Introduction
School technicians work in a variety of roles across schools in the UK, predominantly in secondary schools. They cover a wide range of specialist areas including science, art, design & technology, IT and food technology - supporting teachers and pupils by preparing equipment and materials and helping in practical lessons.

UNISON carried out a survey of technicians to find out more about the issues and concerns of this valuable workforce.

About the survey
UNISON sent an electronic survey to members working in technical roles in all publicly-funded UK schools in November 2019. There were 501 responses.

About the respondents

- 97% worked in secondary schools; others worked in primary and schools, with one respondent from a special school.
- 41% worked in local authority schools, 38% in multi-academy trusts, 12% in single academies, 5% in voluntary aided/foundation schools, 2% in federations.
- 64% were science technicians, 15% design & technology, 4% information technology, 4% art, 4% food technology. The rest worked across performing arts, reprographics and textiles.
- 32% worked across more than one technical department, for example as ‘all school’ technicians.
- 55% had GCSE qualifications, 32% A-levels and 30% undergraduate degrees. 4% had a PGCE (post graduate certificate in education) and 8% another post-graduate certificate or degree, 2% of technicians surveyed had a PhD. Only 3% have no formal qualifications.

Key findings

Understanding of the role
A concern among technicians was that they didn’t feel others understood their role. Just under one in six (15%) said their school leadership team completely understood what they did. More than half (58%) said their leadership team only partly did and just over a quarter (27%) said their school leaders did not understand what their job involves at all.

As for the government, more than two thirds (67%) said the technician role was not understood at all, with a similar proportion (63%) feeling the same about the public’s understanding.

Training
There was a spilt in experiences of training/continuing professional development (CPD) that highlighted a lack of consistency across schools. Almost half (49%) felt they had adequate
opportunities while 51% did not. Most comments were from the latter group and many touched on issues of funding and availability.

**Selection of comments**

“I have a very supportive team of teachers and managers who support my professional development on the whole”

“What training? It’s all geared towards teaching and advancement for teaching colleagues”

“None. I’ve been in my role 10 years and there has been none”

“Training is offered annually at performance management meetings, but is never acted on”

“No CPD opportunities local enough to take part in. School won’t pay for courses and travel if it’s too far”

“We rarely have suitable CPD arranged unless we do it ourselves. We are often turned down for external courses because of the cost”

“Have not been to training in two years. Am refused training on the basis there is no money, no one to cover me when I’m away and training is not required because I know what to do.”

**Duties of the role**

Almost two in five (39%) technicians said they were often asked to undertake tasks outside their job description; two in five (40%) sometimes. Only one in twenty (3%) said this never happened. Some commented that their job description included a catch-all line which made it difficult to refuse.

Tasks respondents had been asked to do included scribing for pupils sitting exams, data input, first aid, photocopying, organising cover work, exam invigilation, pupil discipline, organising staff department parties and running a gardening club. One technician said they’d once be asked to catch a chicken in the playground.

Some commented that they liked the variety that came with being asked to do lots of bizarre tasks. Others described the tasks they could be given as below their pay grade and leading to further misunderstanding of the profession. For example, one respondent commented that pupils had referred to them as a “helper” which is how the school described volunteer parents. Others commented that they were so busy with their day job that they tended to be left alone.

**Health and safety**

Almost one in eight (13%) said non-technicians were having to take on technician duties in their school. These staff included just over a third of teachers (37%), teaching assistants (34%) with all other support staff and half from librarians to the head’s PA and in two cases, sixth form students. When asked what duties these untrained staff were having to carry out, a wide range of answers were given from simple tasks such as “washing up, fetching and carrying – the day to day stuff that we haven’t time to do”, to discarding hazardous waste, collecting chemicals and in some cases “all technician duties” where a technician was off-sick or worked part time.
On occasion other support staff had been given these additional duties, sometimes to keep their jobs viable and prevent redundancy. This has led to additional work for the technician who would be made responsible for their training.

One respondent described how the headteacher suggested office staff could do the chemical stock check to help with technician workload. The technician pointed out that she had chemical handling training and years of experience to recognise the risks associated and that an inexperienced person posed a danger to themselves and others. Another respondent commented “We have just employed a part-time technician who has no experience in the role. I work different hours to her, so it has been very difficult training her on relevant health and safety, and I’ve had to raise numerous issues with the head of department.”

Concerns raised about unskilled staff taking on technician duties centred on health and safety, with wider concerns for the undermining of the profession it creates and the impact on lesson quality for pupils.

Selection of comments

“Safety concerns resulting from lack of awareness or training. A novice handling concentrated acids without proper training could have worrying implications.”

“It undermines the skills technicians have. It takes a lot of time and experience to be qualified.”

“It’s dangerous enough with trained staff operating machinery and equipment. Untrained staff may not realise the dangers presented until it’s too late.”

Just under a fifth (17%) of technicians were aware of staff or pupils being injured due to the improper use of practical equipment, with nearly half (47%) saying this number was increasing. Some commented that the occasional accident was an inevitable in a classroom environment when some children/staff do not follow instructions. For example:

“A teacher once burnt her hand because she did not listen to my warning when I handed her the practical, and she heated ethanol directly in a boiling tube over a Bunsen.”

“Kids will always mess around, so sometimes there’s a splash of weak acid or glassware broken – it’s the nature of the learning process. But I do think that classroom support has been cut to dangerous levels.”

Others referred to incidents where teachers had run experiments without the expertise of a technician.

Selection of comments

“Hospitalisation of senior management due to taking an experiment involving hydrogen peroxide, not following guidance and not wearing eye protection”

“Had a science supply teacher who once an experiment with pupils too close to the demo. This resulted in burns to blazers.”

“Needlestick injury to a cleaner with glass melting point apparatus left unattended due to an inexperienced teacher using the kit without technician instruction.”
Impact of school funding cuts
Nearly one in four (24%) said technicians at their school had left and not been replaced in the last 12 months, and almost one in ten (9%) said technicians had been made redundant over the same timeframe. Around three quarters of technicians said school cuts had an impact on the availability of the equipment/resources (77%) and their quality (74%). More than two in five (42%) had experienced a decrease in the number of practical experiments undertaken. One respondent said their departmental budget was less than one third of what it had been ten years ago.

Selection of comments
“We are now only using the cheapest sketchbooks, paint, clay etc. And if our kiln needs a costly repair, we may lose the ceramics lessons altogether”

“Constantly scrimping and saving. Bringing in resources from home. Buying our own washing up liquid.”

“With more students crammed in, some practicals have had to be changed as movement in labs has been restricted by numbers.”

“Many activities that used to be practicals are now done as demos or the pupils are shown a YouTube clip instead. I cannot buy any more equipment until at least April.”

“We still run all practicals but ask parents to contribute towards the cost.”

“We are using cheaper equipment that breaks more frequently.”

“Funding for ingredients for food technology is not available like it used to be.”

“Pupils often have to work in larger groups to spread what little resources we have.”

“So many bits of equipment need updating and replacing and we are constantly told there is no money.”

Almost a third (32%) of technicians said they were concerned safety is being compromised. Comments included the risk of electrocution/fire due to equipment not being adequately tested or repaired, and lack of time/hours to complete all the required safety procedures.

More than one in three (34%) science technicians said cuts had an impact of the ability to meet guidelines for safe storage and disposal of hazardous chemicals.

Selection of comments
“We have an amount of mercury we cannot afford to dispose.”

“We are storing hazardous chemicals that should have been disposed.”

Impact of cuts on staff health and well-being
More than eight in ten (84%) said pressures caused by cutbacks at school had resulted in them experiencing reduced morale; and 83% reported an increase in stress levels. Around half of technicians (48%) were experiencing anxiety as well as depression and burn out (47%), and 41% were experiencing difficulty sleeping at night.

Selection of comments
“I am waiting to find out if I have a job, plus learning another technician’s role as they are leaving so that I can cover until a replacement is found, which is very stressful”
“I have recently started suffering from panic attacks and am unable to switch off. I am considering leaving as I cannot cope with the amount of stress and the pay is terrible.”

“We were made term-time only (from full time) and it has had a significant impact on me and my role here, so much so that I am considering other work after 18 years of otherwise happy service here at my school. I am demoralised and feel that I am seen as a glorified cleaner.”

“I was off with work-related stress as my colleague was on maternity leave without being replaced. Apparently there is no budget for cover for support staff.”

Job satisfaction
Despite the issues and concerns facing many science technicians, eight in ten (83%) school technicians said they were happy in their role. The variety of the job shone through as an enjoyable aspect, with many commenting that no two days were ever the same. Others mentioned the problem-solving involved and the satisfaction of seeing students achieve well after doing the practical work they had prepared. This shows that regardless of the problems around status, pay health and reduced morale, the majority still enjoy their work.

Selection of comments
“The variety, no day is the same. Passing on the love of science to students. Aiding the teachers in delivering excellent practical science.

“Using my science knowledge, interaction with students and teachers. Knowing I have an active role in the learning process.”

“I love being able to create informative and fun lessons for children.”

“It is varied, never boring. I enjoy being part of a school community. It is great when a practical works well and you can see the children enjoying it and ‘getting’ the science.”

Conclusion
This survey highlights the vital role technicians play in delivering quality education for pupils and the safe and smooth running of the various departments in which they work. It also shows that technical roles in schools are still poorly understood, particularly the degree of expertise needed and the huge variety of tasks involved.

The survey highlights the worrying health and safety implications of cuts to technicians and their hours, with untrained staff putting themselves and others at risk. It also shows that funding cuts are having a detrimental effect on the quality of practical lessons, with fewer taking place and the experience being diluted due to larger pupil groups.

The impact on technicians’ health and well-being is also worrying and must be addressed.

UNISON will continue to campaign for fair funding for all schools and work to raise the profile of the highly skilled work of technicians and the impact they have.

UNISON will conduct further analysis of the survey data to look at the experience of different types of technicians in more detail.