



caspa 2010

Comparison and Analysis of Special Pupil Attainment

Using CASPA to inform target setting

This document gives brief details of how CASPA's benchmark data can support target setting activities within schools and, in particular, how CASPA's feature to populate target fields with CASPA-generated expected outcome levels assists this process.

Introduction:

Target setting is rapidly becoming more sophisticated and schools now more commonly use multiple sources of information to support and guide target-setting activities. CASPA has been one of these sources for a number of years because CASPA's benchmarking provides a guideline for expected progress for a pupil.

Targets are expected to be 'aspirational' or 'challenging' to ensure pupils are provided with an environment that stimulates them to make the best progress possible. As a result, target setting now often uses multiple sources of information to arrive at appropriate targets for each pupil including:

- Teachers' knowledge of the pupil and their circumstances
- CASPA's benchmark expectations

CASPA's role in setting targets:

CASPA users are able to use CASPA's comparative data not only to compare the historical progress of pupils against the benchmark but also to understand what 'expected' progress would be for pupils based on the amount of progress that statistically would be expected for a pupil of the same age, category of need and level of prior attainment.

User have three options for adding targets into CASPA that will enable CASPA's analysis to assist with considering future progress:

- Manually enter targets
- Import targets from Excel spreadsheets or CSV files and from SIMS Assessment Manager 7, for SIMS users
- Use CASPA to generate expected outcome levels

This guidance note addresses the third option above. Other guidance notes describe the processes of manual entry or importing.

CASPA's feature for generating expected outcome levels for pupils aims to inform the target setting process by populating target fields with CASPA's expected level. This automates the manual activity that was achieved historically by adding the amount of progress expected to the previous year's assessment result arriving at an expected level. This level is then used to inform the decisions about what will be set as a target.

For clarity, CASPA does not 'set targets' for pupils – no IT system could do this in any reliable way as there are too many factors to take into account, many of which will be known to school staff but not captured in any IT system. However, CASPA's benchmark provides a valuable starting point to inform target-setting and by doing this, removes the element of guesswork about what might be 'expected' progress.

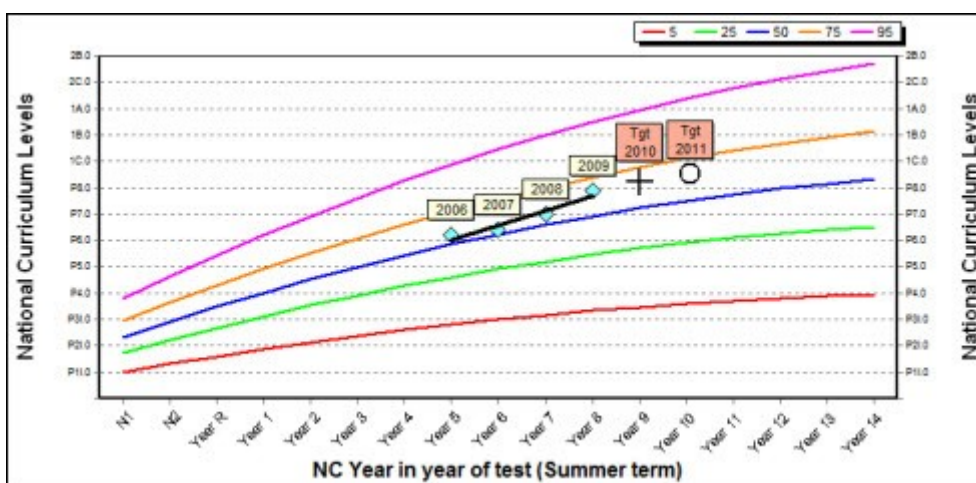
Users are optionally able to ask CASPA to calculate expected progress for every subject for each pupil and populate the relevant target fields in CASPA with this expected level for all pupils within the range of outcomes found for children of the same NC year and category of need in a subject. These are then reviewed, amended as appropriate for each pupil and verified to arrive at a set of targets that will be used to drive and monitor progress. Analysis is immediately able to be used to consider these expected outcome levels to inform target setting activities.

How does CASPA calculate these expected outcome levels?

When generating expected outcome levels, CASPA uses the last annual assessment result from the previous summer term as the starting point, or prior attainment. From this level, CASPA uses its benchmark data to identify what progress would be expected from this prior attainment. CASPA's expectation is that a pupil's progress will follow a percentile ranking. In other words, the prior attainment will place a pupil's assessment on a percentile ranking and CASPA will expect that the pupil will maintain that same ranking in later years.

Where target values already exist for the end of the current academic year, CASPA will calculate expected levels for the subsequent year from these target levels. This enables, where targets are set separately, expected levels for the 2nd year to be based on the percentiles associated with targets set for the end of the current year rather than the results for the previous year. Where expected levels are generated for both years at the same time, they will, both be based on the same percentile as the previous summer term result.

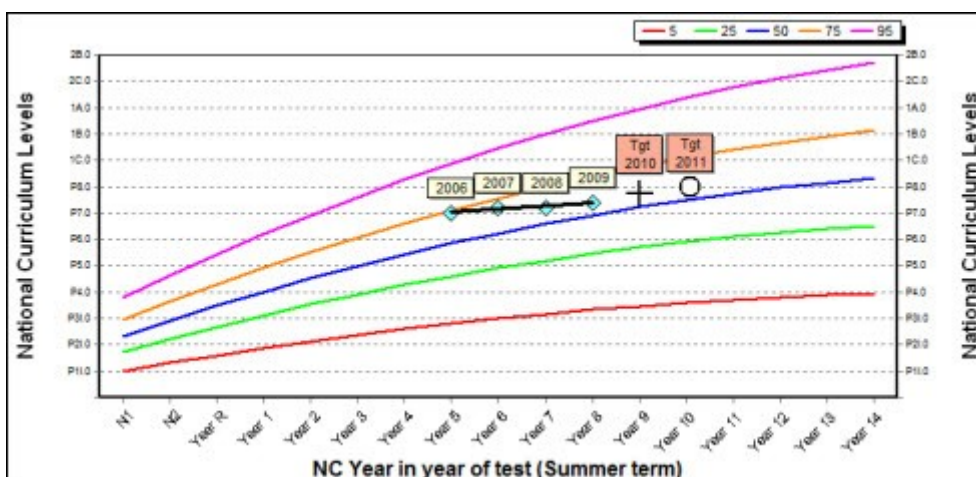
The following graph illustrates two years of expected outcome levels generated for a pupil based on their 2009 assessment result.



When we consider this pupil, we can see that her progress prior to 2009 has been, on the whole, above expected. We can also see visually that the target values (with tan coloured year markers), instead of following the same rate of progress seen in the previous year or years, follow an imaginary percentile line starting from the 2009 assessment. This is exactly how CASPA generates expected levels, based on the last end of year result. If the expected outcome levels followed the previous rate of progress, the targets would have been set considerably higher. CASPA does not assume that any previous rate of progress will be maintained, because there is no statistical evidence to justify this to be the case. The most reliable progress that can be predicted is expected progress from the most recent end of year result.

In the case of this pupil, it is quite likely that setting challenging targets would result in the values CASPA has suggested will be increased. However, this is based on a judgement that also takes into account the circumstances of the pupil. For example, if this pupil was known to be scheduled to be out of school for a term, even maintaining the percentile ranking may be challenging.

In the next graph, we can see a pupil who, historically, has made, on average, below expected progress for the results available.



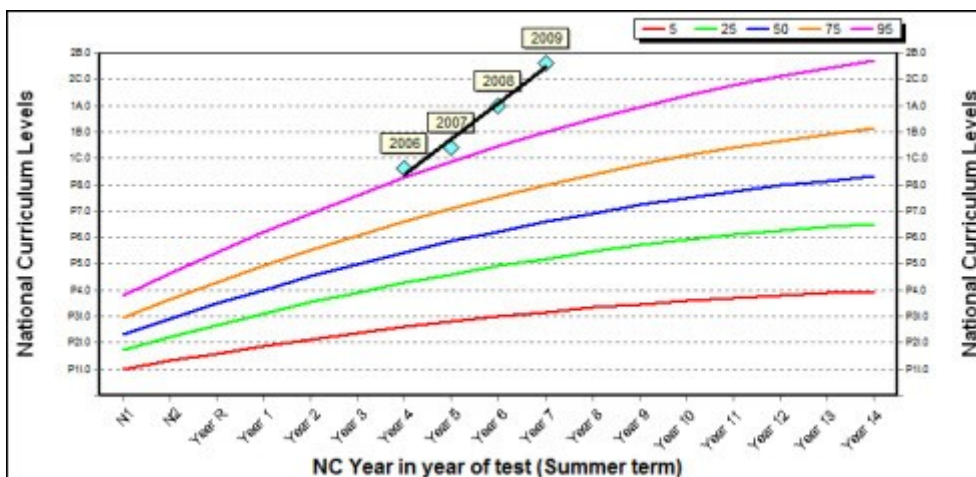
CASPA's expected outcome levels for this pupil would appear challenging if we take progress across all years into account yet if we take into account only progress from 2008 to 2009, the expected outcome levels would appear to result in approximately the same rate of progress made in that year.

The point of illustrating these two scenarios is to not only describe how CASPA arrives at the level expected in each of the years as target suggestions, but also to highlight that these suggestions immediately inform the essential debate that will result in targets being set that teaching staff can believe are appropriate and, crucially, justifiable. In addition, these also illustrate how CASPA's analysis can be used to consider visually targets in comparison to historical progress and CASPA's benchmark.

There are some circumstances where CASPA is unable to make a prediction for progress and where this is the case, target suggestions would not be made for those pupils, perhaps only for some subjects. There are three scenarios where this could be the case:

- There is no summer term assessment for the subject for a pupil
- Where a pupil is out of the range of expected outcomes
- Where a pupils' target year would take them beyond the benchmark data

For the first point, the following graph illustrates a pupil whose most recent assessment places him significantly above the highest percentile ranking for the category of need assigned. The implication of this is that the benchmark data, which is based on actual assessments submitted by schools using CASPA would suggest that an assessment so high would not be appropriate for the assigned category of need. As a result, CASPA would not be able to benchmark this pupil and a prediction is not possible. In reports, this pupil will be identified as 'Out of range' or OOR.



Generating expected outcome levels

The default settings for most schools ensure that the option to generate expected outcome levels is immediately available via menu options. It is therefore most likely that the **Data | Advanced tasks** menu will already include this option.

Enabling generation of expected outcome levels:

Should the option to generate expected outcome levels not be available via the **Data | Advanced tasks** menu option as mentioned above, it is possible to make them available by changing system configuration options. The ability to switch generation of expected outcome levels on and off is only available to users with the System Manager or Administrator roles; similarly, the ability to generate expected outcome levels is restricted to users with the System Manager or Administrator roles.

To make expected outcome levels enabled, select **Options | CASPA configuration options** and under 'Target data options', ensure 'Maintain and display targets for <year>' and 'Enable generation of expected outcome levels for <year>' are both checked for each year required. Once checked, the option under the Data menu will be available. Note that the ability to switch generation of expected outcome levels on and off is only available to users with System Manager or Administrator privileges.

Where a Local Authority or equivalent has advised that these options should not be available to schools in that authority/organisation, the options for 'Enable generation of expected outcome levels for <year>' will not be available.

Generating expected outcome levels:

Users with System Manager or Administrator privileges are able to access the menu option to generate expected outcome levels. This menu option is available under the **Data | Advanced tasks** menu.

On-screen prompts guide users to confirm that they understand the implications of generating expected outcome levels. In particular, that there are 3 stages to using CASPA's expected outcome levels:

1. Generate expected outcome levels reflecting the expected outcome levels for pupils with the same age, category of need and level of prior attainment: this is achieved by running the menu option **Data | Advanced tasks | Generate expected outcome levels**.
2. Review expected outcome levels and adjust them to reflect a degree of challenge appropriate to the pupil in each subject, based on professional judgement and knowledge of the pupil: reviewing of targets and entering of modified targets can be accomplished via the Main CASPA data entry screen; until targets have been verified as being correct, targets will appear on-screen and in selected reports in a red font.
3. Where your chosen target levels are the same as CASPA's expected levels, verify that these are the targets you wish to set: CASPA-generated expected outcome levels will be displayed in a red font. If you choose to use this value as a target, you need to verify that this is the case. See the section below 'Converting expected outcome levels to targets' below for details about verifying these levels.

Users are offered choices during the generation of expected outcome levels. The user will be able to choose for which pupils CASPA should attempt to calculate expected outcome levels and the year(s) that should be populated. On-screen prompts also allow the user to choose whether all target values are replaced by expected outcome levels or whether only blank fields and values that are still CASPA's calculated expected outcome levels are replaced.

On completion, a report can be viewed and printed detailing the outcome of generating expected levels. The report lists the outcome for every subject for each pupil selected. Where an expected level cannot be generated for a subject, the reason(s) will be displayed, enabling you identify the issue and to make a correction to key data where appropriate prior to re-running this feature.

You can use the feature to generate expected levels as many times as is required. During the the generation, you are offered a choice to select which pupil's targets will be generated/regenerated and whether to overwrite all values or to populate just blank values and overwrite CASPA-generated levels (leaving

verified targets unaffected). Where key data has been altered (eg, prior attainment, category of need), any unverified values will be recalculated using the amended data.

On completion of the generation of expected outcome levels, CASPA will, for the pupils selected and for the years selected, have attempted to calculate expected outcome levels for each subject. Bearing in mind the discussion above in the section 'How does CASPA calculate these expected outcome levels?', all pupils who are within the range of expected outcomes and also do not have targets being set for years later than a comparison can be made, will have target values populated representing expected outcome levels for each year requested.

Converting expected outcome levels to targets:

All CASPA-generated expected outcome levels will be highlighted in a red font to distinguish them from manually entered or imported targets which are displayed in a black font. It is vital that these statistical suggestions are used as a starting point for target-setting and reviewed and adjusted to reflect an agreed target for each subject for each pupil. These levels can be adjusted up or down until each subject contains a level that will then be used as a target against which progress will be measured. Once a CASPA-generated expected outcome level is edited, the font will change from red to black to indicate that this is no longer a CASPA-generated value.

When target fields have all been reviewed, any values that are to be left as the CASPA-generated level need to be verified as targets. After CASPA expected outcome levels have been generated, options are made available to verify one, or a number of targets:

- If you right click a target for Reading for a pupil, the dialog will display three verification options:
 - 'Verify all unverified targets for <year>'. This will change the status of all unverified target values for that year for every subject
 - 'Verify all unverified targets for <year> for Language and Literacy'. This will change the status of all unverified target values for that year for every aspect within Language and Literacy
 - 'Verify target for <year> for Reading.' This will verify the unverified target value for the Reading aspect only
- If you right click a target for the first target in any other subject group, the dialog will display two verification options:
 - 'Verify all unverified targets for <year> for <subject group>'. This will change the status of all unverified target values for that year for every aspect within that subject group
 - 'Verify target for <year> for <aspect>'. This will verify the unverified target value for the aspect selected only
- If you right click any target that is not the first in a subject group, the dialog will display one verification option; 'Verify target for <year> for <aspect>'. This will verify the unverified target value for the aspect selected only

Once targets have been verified, target values will appear on-screen in a green font until saved, after which, and in reports, target values will display in a black font.

Prior to saving the verification changes (whilst displayed in a red font), the right-click menu also allows you to cancel one or more of the verifications made.

This verification needs to be completed for each pupil when that pupil's targets have been set. After verification, users continue to be able to edit the target values so that, for example, if targets are reviewed, they can be amended in CASPA.

NOTE: Once you have enabled CASPA's feature for the generation of expected outcome levels, you will not be able to carry out any export that involves target data until you have verified that all targets for all pupils are appropriate. It would be impossible to know whether target values exported from CASPA were bona-fide targets based on teachers' professional judgement, or suggestions from CASPA based on statistical analysis alone so, to avoid this, exporting of unverified target values is prevented.

It is possible to export only assessment results by disabling all 'Maintain and display targets for <year>' options via **Options | CASPA configuration options** temporarily. This will exclude targets from the export, allowing the export to be generated.