Using Yellis to identify more able & talented students

How to help more able students fulfil their potential

Ruby is an energetic, imaginative and articulate GCSE student. She has a particular flair for processing new information and applying her knowledge, experience and insight to unfamiliar situations. She demonstrates great interest and enjoyment in her subjects and expresses her ideas succinctly and elegantly. She takes every opportunity to produce work that is substantial and is the product of sustained, well-directed effort.

Her teachers recognise that she excels in all areas, both socially and academically.

Ruby’s school uses Yellis to focus on early identification of the more able students in Key Stage 4, so they can nurture the talents of their students, setting motivational targets, and providing encouragement so more able pupils can go on to achieve the best that they can.
What does the Yellis assessment measure?

The Yellis assessment measures student aptitude in three key areas:
- Vocabulary
- Mathematics
- Non-verbal ability (Patterns).

The assessment measures ability rather than achievement, and fluency rather than knowledge.

The overall Yellis score shows Ruby’s ‘developed ability’. This is a measure of the capacity that Ruby has to learn. It is something that Ruby has developed over her lifetime and it will continue to develop.

What do the scores mean?

The Yellis scores are a good indication of later outcomes at GCSE. The overall score, in particular, gives a better prediction of later academic achievement than the individual section scores.

However, these section scores are important for identifying specific areas of strength.

<table>
<thead>
<tr>
<th>Score</th>
<th>Meaning</th>
<th>% of the population</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 130</td>
<td>Most able</td>
<td>2%</td>
</tr>
<tr>
<td>More than 120</td>
<td>Well above average</td>
<td>10%</td>
</tr>
<tr>
<td>More than 108</td>
<td>Above average</td>
<td>30%</td>
</tr>
</tbody>
</table>

The Vocabulary and Maths scores from the Yellis assessment are important to the prediction of future attainment of all subjects at GCSE.

The Vocabulary component is an important element for most subjects, although it is particularly well-correlated (i.e. gives accurate predictions to GCSE results) for English, History and some Foreign Languages.

The Maths score is also well-correlated with a range of subjects but is particularly important when predicting Maths, Statistics, ICT, Design Technology and Economics.

The Patterns score is important when predicting Maths, Science, Design Technology, Geography, Art and Drama. It provides a measure of the pupil’s ability in 3-D visualisation, spatial aptitude, pattern recognition and logical thinking.

Ruby’s Yellis results show that her scores are significantly higher than the national average and, therefore, provide vital objective evidence of her cognitive strengths.
How can Yellis support more able pupils?

High ability students like Ruby may have particular educational needs and may underachieve unless those needs are met. The Yellis assessment can help schools identify such students, so they can act to meet their needs and help them reach their potential.

What can Ruby’s school do to help her?

Based on the results of Ruby's Yellis assessment, she and her teachers can expect her to perform well in her GCSE examinations. There is a high probability that she will gain a grade 9 in all of her subjects.

So what can Ruby's school do to support, stretch and continue to motivate her at this stage?

Schools who use Yellis implement a range of strategies and interventions for their more able and talented pupils:

- Use the Yellis scores to devise individualised or personalised approaches to learning
- Provide mentoring sessions to support pupils in making options and career choices
- Return to the Yellis data whenever appropriate throughout the year
- Focus on improving the use of data and assessment to identify, track and monitor the progress of more able and talented pupils, and sharing this information with all staff and parents

Why not ask teachers to identify more able and talented students?

We recommend that students with high aptitudes should be identified strictly by the use of aptitude tests.

Using teacher recommendations has been found in much research to result in inconsistencies from school to school, and teacher to teacher. This is inevitable when students present such different pictures of themselves to different teachers in some cases.

Additionally, aptitude does not necessarily show up in the same way in all subjects.

Aptitudes can, of course, be diverse and hard to identify without an objective assessment of reasonable length.

Find out more: cem.org/yellis