Analysis of Standardised Assessments

Individual questions are suggested for each section of information. The analysis of individual sections should be looked at in relation to, and in combination with analysis from other sections. There should also be cross-referencing to the data contained across sections.

Section A - Student listing

For stanine, percentile rank, group rank and raw score section

- Were these results as expected?
- Did this correlate to the wider range of evidence from on-going class work and assessment?
- What were the surprises of pupils exceeding expectation?
- Which pupils did not perform as would have been predicted?

Section A – Student Listing : Percentage Correct – curriculum content categories

- Did individual pupils have particular strengths / development needs in specific content areas?
- Did groups (working groups of pupils within classes) have particular strengths / development needs in specific content areas?
- How well do the groups perform in relation to the National '100' line?

CfE Mathematics Organisers – Number, Money and *Measure*; Shape, position and Movement; Information Handling.

The confidence band (margin of error in the test situation) is shown by the horizontal line. It indicates that you can be 90% sure the pupil score (vertical line) lies within these limit. The blue band indicates the confidence band for the average standardised score of (100).

*Pupils with the **same raw score will have a different standardised score** – this is related to pupil age at test.*

***Group rank** is based on Standardised score.*

***Ignore Maths level column** (England and Wales National Curriculum)*

***Before** drawing conclusions regarding category area look at the Number of marks (see below) awarded for curriculum content area.*

*** P4** – Shape, Space and measure (**10**); Number (**21**), Algebra (**2**), Data Analysis and Probability (**5**)*

***P7** - Shape, Space and measure (**15**); Number (**22**), Algebra (**3**), Data Analysis and Probability (**12**)*

Section B: Progress in Maths - Group and National Comparison

Comparison of Gender Category score and

Mean Standard Age Score Chart - gender

- Are there differences between gender?
- Were these differences predicted?
- How well do the groups perform in relation to the National '100' line?

Comparison of group and National Standard Age Score Distributions

- How does the school profile of attainment relate to the national line?
- Is there a gender imbalance within the stanines?
- Who are the pupils within the stanines? Is this as expected?
- How are our lowest (< 88%,stanines 1-3) and highest (>112%, stanines 7-9) performing pupils doing in relation to the national average?

Analysis by Process Area

Curriculum Categories

- How do pupils perform in relation to the national scores in the curriculum categories?
- From this information are there particular strengths / areas for development?

CfE Mathematics Organisers – Number, Money and Measure; Shape, position and Movement; Information Handling.

Standard deviation *indicates the spread of individual results. A larger value indicates that the individual test scores are farther from the mean value … The bigger the SD the greater the range. This is also shown visually on the chart in Section B "Mean Standard Age Score". The dot represents the mean and the bar ends show the extremes of the range of values.*

Depending on the number of pupils at a stage it is likely to be worth calculating the number of pupils in the stanines eg 45% of 11 females is 5 girls.

Again … Before *drawing conclusions regarding category area look at the Number of marks awarded for curriculum content area.*

P4 – Shape, Space and measure (10); Number (21), Algebra (2), Data Analysis and Probability (5)

P7 - Shape, Space and measure (15); Number (22), Algebra (3), Data Analysis and Probability (12)

Process Categories – Analysis by Process Area

How do pupils perform in relation to the national scores in the process categories?

- From this information are there particular strengths / areas for development?

- Do our school learning and teaching approaches reflect the four process categories?

Section C: Progress in Maths – Question by Question Analysis

Which questions did pupils perform well / less well in - relative to the national (look at national line in chart and group national difference data column in the table)?

What curriculum category area were these?

What process area were these?

The question by question chart gives a visual representation of how pupils performed in individual questions. This information is also contained in the tables.

The second table sorts this by the National percentage difference. The Group national difference indicates the difference between the stage and the UK national performance. This table may be easier to use for analysis purposes.

The first table that appears in this section is sorted by national percentage correct.

For P7 questions starting with an 'A' were those questions where a calculator was allowed.

So what ...

What are the reasons for the performance?

How close do the results reflect predicted results based on on-going classwork and assessment?

Have all pupils been exposed to learning in particular areas … therefore would you expect them to answer specific questions correctly?

How do the school results compare with Edinburgh results?

How do you ensuring pupils are set challenges using a variety of language and representations of maths concepts?

Are there issues which need addressed?

Are there general areas of weakness for a large group of pupils / individuals?

Are staff confident in teaching particular aspects?

What are we going to do with the information?

Shocks and surprise

Have some pupils exceeded expectation? … Should the pace / level of challenge in classwork for some pupils be increased?

Have some pupils performed less well than expected? What action is being taken to further investigate this? Is further support required?

Other …?