Exploring the technician experience: MI TALENT reports on research culture, teaching and health and safety

Catrin Harris – Research Fellow, MI TALENT

Outline

- The TALENT programme and background to the reports

- Research Culture: A Technician Lens

- Technicians as teachers: the emerging role of technical staff within higher education teaching and learning environments

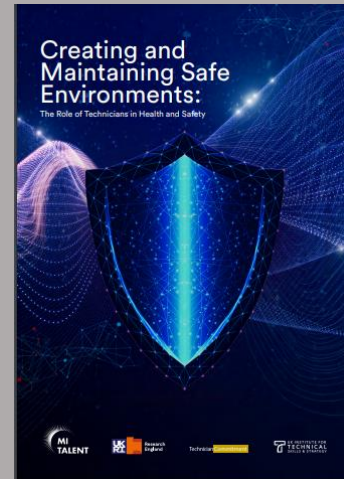- Creating and maintaining safe environments: The role of technicians in health and safety

The TALENT programme and background to the reports

MI TALENT

UKRI Research England

Leading and influencing change to advance status and opportunity for technical skills, roles and careers in UK higher education and research.
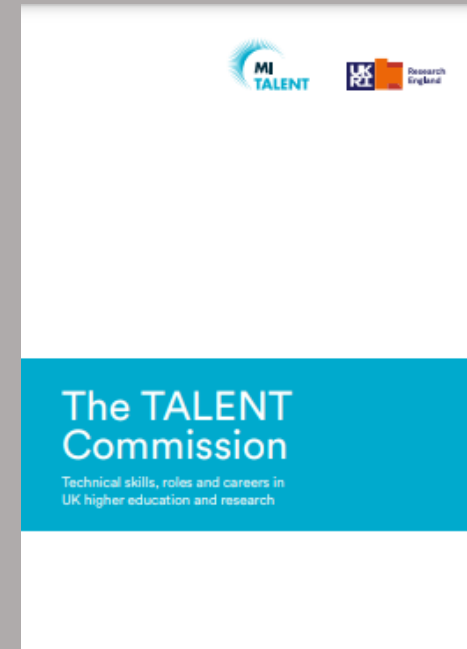
MI TALENT: 3 main strands

Policy commission

Strategic insight into technical skills of the future

Culture change projects

Driving culture change for the technical community

Training and empowerment

Career development for technicians through tailored technical training

Research Culture:
A Technician Lens

MI TALENT · UKRI Research England · Technician Commitment

Creating and Maintaining Safe Environments:
The Role of Technicians in Health and Safety

MI TALENT · UKRI Research England · Technician Commitment · UK INSTITUTE FOR TECHNICAL SKILLS & STRATEGY

MI TALENT · UKRI Research England

The TALENT Commission
Technical skills, roles and careers in UK higher education and research
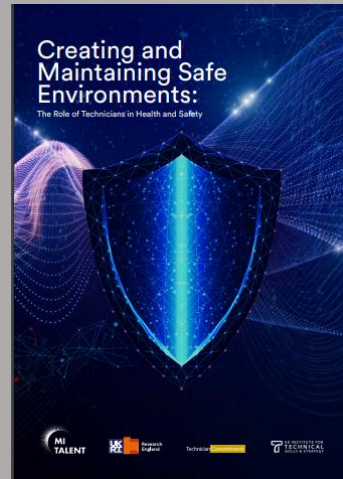
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Technicians as teachers: the emerging role of technical staff within higher education teaching and learning environments

F. P. H. Wragg [a], C. Harris [a], A. Noyes [b] and K. Vere [a]

aFaculty of Engineering, University of Nottingham, Nottingham, UK; bSchool of Education, University of Nottingham, Nottingham, UK

The Role of Technicians in Knowledge Exchange
An explorative study

UKRI Research England · MI TALENT · Technician Commitment · Research Consulting

Research Culture:
A Technician Lens

Creating and Maintaining Safe Environments:
The Role of Technicians in Health and Safety

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Technical skills, roles and careers in UK higher education and research

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The Role of Technicians in Knowledge Exchange
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Methodologies

Surveys of technical staff

Surveys of non-technical staff and students

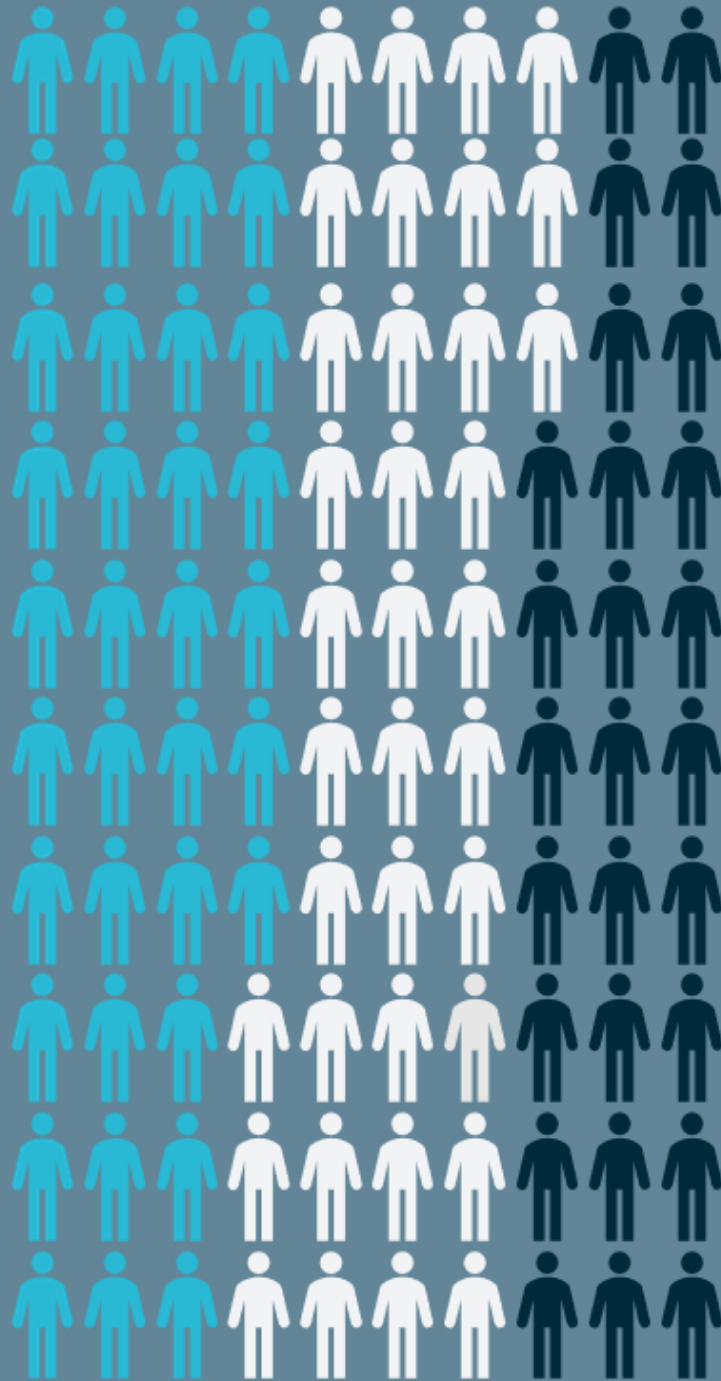Focus groups

Interviews

Research Culture: A Technician Lens

30% of technicians feel *included* in the research community
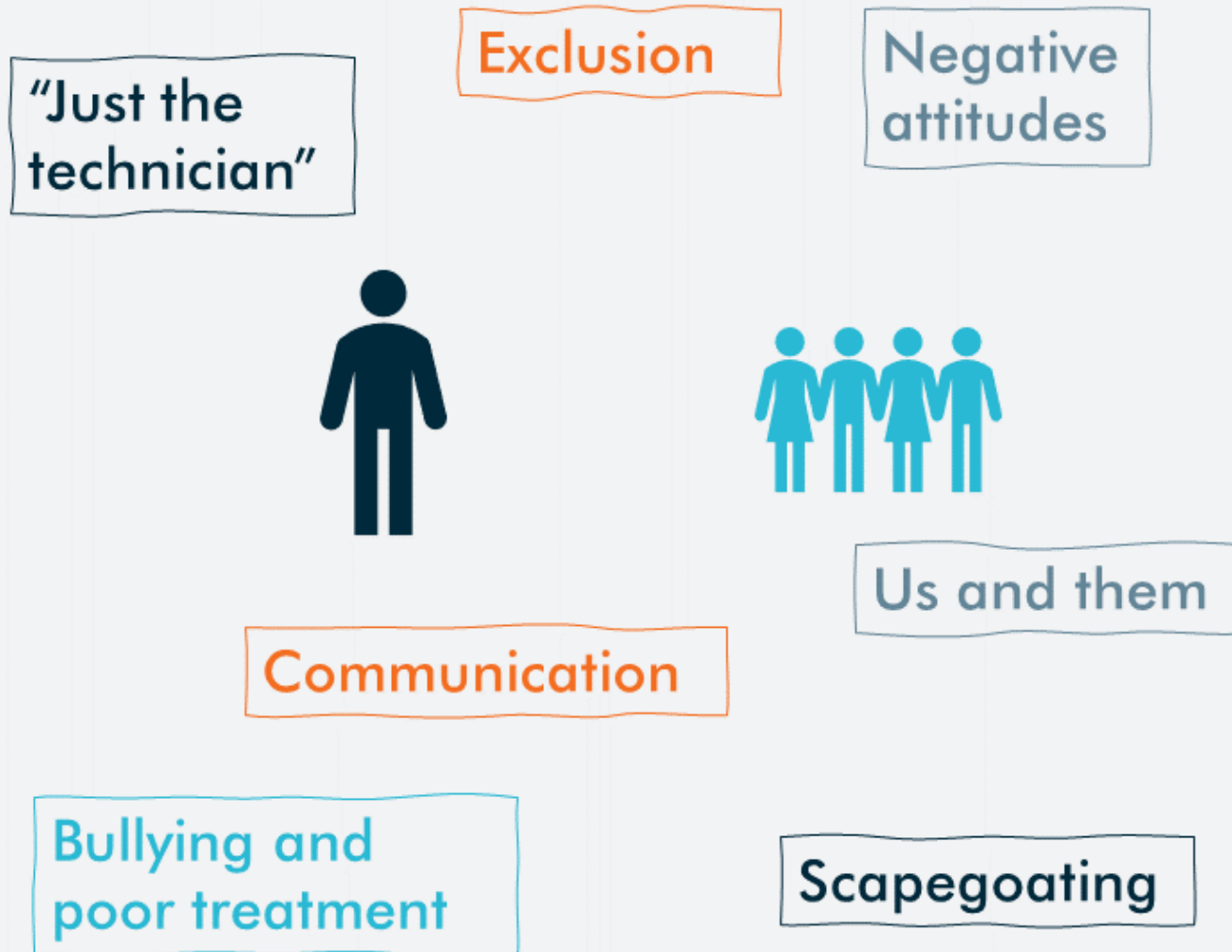
27% feel *excluded*

43% expressed *neutrality*

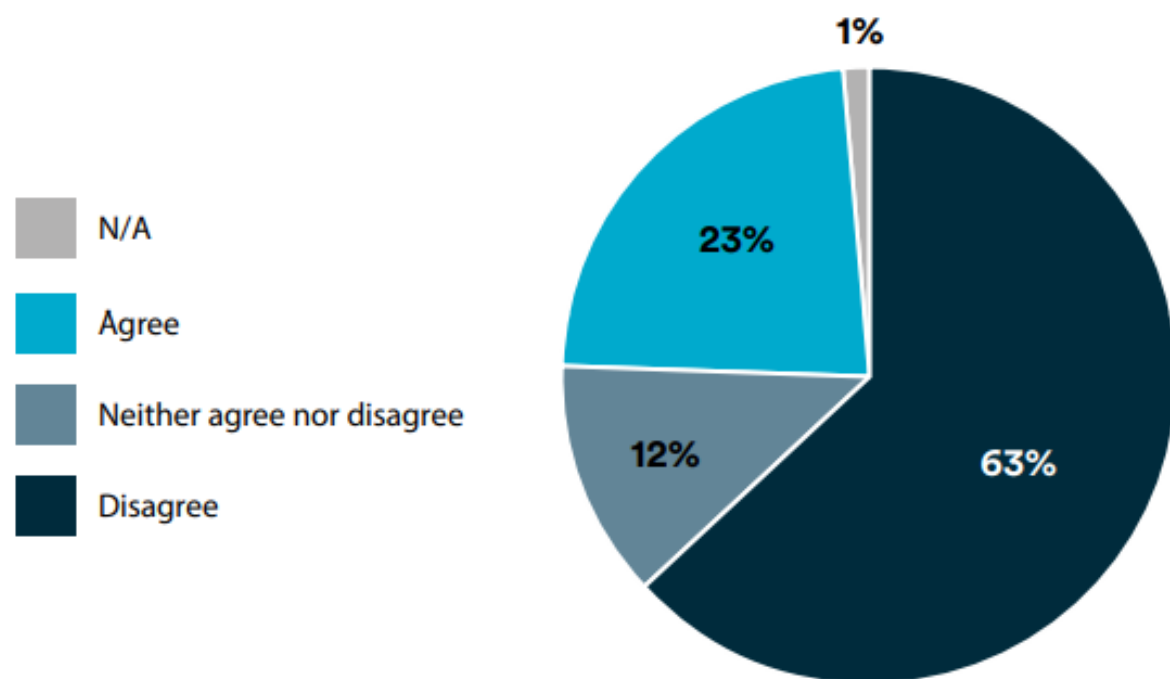**37%** of technicians feel *valued* as a member of the research community

27% *do not feel valued*

36% expressed *neutrality*

'Technical staff are usually credited appropriately for their contribution to research and/or research outputs'

Legend:
- N/A
- Agree
- Neither agree nor disagree
- Disagree

Pie chart values: 1%, 23%, 12%, 63%

63% of technicians and **52%** of non-technical staff and students do not think technical staff are appropriately credited for their research contributions

Career Development

Only 19% can see a clear career pathway

Technical careers capped at lower levels

Difficulties accessing professional development opportunities

Lack of opportunities factor for those considering leaving the profession

61% of academic staff said technical staff should be able to apply for grants

Research Quality and Integrity

Unrealistic expectations placed on technical staff – workloads and timescales.

Health and safety sometimes deprioritised in favour of other tasks.

Pressure on technicians

The Recommendations

Initiatives to improve research culture should be inclusive of technical staff

The role that technical staff play in ensuring the health and safety of staff and students across UK higher education and research needs increased recognition

Technical staff should be credited appropriately on research publications and outputs

Opportunities for technical staff to be considered as principal and co-investigators, co-supervisors or named researchers on internal and external grants and projects should be enabled

The importance of technicians' contributions and expertise to projects should be recognised and they should be included at all stages

Clearly defined career pathways, both through managerial and specialist progression routes should be visible and opportunities for career development opportunities should be available and accessible

Technicians as teachers: the emerging role of technical staff within higher education teaching and learning environments
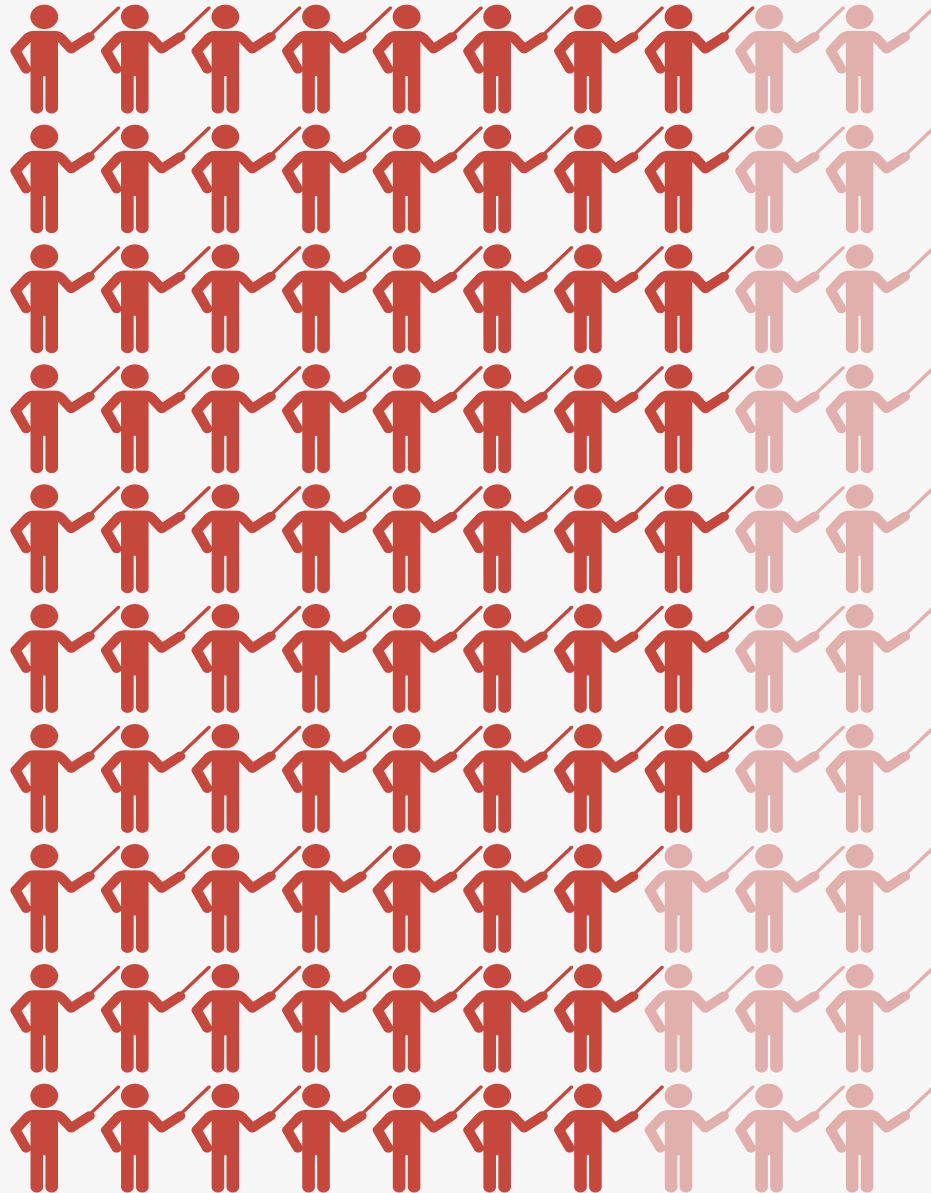
77% of technicians were involved in teaching
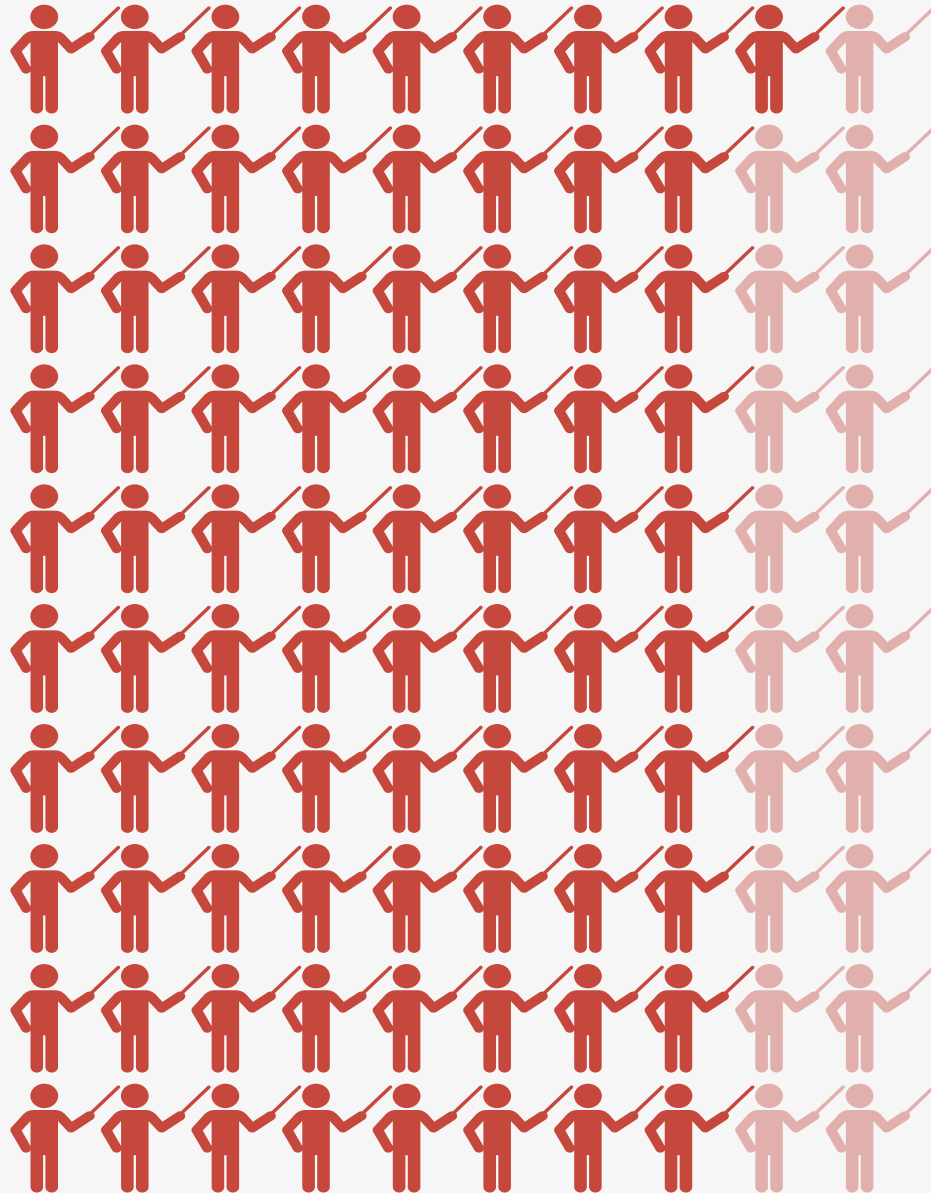
81% of university technicians were involved in teaching

Icon created by b farias from the Noun Project

95% of creative arts technicians were involved in teaching

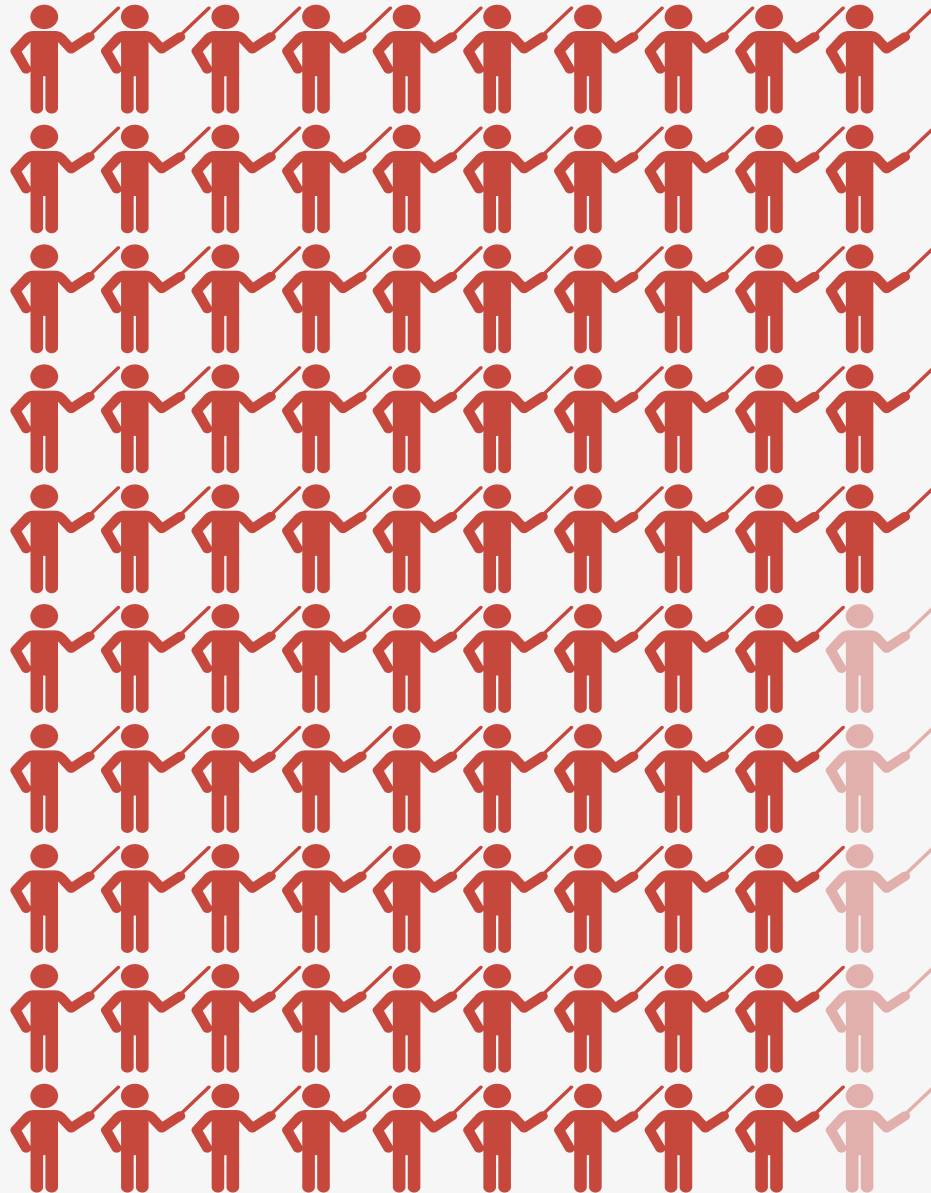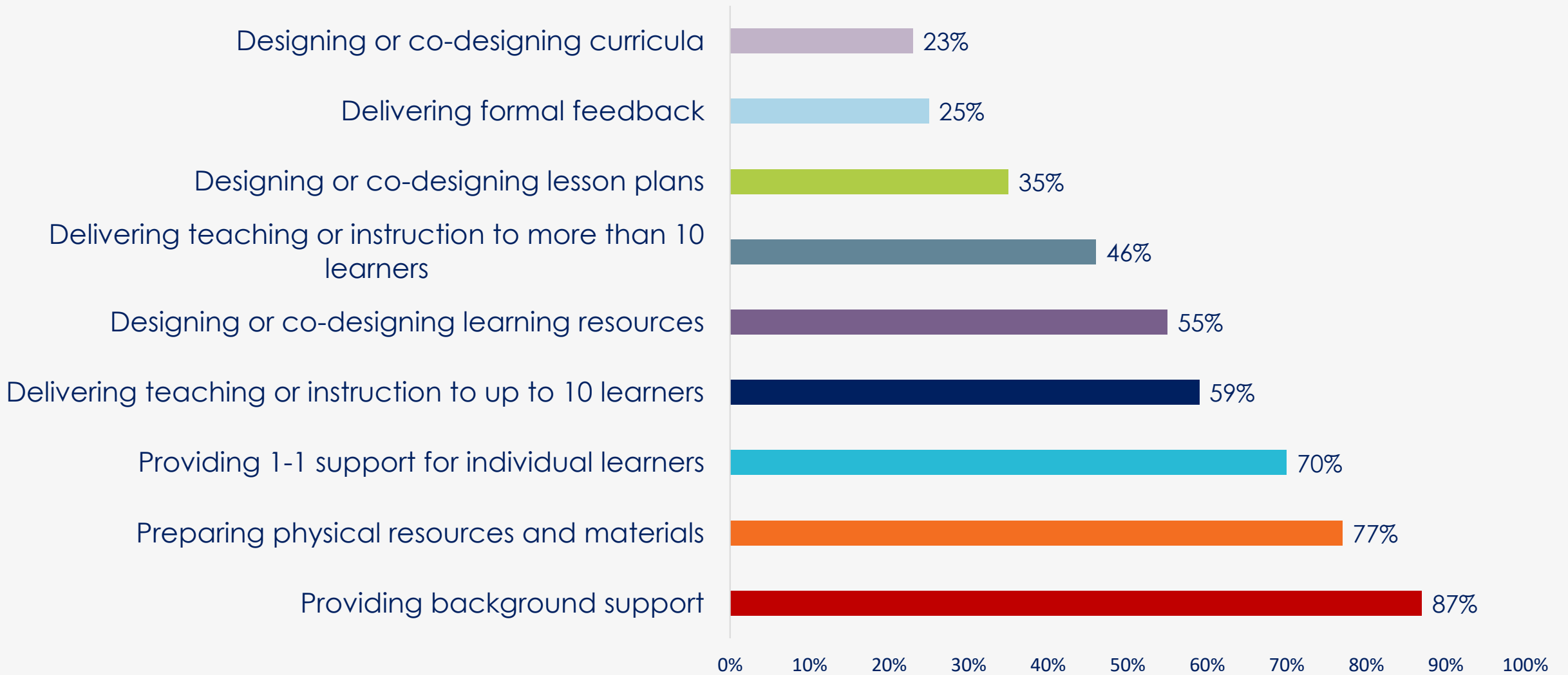Teaching Activities

62% of university technicians involved in teaching had not received any relevant training

15% had received training that contributed towards an externally recognised qualification

56% who spent more than half of their time on teaching activities hadn't received relevant training

65% of those involved in teaching but hadn't received any relevant training wanted to develop their teaching and/or teaching-related skills over the next 3 to 5 years

Perceptions of technical staff's own value for contributions to teaching

Undergraduate students

Technical colleagues

Postgraduate students

Manager

Academic colleagues

Senior leadership in organisation

Other colleagues (e.g. professional services)

National policymakers

Valued

Not valued
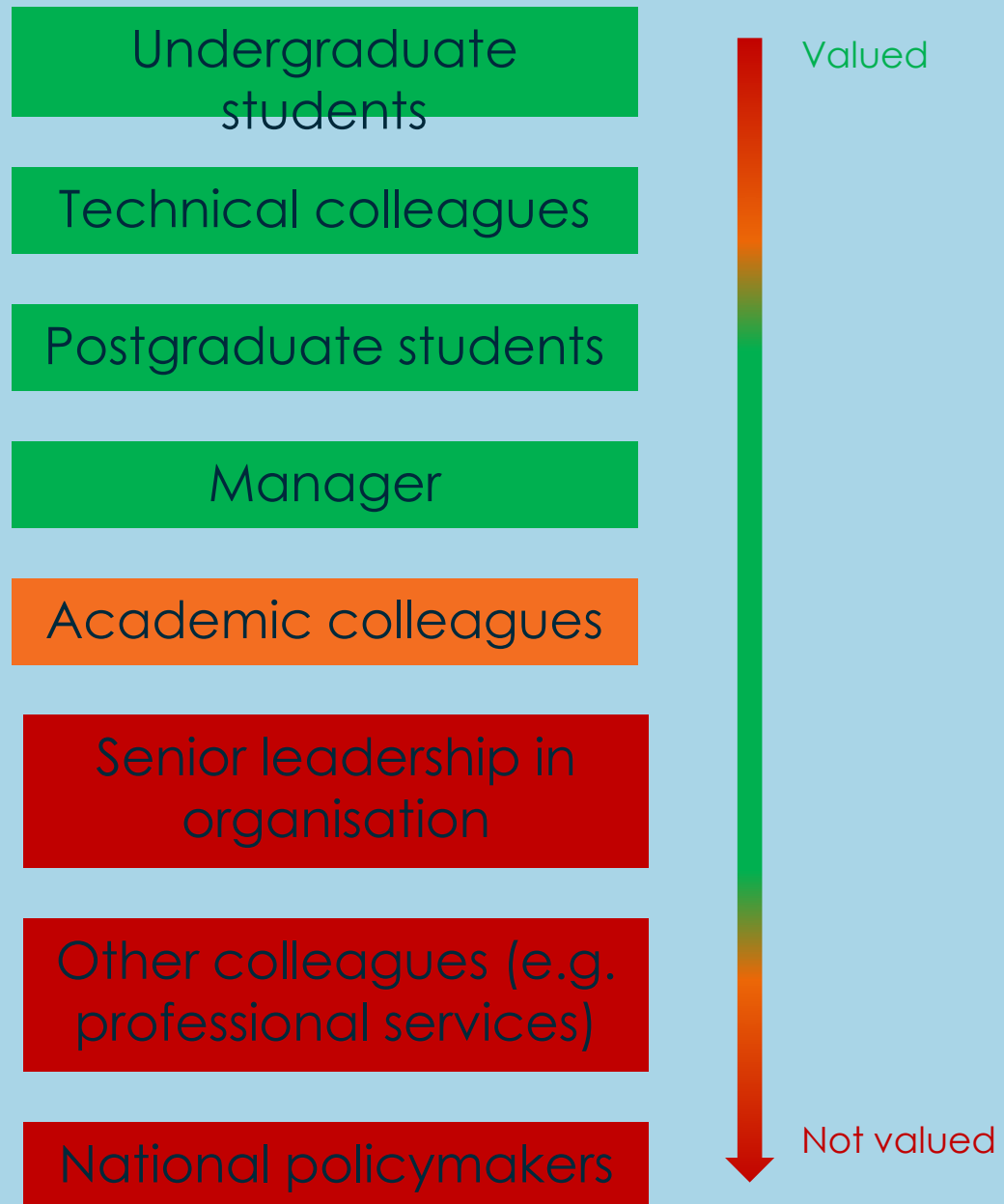
The Recommendations

Funders and employers of technical staff in higher education and research should recognise the blurred boundaries between technical and academic roles. They should provide opportunities and mechanisms to move between career pathways and across sectors.

Employers of technical staff should collect, report and analyse data on their technical workforce, with careful consideration of those roles at the interface with academic roles. This should include capture of numbers of technical staff involved with delivering teaching and learning activities, and whether they are provided with training, qualification or accreditation opportunities.

Employers of technical staff, funders, and sector bodies (e.g. professional associations and learned societies) should ensure provision and access to a range of professional development opportunities tailored to technical roles and careers, including those relevant to teaching.

Employers of technical staff, publishers, and other sector bodies (e.g. professional associations and learned societies) should ensure the teaching contributions of technical staff are visible and recognised.

Creating and maintaining safe environments:
The role of technicians in health and safety

91% of technical staff have health and safety responsibilities

99% of technical managers have health and safety responsibilities

The 5 H&S activities that technicians are most involved in doing

- Writing risk assessments
- General preventative maintenance
- Working with hazardous substances
- PPE – maintenance / storage / signing out / guidance
- Training staff

On average technical staff spend **22%** of their time on health and safety responsibilities

83% of technical staff had provided informal training to other staff and/or students

41% of technicians feel their health and safety responsibilities are not adequately reflected in their job descriptions

Technical managers, safety officers/head of health and **safety** and **technicians** themselves were most likely to sign off health and safety work

99% of technicians had received internal training

68% of technicians had received external training

82% of technicians felt training was somewhat or completely accessible

17% of technicians wanted to complete a NEBOSH qualification

Perceptions of technical staff's own value for contributions health and safety

Technical colleagues

Manager

Academic colleagues

Postgraduate students

Undergraduate students

Senior leadership in organisation

Other colleagues (e.g. professional services)

National policymakers
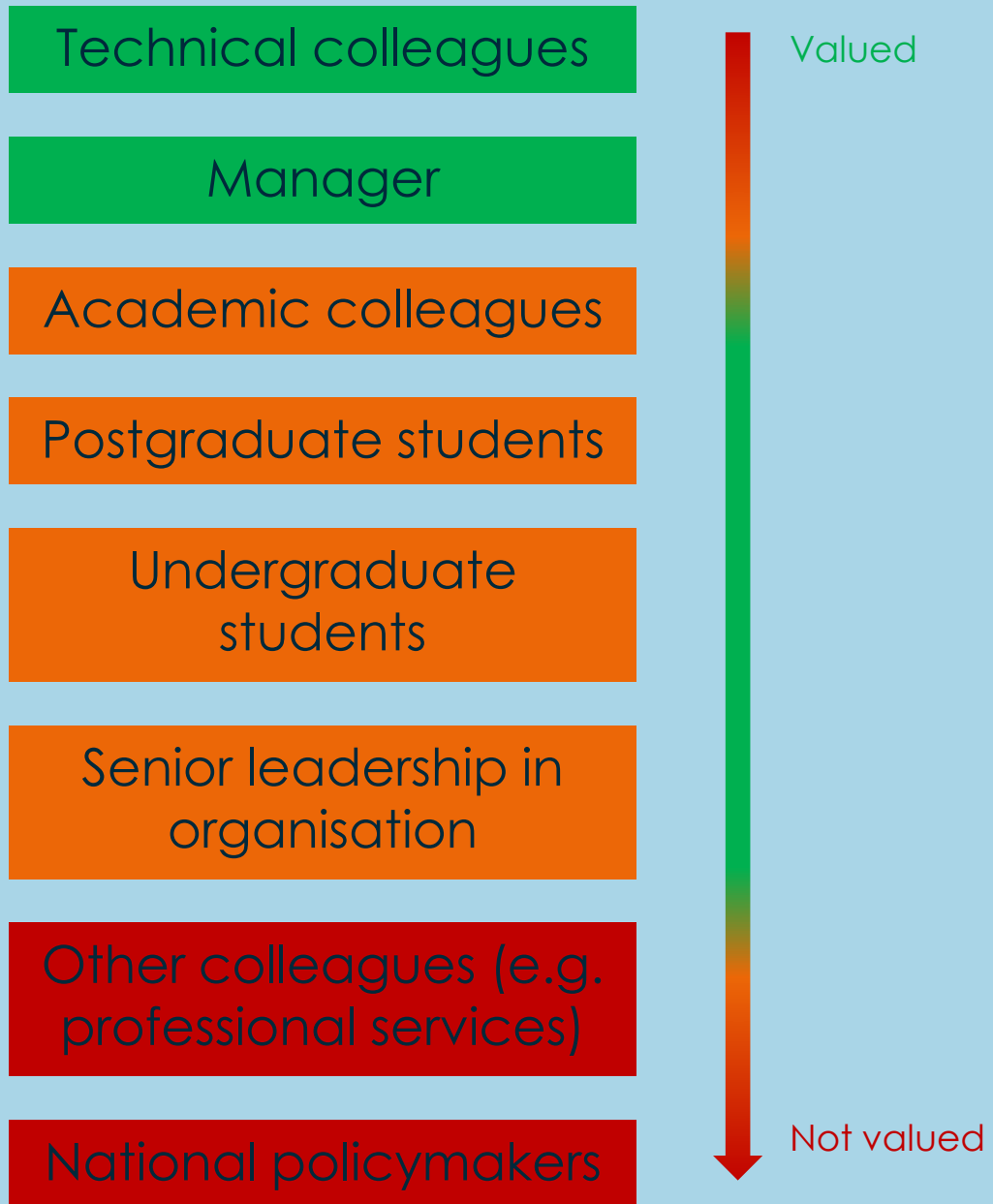
Valued

Not valued

39% of technical staff and **31%** of non-technical staff/technical staff without health and safety responsibilities believe technicians are well recognised for their contributions to health and safety

36% of technicians with a H&S role are on an appropriate committee
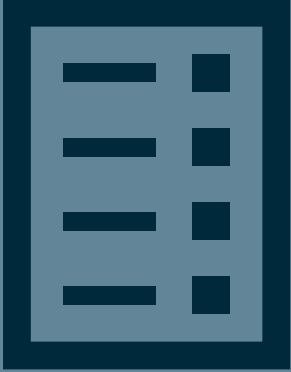
94% are members
10% are Chairs
2% are secretaries

Health and safety committee membership

74% of technicians feel they have a significant role to play in setting the health and safety culture/agenda in their workplaces
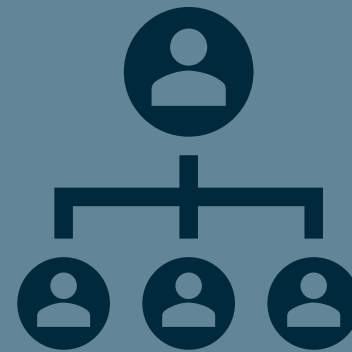
82% of technical staff agreed that health and safety was considered when projects were planned

79% of technical staff felt conversations about health and safety took place frequently

46% of technicians feel conversations about health and safety take place formally

54% of technical staff feel their work in health and safety is openly discussed or delegated

Creating a better health and safety culture

Changes in attitude

Health and safety integral to roles

Involvement in health and safety planning

Transparency and openness

Better policies and procedures

Communication

Staff relationships and interactions

Support

The Recommendations

Understanding Responsibilities: Managers, colleagues, and employers of technical staff must understand the time commitment required for health and safety tasks, actively backing and enabling these responsibilities.

Accurate Job Descriptions: Employers should ensure that health and safety responsibilities are accurately reflected in technical job descriptions.

Leadership in Safety: Senior leaders should promote a culture of positive engagement with health and safety from their whole organisational community. Regular training and engagement in processes and with colleagues with health and safety responsibilities should be promoted.

Visible Roles: Employers of technical personnel should ensure their pivotal roles and contributions to health and safety are visible and recognised.

Training and Development: Technical staff need access to comprehensive health and safety training, including pathways to external qualifications. Employers should ensure that appropriate training is available and accessible to them, and that 'on the job' time to complete health and safety training is supported.

The Recommendations

Resources: Employers of technical staff and technical managers should ensure that technical staff have the appropriate resources to ensure that their health and safety responsibilities can be carried out effectively.

Representation and Participation: Employers must ensure continuous representation of technical staff on health and safety committees, fostering active involvement.
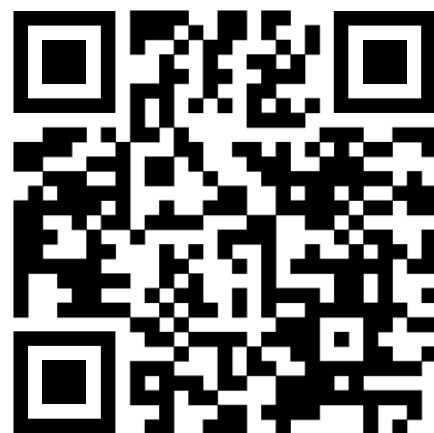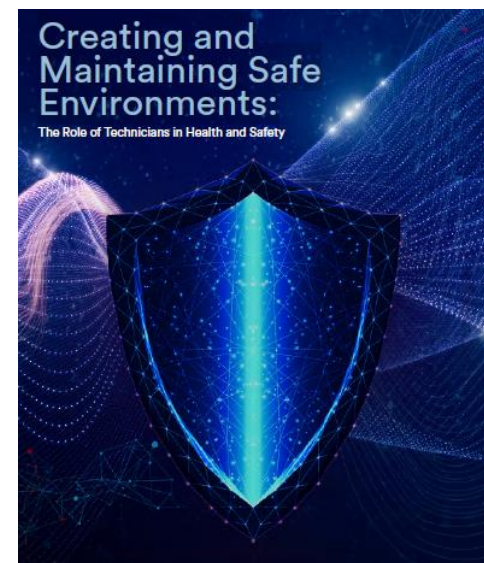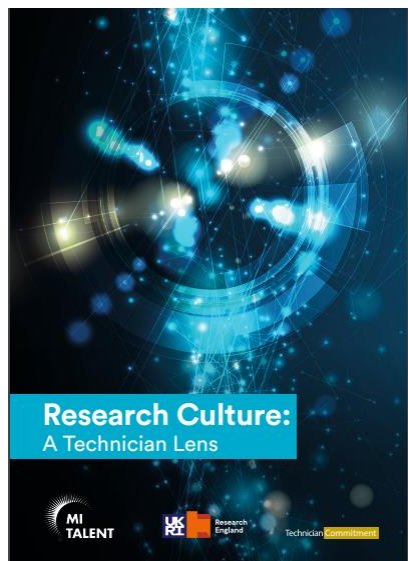
External Recognition & Engagement: External organisations should recognise and engage with the technical community, to provide recognition for their contributions to health and safety, and avenues for professional development.

Teamwork: Employers, technicians, and other health and safety stakeholders should forge collaboration and communication channels, sharing best practices and lending mutual support. Solid teamwork cultivates a healthy working environment.

Transparent Fora: Organisations should ensure the creation of platforms for open and transparent health and safety dialogues that focus on improvement and best practice sharing, steering clear of placing blame.

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Thank you!

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