Professor Marc Griffiths

Pro-Vice Chancellor & Head of College for Health, Science & Society

8th June 2023

Creating programmatic healthcare education teams by involving our technicians

UA Deans of Health Network Summer Meeting

- Over the last six years @ UWE Bristol there has been a greater focus on the roles that our Technicians play across the University.

- Becoming a member of the Technician Commitment was a key driver / enabler as a founding member.

- Connecting with other Universities to understand where the national drivers / enablers existed.

- Becoming a member of the National Technician Development Centre was key from a CDP / Life Long Learning perspective.

- Creating a Technician Commitment Steering Committee.

- Creating a Future Technician Group.

- Ensuring their was a Technician voice at Academic Board.

Vision | Future Technician

- Technical staff are integral to achieving outstanding student teaching and learning, and research impact.

- Technical staff, through multidisciplinary working are embedded in design and planning of research and teaching, and work in partnership across the University.

- Technical staff have distinct identity, recognition and opportunity.

Opportunity |

Figure 1: Examples of job titles held by technical staff within UK HE and research.

[TALENT commission (mitalent.ac.uk)](mitalent.ac.uk)

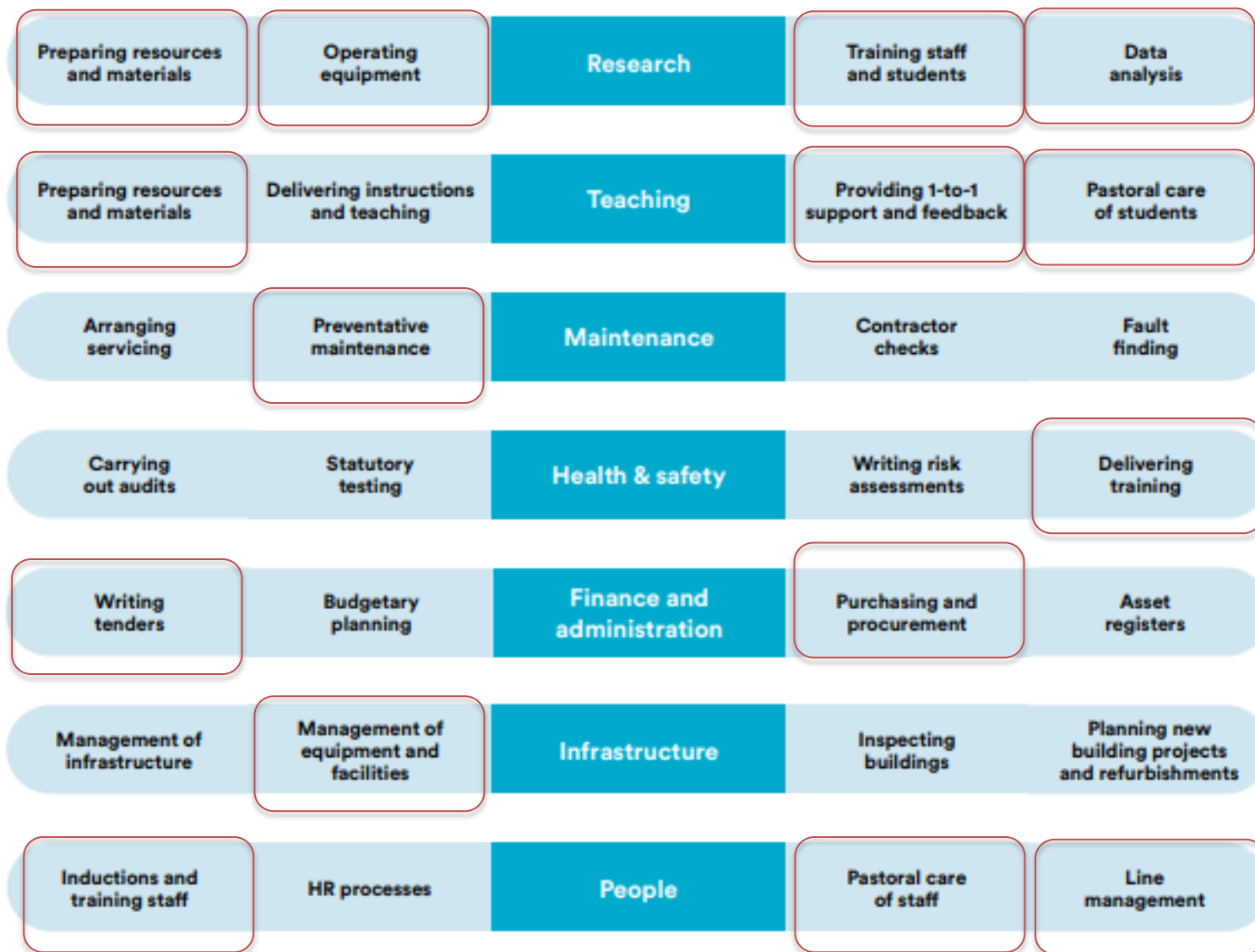|				
Preparing resources and materials	Operating equipment	**Research**	Training staff and students	Data analysis
Preparing resources and materials	Delivering instructions and teaching	**Teaching**	Providing 1-to-1 support and feedback	Pastoral care of students
Arranging servicing	Preventative maintenance	**Maintenance**	Contractor checks	Fault finding
Carrying out audits	Statutory testing	**Health & safety**	Writing risk assessments	Delivering training
Writing tenders	Budgetary planning	**Finance and administration**	Purchasing and procurement	Asset registers
Management of infrastructure	Management of equipment and facilities	**Infrastructure**	Inspecting buildings	Planning new building projects and refurbishments
Inductions and training staff	HR processes	**People**	Pastoral care of staff	Line management

Figure 2: What do technicians do? Seven key areas of responsibility held by technical staff within UK HE and research, plus examples of common contributions for each area.
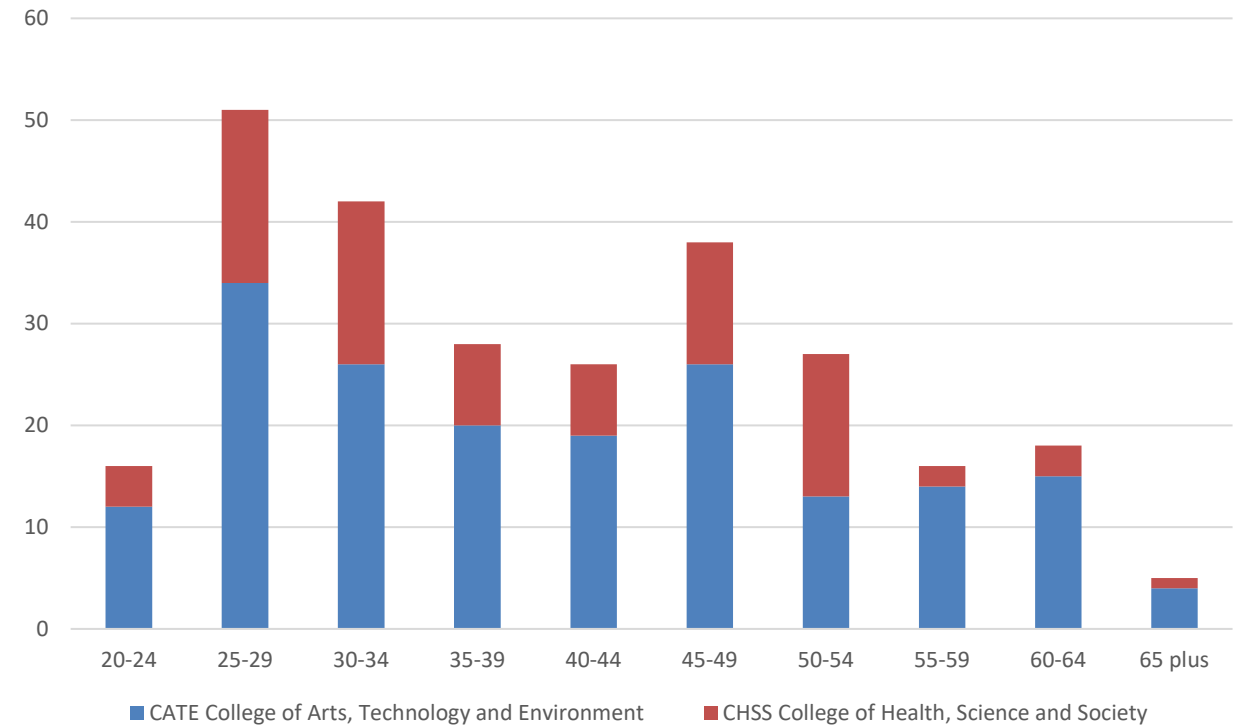
Technician workforce profile @ UWE Bristol

267 Head count of Technicians at UWE Bristol

Future Technician | Principles
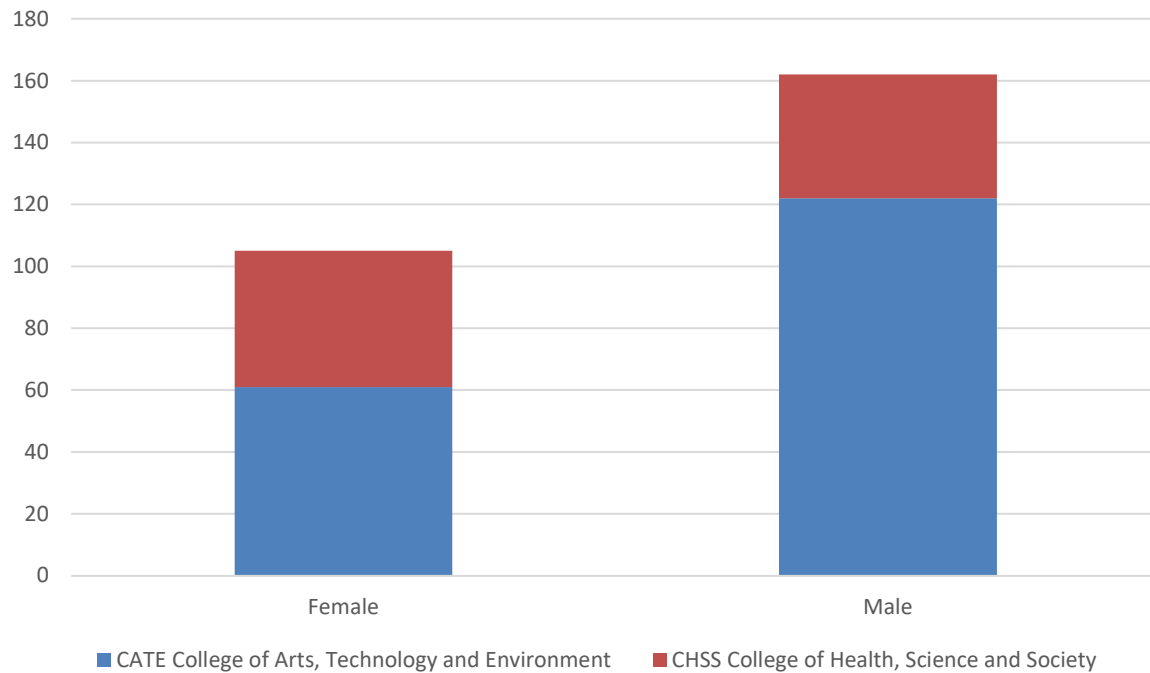
Principles

1. Alongside our Academic and Digital endeavour, the work of Technical staff is integral to delivering outstanding teaching and research through practice-led, innovative and collaborative working practices.

2. There should be a common technical framework across colleges & schools that enables recruitment and retention of talent, ensuring equality of recognition and opportunities for progression and development across UWE. This means:

- There is a technical staff family of roles, with supporting job descriptions, linked by indicative career pathways.

- There is equality of recognition and retention of talent for technical staff across UWE.

- There are effective processes for the recruitment and development of talent, and these reflect the diversity of our population.

3. Clearly defined progression and development pathways should align to UWE 2030 Strategy - Outstanding Learning, Research with Impact, and the leadership and management of our People and Place. This means:

- Technical staff are aware of opportunities for progression and development.

- Technical staff are able to access opportunities for progression and development.

4. The identity of technical staff and the requirement for multidisciplinary working must be recognised and supported. This should be achieved by:

- Technical operations will be co-ordinated at college level.

- Technical staff will normally have Technical line-managers and day-to-day work activities may be guided by staff in school, programme and research teams as appropriate.

- Individual members of Technical staff may collaborate across programmes, subject clusters, schools and colleges, as appropriate to enable best use of their expertise.
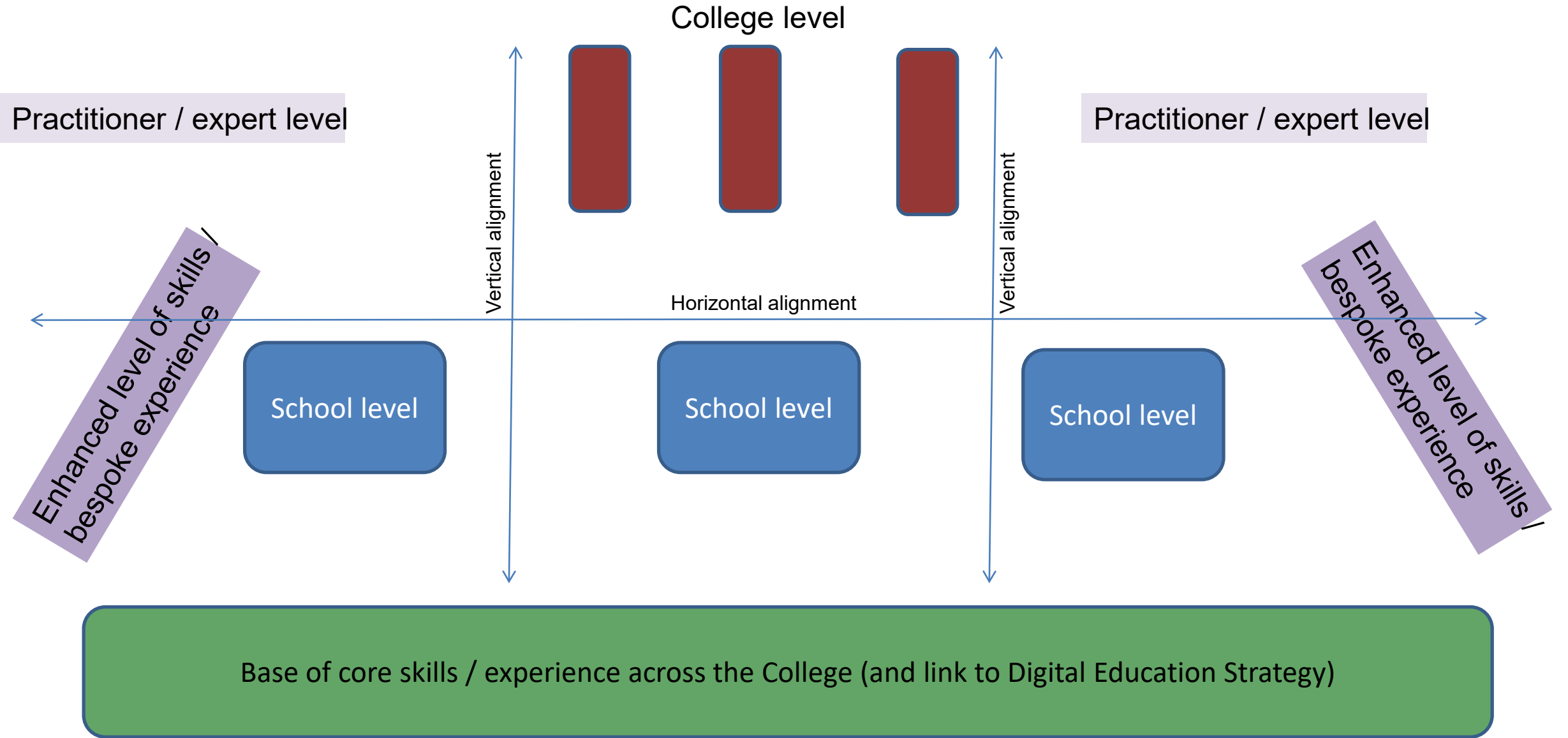
5. A member of Technical staff should be embedded in any design, planning and decision-making which would lead to a requirement for technical resources or expertise, in colleges, schools, programmes and research.

6. Technical staff work in close partnership with ITS, Digital Learning @ UWE, Health & Safety Team, Estates and Facilities (and other professional services as necessary) to manage specialist spaces and services in each college & school.
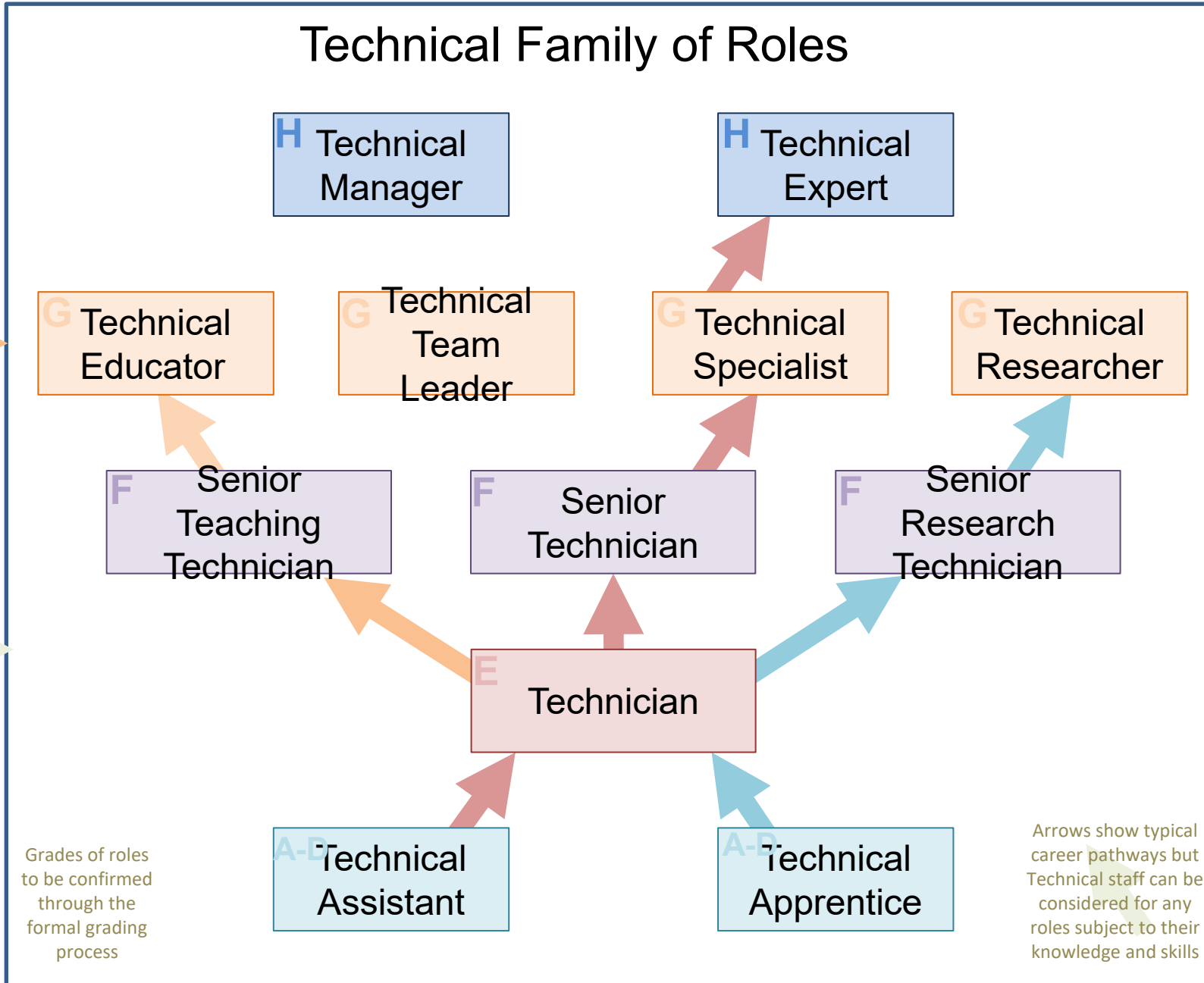
Programme Team Definition

Core Programme Team A group of named staff who each have a role in the delivery of specific programmes over an academic cycle and who are jointly committed to the success of the students on those programmes.	The Core Programme Team typically comprises: • **Programme Leader** • **Module Leaders** • any other academic staff to whom a specific programme leadership element is assigned, such as **Pathway Leaders, Year Tutors, Admissions Tutors, Link Tutors, Widening Participation Leads**, etc. • Representative of the **Student and Programme Support Team** • Representative of the **Technical team** (for those programmes that use technical resources) • Representatives of other **professional services teams** such as Professional Practice Office, where appropriate
Connected Programme Team The Core Programme Team plus the members of teams which have a direct role in the delivery of specific programmes.	The Connected Programme Team typically comprises: • The **Core Programme Team** defined above • Members of the **Student and Programme Support Team** for that School • Members of the **Technical team** supporting the technical resources used by the programme
Programme Development and Review Team The Core Programme Team plus representatives of services supporting curriculum design.	The Programme Development and Review Team typically comprises: • The **Core Programme Team** defined above • Representatives from additional areas, such as **Library** and **Careers**, and the **Digital Learning Service** which provides specialist resources, advice and technical support in learning content creation, content design, and college facing support

Associate Heads of School

Programme Teams are supported, guided and co-ordinated by AHoSs who are the **subject leads**.

Notes
1. *The team may cover a single programme or a group of very closely related programmes where these are effectively delivered as one.*
2. *There needs to be some flex in this to accommodate the realities of programme leadership in different disciplines and schools.*
3. *There are many other staff who make valuable and indeed essential contributions towards the delivery of programmes and success of students, without being members of specific programme teams.*
4. *Some staff may play a key role at particular points in the academic cycle, and may join Programme Team activities for a time, without being permanent members of the Programme Team.*
5. *Where there are any modules shared by very many programmes, it may not be feasible for the Module Leader to be a member of every Programme Team, and so the Programme Leader may separately liaise with a Module Leader as necessary.*
6. *Similarly, where a programme leadership element (eg. Widening Participation Lead) is assigned to one person by many programmes, the Programme Leader may separately liaise with that Lead as necessary.*

Future Technician | Providing expertise at the point of need

College level

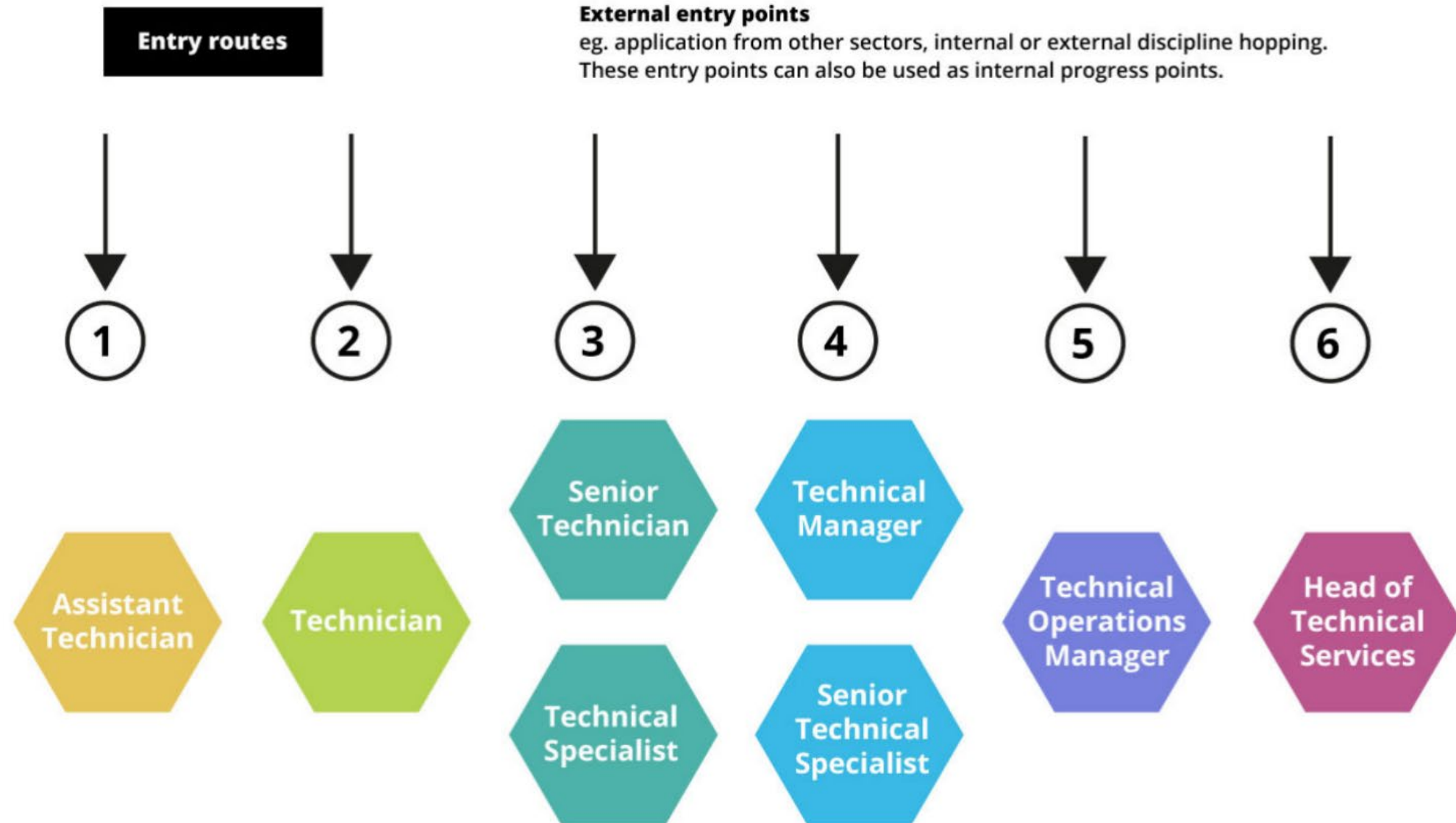Practitioner / expert level

Practitioner / expert level

Vertical alignment

Vertical alignment

Horizontal alignment

Enhanced level of skills / bespoke experience

Enhanced level of skills / bespoke experience

School level

School level

School level

Base of core skills / experience across the College (and link to Digital Education Strategy)

Technical Family of Roles

UWE Bristol | University of the West of England

Academic Family of Roles

Research Family of Roles

Digital Education Family of Roles

Prof Services Family of Roles

H Technical Manager

H Technical Expert

G Technical Educator

G Technical Team Leader

G Technical Specialist

G Technical Researcher

F Senior Teaching Technician

F Senior Technician

F Senior Research Technician

E Technician

A-D Technical Assistant

A-D Technical Apprentice

Grades of roles to be confirmed through the formal grading process

Arrows show typical career pathways but Technical staff can be considered for any roles subject to their knowledge and skills
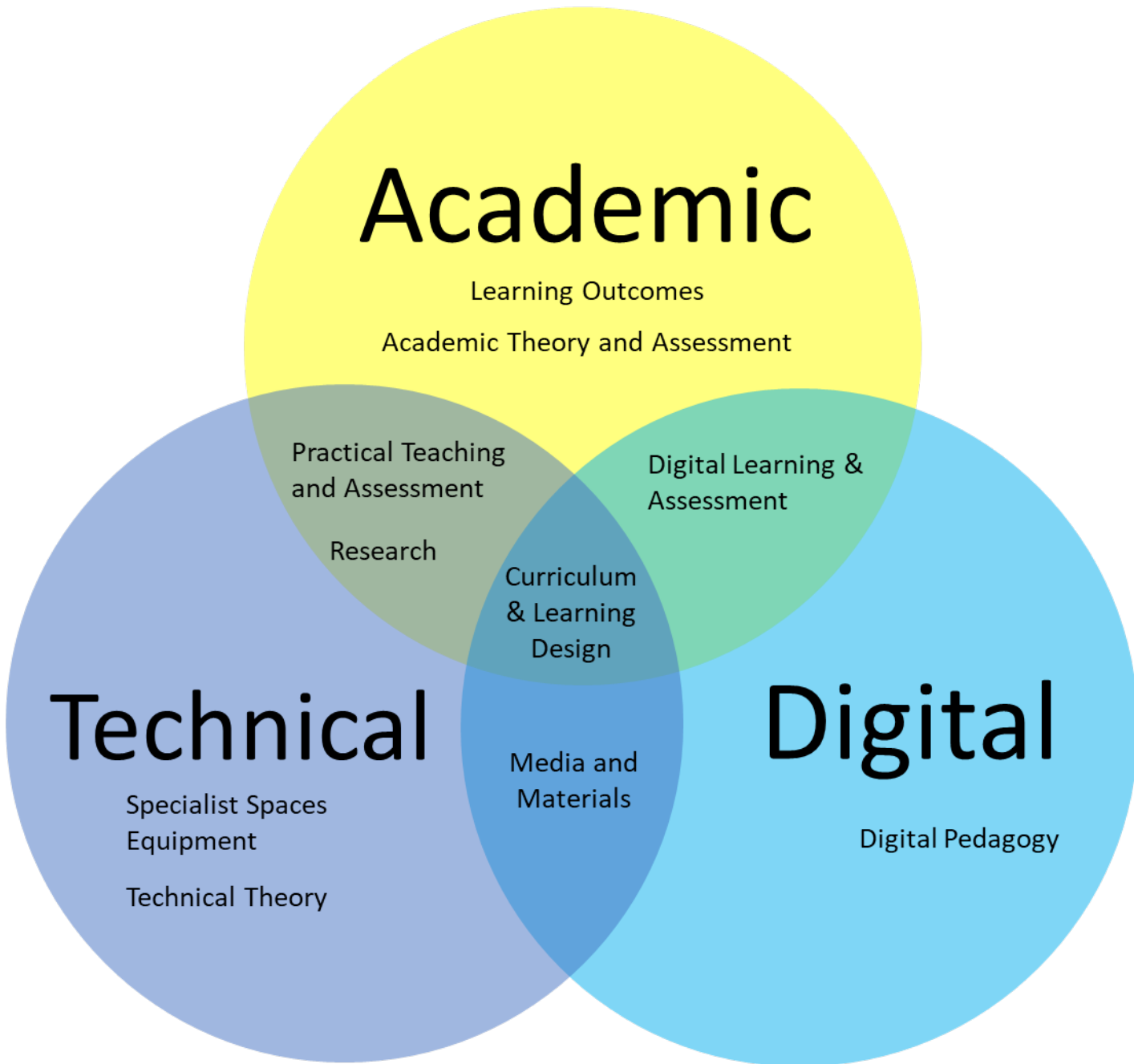
National Technician Development Centre

A number of routes into the service exist. The Assistant Technician role could provide a convenient entry point for those completing apprenticeships or traineeships etc.

Focusing on Health and Care
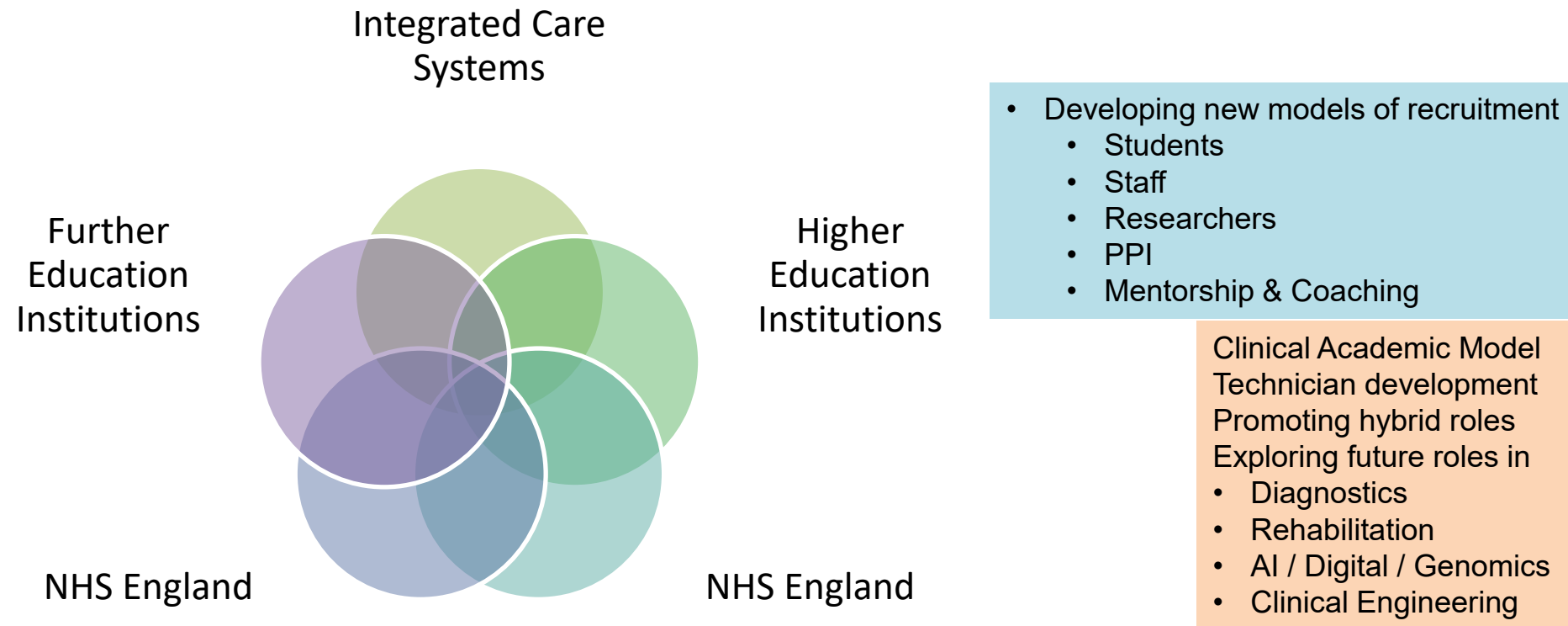
Integrated Care Systems

Further Education Institutions

Higher Education Institutions

NHS England

NHS England

- Developing new models of recruitment
  - Students
  - Staff
  - Researchers
  - PPI
  - Mentorship & Coaching

Clinical Academic Model
Technician development
Promoting hybrid roles
Exploring future roles in
- Diagnostics
- Rehabilitation
- AI / Digital / Genomics
- Clinical Engineering

Creation of the Programmatic Team (2.0) | Third Space working

Learning and Teaching Spaces across different subject areas

Creating greater synergies between subject areas

Third Space learning environments

Use of different equipment and learning spaces in the creative industries
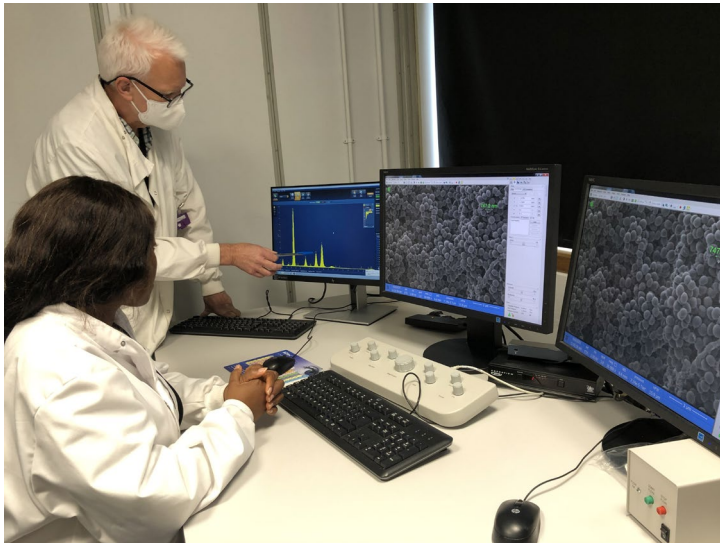
Electron microscopy with Dr David Patton - Senior Technician

Dave works alongside academics in Applied Sciences to develop sessions for Forensics, Environmental and Biological science classes. He instructs the students how to prepare samples for the Scanning Electron Microscope (SEM) and Energy Dispersive Xray (EDX) equipment. During these sessions, the students will learn how to operate the SEM and EDX, choose the optimum detector, voltage and magnification to obtain the best images possible for their samples. The samples could include many different materials from concrete, nanoparticles, fake coins and paint to pond water, insects and bacteria.

Dave works very closely with both undergraduate and postgraduate students, advising them during their research projects and making sure that risk assessments are in place. By teaching and guiding them, he enables these students to work independently.

# Third Space environments | Celia Whitchurch
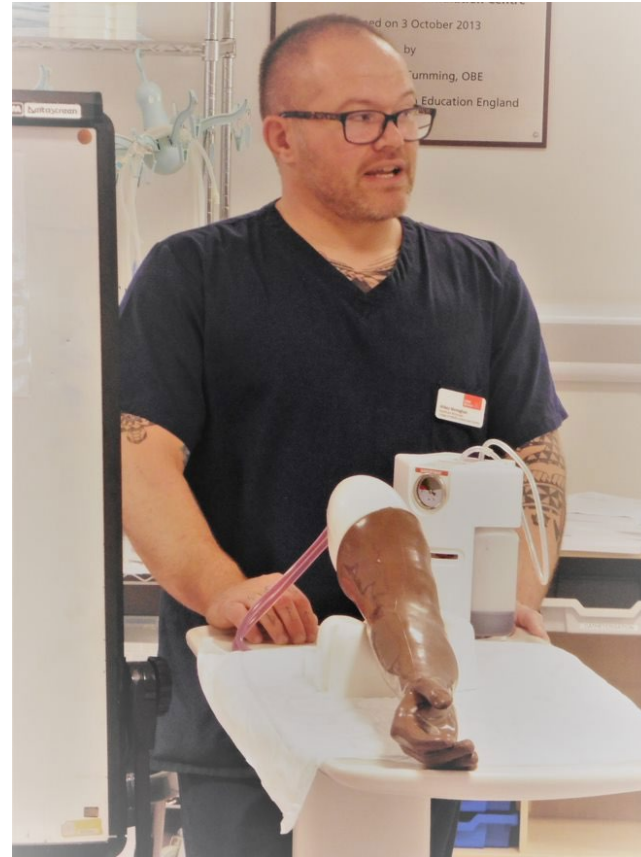
Creation of hybrid learning environments that are typically practice orientated

Creation of new third space learning environments

'The context in which we are working is increasingly complex, with a greater need to explore the social Conscience of our learners, and be mindful of the way in which they engage…..'McIntosh & Nutt (2022)

Learning from other subject disciplines
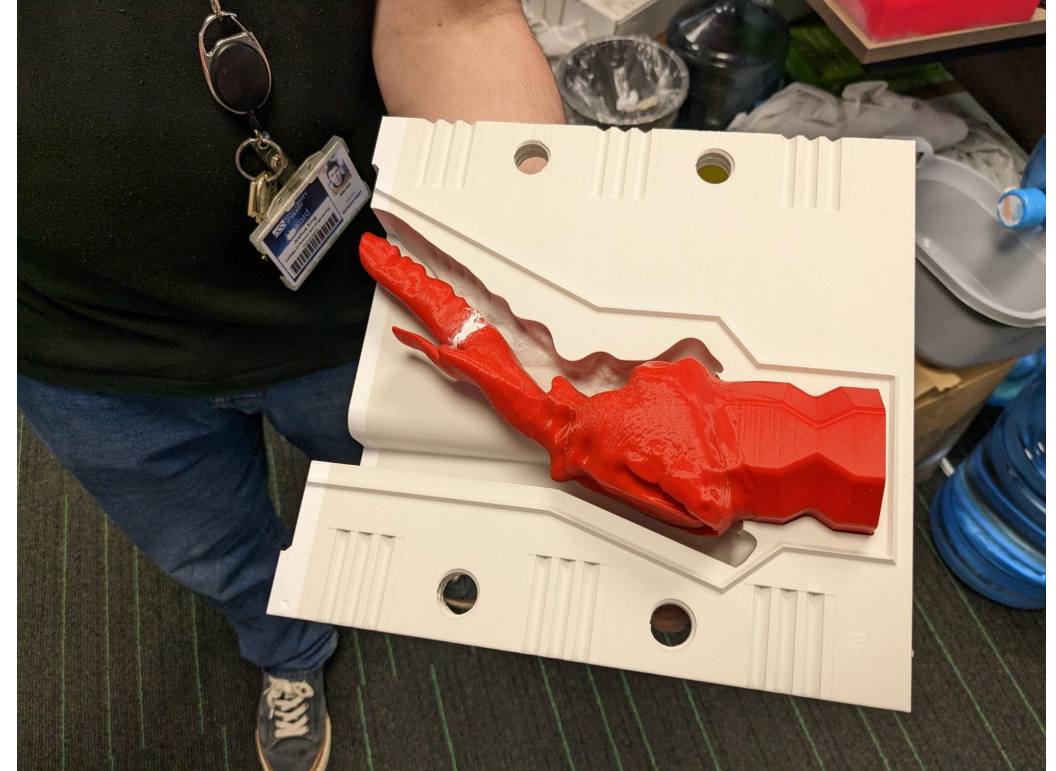
3D printed intubation cast and creation of silicon mould for use in practical sessions

A model for change | collaborative working
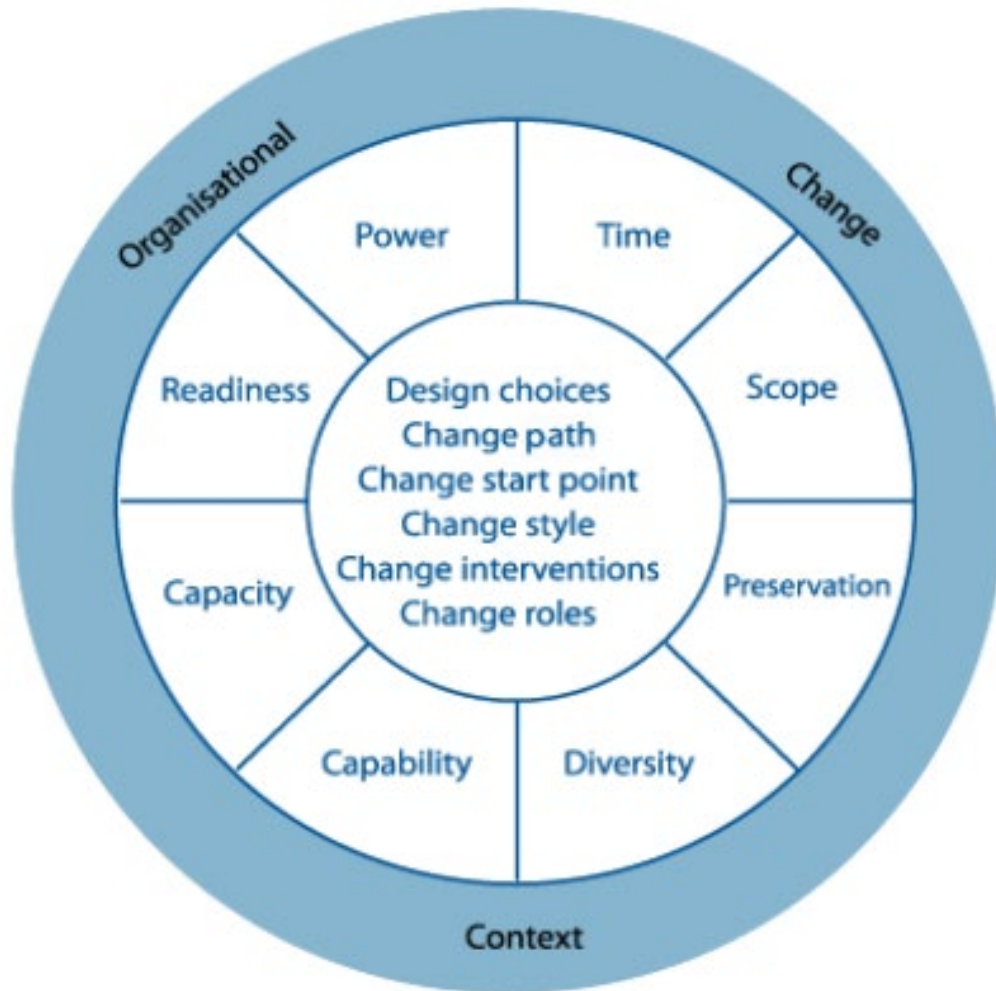
Balogun et al (2016)

Programmatic Teams by design

- Values statements such as 'Innovation', 'Collaboration' & 'Enterprise' have traditionally not been associated with Technician Role Descriptors

- Replacement Competency statements with Values and Behaviours that align with the Universities own Values, but also speak to the emerging development of Technicians / third space working

- A need to adapt to new models of educational delivery:
  - Micro-credentials / Life long learning
  - Online design / delivery
  - Various learning platforms

|	Emerging Technical Values
Ambitious	Actively developing your own skills and helping others to do the same. Having the confidence to question current processes to understand how they can be improved. Working to the best of your ability, irrespective of the situation.
Collaborative	Working together within your team and across wider teams as appropriate and encouraging all to work collaboratively and transparently. Effective communication with all academics, professional services, students and other technical staff. Treat everyone with respect whist recognising own abilities.
Inclusive	Be welcoming and kind to colleagues and open to sharing interests. Recognising and appreciating differences in others. Using your skills and knowledge to break down barriers and support all students and staff. Being respectful of, and open to, adopting other ideas and ways of working.
Innovative	Questioning the obvious or current solutions and solving problems in a creative way. Keeping up to date with latest techniques and skills within your field. Identify, and bring forward, opportunities for improvements.
Enterprising	Using different techniques, skills, processes in your work keeping up with the changing environment. Looking for opportunities to grow and enhance skills and connections with other staff and industry partners where appropriate. Ensure sustainability is built into innovation with a sound business case.

Creation of the third space learning and assessment environment

- Development of hybrid approaches to learning, assessment and pedagogical design within health and care programmes.

- Mirroring ways of working within practice and taking the essence of the NHS People Plan / Long Term Plan.

- Creating spaces where testing, experimenting, creating sense and providing spaces where failure can also be played out and reflection exists

Cardio-physiology students using haptic feedback U/S simulation equipment

Examples of where Technicians at UWE Bristol make a difference
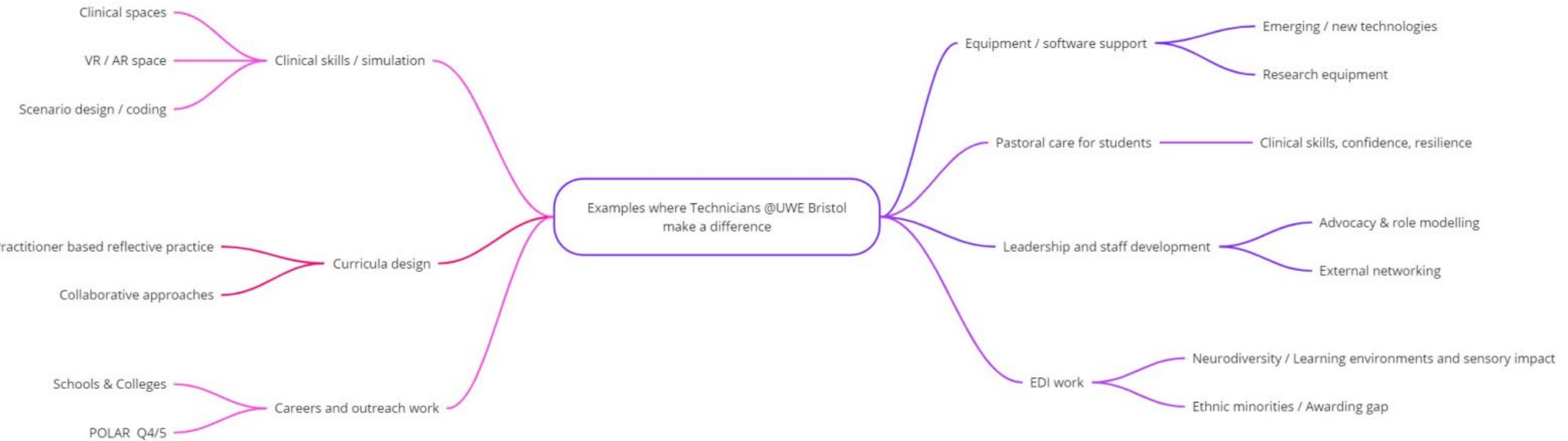
Where does this position traditional models of academic practice in health and care?

- Potential change in the workforce demographics in the future?

- Greater focus on skills and knowledge mix?

- Greater professional identity for Technicians?

- Evolving role of academics within the health and care education space?

- Technicians as core members of research teams?

- Greater access routes into Universities for practitioners?