



Education & Training Foundation

Functional Skills Reform

Findings from the Employer Survey

May 2016

Pye Tait Consulting

Royal House, 110 Station Parade, Harrogate, HG1 1EP

Tel: 01423 509433 Fax: 01423 509502 Email: info@pyetait.com Website: www.pyetait.com







Cert No: 76000/GB/Q

Contents

1.	Introduction	3
	Employer Survey – Key Messages	
	Maths Skills in Detail	
	English Skills in Detail	
5.	Awareness of Functional Skills Qualifications	21
6.	Views on Content for Maths and English Functional Skills	22
7.	Workforce and Respondent Profile	23

1. Introduction

1.1 Overview of Functional Skills Reform

Functional Skills standards and qualifications have been in existence since 2010/2011 and although employers and learners are generally pleased with them, a number of potential weaknesses were highlighted by the Education and Training Foundation's 2015 research *Making maths and English work for all (MMEW)* ¹. The review found that Functional Skills were not broken, but that work could be done to improve their relevance and content, as well as improve their recognition and credibility in the labour market.

The Government wants to ensure everyone has an appropriate opportunity to improve their maths and English skills and achieve a credible qualification that employers recognise. It is therefore keen to ensure that Functional Skills standards and qualifications are fit-for-purpose for the next decade and more.

The Education and Training Foundation (the Foundation) has been tasked by the Department for Business, Innovation and Skills (BIS) to reform Functional Skills qualifications in maths and English to ensure these are better recognised and valued by employers.

1.2 What are Functional Skills?

Functional Skills (available in English, maths and ICT) provide young people and adults with essential knowledge, skills and practical problem solving ability to enable them to operate confidently and effectively in life and work. They are components within apprenticeships and study programmes, as part of the Condition of Funding (supporting progression towards GCSE A* - C) and as free-standing qualifications widely within adult education provision.

Functional Skills qualifications are currently available at five levels from Entry (which is sub-divided into three), and Levels 1 and 2. Assessment availability is flexible and awarding organisations can offer paper-based assessments, on-line assessments, or a mixture of the two.

1.3 The Functional Skills Reform Consultation

Based on detailed consultations and research conducted in 2015, the Foundation, with its delivery partner – Pye Tait Consulting (with the Learning and Work Institute (LWI)) – has embarked upon a set of consultations designed to achieve an up-dated set of National Literacy and Numeracy Standards, Functional Skills subject content to move towards, ultimately, by 2018, Functional Maths and Functional English qualifications recognised and valued by learners and employers.

¹ http://www.et-foundation.co.uk/making-maths-and-english-work-for-all/

The current – Phase 1 – research is based on a multi-part process consisting of a detailed consultation with employers (early January to April 2016) plus verification from the sector, including practitioners and subject experts (May to June 2016) on aspects of the findings and draft outputs from the first stage. Alongside the employer survey, consultations have also taken place, through a variety of forms, with a range of stakeholders including subject bodies, literacy and numeracy experts, awarding organisations and learners. At every stage of the work, findings and outputs have been cross-checked with experts and the major stakeholders.

Further activities will take place with the purpose of verification, before a final period of analyses and reporting, culminating in the revised Standards, subject content and a final report being delivered to the Foundation at the end of August 2016. The Foundation will then move forward into the next phase of the Reform Programme, which will focus on new core curricula, and building on training materials and CPD for teachers and trainers.

This report summarises the findings on one aspect from the first stage of the research - specifically the online survey of employers.

1.4 More about the Employer Survey

The employer survey sought to understand more about the maths and English skill requirements of employers and the skills held by the workforce, particularly among new and junior staff. The main evidence gathering tools included two online survey questionnaires (one detailed, and an alternative, shorter version), which were open for responses between January and April 2016. The online responses were supplemented by telephone-based interviews with employers carried out by Pye Tait Consulting.

In addition to a range of relevant questions the detailed survey asked employers to rate the importance for job roles within their business of a lengthy list of maths and English skills. The short survey used a smaller set of broad skills statements and explored the extent to which employees have these skills. The two surveys were extremely valuable in that they acquired complementary perceptions on a similar set of target variables.

In total, the consultation received 531 responses, comprising 217 from the detailed survey and 314 from the short survey.

2. Employer Survey – Key Messages

A common theme across the responses is that employees actually fear maths, and sometimes English, and are reluctant – often very reluctant – to engage with the subjects. Lack of confidence and mastery of the essential skills (in speaking, reading and writing as well as use of numbers) are the main issue, with some additional concerns raised that teachers themselves may also lack confidence as well as key areas of subject knowledge.

Employers need their workforces to have a good command of the basic skills, to be able to apply these more effectively in the workplace and to be competent in their job roles. Of particular importance are the skills of communicating well, (precisely and appropriately), writing accurately and comprehensibly, and being able to perform simple calculations and overcome work-based problems.

Maths skills

The most important reported maths skills for employers including solving problems that involve number or measurement in a job-specific context (e.g. working out VAT or room areas/volumes), breaking a problem down into smaller parts and then working through systematically to get to a sensible answer in a job-specific context, the ability to perform mental arithmetic, the ability to estimate the probable answers to any maths question, and persevering by trying different approaches if the answer is not achieved straightaway.

Skills of particular importance include basic maths (area, estimation, conversions, days, geometrical, magnitude, perimeters, scales, 10s, 100s, 100os), percentages, fractions, ratios and mental arithmetic. This largely mirrors one of the findings from the MMEW research which found that employers are less interested in what they consider to be academic mathematics (e.g. algebra, calculus, etc.), but instead – for these levels of staff - want basic applied and practical skills.

English skills

Employers need people who can speak confidently and clearly, understand questions and give a relevant, logical and coherent answer in language that is appropriate to the audience. They also need individuals to able to write clearly and coherently in a style suited to the intended audience (e.g. not using 'text speak' or portfolio words such as "cool"). These, the most important skills, achieved overall average ratings of just over 9 out of 10.

The basics of what is known as the "SPAG" group of skills (spelling, punctuation and grammar) were also frequently mentioned as being important, together with good communication skills – especially oral ones via telephone and in customer-facing and colleague-facing environments.

Again, these findings largely reflect the MMEW research, which identified a need for significantly enhanced listening and speaking skills, good writing, oral and spoken skills, comprehension and improved spelling, grammar and vocabulary.

The potential breadth and depth of skills gaps

Recent research published by the Department for Business, Innovation and Skills, suggests that, in the modern workplace, limitations in employees' numeracy and literacy may be masked by the use of ICT and other interventions, such as software packages that help with account management, templates for written correspondence² and scripts for telephone conversations. The same report noted that a sizeable minority of workplaces (43%) do not undertake an annual performance review for all their staff which points to a lack of effective mechanisms to measure and monitor basic skills in the workplace.

A high proportion of employers responding to the recent survey (83%) for the Foundation report being satisfied that their new recruits are able to apply maths skills to workday problems, rising to 89% for applying English skills to workday problems. The statistic of 83% is very similar to other recent reports that examine and reveal a range of skills issues³. As such, this should not be taken to mean that the majority of employers do not experience at least some problems associated with maths and English skills and the consultation uncovered many such examples through its exploratory questions. Linked to this, it is also worth noting that the Foundation's 'Making maths and English work for all (MMEW)' research from 2015 revealed that only 11% of employers said they had no concerns about either maths or English skills —in other words 89% implied concern to some degree.

Rating scales (such as those deployed in the consultation to examine the capability of the existing workforce) can be subject to central tendency bias which means that some respondents will avoid using the highest and lowest ends of any given scale. This can lead to negative views being rated slightly higher than the true position, whilst positive views may be rated slightly lower. However, while the range may be slightly constricted the spread and shape of the ratings provide powerful evidence.

Comparisons by size of employer

A comparison by size of employer in employment terms suggests that larger organisations (those with greater than 50 staff) are slightly less happy with the maths and English capabilities of their existing workforce. Larger employers also place greater importance on collecting and representing data using ICT, including spreadsheets, while small businesses appear more likely to view mental arithmetic skills as being of greater importance. There is a body of anecdotal evidence surrounding the reasons for these employer perceptions but detailed research remains to be carried out into these important areas.

² Department for Business, Innovation and Skills (2015) Impact of poor basic numeracy and literacy on employers

³ 83% lies in the middle of a range of other statistics quoted in relevant skills surveys. The UKCES 2015 Employer Skills Survey shows a slightly lower set of employers (76%) satisfied with their employees basic numerical skills, whereas the research conducted for BIS in 2015 (Impact of poor basic literacy and numeracy in English employers) shows a higher rate of 88% of workplaces claiming not to have any basic skills gaps.

Working in a digital-rich environment

There appears to be a polarisation of opinion on the treatment of digital skills within English and maths. Some employers regard such skills as a distraction – almost an irrelevance – to the need to upgrade basic maths and English skills – while some argue that everything should be integrated into digital skills.

Prior awareness of Functional Skills

Half of surveyed employers (50%) had heard of Functional Skills qualifications prior to responding to the consultation, with the results indicating that larger employers are more likely to be familiar (64% familiar) than those with fewer than 50 staff (39% familiar).

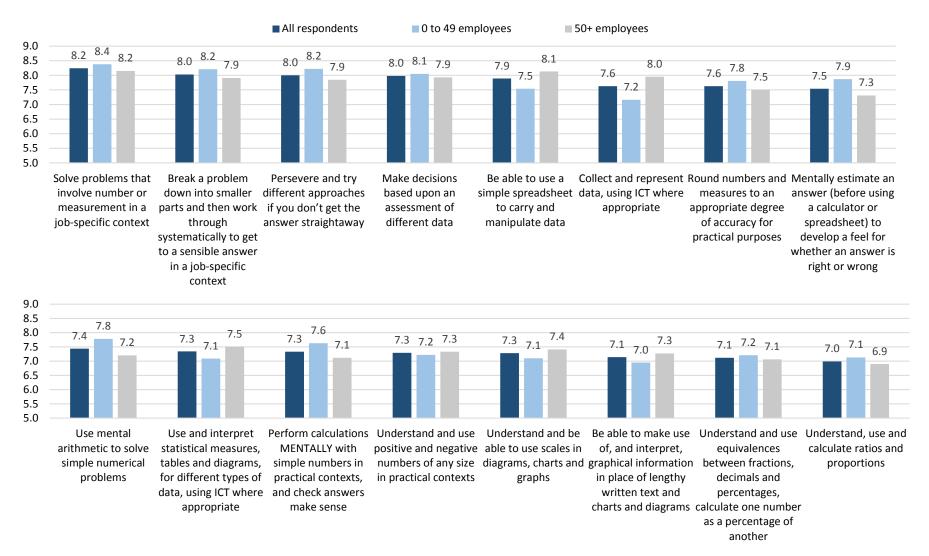
3. Maths Skills in Detail

Employers responding to the detailed questionnaire were asked to rate a list of maths skills on a scale from 1 'not required' to 10 'essential' for their organisation. The results are shown in Figure 1, with the three most essential skills being to:

- Solve problems that involve number or measurement in a job-specific context (8.2);
- Break a problem down into smaller parts and then work through systematically to get to a sensible answer in a job-specific context (8.0); and
- Persevere and try different approaches if you don't get the answer straightaway (8.0).

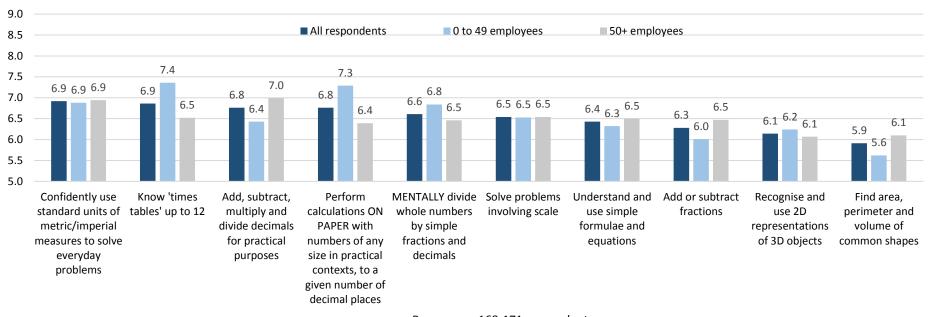
Perceptions by size of organisation are similar, although larger employers place greater importance on collecting and representing data using ICT, including spreadsheets, while smaller businesses appear more likely to view mental arithmetic skills as being of greater importance.

Figure 1 Maths skills – importance to employers



Prepared by Pye Tait Consulting Page 8 of 25

Functional Skills Reform – Employer Consultation Analysis



Base range: 168-171 respondents

Prepared by Pye Tait Consulting Page 9 of 25

Functional Skills Reform - Employer Consultation Analysis

When asked what maths skills are particularly important, respondents tended to speak of wider aspects of maths skills such as teacher and tutor ability and the lack of confidence among many young people.

The most mentioned required skills were:

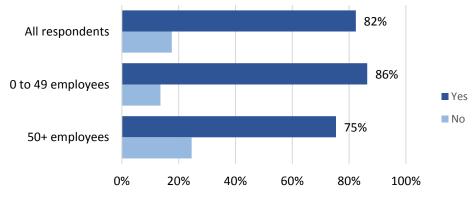
- Basic maths (area, estimation, conversions, days, geometrical, magnitude, perimeters, scales, 10s, 100s, 1000s);
- Percentages;
- Fractions;
- Ratios;
- Arithmetical calculations (as for basic maths, VAT);
- Mental arithmetic (estimation, conversion, space, weight);
- Time (coordination, dates, journeys, deliveries, estimation); and
- Metric systems (full understanding, conversions).

There was an underlying theme throughout many of the responses to do with respondents' perception that their employees feared maths, and sometimes English, and were therefore reluctant to engage with the subjects, preferring instead to explain their lack of ability away with such phrases as

- "don't do maths";
- "never been good at words";
- "I'm not a numbers person"; and
- "can't do the writing stuff".

The majority of employers (82%) report that new recruits generally have adequate maths skills (Figure 2). The same proportion is also of the view that new recruits have sufficient ability in mental arithmetic (Figure 3). Smaller employers are slightly more favourable than those with more than 50 staff.

Figure 2 Do new recruits have adequate maths skills?

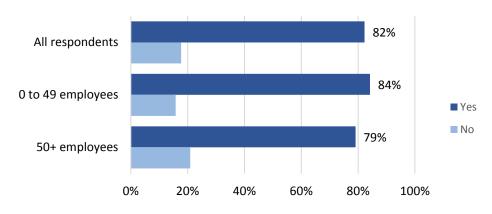


Base: 316 respondents

Prepared by Pye Tait Consulting

Page 10 of

Figure 3 Do new recruits have sufficient ability in mental arithmetic?



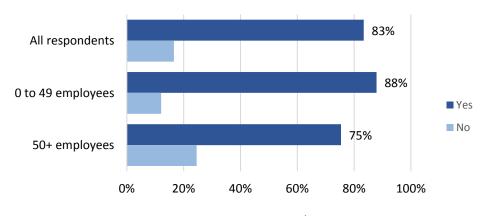
Base: 314 respondents

Mental arithmetic skills mentioned as lacking among new recruits:

- Estimation;
- Multiplication;
- Division;
- Addition;
- Subtraction;
- Averages; and
- Ability to work out percentages.

The majority (again, 83%) are of the view that new recruits are able to apply maths skills to workday problems, with smaller employers somewhat more favourable than larger organisations (Figure 4).

Figure 4 Are new recruits able to apply maths skills to workday problems?



Base: 316 respondents

More than half of employers (57%) believe that new recruits are sufficiently skilled at being able to work with mathematical data using ICT, for example spreadsheets, tables and charts (Figure 5).

57% All respondents 59% 0 to 49 employees Yes No 54% 50+ employees 0% 10% 20% 30% 40% 50% 60% 70%

Figure 5 Are new recruits able to work with mathematical data using ICT?

Base: 316 respondents

There appears to be a polarisation of opinion on the digital requirement. Some employers regard such skills as a distraction – almost an irrelevance to the need to upgrade basic maths and English skills – while some argue that everything should be integrated into digital skills. One respondent went so far as to propose that maths and English should both be subsumed into digital skills and taught only through electronic methods.

Top priorities when listed were:

- Spreadsheets
- Underpinning maths
- Data handling

There was a clear underlying theme in many of the responses that "business experience" and/or "experience in business applications and software" was an important consideration.

"They need the ability to use the basic and more advanced functions of word-processing and spreadsheet applications."

New Recruits and existing junior staff:

With respect to new recruits and existing junior staff, respondents were asked to rate a range of maths skills on a scale from 1 'totally incapable' to 10 'extremely proficient' (Figure 6). The ratings of specific skills suggest that potential skills gaps among larger organisations could be more prevalent than in small businesses.

The three lowest rated skills include:

- Understand and use equivalences between fractions, decimals and percentages (6.2);
- Understand, use and calculate ratios and proportions (6.4); and
- Using mental arithmetic to solve simple numerical problems (6.5).

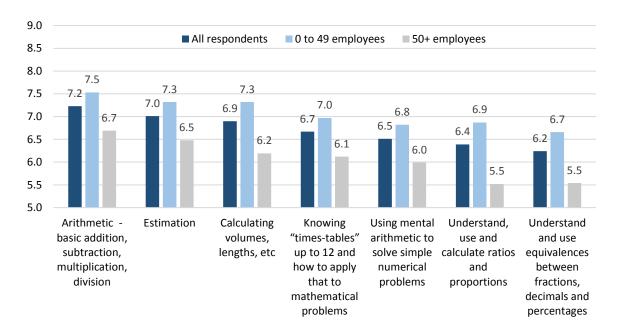


Figure 6 Maths skills – capability among existing staff

Base range: 282-307 respondents

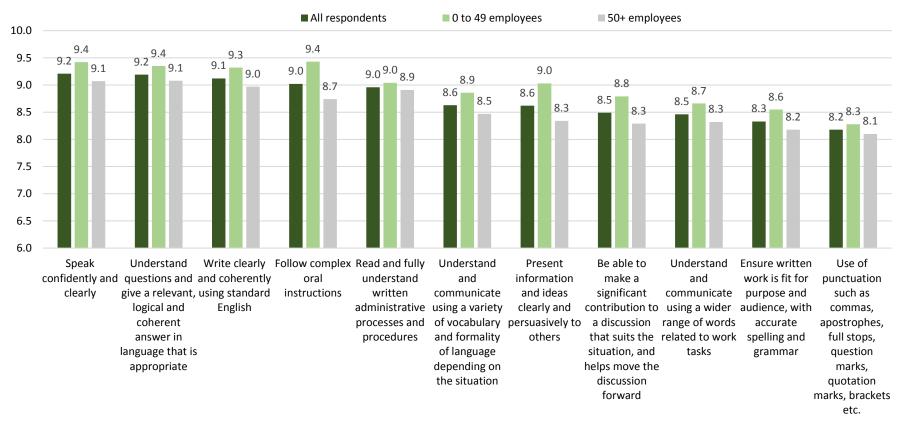
4. English Skills in Detail

Employers responding to the detailed questionnaire were asked to rate a list of English skills on a scale from 1 'not required' to 10 'essential' for their organisation – Figure 7. As was the case with maths, smaller organisations are more favourable than larger organisations, with the three most essential skills being to:

- Speak confidently and clearly (9.2);
- Understand questions and give a relevant, logical and coherent answer in language that is appropriate (9.2); and
- Write clearly and coherently using standard English (9.1).

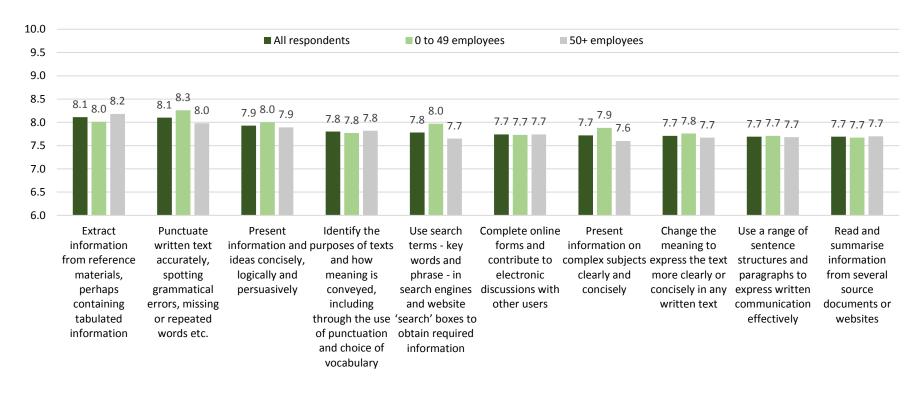
Functional Skills Reform – Employer Consultation Analysis

Figure 7 English skills – importance to employers



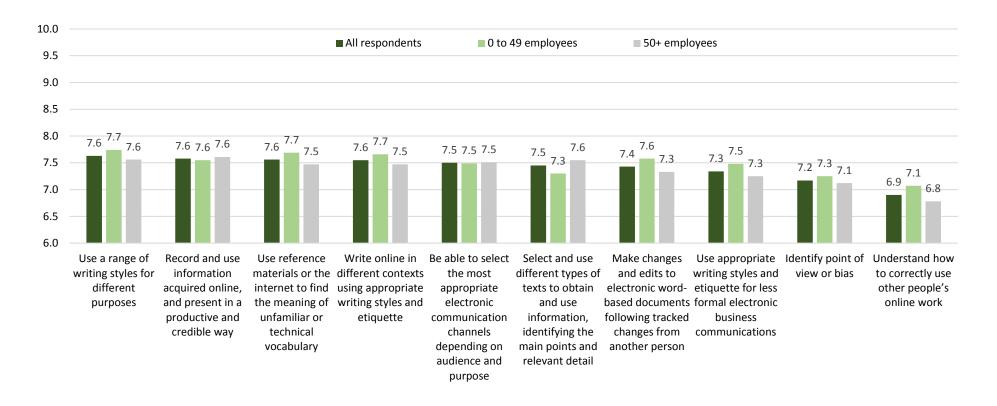
Base range: 166-173 respondents

Prepared by Pye Tait Consulting Page 14 of 25



Base range: 166-171 respondents

Functional Skills Reform – Employer Consultation Analysis



Base range: 167-171 respondents

Functional Skills Reform – Employer Consultation Analysis

When asked what English skills are particularly important, the basics of what is known as the "SPAG" group were frequently mentioned, i.e. spelling, punctuation and grammar together with good communication skills – especially oral ones via telephone and in customer facing environments.

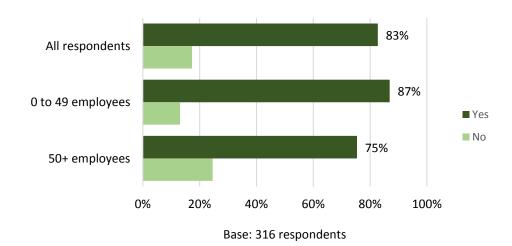
- Grammar
- Writing
- Spelling
- Punctuation
- Summarising (different documents, complex information)
- Communicate (written, oral, clearly, sophisticated)
- Business vocabulary
- Hand-writing skills
- Telephone skills

Underpinning many of the responses was a similar point to that made for maths – that employees lack confidence in speaking as much as writing and reading.

"They need more practice with usual business writing and tailoring it to the recipient. Back to basics. Spelling and grammar are issues. There is too much reliance on spell checking and computers – usually ending up with American spelling."

The majority of employers (83% - the same percentage as with maths) report that new recruits generally have adequate English skills (Figure 8).

Figure 8 Do new recruits have adequate English skills?



A similar majority of 85% consider new recruits to have sufficient ability in problem solving (Figure 9).

Prepared by Pye Tait Consulting

Page **17** of

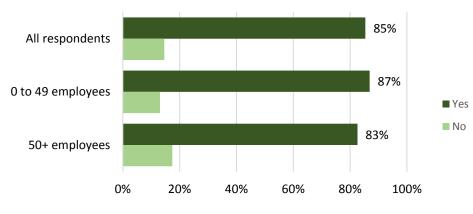


Figure 9 Do new recruits have sufficient problem solving skills?

Base: 317 respondents

Employers tended to point not only to specific types of work-based problem but to wider issues and potential issues such as individual aptitude and confidence.

The vast majority (89%) feel that new recruits are able to apply English skills to workday problems (Figure 10).

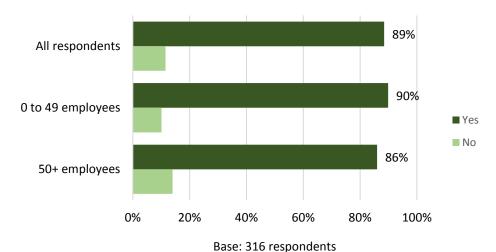


Figure 10 Are new recruits able to apply English skills to workday problems?

"They have to be understood and have to be able to translate their skills across the language barrier from 'mechanics and fitter' language to more professional language. Very few can do this adequately."

New Recruits and existing junior staff:

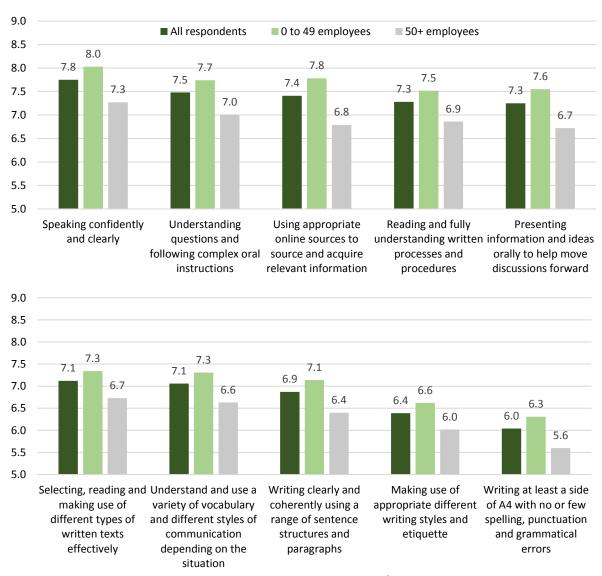
Respondents were asked to rate new recruits and existing junior staff across a range of English skills, on a scale from 1 'totally incapable' to 10 'extremely proficient' (Figure 11). As with maths, the

ratings of specific skills suggest that potential skills gaps among larger organisations could be more prevalent.

The three lowest rated skills include:

- Writing at least a side of A4 with no or few spelling, punctuation and grammatical errors (6.0);
- Making use of appropriate different writing styles and etiquette (6.4); and
- Writing clearly and coherently using a range of sentence structures and paragraphs (6.9).

Figure 11 English skills – capability of existing staff

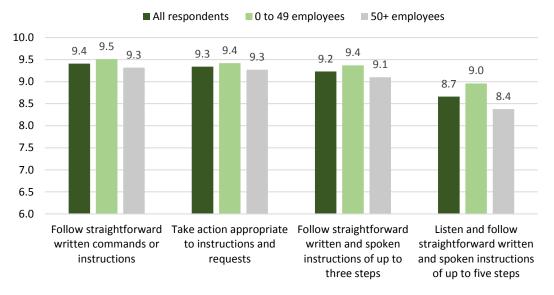


Base range: 284-312 respondents

The consultation also asked employers to rate a number of factors relating to new recruits' ability to understand and carry out instructions. These were also measured on a scale from 1 'not required' to 10 'essential' and are shown in Figure 12. The results suggest that all of these skills are very important particularly:

- Following straightforward written commands or instructions (9.4); and
- Taking action appropriate to instructions and requests (9.3).

Figure 12 New recruits' ability to understanding and carry out instructions



Base range: 177-180 respondents

"School leavers are generally unable to break down a problem into steps, as they do not seem to be taught this at school. General vocabulary seems to be diminishing over the years."

"New employees do not always have the resilience or fortitude to check their work is free from error. or understanding that things don't make sense."

The vast majority of employers (89%) are of the view that new recruits have sufficient skills in being able to navigate and access written online material (Figure 13).

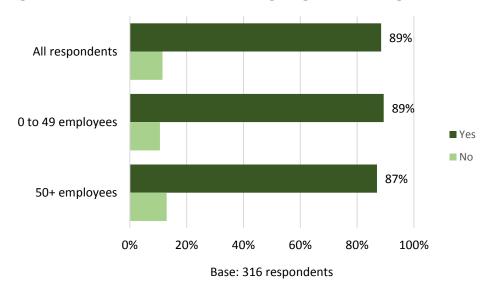


Figure 13 Are new recruits skilled in navigating and accessing written online material?

5. Awareness of Functional Skills Qualifications

Half of the surveyed employers (50%) had heard of Functional Skills qualifications prior to responding to the consultation, with the results indicating that larger employers are more likely to be familiar than those with fewer than 50 staff (Figure 14).

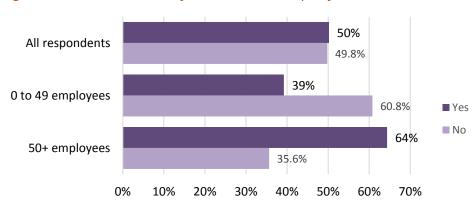


Figure 14 Prior awareness of Functional Skills qualifications?

Base: 465 respondents

Among organisations that had heard of Functional Skills, just under three quarters (73%) had previously offered these qualifications to their workforce, again more so among larger employers than smaller businesses (Figure 15).

All respondents

27.2%

0 to 49 employees

50+ employees

0% 10% 20% 30% 40% 50% 60% 70% 80% 90%

Figure 15 Functional Skills previously offered to the workforce?

Base: 117 respondents

6. Views on Content for Maths and English Functional Skills

On the question of the types of content that should be included in maths and English Functional Skills qualifications to make them more valuable to employers respondents mentioned a wide range of topics.

A single quote sums up the views of most employers as to content. In one form or another the objective was stated by many employers ...

'employees must be able to do the basics ... better'

Respondents were of the view it is important for employees to have a good grasp of basic skills in the two subjects with a much better understanding of the business environment and workplace context.

For the most part respondents reiterated the priorities listed in responses to other questions:

- Understanding the workplace;
- Better reading, writing, spelling;
- Better maths;
- Better communication (more accurate, precise); and
- Better vocabulary.

"Functional skills is of far more use than GCSE for lower ability students. Qualifications are clearly important but actually being useful to an employer for these people is far more important."

"We would like to see more young people joining us with strong practical maths skills but particularly analysis and decision making. Being able to collate information and data and make sound decisions/recommendations is key."

7. Workforce and Respondent Profile

Based on 83 respondents choosing to provide this information, approximately 5% of total staff are migrant workers. This is noticeably higher among larger organisations, reaching 10% (Figure 16).

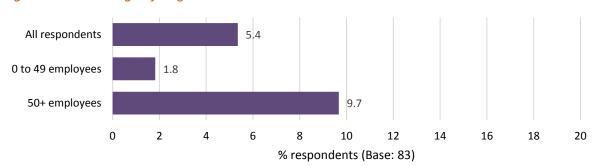


Figure 16 Percentage of migrant workers

Based on 92 respondents, approximately 10% of total staff have English as a second language, rising to 16 among larger organisations (Figure 17).

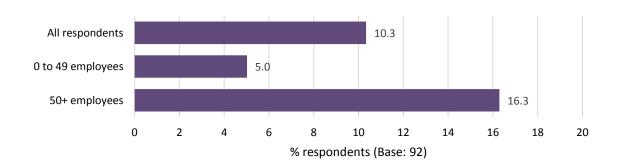
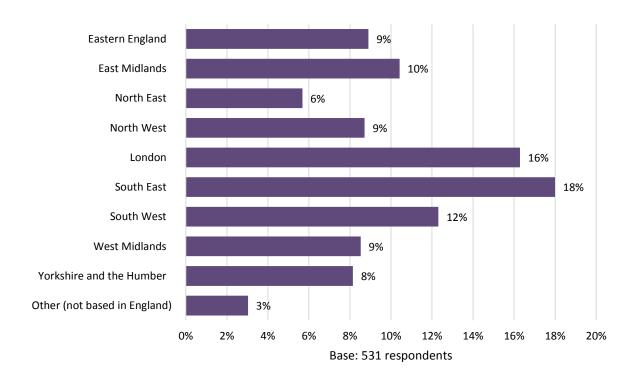


Figure 17 Percentage of workers with English as a second language

Figures 18 to 20 show the profile of consultation respondents by region, size band and industry sector, respectively (Figure 18).

The consultation captured views of employers based across all Government regions of England, as well as a small number responding from outside England (Figure 18).

Figure 18 Respondents by region



Most employers (55%) responding to the consultation represented micro or small businesses (0-49 employees) (Figure 19).

Figure 19 Respondents by size band (total employees)

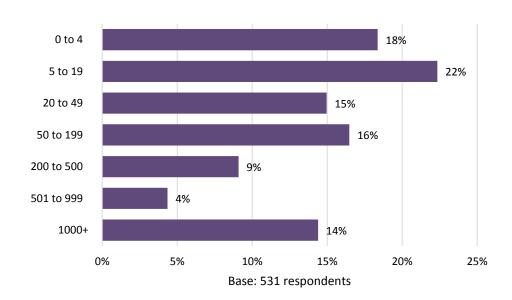


Figure 20 illustrates the breakdown of respondents by sector, with most engaged in health and social care (16%) followed by education (15%).

Figure 20 Respondents by industry sector

