The structure of the technical staff within the three academic faculties remains the same (Figure 1) - approximately 300 technicians, with more than 85% of those technicians based within the Science Faculty: Biology, Chemistry, School of Physics, Engineering and Technology (SPET), Computer Science, Environment & Geography and Psychology. There is active engagement from the small number of technicians within the Faculty of Arts & Humanities and with the Faculty of Social Science.

The primary change from the self-assessment report of 2020, was the new post, Head of Technical Services, held by Dr Simon Breeden, formal appointment in 2021. Simon represented the technical workforce from the academic departments at University and Faculty level and was the line manager of the technical managers of each academic department. However, as of October 2023, the role of Head of Technical Services was removed, with Simon Breeden leaving the university and the role not being backfilled. Lucy Hudson, Graeme McAllister, and Andy Firth have taken on the role of Faculty Technical Managers, each managing a large academic science department and one or two smaller departments, and an additional responsibility of delivering on the University’s Technician Commitment action plan.

Technical roles are from grade 3 to 8, dividing at grade 5 to either managerial or specialist roles, all technical roles are appointed using the technical job descriptions, creating parity across the roles. In 2022 there was the addition of the grade 8, lead technical specialist.

We have continued to invite and encourage other technical groups to join the Technician Commitment, to partake in the events, workshops and to recognise the merits of the action plan. Technicians from a University of York spin-out biotechnology company join our events, but the IT department has recently been embedded within the University Estates Directorate and do not identify themselves as technicians.
Figure 1. Technician management structure at the University of York
Please provide an overview of the governance, leadership, and reporting lines of the Technician Commitment at your institution, along with details on how it is resourced, and information on how your organisation has engaged with the wider community within and beyond your institution. How has this developed since you became a signatory?

Governance

The Technician Commitment is firmly established as part of the university culture and is regularly cited and discussed at meetings both departmentally and at faculty level. All involved in the Technician Commitment at York are volunteers, no formal allocation of staff time has been given to the delivery of the action plan. Time to manage the project is found by the individual, supported by their line manager, around their role and responsibilities. Financial support (budget for 2023 onwards is now £10,000 p.a. reduced from £25,000 p.a. in previous years) has been given by the Faculty of Science for the past three years, this budget is managed by the Technician Commitment Delivery Group.

Leadership

Has been primarily by the Head of Technical Services, Simon Breeden and the chair of the Delivery Group, Lucy Hudson, who have led the team of volunteers. The Delivery Group is a driving force for the execution and delivery of the action plan and is a team of dedicated technical champions: Tim Ayers, Andy Firth, James Fox, Richard Hagan, Richard Keogan, Graeme McAllister, Abby Mortimer, Caragh Whitehead, and Kerrie Wright. Going forward the Faculty Technical Managers: Lucy Hudson, Graeme McAllister and Andy Firth will lead on the delivery of the action plan.

Reporting Lines

All Technician Commitment activities are managed through the Technician Commitment Delivery Group. Currently, the formal line of reporting is to the Dean of the Faculty of Science, Professor Andy Dougill, who is the nominated institutional lead and member of the University Executive Board. This self-assessment report will be shared with Professor Dougill, the VC and the University Executive Board; it is hoped this will ignite a renewed interest in the Technician Commitment at senior level and the reformation of the Technician Commitment Steering Group, which has not met actively since 2019.
Engagement with wider community

We have had great success engaging with the wider community, through the individual passion of our technicians. Lucy Hudson was elected as the first technician to be a trustee of the Royal Society of Biology, Graeme McAllister and James Fox are peer reviewers for professional registration applications with the Science Council and the Institute of Science and Technology (IST). Lucy Hudson is a Fellow, member of the executive board and honorary secretary of the IST, James Fox is an editor of the IST journal. We are delighted that Abby Mortimer has recently been appointed to the ITSS board and that James Fox has been recognised for his outstanding contribution to science and outstanding professional development with the Science Council in 2023.

There is technical representation at parallel activities including the University committees Research Culture and Sustainability Steering Groups, and we have created the Yorkshire Technical Exchange Partnership (YoTEP) with Leeds University, soon to expand to other Yorkshire universities.

Please provide a RAG analysis on your institutional 36-month action plan indicating which activities you have undertaken and completed (green), which are in progress (amber), and which are still to be carried out (red). Please provide an explanation for those categorised as red.

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

RAG analysis of the Action Plan 2020 to 2023 is available in Appendix 1.
Please provide evidence that your previous action plans are having impact. (For example, you may wish to provide links to initiatives, websites, testimonials, articles/blogs).

**Introduction**

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 has excellent knowledge of the number and location of technicians within the organisation. Since 2018 technician data has been collected and the number of technicians working at the university has increased to 326, approximately 7% of the total workforce. The decision was taken to not include technicians in professional support services with a focus on technicians in academic departments where the majority of technical staff are located. The breakdown across departments can be found in the pie chart below (Figure 2).
We have continued to improve our visibility within departments, across the institute and the sector since the last assessment in 2020. This has been led by our Technician Commitment Delivery Group, composed of technicians/technical managers in the institution, accountable for delivery of the action plan. In addition, TechYork is a technician-run hub for technical staff working in departments across the University. TechYork has its own dedicated web page on the University of York website allowing easy access for existing or prospective technicians. Information provided to technicians includes: TechYork conferences and other networking events; Career progression and professional registration; The University's involvement in the Technician Commitment initiative; Becoming a technician. This also includes Technician Stories.

In addition, TechYork has a social media presence on X (@UofYTechs) which improves the visibility of technicians internally and externally to the organisation - we currently have 534 followers, which is a mix of internal staff, external technical staff, prospective staff etc.. The majority of our posts on this platform are for recruitment opportunities, events/sector-wide news or celebrating the successes of our staff, e.g., where a staff member has been awarded professional registration. There has been increased engagement with Arts and Humanities and there is now a representative in the technician commitment delivery group. Nationally, York hosted the Technician Commitment Signatory Event in July 2022 and the 2022 IST conference where a significant number of York technicians delivered lectures, workshops and tours increasing visibility outside of the institution.
Recognition

The University of York supports technicians in professional registration and recognition of their work internally and externally. The TechYork team has been holding multiple workshops to mentor and coach technicians seeking to obtain professional registration, led by staff who are assessors for professional registration. The number of technicians that held professional registration or have become reaccredited has increased by 4. The university also now financially supports the professional registration application process, and we are working towards employer champion status with the Science Council, supporting those technicians who wish to be professionally registered.

The university and departments hold internal award events rewarding staff for their contribution. The number of technical nominations has doubled since the last submission and accounts for 9% of all submissions which is consistent with the technical staff in the workforce, across the science departments, 36 or the 67 nominations were successful. In addition, technicians at York have been nominated for external awards including PAPIN Lifetime Achievement (2021 winner, see picture), PAPIN Covid-19 Recognition (2021 runner-up, National Impact), PAPIN Outreach and Community award (2023), HETS Community Award, HETS Technical Team Award, THE Outstanding Technician of the Year, Royal Society Hauksbee Award, and Science Council CPD awards.

At the University of York, we decided to adopt the concept of reverse mentoring to help us fulfil one of the Technician Commitment pledges for our technicians to have a voice. In large organisations with established hierarchical structures, it can be difficult for all staff to be heard and their views considered. There have been 6 technical staff involved in the scheme, which was recently discussed in an IST article.

Career Development

Career development was placed as a priority in the action plan due to feedback from technical staff. Previously we developed generic role descriptors that have since been updated in 2021.
As part of our first assessment, York had 117 different job titles and descriptions. The university developed generic role descriptors (February 2019) that were implemented across the university. 61% of technicians are currently working under the new descriptions (an increase from ~16% in 2020), which are presented on one Technician Job Description 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 followed by the publication of the York Technicians Career Pathway booklet in June 2022 outlining what is a career pathway and the mechanisms to progression. The booklet was sponsored by the Dean of the Faculty of Science and Head of Technical Services and was launched to all technicians during the “TechYork week”. This also resulted in a new grade 8 lead technical specialist role in the progression structure. Feedback on the booklet will be utilised to make improvements to future versions.

In 2020 we advertised our first internal technician secondment opportunity. Since then, secondments have become more frequent and resulted in individuals experiencing different opportunities and allowing them to develop into areas they previously hadn’t considered (see testimonial). Overall, there have been 12 secondments across the faculty with 9 leading to new roles or promotion.

To help support our technicians' career development, every technician now has 10 days of Continuing Professional Development (2021 onwards) that enables them to broaden their knowledge and understanding in areas that they would like to develop. This could include conferences, training, exhibitions etc. There has been increased attendance at conferences, IST: 2022 100+, 2023 20+, HETS: 2023 20+, TMU, inaugural TSN, NTDC etc. and technicians presenting at these conferences.

Two technicians, James Fox (CSci) and Abigail Mortimer (RSciTech), via their membership with IST, are Science Council 2023 CPD award winners, which recognises the quality of their CPD and their reflections upon it.
In 2021 we completed a Technician Training Survey where 65% of respondents identified training needs that were not currently provided by the university. 42% of respondents had requested training to support their current role and 31% of respondents had requested training for their current job and possible future career progression. The technician delivery group has taken this data and has implemented training courses required for technical roles, including: Cryogenics and liquid nitrogen (24), safe use of lab gases (26), certification in the transportation of biological substances and dry ice by air (10), NEBOSH certificate (5) ladder user (30), ladder inspector (14), PUWER (6), HEaTED training (4), The Herschel Programme for Women in Technical Leadership (7), and many others (in total >250 courses completed over the assessment period, an ~£85,000 commitment by the university).

The university also launched ‘LinkedIn Learning’, which included a promotional session and special section for technicians and consists of online training courses from a huge array of training courses on very diverse subjects that supplement the more standard University training courses offered on our internal learning management system. The survey will be repeated as part of the next delivery plan to monitor progress.

**Sustainability**

Over the last 3 years the technical community has been managed by the Head of Technical Services who has represented the technicians across the institution on key managerial and working groups e.g., health and safety, rewarding excellence, capital equipment replacement etc. Following a reorganisation (October 2023) these responsibilities have been split across three faculty technical operations managers in the science faculty where most of the institution’s technical workforce is located to ensure that good progress is not lost.

Following completion of the skills survey it was decided that the data did not reflect the current workforce because of COVID-19 and the passage of time; however, the data collected from the skills survey was utilised to produce the career pathway booklet and set-up the first apprenticeships in the science faculty. Four apprentices have completed their apprenticeships (Mechanical Engineering, Procurement and Supply Assistance etc.) with a highly commended award presented to one of the Mechanical Engineer apprentices (pictured).
The faculty has plans for future apprentices in teaching laboratories, mechanical / electronic workshops, and research laboratories to continue sustainability work in our technical workforce. This will be led by the new faculty technical managers who will coordinate succession planning in their areas of responsibility and will be expanded beyond apprenticeships.

All science departments have technical representatives on their EDI groups, which has recently directly contributed to the successful application by the School of Physics, Engineering and Technology for JUNO Champion Status in Physics through the Institute of Physics. The impact of the technician commitment was presented to a JUNO panel in October 2022 and was part of the submission, which received very positive feedback.

To help create a culture of support for technicians, a series of networking events have been organised across campus to promote a community network and build confidence and support in technical careers. These will continue to be run and have proved highly successful and recently led to a sustainability workshop (2023) led by technicians (see picture). Technical careers have also been promoted at Outreach events at the university and through the North Yorkshire Business and Education Partnership (NYBEP) scheme including mock interviews and career fairs. This will be expanded as we move into the next assessment period. Finally, a new collaborative project between technicians at the University of Leeds and the University of York has been launched - Yorkshire Technician Exchange Partnership (YoTEP). During the pilot scheme (between April and December 2022), twenty-seven technicians participated in exchanges. These were distributed across a range of disciplines and topics including Music, Biology, Plant Sciences, Electronic Engineering, Environmental Analysis, Chemistry (Atomic Absorption Spectroscopy, Chromatography), BioArchaeology, and networking activities. This has led to increased requests for internal shadowing and skills sharing, as technical staff felt empowered to contact others and make a request, and raised the visibility of technical staff within their own institution and provided a framework for technicians to be able to forge networking links for themselves and take ownership of different aspects of their own career development. Leeds appointed an administrator in November 2023 to assist with the organisation and broadening the scheme to other Yorkshire universities resulting in Sheffield, Sheffield Hallam, Hull, and York St John Universities joining the scheme.
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. Monthly reviews of progress against the action plan were completed by the technician commitment delivery team with regular review meetings and a live assessment document. No interim report was produced as the rolling update document and live actions has measured progress against the plan and ensured an early resolution of issues, allowing the plan to be updated as required. Key performance indicators have been collected with the help of Human Resources and the data fed into the report (recruitment, progression, secondments, rewarding excellence etc.).

The technician’s voice has been represented through surveys and feedback requests following events and in TechYork week all technical staff were addressed by the head of technical services where the new career pathway booklet was presented. Actions for the new delivery plan will be Specific, Measurable, Achievable, Realistic, Timebound (SMART) objectives to ensure the impact of activities can be effectively evaluated.

Please provide details of how your institution is enacting the recommendations of the TALENT Commission (https://www.mitalent.ac.uk/theTALENTcommission).

In response to the sixteen recommendations from the Talent report, York have:

Improved sustainability recruiting apprentices into vacancies when appropriate, with four successfully having completed apprenticeships, three currently undertaking, one undertaking further accreditation for a higher-level apprenticeship as a mechanical workshop technician (recommendation 1).

We have not, yet, made significant progress on recommendation 2 recognising the blurring of lines between roles but will look to progress this through the ongoing review of generic role descriptors and engagement with the Research Culture Working Group.

In relation to recommendation 3 (data reporting) the institution has currently decided not to return demographic data on technicians to HESA for data minimisation reasons.
We believe that this is a missed opportunity and are in active discussions with the University, through the Research Culture Working Group, to review this decision.

York has EDI challenges in professional services staff groups (recommendation 4), but the Athena SWAN initiative is well embedded within the organisation and working groups within departments have requested technical representation.

We actively encourage the institution to advertise all technical roles in wide and varied locations, not just the University website to ensure we get as wide a possible field of applicants.

A key role for the technical managers is to inform and work with research support officers to ensure technical staff and their services are included on grants submissions, where possible (recommendation 5).

York is now beginning to accelerate progress against recommendation 6: we have recruited technical champions to be part of outreach either individually, for example NYBEP, or as a technical group, for example the teaching technical teams organise and host outreach for local schools every summer; we have two technicians who are STEM ambassadors.

Broadening access routes (recommendation 7) has not yet been a focus of activities at York but evolution of our career pathway work (see recommendation 9) as well as our outreach work (recommendation 6) will address this in the medium term.

York was already strong on recommendation 8 (inclusion on recruitment panels); however, we took the opportunity to review the technical recruitment process. A technician is now part of every technical recruitment panel with all staff being required to complete the unconscious bias training before becoming part of an interview panel.
York has made very good progress in recommendation 9: Career Pathways and produced a career pathway booklet published in 2022, relevant for all technical staff, including information on the various informal and formal ways to develop and progress with a technical career at York. The career booklet was updated in response to feedback with examples of individuals’ career pathways in 2023. We also acted on feedback from technicians for example since the introduction of the generic job descriptors there has been the introduction of a grade 8 Lead Technical Specialist, the equivalent of a senior lecturer.

We have also taken a strategic approach to technical leadership; the strategic lead role was lost in October 2023; however, we have put in place a strong team of senior, experienced technical managers to deliver the TC action plan (with an annual budget of £25,000), and to update and inform senior leadership.

Similarly, York has already made excellent progress on access to CPD (recommendation 10). We have brought parity across the professional support staff (technical then administrative) in the academic departments to allocate 10 days (pro rata) for continual professional development, asking technicians to report in their annual performance review how this time has been utilised. We have also surveyed the community for training needs and made funds available at departmental and faculty level to support this. For example, all senior technical managers have been supported in accessing external NEBOSH training and through promotion via TechYork and the availability of the university TC fund, more technicians than ever before are attending conferences, training and YoTEP exchanges.

We have two technicians who are professional registration assessors for the Science Council who hold regular workshops to support, advise and provide a quiet place for prospective applicants to work through their personal professional registration applications.

York has been somewhat behind the curve in formally issuing guidance to recognise technicians’ contributions to academic outputs (recommendation 11). We will develop fair attribution guidance within the Technician Commitment Delivery Group to then take to the Research Culture Working Group to formally address this at an institutional level.

York has very much pushed on recommendation 12 (technician voice) including encouraging our technicians to take part in the university mentoring scheme, as either mentees or mentors, with staff being asked if they would like to take part in the scheme at their annual performance review. We have also extended our technical community, collaborating with Leeds University (supported by the Technician Commitment Collaboration Fund) we have set up the Yorkshire Technical Exchange Partnership (YoTEP), an informal route to learning, supporting, and networking with colleagues and teams from Leeds. Leeds have secured administrative funding to broaden the participation to Yorkshire universities.

York’s geographic location provides a challenge to quickly deliver on recommendation 13 (partnering with technical and vocational training centres) but we will actively pursue the University offering T level placements with local education providers to start this partnership model.
Recommendation 14 is primarily for government policymakers, but York has allowed its senior technical leadership to work with outside organisations, primarily professional bodies, increasing the external profile of York ensuring that York has a distinct voice within the technical community.

Recommendation 15 is to technicians themselves to engage with the opportunities available to them and York has worked hard at this, although as seen across the sector this is something of a challenge.

However, our technician owned network TechYork has done phenomenal work in this space through a combination of emails, social media, and networking to really engage and enthuse the community.

The final recommendation (16) regarding the setup of the UK Institute for Technical Skills & Strategy was supported by York at application stage (formal letter of support from the VC). York has a strong voice in the ITSS after our technician Abigail Mortimer was elected to be one of its 14 council members, carefully selected from 158 applicants. Council members are expected to actively engage in discussions with other members and the institute leads and provide advice and guidance on matters such as (but not limited to) Technical roles, Skills, and careers. Council members are expected to act as ambassadors for the Institute, promoting its objectives and initiatives as well as encouraging knowledge sharing and professional development opportunities.

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, and initiatives resourced: (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.

The action plan for 2024 to 2026 is available in Appendix 2.

The draft self-assessment report and action plan 2024 to 2026 were circulated to the technical managers who disseminated the information to their teams, requesting feedback on the action plan for 2024 to 26. The action plan was then collectively written by the TC Delivery Group, a group of technical managers and technicians who champion the values of the TC.

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:
This self-assessment report and the action plan for 2024 to 2026 have been uploaded to the TechYork webpage.

https://www.york.ac.uk/staff/working/tech-york/tech-commitment/

The documents have been circulated via email to all our technical staff, welcoming comments and suggestions and there is a TechYork event planned for 14th December 2023 to present the report and action plan.

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

Professor Andy Dougill
Dean of the Faculty of Sciences
Date: 14th November 2023

Signed……………………………………… (Technician Commitment Signatory – Leader of Institution)

Professor Charlie Jeffery
President and Vice Chancellor
Date: 23rd November 2023