

2011 Review of Functional Skills Standards in Mathematics

Summary findings report



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Executive summary

In 2011, we reviewed the specifications for 39 functional skills mathematics qualifications across five levels (Entry 1, Entry 2, Entry 3, Level 1 and Level 2) and ten awarding organisations which were accredited in September 2010 and had assessments taking place between September 2010 and March 2011.

The review compared subject specifications, assessment materials and learner work from the ten awarding organisations awarding these qualifications (AQA; Ascentis; City & Guilds; EAL¹; Edexcel; EDI; NCFE; NOCN; OCR and WJEC) by collecting the views of a number of subject specialists.

We aimed to judge whether the qualifications met the requirements of the functional skills criteria² relevant at the time of the review. These criteria have since been reviewed in line with the *General Conditions of Recognition* (Ofqual, 2011) and have been revised and reissued and are available on our website³.

This report provides a summary of findings from our review and of the actions awarding organisations are carrying out, or have already completed, to improve the qualifications.

The review found that all qualifications generally met the criteria. However, we did find some non-compliance that could impact on the standard of the qualifications. These fell into similar topic areas, including the language being too difficult for the level being assessed; questions and tasks written in a way that makes information and expectations unclear; errors in question papers and mark schemes; and unclear guidance.

At the review of learner work at all levels, we found that the standard of the learner work fell within the expected range of achievement. The exception to this was AQA at Level 1, and to a lesser extent at Level 2, where the level of difficulty⁴ was found to

¹ EAL is working in partnership with IMI Awards, ITEC and Skillsfirst and is representing all of them for this project.

² Criteria include the *Functional Skills Qualifications Criteria* (Ofqual, 2009), *Functional Skills Criteria for Mathematics* (Ofqual, 2009) and *Controlled assessment regulations for Functional Skills* (Ofqual, 2009).

³ www.ofqual.gov.uk/qualifications-assessments/89-articles/238-functional-skills-criteria

⁴ 'Level of difficulty' is defined in the *Functional Skills Qualifications Criteria* as interacting factors of complexity, technical demand, familiarity and independence (Ofqual, 2009, p.2).

be too high. AQA has already identified and taken steps to correct this issue in their papers.

We provided awarding organisations with their individual findings in November 2011. They have all provided action plans on how they intend to rectify these non-compliances. In some cases they have provided evidence that actions have already been completed. We continue to monitor those actions that are still to be completed.

Introduction

We are the regulator of qualifications, examinations and assessments in England, and of vocational qualifications in Northern Ireland. Our work ensures that children, young people and adult learners get the results their work deserves, that standards are maintained and that the qualifications learners receive are correctly valued, both now and in the future.

Awarding organisations that offer functional skills operate within a regulatory framework, which is set out in the *General Conditions of Recognition* (Ofqual, 2011) and in the *Criteria for Functional Skills Qualifications* (Ofqual, 2012), *Functional Skills Criteria for Mathematics* (Ofqual, 2011) and *Controlled Assessment Regulations for Functional Skills* (Ofqual, 2011). We carry out a programme of monitoring activities to assess the performance of awarding organisations against these regulatory requirements.

What we aimed to do

The review of functional skills mathematics qualifications aimed to:

- judge whether the relevant qualification criteria and controlled assessment regulations for functional skills had been met by the assessments offered by awarding organisations
- judge the effectiveness of awarding organisation procedures designed to ensure consistency of practice and comparability of standards
- judge the fairness and effectiveness of the assessments in measuring achievement by learners in respect of the skill standards specified in the criteria
- identify any aspects of the qualifications that appear to have constrained fair, effective and reliable assessment.

What are functional skills?

Functional skills assess practical skills that allow people to use English, mathematics, and information and communication technology (ICT) in real-life contexts. In developing functional skills, people can adapt and apply the knowledge to suit different situations they may face at home, at work, in education, and in the community.

The qualifications at Level 1 and Level 2 form part of apprenticeship frameworks and can also be taken in schools and in colleges of further education. They are available at five levels; three entry levels as well as Level 1 and Level 2. Entry-level qualifications are designed to facilitate learning in practical situations which motivate learners and are relevant to adult life.

Achievement at:

- Entry 1 recognises progress along a continuum that ranges from the most elementary of achievements to beginning to make sure of skills, knowledge or understanding that relate to the immediate environment
- Entry 2 reflects the ability to make use of skills, knowledge and understanding to carry out simple, familiar tasks and activities with guidance
- Entry 3 reflects the ability to make use of skills, knowledge and understanding to carry out structure tasks and activities in familiar contexts, with appropriate guidance where needed
- Level 1 reflects the ability to use relevant knowledge, skills and procedures to complete routine tasks; it includes responsibility for completing tasks and procedures subject to direction or guidance
- Level 2 reflects the ability to select and use relevant knowledge, ideas, skills and procedures to complete well-defined tasks and address straightforward problems. It includes taking responsibility for completing tasks and procedures and exercising autonomy and judgement subject to overall direction or guidance.

Each qualification is separate and assessed independently. Functional skills subject criteria for English, mathematics and ICT specify what is expected for each qualification at each level in the:

- skills standards – the knowledge, skills and understanding learners are expected to gain in this qualification
- coverage and range – the content/subject to be assessed
- process skills – how learners demonstrate their knowledge.

The qualifications must also be consistent with the National Curriculum Mathematics and Adult Numeracy standards.

In assessments, other than those relating to functional skills English, the language used must be accessible to learners operating at least a level below the primary focus of the assessment content. This means, for example, that the language used in a Level 1 paper should be accessible to learners at Entry 3.

The 'level of difficulty' for functional skills assessment is defined in the *Functional Skills Qualifications Criteria* (Ofqual, 2009, p.2) as these interacting factors:

- the complexity of tasks/problems and the contexts within which they are embedded
- the technical demand of the content that might be applied in these contexts
- a learner's level of familiarity with the type of task/problem and context
- the level of independence required of the learner.

The mathematics qualifications assess three interrelated process skills:

- representing – selecting the mathematics and information to model a situation
- analysing – processing and using mathematics
- interpreting – interpreting and communicating the results of the analysis.

Methodology

In this review we examined different specifications within a qualification, their associated assessment instruments and learner work by collating and analysing the views of a number of subject specialists. The following subsections detail the process of collecting and processing this information.

Provision of assessment materials and learner work

Each of the ten awarding organisations involved in the review was asked to provide their question papers, tasks, mark schemes, procedures, and any related materials for the specifications accredited by September 2010 and that would have assessments taking place between September 2010 and March 2011.


We reviewed specifications and learner work for the following organisations:

Awarding Organisation	Level				
	Entry 1	Entry 2	Entry 3	Level 1	Level 2
AQA	N/A	N/A	N/A	✓	✓
Ascentis	✓	✓	✓	✓	✓
City & Guilds	✓	✓	✓	✓	✓
EAL⁵	N/A	N/A	N/A	✓	✓

⁵ EAL is working in partnership with IMI Awards, ITEC and Skillsfirst and is representing all of them for this project

Awarding Organisation	Level				
	Entry 1	Entry 2	Entry 3	Level 1	Level 2
Edexcel	✓	✓	✓	✓	✓
EDI	N/A	N/A	✓	✓	✓
NCFE	N/A	N/A	N/A	✓	✓
NOCN	✓	✓	✓	✓	✓
OCR	✓	✓	✓	✓	✓
WJEC	✓	✓	✓	✓	✓
Total for independent analysis	6	6	7	10	10
Total for script review	3	5	6	9	9

Key

- N/A no accredited specification at the time of review
- ✓ specifications and assessment materials reviewed
-  learner work was not available for the review

The review team

The overall review process involved an independent analysis of awarding organisation question papers, tasks, procedures and mark schemes by our team of ten appointed reviewers including two representatives of the Joint Mathematical Council (JMC) and a script review of learners' work by a team of approximately 20 reviewers, consisting of those who carried out the analysis plus one representative per awarding organisation involved in the review.

Analysis of the specifications and assessment materials

Each reviewer was allocated a sub-set of assessment materials across different levels and awarding organisations and was asked to give detailed comments on how effectively the assessment had met the requirements of:

- *Functional Skills Qualifications Criteria* (Ofqual, 2009)
- *Functional Skills Criteria for Mathematics* (Ofqual, 2009)
- *Controlled Assessment Regulations for Functional Skills* (Ofqual, 2009).

The allocation of assessment materials was designed to ensure that five reviewers considered a set of assessment material in detail for each level that an awarding organisation offered at the time the review began. In addition, each reviewer considered in detail a set of assessment materials for one particular level for all awarding organisations that offered that level (for example there were six awarding organisations offering Entry 1).

Analysis of learner performance

A script review exercise was carried out by subject reviewers previously involved in the question paper and mark scheme analysis plus a representative from each awarding organisation involved in the review. Reviewers were briefed beforehand to ensure the expectations of everyone involved in the script review were clear and that everyone understood the process that was being followed.

Scripts were organised into 20 packs for consideration during the exercise. Each pack contained one script from each awarding organisation able to provide work at that level. The number of scripts in each pack was between three and nine depending on the level of qualification.

The script review exercise required reviewers to place each of the scripts in the pack into a rank order (highest achievement first) according to the relative levels of achievement in terms of the skill standards⁶, noting any supporting comments, before using their best judgement to identify where they consider the pass/fail boundary should fall in relation to the rank ordered scripts in that particular pack.

Given the enormous number of possible script combinations available, efforts were made to provide reviewers with balanced packs, wherever possible avoiding repetition of script combinations. The packs were designed to present the reviewers with 20 unique combinations of learner materials (each script would appear in at least two packs), ensuring a wide range of comparisons across the available materials.

Data analysis

We used a software package called FACETS to analyse the results from the datasheets produced during the script review. FACETS uses a Rasch model (often classified under item response theory) to convert the qualitative ranking decisions made by reviewers into a single list that reflects the probable overall order of the sets of candidate work, from best to worst.

We used this list, alongside the qualitative comments made during the candidate work review process and findings from the specification review, to inform the section on 'What we found' in this report.

Details of the full review methodology are in Appendix A.

⁶ Skill standards for each level are in the *Functional Skills Criteria for Mathematics* (Ofqual, 2009).

What we found

Overall

Overall we found that awarding organisations generally met the requirements of the criteria, including the assessment of the skill standards, coverage and range and process skills. There were, however, similar issues coming through in all levels of the qualification. For example, some questions were written in such a way that they would confuse learners and some guidance was unclear, which is likely to lead to inconsistencies in how learners are assessed. Entry 1 and 2 were the most comparable between awarding organisations and we found the most non-compliance at Level 2.

Controlled assessment for entry level

We found that nearly all awarding organisations had processes in place to ensure that the *Controlled assessment regulations for functional skills* (Ofqual, 2009) were followed appropriately. At entry level centres can devise their own tasks and contexts within the guidance provided by awarding organisations.

In two cases it was unclear from the information provided how internal verifiers and assessors could make sure that the mark scheme was applied consistently. In both cases the awarding organisations have acknowledged our concerns and have informed us that they have already taken action to improve their processes for the training and standardisation of markers and verifiers.

Entry 1

Review of specification and assessment materials

At Entry 1 we reviewed materials for six awarding organisations. Generally we found the papers to be at the right level of difficulty, tasks were clear, straightforward and accessible to learners and the mark schemes were well structured.

However, in some the cases we found some questions and tasks were inaccurate, were either too challenging or not challenging enough, or written in a way which would confuse some learners. Some of the guidance for assessors and some mark schemes were unclear, which is likely to lead to inconsistent and inaccurate marking.

All awarding organisations have acknowledged our concerns and are taking, or have already taken, action to put right the issues we identified in their materials and papers. Some of the actions identified are to amend their guidance and mark schemes to improve the consistency of assessing and marking, and to improve how they write their papers to improve accuracy and clarity.

Review of learner work

During the script review all of the marked scripts from 19 learners across three awarding organisations were reviewed and ranked in order of level of achievement against the Entry 1 skills standards.

The ranked scripts fell within the expected range of achievement in line with the marks learners were awarded. Reviewers indicated they were confident that the learners with a passing mark had demonstrated what was needed by the Entry 1 criteria.

Entry 2

Review of specification and assessment materials

At Entry 2 we reviewed the materials for six awarding organisations. Generally we found the papers to be at the right level of difficulty with clear and appropriate contexts, good assessment materials and mark schemes.

However, in some cases we found that the design of the papers and the language used in some questions was too difficult for Entry 2 learners and was likely to confuse them; some of the guidance to assessors was unclear; and some papers did not fully assess the requirement for learners to check their work.

All awarding organisations have acknowledged our concerns and are taking, or have already taken, action to put right the issues we identified in their materials and papers. Some of the actions identified are to amend how they design and write their papers to improve accuracy, challenge and clarity; improved guidance to assessors; the use of literacy experts to check the clarity of language and that it is at the right level; and providing additional training to their subject experts on question-writing techniques.

Review of learner work

During the script review all of the marked scripts from 28 learners across five awarding organisations were reviewed and ranked in order of level of achievement against the Entry 2 skill standards.

The ranked scripts fell within the expected range of achievement in line with the marks learners were awarded. Reviewers indicated they were confident that the learners with a passing mark had demonstrated what was needed by the Entry 2 criteria.

Entry 3

Review of specification and assessment materials

At Entry 3 we reviewed the materials for seven awarding organisations. Generally we found the papers to be clear and comprehensive with familiar contexts.

However this was the level where we found that most of the awarding organisations had included content in their papers that was required in another level, making papers more demanding. We also found that the language and presentation was not always clear or straightforward; questions and tasks were ambiguous and inaccurate; some papers did not allow learners to demonstrate their interpreting skills; and some mark schemes were unclear and allocated marks in an inconsistent way across similar questions, which is likely to lead to inconsistent marking.

All awarding organisations have acknowledged our concerns and are taking, or have already taken, action to put right the issues we identified in their materials and papers. Some of the actions identified include improvements to how awarding organisations write questions and the language used to ensure the level of difficulty is appropriate; amendments to processes to improve the accuracy and clarity of questions and papers; and improved guidance to assessors.

Review of learner work

During the script review all of the marked scripts from 45 learners across five awarding organisations were reviewed and ranked in order of level of achievements against the Entry 3 skill standards.

The ranked scripts fell within the expected range of achievement in line with the marks learners were awarded. Reviewers indicated they were confident that the learners with a passing mark had demonstrated what was needed by the Entry 3 criteria.

Level 1

Review of specification and assessment materials

At Level 1 we reviewed the materials for ten awarding organisations. Generally we found the papers to be well structured, using familiar contexts and comprehensive mark schemes.

However in some cases we found that the content used and the way some of the questions were written could increase the level of difficulty, which means that learners would struggle to finish all of the tasks. There were also occurrences of inconsistent and unclear language, and inaccurate and ambiguous tasks, which are likely to confuse learners; some mark schemes did not provide enough detail for markers to ensure consistent marking; some papers did not fully assess the requirement for learners to check work or the interpreting requirement.

All awarding organisations have acknowledged our concerns and are taking, or have already taken, action to put right the issues we identified in their materials and papers. Some of the actions being carried out include additional training and improvements on how questions are written and the language used to improve the accuracy and clarity of papers and mark schemes; the requirement to check work is being included; and more checks are taking place to ensure that the content of the questions are at the level required by the criteria.

Review of learner work

During the script review all of the marked scripts from 75 learners across nine awarding organisations were reviewed and ranked in order of achievement against the Level 1 skill standards.

With the exception of AQA, the ranked scripts fell within the expected range of achievement in line with the marks learners were awarded. Reviewers indicated they were confident that the learners with a passing mark had demonstrated what was needed by the Level 1 criteria.

For AQA, the level of difficulty was found to be too high, which resulted in AQA awarding a very low mark pass mark. AQA had identified issues quickly with their early papers and have already taken action to correct these; our script review supports AQA's early findings.

Level 2

Review of specification and assessment materials

At Level 2 we reviewed the materials for ten awarding organisations. Generally we found the papers to be well structured with comprehensive mark schemes ensuring consistency of marking.

However, in some cases, we found that the way some of the questions were written could increase the level of difficulty, which means that learners would struggle to finish all of the tasks; in some papers the language used was inconsistent and unclear; inaccurate and ambiguous tasks were likely to confuse learners; some mark schemes were inaccurate and did not provide enough detail for markers to ensure consistent marking; and some papers did not fully assess the requirement for learners to check work.

All awarding organisations have acknowledged our concerns and are taking, or have already taken, action to put right the issues we identified in their materials and papers. Some of the actions being carried out include how questions are written and the language used to improve the accuracy and clarity of papers and mark schemes; the requirement to check work is being included; and more checks are taking place to ensure that the papers are at an appropriate level.

Review of learner work

During the script review all of the marked scripts from 78 learners across nine awarding organisations were reviewed and ranked in order of achievement against the Level 2 skill standards.

With the exception of AQA, although not as marked as Level 1, the ranked scripts fell within the expected range of achievement in line with the marks learners were awarded. Reviewers indicated they were confident that the learners with a passing mark had demonstrated what was needed by the Level 2 criteria.

For AQA, the level of difficulty was found to be too high, which resulted in AQA awarding a low pass mark. AQA had identified issues quickly with their early papers and have already taken action to correct these; our script review supports AQA's early findings.

Appendix A: Methodology

Analysis of the assessment instrument

Question paper and mark scheme analysis

The reviewers reported their findings using a template provided by us. The template structured reviewers' activities and findings to consider the following features of the assessments:

- match with the skill standards/process skills
- level differentiation
- quality of the question paper/internal assessment
- focus of the mark scheme.

Match with the skill standards/process skills

Reviewers were asked to consider which parts of the particular skill standards, within the *Functional Skills Criteria for Mathematics* (Ofqual, 2009), were tested at that level by the assessments. Once these had been identified reviewers scored the assessment overall against each part of the skill standard.

Level differentiation

Reviewers were then asked to consider how the activities, tasks or questions relate to the level differentiation factors at that level as detailed within the *Functional Skills Qualifications Criteria* (Ofqual, 2009) and the *Functional Skills Criteria for Mathematics* (Ofqual, 2009).

Each question, or for more complex activities and tasks each part of the question, as well as the whole assessment, were scored for complexity, unfamiliarity⁷, technical demand and independence.

Reviewers were also asked to provide a short explanation of the ratings they gave and to comment on any aspects of the assessment which were in need of improvement in relation to the level differentiation. Particular attention was given to considering whether the overall level of demand, as identified in the level differentiation, was appropriate for an assessment at this level.

⁷ While the skill standards refer to 'familiarity', the term 'unfamiliarity' has been used in preference to allow the rating scales to go the same way.

Quality of the question paper/internal assessment

Reviewers considered the overall construction and presentation of the assessment materials and how individual questions and tasks operate, and the pass mark, to ensure that the assessment materials let learners demonstrate their functional skills at the correct level.

Focus of the mark scheme

Reviewers looked at the effectiveness of the mark scheme in allowing markers to consistently and correctly recognise and reward learners' when they demonstrate their functional skills at the correct level. This included the impact of structure and presentation, as well as the level of explanation and exemplification provided.

Assessment of learner performance

A script review exercise was carried out by subject reviewers previously involved in the question paper and mark scheme analysis plus a representative from each awarding organisation involved in the review.

Reviewers were briefed beforehand to ensure the expectations of everyone involved in the script review were clear and that everyone understood the process that was being followed.

Script review

For the review, scripts were provided by awarding organisations from assessments which had been taken between September 2010 and March 2011 for each level offered during this period.

Each awarding organisation was asked to provide learner work at the pass mark. Where work was not available at the pass mark, work was provided just above and below the pass mark to ensure a good range of scripts were available for the review. Some awarding organisations were unable to provide work at some levels due to their low entry numbers.

These scripts were organised into 20 packs for consideration during the exercise. Each pack contained one script from each awarding organisation able to provide work at that level. The number of scripts in each pack was between three and nine depending on the level of qualification.

The script review exercise required reviewers to place each of the scripts in the pack into a rank order (highest achievement first) according to the relative levels of achievement in terms of the skill standards⁸, noting any supporting comments, before

⁸ Skill standards for each level are in the *Functional Skills Criteria for Mathematics* (Ofqual, 2009)

using their best judgement to identify where they consider the pass/fail boundary should fall in relation to the rank ordered scripts in that particular pack.

Given the enormous number of possible script combinations available, efforts were made to provide reviewers with balanced packs, wherever possible avoiding repetition of script combinations. The packs were designed to present the reviewers with 20 unique combinations of learner materials (each script would appear in at least two packs), ensuring a wide range of comparisons across the available materials.

Statistical analysis

We converted the reviewers' ranking lists for the packs they examined into an overall rank order at each level.

The first step of this process required the ranking list to be converted into a series of pair-wise comparisons. These were then input into a programme called FACETS which uses a Rasch analysis of the pairs to calculate the position of each script in an overall rank order.

In addition the position of the individual scripts relative to the pass/fail boundary on each individual ranking list was collated to summarise the reviewers' judgements about individual scripts. This identified overall those scripts that appeared to meet or exceed the standard required to achieve the qualification, those which appeared to be close to the pass/fail boundary, and those that appeared to fall below the standard required to achieve the qualification.

Combining the overall rank order produced by the Rasch analysis with the individual script classifications identified above gave a location for the reviewers' boundary region on the overall rank order for each subject at each level.

It has been possible to identify how certain features of the question papers and mark schemes have been reflected in the learner performance and the outcomes of the script review, and also to identify in a general sense which awarding organisations are recognising learners demonstrating functional skills at the appropriate levels of achievement.

It was at this interpretation stage that the judgements on learner achievement were tempered by the knowledge of the assessment materials gained during the analysis of question papers and mark schemes.

For example, a piece of work might appear to demonstrate the skills required, but this would be incorrect if it was produced in response to a very structured assessment with too few opportunities for learners to actually use and apply their functional skills at the appropriate level.

An individual report was prepared for each awarding organisation, detailing the outcome of the script reviews for all levels, taking into consideration the judgements made about the assessment materials.

Limitations of the review

Materials supplied

There are several limitations arising from any analysis of assessment materials and review of learner work. The exercise is always limited in scope and greatly dependent on the materials supplied.

In order to manage the impact of these limitations, we closely defined the assessment materials and the type of learner work required, so as to limit and manage potential variables which might reduce the validity and reliability of the statistical analysis.

Provision of assessment materials

For this exercise we specifically asked awarding organisations offering functional skills in mathematics to provide the following assessment materials from the period September 2010 to March 2011 for inclusion in the review:

- a copy of assessment instruments (past papers) used in that time period, together with all supporting information provided to learners either before or at the assessment
- a copy of all supporting information normally provided to centres concerning the administration of the assessments
- a copy of the final/agreed mark scheme for each assessment instrument together with any supporting guidance provided to markers, assessors, verifiers and/or moderators.

Additional guidance was also given concerning the provision of live and sample assessment materials as not all awarding organisations were able to provide past papers for the independent analysis.

Selection of learner work

For each award, at each level, we asked each awarding organisation to provide ten pieces of work at the pass mark boundary.

Not all awarding organisations were able to meet this request, as the selection of learner work available was often limited by the number of entries and the range of achievement over the time period specified.

Personnel employed

This type of review relies heavily upon the judgements made by the reviewers, but instructions can be misinterpreted and human judgements are fallible.

In an effort to manage the inherent unreliability of any process reliant upon human intervention, we took the following steps.

For the analysis of assessment instruments we:

- employed several experienced reviewers
- provided thorough briefings to ensure common understanding of the methodology and the judgement criteria
- constructed documentation to confirm criteria and support clear decision-making
- arranged a plenary to ensure a consensus of findings for each level and awarding organisation.

For the script review we:

- provided thorough briefings to ensure common understanding of the methodology and the judgement criteria
- constructed documentation to confirm criteria and support clear decision-making
- presented scripts in a wide variety from the possible range of combinations
- included the pass/fail boundary as an additional judgement from reviewers
- used the outcomes of the script review to identify the impact of the assessment features on the learners.

Documentation was designed at each stage to be clear, concise and unambiguous, supporting the reviewers' focus on the specific task at hand and ensuring relevant and complete information could be captured in a straightforward manner.

Further, at each stage efforts were made to maximise the number of reviewers providing decisions, increasing the probable accuracy of the analysis and therefore the overall findings.

Statistical limitations

Statistical analysis of the outcomes from the analysis of assessment instruments was limited by the nature of the information produced. There was scope for a

straightforward collation of the scores awarded by reviewers for testing against the skill standards and compliance with the level differentiation, but no further statistical process was applied to the primarily qualitative data.

In contrast, the script-ranking exercise generated considerable amounts of data. The smallest data set (Entry Level 1) contained 438 decisions by 18 reviewers expressed as pairs and subjected to the Rasch analysis. The largest data set (Level 1) contained 9,056 decisions by 21 reviewers expressed as pairs and subjected to the Rasch analysis.

The FACETS application used to perform the analysis includes a series of measures designed to test and quantify variability in the quality of data provided. For example, the FACETS output includes a measure on the consistency or dependability of reviewer judgements, both by individual reviewer and between all the reviewers. In each instance when the FACETS application was utilised, all of these measures were well within the acceptable tolerances.

We were able to draw useful conclusions about individual awarding organisations from this information, particularly when the interpretation of FACETS outputs was combined with the findings about the assessment materials.

Appendix B: Schemes of assessment

All functional skills mathematics qualifications have 45 hours of guided learning.

Qualification title	Qualification number
AQA Functional Skills Qualification in Mathematics at Level 1	500/8703/4
AQA Functional Skills Qualification in Mathematics at Level 2	500/8702/2
Ascentis Functional Skills Qualification in Mathematics at Entry 1	501/1432/3
Ascentis Functional Skills Qualification in Mathematics at Entry 2	501/2380/4
Ascentis Entry Level Award in Functional Skills for Mathematics (Entry 3)	600/0121/5
Ascentis Functional Skills Qualification in Mathematics at Level 1	501/1672/1
Ascentis Level 2 Award in Functional Skills Mathematics	600/0122/7
City & Guilds Functional Skills Qualification in Mathematics at Entry 1	501/0637/5
City & Guilds Functional Skills Qualification in Mathematics at Entry 2	501/1821/3
City & Guilds Functional Skills Qualification in Mathematics at Entry 3	501/1820/1
City & Guilds Functional Skills Qualification in Mathematics at level 1	501/0986/8
City & Guilds Level 2 Award in Functional Skills Mathematics	501/0987/X
EAL Functional Skills Qualification in Mathematics at level 1	501/1187/5
EAL Functional Skills Qualification in Mathematics at level 2	501/1139/5
Edexcel Functional Skills Qualification in Mathematics at Entry 1	500/9172/4
Edexcel Functional Skills Qualification in Mathematics at Entry 2	500/9196/7
Edexcel Functional Skills Qualification in Mathematics at Entry 3	500/9295/9
Edexcel Functional Skills Qualification in Mathematics at Level 1	500/8906/7
Edexcel Functional Skills Qualification in Mathematics at Level 2	500/8907/9
EDI Functional Skills Qualification in Mathematics at Entry Level 3	501/1944/8

Qualification title	Qualification number
EDI Functional Skills Qualification in Mathematics at level 1	501/1522/4
EDI Functional Skills Qualification in Mathematics at Level 2	501/0956/X
NCFE Functional Skills Qualification in Mathematics at Level 1	501/2325/7
NCFE Functional Skills Qualification in Mathematics at Level 2	501/2324/5
NOCN Functional Skills Qualification in Mathematics at Entry 1	500/8466/5
NOCN Functional Skills Qualification in Mathematics at Entry 2	500/9335/6
NOCN Functional Skills Qualification in Mathematics at Entry 3	501/0834/7
NOCN Functional Skills Qualification in Mathematics at Level 1	500/8501/3
NOCN Functional Skills Qualification in Mathematics at Level 2	501/1158/9
OCR Functional Skills Qualification in Mathematics at Entry 1	500/8496/3
OCR Functional Skills Qualification in Mathematics at Entry 2	500/8497/5
OCR Functional Skills Qualification in Mathematics at Entry 3	500/8498/7
OCR Functional Skills Qualification in Mathematics at level 1	500/8910/9
OCR Functional Skills Qualification in Mathematics at level 2	500/8908/0
WJEC Functional Skills Qualification in Mathematics at Entry 1	500/8903/1
WJEC Functional Skills Qualification in Mathematics at Entry 2	500/8904/3
WJEC Functional Skills Qualification in Mathematics at Entry 3	500/8905/5
WJEC Functional Skills Qualification in Mathematics at Level 1	500/8492/6
WJEC Functional Skills Qualification in Mathematics at Level 2	500/8491/4

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