- Electronics Technical Specialist Tim Ayers, seconded from Chemistry to Physics. Tim said: *“I applied for a secondment because I was interested to learn how a different workshop within a different department approached their day to day work. What I gained from my secondment was so much more; developing and expanding my skills, bidirectional sharing of knowledge and experience, exposure to new fields of research and ultimately realising that my skill set was better aligned to my temporary role. Subsequently, I was offered a permanent position and I believe that my secondment has been a worthwhile opportunity to further my career at the University”.*

There is an awareness across our technical community of the importance of continuing professional development and learning with technicians being encouraged to continue studying and apply for secondment and shadowing opportunities at their performance review. One particular example is one of our teaching technicians, with nine years service has recently started a part-time Bioscience degree at York St John University.

Sustainability:

We met with the NTDC after the survey closed to discuss results and action plan. Individuals got their reports in August 2019 in time for the University performance review cycle. Departmental reports have been written, and are sitting with departmental management teams before dissemination. Initial findings have been presented at department technical meetings (primarily the ones with the largest technician populations).

“The Whole Shebang”:

This week-long technician festival was scheduled to be held in Sept 2020 and would have incorporated the IST Annual Meeting (held on campus). Other activities were to include: career and sustainability presentations/competitions, department tours and activities (e.g. “What’s it like to work in a Chemistry lab?”), 3-minute “What I Do” talks and outreach activities for local schools. Due to the COVID-19 disruption this was cancelled and the detailed delivery of this celebration will need to be reimaged for delivery within the next action plan.

Not done (Red) areas

Sustainability:

Our survey action plan and report template have been drawn up, however a full data analysis has not yet been completed, although detailed reports for Chemistry and Biology are available. As a consequence, later action points (review, approval and communication of the survey action plan) have not yet been started; these actions will be rolled over.

Impact Evaluation:

It was agreed that impact evaluation methodology would be qualitative, therefore external evaluation would not be needed. As a result, further evaluation methodology action points were no longer required.

<i>Tell us how you evidence that your action plan has had/is having an impact?</i>

For the purpose of reporting the impact of our action plan, and in keeping with the essence of the Technician Commitment (TC), we will report our impact under the TC pledges: Visibility, Recognition, Career Development, Sustainability and Evaluating Impact. The assessment is based on both qualitative and quantitative evaluation of the impact of the action plan.

Visibility

The University of York started with good knowledge of the number and location of technicians within the organisation (Self Assessment, 2018). Initially the decision was taken to not include technicians in professional support services with a focus on technicians in academic departments. Feedback from technicians at the time indicated that there was good visibility of technicians at department level however they felt institutionally invisible and that the senior management of the University do not understand the role of technicians. It was also noted that web and/or social media presence for the technical community could be improved upon. The action plan looked to address these issues while continuing to increase the visibility of technicians within and beyond the institution.

Impact - We have increased our visibility within departments, across the institute and sector significantly since 2017, through our technicians, technical managers and our Dean of Faculty of Sciences (Brian Fulton). The appointment of technical managers in Physics and Electronic Engineering has resulted in increased engagement in these departments and helped improve visibility and engagement of technicians within the institution. TechYork have their own dedicated [web page](#) on the University of York website allowing easy access for existing or prospective technicians.

The first action of our TC plan was to hand over the management of our technician network, TechYork to a group of volunteer technicians. The TechYork team have created web pages, a platform for TechYork events, support for learning and now act as the route of communication for information associated with the Technician Commitment. Graeme McAllister, a technical manager in the Chemistry Department has been communications lead, regularly tweeting York information and retweeting TC, National Technician Development Centre (NTDC), Science Council and Technicians Make it Happen (TMiH) events and communications. Opportunities for secondments,

promotions and opportunities both internal and external are promoted *via* email to the technical community.

The technician's voice is clearly demonstrated as it is our technicians who decide what to host whether it be formal learning or a social event. Through the TechYork webpages, technicians can find inspiration in [career stories](#), support to become [professionally registered](#), or simply to reach out to other departments through networking events.

The University of York were fortunate to be part of the [Technician Commitment, One Year In](#) video and have been well represented at Signatory Events with presentations from Simon Breeden, Graeme McAllister and James Fox. This demonstrates visibility beyond the institution for our technicians.

Following a Technician Commitment presentation at University Council by technicians and as part of improving visibility in senior management he visited the Departments of Biology, Chemistry and Physics (March 2020). The VC spent the day talking to technicians working in research laboratories, teaching laboratories and workshops. He gained a good understanding of the wide and varied skill set technicians have, as well as the size and complexity of supporting the teaching and research.

Increased communication and visibility has resulted in a 89% completion rate of the technician survey with some departments obtaining an 100% response rate. Through increased and improved communications the word has certainly got around, as proven when our VC personally e-mailed to say that he had just met two technicians in the [Centre for the Study of Christianity & Culture](#), to check they were part of our community.



Ongoing Development - In 2019 we met with the Deputy Registrar and her senior team to discuss whether our Information Technology (IT) colleagues would like to be part of the TC. IT Services at York had recently completed a large restructure, including introduction of grade descriptors and staff were aligned within and across departments, with consistent job titles which dovetailed perfectly with the work carried out with grade descriptors for technicians in academic departments. Our IT colleagues are invited to TechYork events and we are slowly making progress towards full inclusivity of IT in the TC at York. In addition we have recently made contact with our Estates department to discuss how we can include Estates colleagues in the TC. Further activities and actions will be included in our action plan to expand the community at York.

York has a significant national presence in the Technician Commitment, it has been involved in the last three IST meetings and before the impact of COVID-19 technicians attended conferences, lectures and launch events for the technician commitment. York secured the Institute of Science and Technology National Technical Conference 2020 (~300 delegates), which has been delayed to September 2021. York is looking forward to hosting the event with many technician-led events planned.

Opportunities that have come about because we signed up to the TC include: hosting a [regional HEATED conference](#), [NTDC article about technician engagement](#), many opportunities to speak at other Universities and hosting the aforementioned IST conference, Sept 2021. Technicians have also applied to assist at the Royal Institute Christmas Lectures, I'm an engineer outreach, TMIH events and York now has six TC peer reviewers.

Recognition

The University of York supports technicians in professional registration and recognition of their work internally and externally. The number of technicians that held professional registration was not understood at the previous submission and work was initiated through the technician survey to provide baseline data for future assessment.

Since its launch in 2015, [Professional@York](#) (P@Y) is about valuing our support staff in their contribution to York's ambitious agenda. Technicians had previously shown minimal interest due to poor visibility of the scheme, however at the last awards in 2018, many technicians were nominated, including the TechYork committee and many in the 'Unsung Hero' category, and there were a number of technicians in several of the winning teams (eg. the Chemistry Mental Health Support Team). The action plan was devised to increase recognition of technicians at York and improve visibility of, and engagement with, professional registration.

Impact - The University of York hosts a [biannual conference](#) for all professional support staff celebrating their contribution to the University and wider community. Simon Breeden became our technician representative on the P@Y board and technical managers and team leaders were encouraged to submit applications for their teams and individuals who showed outstanding commitment. As we approach the next P@Y event the established TechYork communication routes, along with Department Technical managers, will be utilised to improve visibility and engagement.

In addition to P@Y, Departments hold Internal Award events recognising all staff and their contributions. For example, technicians in the Department of Physics have recently been successful in their departmental "Making the Difference Awards" for enabling a return to research operations following the national COVID-19 lockdown; the Physics Teaching Laboratory staff have also won the Professional Support Staff award for their contributions (nominated by students).

An action was to explore and submit appropriate applications for external awards for our technicians. We focussed on the IOP, RSC, RSB, Papin and IST, submitting applications to all. We were very pleased to have - Nikki Savvas and Andy White as runners up and Ian Helliwell received the inaugural [Technician of the Year Award from the IOP](#).



Other awards included: Mark Bentley, I'm an Engineer outreach, Jing Wood & Becca Neale, the NTDC Technician photo competition.

The University recognises and values the hard work, commitment and achievements of all staff. The Rewarding Excellence awards are intended to provide recognition to those staff (including technical) who have demonstrated sustained achievement over and above the expectations of their job description, over a significant period of time. Achievements must have been outstanding and worthy of particular note. The scheme provides an annual opportunity to be considered for an award. From the data, the number of technicians applying and successfully gaining the award has been consistent for the last five years with a very high success rate (16 successful applications out of 18 submitted), in recognition of the achievements of our technicians. Although the success rate (89%) is high, the number of applications is relatively low and so applications from technicians should be actively encouraged.

Ongoing Development - Professional Registration is promoted through [TechYork web pages](#) and the University has Professional registration champions who are assessors for the Science Council. TechYork has held two workshops with a speaker from the science council (50 attendees) to promote registration within the University. The skills survey provides a baseline to measure performance moving forward. In total, 33 individuals reported being professionally registered with 18 planning to apply. Further work is required as part of the next action plan to promote and expand registration.

Career Development

Career development was placed at the centre of the previous University of York action plan due to feedback from the staff survey which highlighted that only 10% of technicians saw a career pathway at York. Agility between technician roles was seen as fundamental to career pathways with the promotion of secondments, shadowing and job swaps. The University has good knowledge of the number and location of technicians within the organisation where they perform a wide and varied role depending on department/service provided.

There are two areas of success within career development at York, TechYork arranging and hosting learning events and the implementation of grade descriptors for technical roles. Having informal contact across the institute to all technicians, our TechYork team understands the needs of our technicians on the ground. The team attends central inductions and arranges many courses and events.



Impact - During analysis for our first self-assessment report, we found that we had around 300 technicians in academic departments, working under 117 different job titles and descriptions. We

needed to develop consistent role descriptors to enable technicians to identify career stepping stones across the institution. Clarity of job descriptions (JDs) and creating a consistent career stepping stones of skills, knowledge and experience became a priority project.

Involving HR, technical managers, technicians, the NTDC and unions, we compared our JDs with those from the NTDC, Manchester Metropolitan and Birmingham Universities. This resulted in the production of generic role descriptors, which were tested on technician recruitments and volunteer technicians from TechYork (February 2019). We also split at grade 6 to specialist and team manager, helping technicians decide on a career pathway from grade 5 onwards. The project has been a great success: HR and recruitment/line managers have commented how the generic role descriptors have saved staff time ensuring a consistent approach. In addition, the unions have welcomed them and stated that grade descriptors should be written for all staff groups. When presented to the technicians in Biology and Chemistry, they stated that the JDs brought transparency to recruitment and role reviews.

An additional advantage to graded JDs has been in career development planning. The JDs are presented on one [Technician JD Spreadsheet](#) clearly showing the steps in skills and competencies to the next grade. This is an excellent tool for technicians and line managers to use for career conversations and performance reviews.

The generic role descriptors were given a 'soft launch', published in the [HR job library](#) April 2019. These were used for recruitment and for role/team reviews and, to date, well over 50 technicians are now working under the new role descriptors. Once this number has increased further, it is proposed to start one-to-one discussions with technicians at performance reviews to adopt the grade JDs across all academic departments.

We have been asked to share our generic role descriptor with several other institutions, particularly the comparative spreadsheet. To date we have shared these with York St John, Queens Belfast, Bradford, Essex, Imperial, and Newcastle to share best practice.

In February 2020 we advertised our first internal technician secondment opportunity (a great milestone), a one day/week, two-year secondment, by way of succession planning and the opportunity to experience and develop management skills. The recruitment was a great success, eight high calibre candidates who could all have been appointed and all wanting in depth feedback, before visibility of the TC we doubt there would have been such interest.

The University has also continued to support technicians completing Leadership & Management Training. Since 2015, sixteen technicians have completed a Leadership and Management Development Training course. This provides training to existing managers and aspiring leaders through the "So you want to be a manager" and "Leading without a team" courses. One technician who completed the Leadership in Action course made the following statement - *"Undertaking the University's Leadership in Action course was hugely beneficial to me in both reinforcing my strengths as well as addressing known and unknown weaknesses / areas for improvement with practical real world information and advice. Most importantly, the course boosted my confidence, enabling me to be more comfortable and assertive in dealing with difficult situations in my leadership role. The blend of taught material, group session activities and personal reflection was well balanced and delivered in a genuinely supportive atmosphere."*

I would strongly advise anyone who wishes to improve their leadership to undertake a course like this”.

The University continues to offer these opportunities to technicians and is committed to developing technicians who choose this management career path. With the launch of a new course as well (New Line Manager's Fundamentals Workshop) this further supports the development of technical staff. A technician who completed the New Line Manager's Fundamentals Workshop commented - *“I think it's fair to say I was a little sceptical ahead of going into some management training courses run by the university, however after the event it as was clear that my early thoughts were misjudged: The courses provided help in dealing with difficult conversations, understanding how to get the best from staff that you manage, providing feedback and so on...*

However the main part for me was a better understanding of my own character traits and how I come across to others within the management part of my role, the courses also provide a network of contacts who can provide advice should you need it in the future”.

The University has an extensive range of courses in addition to the management courses to support individuals in developing their interpersonal and technical skills. In addition TechYork has organised a number of events to improve technicians’ skills in the workplace. These have included University finance webinar, use of Regulators (Gas Arc), etc. along with a number of external courses e.g. What you need to know about DSEAR risk assessments (Fire Protection Association), GC Theory & Key Principles webinar (Shimadzu) and many other technical training courses.

Ongoing Development - Due to the COVID-19 pandemic there has been a delay to the implementation of documented careers pathways and the planned communication with technicians. This will form part of the updated action plan in this submission.

Sustainability

To ensure the future sustainability of technical skill at the University it was recognised that a detailed study of technicians skills and experience was required. The Technician Commitment Team would use this information to identify skill gaps, single person dependencies and educate/influence middle and senior management. We chose to run the NTDCs Technician Skills, Roles and Responsibilities Audit to improve our understanding, to ensure that technical expertise could be utilised and succession planning completed. The action plan focused on the Skills Survey completion and data analysis.

Impact - Preparation for the Skills Survey began late 2018 with the ambitious completion date of Easter 2019. In February 2019, we decided to delay the survey, as we felt there was a lack of engagement from some departments. To go live without technician engagement across the institution was unwise as this would have led to incomplete data, substantially devaluing the output of the survey and further disengaging technicians. We therefore focussed our efforts in widening engagement.

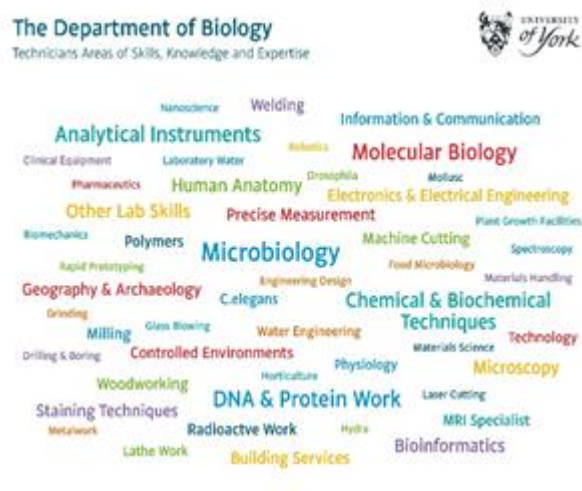
Engagement was increased with our technical colleagues across the institution in a number of ways:

- Roadshows, drop-in sessions, FAQs and a newsletter

- Invitations to complete the Skills Survey to be sent from the Dean of Faculty of Sciences, Heads of Departments and Technical Managers.
- The Skills Survey was advertised *via* the Staff Digest, Departmental Bulletins, TechYork Twitter, posters in departments and the TechYork website.

The survey closed on the 28th June, the survey was sent to 215 technicians and we had an amazing 89% completion rate making it a success. Initial feedback was provided to the technicians *via* heads of department, technical managers and at the summer TechYork event (2019). A [mid-term progress report](#) was prepared in June 2019, shared with the University Executive Board (UEB) and wider staff, and publicised by email and social media.

As an example of the positive use of information collected from the Skills Survey. Of the 78 Biology technicians who responded to the survey, they submitted over 750+ different skills, knowledge and techniques, many skills not being used in their current roles. This is displayed as a poster in the Biology Atrium along with a Word Cloud, illustrating the breadth and strength of skills, knowledge and techniques our technicians in Biology have, the accompanying booklet link details anonymously, where we have expertise, so that staff and colleagues can easily search for assistance.



The skills survey has also impacted on how technicians have started to plan their career development and help them realise the transferable skills that they currently possess. One such example is for a technician that left the University of York and has become a Facilities Manager (Nanosciences) at the University of Sheffield - *“Before I became involved in the technician commitment at the University of York I hadn’t really thought about my career progression fully, in terms of where I wanted to be or how I would get there. Taking part in things such as the skills survey showed me that I was working to a higher level in some aspects of my role, and highlighted where I wasn’t quite at that level in others.*

This enabled me to work on aspects that required development. I believe my work with the TechYork committee helped me see that technicians shouldn’t be pigeon-holed into roles that they are currently fulfilling. We have a lot of transferable skills which became apparent in conversations with people from different departments”.

This is further supported by a dedicated careers section in the TechYork [web pages](#) and the use of example [Career Pathways](#) for current technicians to help individuals in their career planning.

As part of the original submission there was HR support for utilising the apprentice levy for upskilling existing and recruiting the next generation of technicians. This would support succession planning

and the transfer of key skills to new technicians. To date two new apprentices have been recruited (Biology and Chemistry), with more planned for the future.

Ongoing Development - Due to the COVID-19 pandemic there has been a delay to the completion of the action plan. Dissemination of the survey has been completed in the Department of Biology (workshop), Chemistry (presentation) and Physics (preliminary data presentation). Further work is required to enable the delivery of the action plan, including University Executive Board approval. This also aligns with the delivery of documented career pathways; this will form part of the updated action plan in this submission. There is the potential advantage of rerunning the skills survey with increased numbers of open and probing questions. This will enable further assessments of success, impact and progress against the action plan.

Evaluating Impact

The University of York is committed to the evaluation of technician commitment activity impact allowing continuous improvement and embedding this culture in the organisation. Initially the measures to evaluate impact were not defined in the self assessment and were developed during implementation of the initial action plan. This allowed flexibility in approach and the use of learning from other institutions. The decision was taken to utilise a qualitative assessment of activities approach (feedback from technicians, managers, Heads of Department *etc.*) and where possible, the quantitative analysis of data (skills survey and HR data).

Impact - Monthly reviews of progress against the action plan were completed by the technician commitment team with regular review meetings and an [interim self assessment](#) at the end of year one. This ensured progress and resolution of issues early, allowing the plan to be updated as required *e.g.* delay of the NTDC skills survey. Due to the alternate approach the following activities on the action plan were no longer required; External Evaluation of impact evaluation methodology; Impact evaluation methodology agreed by steering group and submitted to UEB; and Impact evaluation methodology presented to technicians. The review process has ensured the delivery of the action plan however some activities have been delayed due to the COVID-19 pandemic. These will be captured for continued development in the next action plan submission.

Ongoing Development - Following feedback from external organisations and implementation over the last two years, future action plans will implement Specific, Measurable, Achievable, Realistic, Timebound (SMART) objectives. The objectives will detail how success is measured allowing improved impact analysis. In addition there is the potential to produce a series of questionnaires (google forms) for technicians which will allow instantaneous feedback following an event and qualitative / quantitative assessment of progress. Work with HR will continue to allow us to assess the impact of the technician commitment on recruitment, progression, rewarding excellence and personal development.

Summary

Detailed above are many initiatives that show we have empowered technicians in the science departments across our institution to make a change. There has been high level engagement with the VC, Deputy Registrar, Dean of Faculty of Sciences alongside presentations to Council, UEB and the University Operations Group. At these meetings we have taken every opportunity to request

their further involvement, (e.g. the Chair of Council will judge one of our competitions at TechYork Festival 2021) to help lead the culture changes and champion technicians in the organisation.

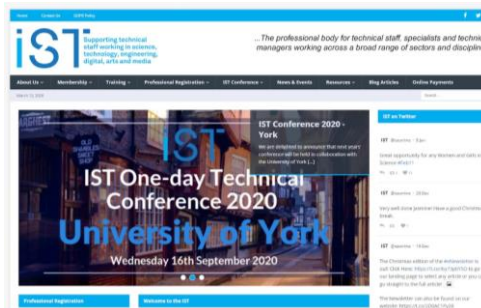
We have also strengthened the support and recognition of our technicians. Building on achievements and success to instil greater confidence to think differently about how to develop personally and progress in their career, if they so choose. It is worth noting that 31% of technicians at York who completed the Skills Survey said they were happy in their role at the University.

Please provide details of any institutional initiatives/programmes/activities aligned to your Technician Commitment that are not covered in your original action plan.

Due to the success of the piece of work around visibility of technicians across the institution and development of the community of technicians we have been able to take advantage of the many opportunities that have presented themselves in the last couple of years. Many of these opportunities have come from the technicians themselves, often through TechYork and a selection of the more high profile institution activities are below.

[Institute of Science and Technology \(IST\) Technical Conference 2020](#)

Within our original action plan was “The Whole Shebang” which was envisioned as a week-long celebration of all things Technician at York, but at the time the detail was left rather open. Through our technicians and technician commitment leads, networking across the sector, and with the active support of the Dean of Faculty of Sciences, we were able to secure the running of the IST Technical Conference 2020 on the University campus itself. This was planned to be the centrepiece to TechFest York 2020, which was to be used to showcase the skills of our technician community. Unfortunately, COVID-19 disruption resulted in the postponement of these events.



Technicians have also become much more visible within recruitment and selection processes as well as ongoing CPD support for technical colleagues. TechYork now has a stand at the university central induction fair (and a [video for virtual inductions](#)) for all new staff showcasing their work, the technician commitment and the support available to technicians.



Technicians are now more involved in recruitment panels and have very much driven the inclusion of skills tests in the selection process: a number of technicians have pushed the university hard to better integrate recruitment of apprentices to the institution. Technicians have also begun to look at internal opportunities for career development (e.g. the recent secondment in Biology attracted applicants from a variety of science departments) and this is very much encouraged and supported



by the technician commitment group and, in a more operational sense, TechYork have put on numerous workshops and organised training for technicians to upskill the team, enabling to take those opportunities when they arise.

Some of this training has been provided by the Higher Education and Technician's Educational Development (HEaTED) team and a number of technicians from York attended the regional networking event in Hull in June 2019 where Helen Burrell, Deputy teaching labs manager,



gave a presentation on "*Diversity of Roles within a Teaching Laboratory*". Through the active encouragement and support of TechYork the next regional network meeting was brought to York in December 2020 where a number of technicians gave presentations on their career pathways.

An issue that was raised at various national technician fora was around acknowledgement of technicians on research papers and this really did not feature within York's original self-assessment and action plan: the reason being was that we were not aware of it as a problem at York: for example, on [this paper](#) authors 1, 4, 6 technicians here at York and [Matt Pickering of Environment and Geography](#) and [Johan Turkenburg of Chemistry](#) have excellent publication records (there are many other examples available). Through the ongoing work on visibility and recognition, as well as a longer term view of career development, we have informally surveyed the technician community at York and reassuringly have found this is not viewed as a concern.

Within the original action plan there was an action to hand over the running of TechYork to technicians, which was relatively simply done, but this was our most impactful action within the plan. The technician led TechYork has really been active and organised a variety



of events over the past two years, all of which are open to all technicians in the university. They have organised day long technical conferences with talks and workshops by technicians and academic staff; "The Science of the Cream Tea" being a particular favourite, although the "Lab coats in Hollywood" was also very well received.



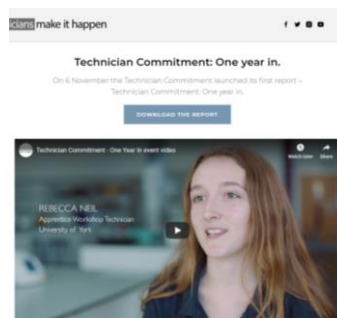
TechYork have really branched out and extended their remit, taking ownership of the network and have organised a professional registration workshop from the Science Council, workshop and practical training on how to get the best out of your pH meter by Mettler-Toledo, training events including GC training for a large number of technicians, as well as social gatherings such as a Treasure Hunt and the ubiquitous brewery tour!

Through the Technician Commitment we have also been extremely successful in engaging with the senior management of the University. A group of technicians were invited to present to the University Council that provides governance to the institution and gave a very well received

presentation of their career trees. During the lifetime of the previous action plan the University appointed a new Vice Chancellor, Professor Charlie Jeffrey: Simon Breeden and Lucy Hudson met with him to highlight the progress to date with the Technician Commitment and from that arranged a walking tour of technicians at work in science departments. He directly asked technicians about the impact of the commitment on the ground and was very impressed with the grass roots engagement and support; he also asked the technicians to provide images of the scientific endeavours for his office so it would better reflect the University.

Finally, one aspect of the initiative that we could not plan for was being asked to be involved in the “Technician Commitment – One Year In” video which was an honour and a privilege and a fascinating insight into how much faff videos are to shoot. The results however were superb and the link is below for you to enjoy.

[Technician Commitment - One Year In](#)



COVID-19 Response

The challenges that Universities and staff have faced have been well documented, we would like to share the positive experiences of our technical colleagues during the pandemic.



At the start of the pandemic, it was quickly realised that across the university we would have a range of supplies such as surgical masks, waste disposal bags, sharp disposal boxes and disposable gloves that [could be used by York hospital](#) (as the University campus was shutting down non-essential research activities). A huge donation effort was soon underway, with the Department of Chemistry taking in van loads of donations that were then sorted and counted by a group of volunteers, mostly comprising

technicians.



In March 2020, Mark Bentley and Joyce Bennett became part of the [COVID-19 Visors for Frontline workers in York](#) group, using their talents and skills to design, manufacture and distribute face visors, at a time when NHS and frontline workers were desperate for PPE. To date the university has made more than [5,000 face visors for NHS staff and front line workers](#), they have also supplied 850 face



visors to staff and students across the University.

Mark Bentley designed and manufactured 850 PALS, [simple devices to aid opening doors](#), operating printers etc. The workshops have also designed and made more than 400 bespoke COVID safe screens for out catering outlets, receptions, library and communal areas.

In March our local York NHS Hospital called out for support to establish and perform manual RNA extraction and qPCR assays, as well as training hospital staff in these techniques, within their newly formed COVID testing facility. Using our NTDC Skills Survey database we easily found the names of those technicians with the appropriate skills to contact and 8 technicians joined the team of 10 volunteers. Our contribution allowed the hospital trust to: have a testing service “in-house”, overcome the challenge of national reagent and equipment shortage and allow the microbiology team to maintain their diagnostic capabilities in non-covid areas. Our assistance was recognised in the [April/May York Hospital Staff Matters magazine](#).

In response to a nationwide call for help to run the COVID testing program, Julia Walton, a biological chemistry technician in the Chemistry department volunteered her services during the lockdown period.

“I volunteered at the Lighthouse Covid Testing Laboratory in Cheshire from April until July. Completed shift work in the labs; either in preparing assay solutions (PCR mix) or preparing the PCR plates prior to final assay. I volunteered as I felt I should offer my services and use my experience to help support the testing process.”

The University of York science departments were one of the first to reopen on the 1st June 2020, our technicians played a critical role in the planning and preparation of the buildings and continue to monitor and assist us as we move through the DoE Tiers.

The management of Covid at the University has raised the profile of individuals and the community of technicians at York; senior managers have turned to our reliable and skilled technical workforce for support in all manner of practices: making PPE, building management, monitoring of space usage and track and trace.

Please provide a 36-month action plan: detailing plans to ensure your organisation continues to address 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). Please evidence how the ‘technician voice’ was present in the development and formation of the 36-month action plan.

[Please see the University of York TC 36 Month Action Plan.](#)

This action plan was drafted by the Technician Commitment group consisting of three technical managers and three technicians for the approval of the technician commitment steering group. Each of the group members consulted with technicians within and outside of their home departments prior to submission.

Please confirm that your Technician Commitment status and 3-year action plan is published on your organisation’s website and provide the relevant URL here:

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.

Theme	Example Activities
<p>Visibility</p> <p>Ensure that technicians within the organisation are identifiable and that the contribution of technicians is visible within and beyond the institution</p>	<ul style="list-style-type: none"> ● 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'
<p>Recognition</p> <p>Support technicians to gain recognition through professional registration</p>	<ul style="list-style-type: none"> ● Organisation communicates the opportunity to become professionally registered to technical staff (Science Council, Engineering Council, BCS). Conferment 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
<p>Career Development</p> <p>Enable career progression opportunities for technicians through the provision of clear, documented career pathways</p>	<ul style="list-style-type: none"> ● 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
<p>Sustainability</p> <p>Ensure the future sustainability of technical skills across the organisation and that technical expertise is fully utilised</p>	<ul style="list-style-type: none"> ● 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