SUPPORTING PUPIL PROGRESS

USING ALIS TO SUPPORT A LEVEL STUDENTS' POTENTIAL

A partnership between

CEM
Centre for Evaluation & Monitoring

CAMBRIDGE UNIVERSITY PRESS

Cambridge Assessment
Understanding aptitude and potential

Any teacher knows that GCSE performance does not rely solely on student ability and that a range of factors can influence performance, from simple demographic factors, such as age, gender and family background to more variable factors like the school climate and the quality of teaching efforts and strategies.

Evidence shows that GCSE grades do not always provide an accurate indication of ability and future attainment at A level, something which has been highlighted further by the recent examination reforms.

If GCSE average point scores don’t provide a level playing field, how can schools and colleges determine student ability, predict future performance, and support student needs effectively?

Lucy’s challenge

Lucy decided to do her A levels at a 6th form college, transferring from a small, but outstanding, local academy where she worked extremely hard to achieve her 5 A*s and 4 As at GCSE.

Lucy found studying and preparation for her GCSEs challenging. However, her academy ensured she maintained her motivation by providing additional support and extra lessons after school. She also participated in study groups and her parents found her a tutor to help her in the last few months leading up to her exams.

How will Lucy cope with the challenges of A levels without the same level of additional support?

Lucy’s 6th form college has used CEM’s Alis assessment for the last 7 years. Alis is not a test. The underlying principal of Alis is that if we can measure a student’s ability, we can determine ‘typical progress’ for the individual, and this can help schools and students get an idea of what they are likely to achieve in the future.

Using grade trends to determine typical progress

Alis measures ‘ability’ in two ways:

- Using prior attainment (GCSE) scores
- Using CEM’s Computer Adaptive Baseline Test (CABT)

Computer Adaptive Baseline Test

The Alis baseline assessment evaluates each student’s starting point and provides a standardised, benchmark score in 3 crucial areas which research shows are linked to later academic outcomes: Vocabulary, Mathematics, and Non-verbal ability.

Based on these 3 areas, we are able to measure a student’s developing ability, without the influence of prior learning or the impact of teacher effectiveness.

Free from the adverse influences of the GCSE exam periods and the vagaries of examination reform, the Alis baseline gives a consistent measure that is independent of government policy and provides the best independent measure of ability.

<table>
<thead>
<tr>
<th>Standard Score</th>
<th>Band</th>
<th>Stanine</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary</td>
<td>117</td>
<td>A</td>
<td>7</td>
</tr>
<tr>
<td>Maths</td>
<td>88</td>
<td>C</td>
<td>4</td>
</tr>
<tr>
<td>Non-verbal</td>
<td>89</td>
<td>D</td>
<td>3</td>
</tr>
<tr>
<td>Ability</td>
<td>99</td>
<td>C</td>
<td>5</td>
</tr>
</tbody>
</table>

Lucy’s Individual Student Record sheet gives a breakdown of her scores in each of the sections as well as an overall ‘ability’ score.

What do the scores mean?

The breakdown of Lucy’s scores shows that while her overall ability is average (99), she is particularly able in the Vocabulary area (118).

However, her Mathematics and Non-verbal scores (85) are statistically below average and indicate that she may experience difficulties in a number of areas which may affect her performance at A level.

<table>
<thead>
<tr>
<th>Score</th>
<th>Meaning</th>
<th>% of the population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 70</td>
<td>Well below average</td>
<td>2%</td>
</tr>
<tr>
<td>70 – 85</td>
<td>Below average</td>
<td>14%</td>
</tr>
<tr>
<td>85 – 115</td>
<td>Average</td>
<td>68%</td>
</tr>
<tr>
<td>115 – 130</td>
<td>Above average</td>
<td>14%</td>
</tr>
<tr>
<td>More than 130</td>
<td>Well above average</td>
<td>2%</td>
</tr>
</tbody>
</table>
Predictions for A levels

Student outcomes can’t be predicted with total certainty. However, it is possible to statistically predict their chances of achieving certain grades.

The Alis ‘Chances Graphs’ tell us how likely your students are to get certain grades in each of their A level exams, based on both their GCSE results and the Alis baseline assessment scores.

The Alis predictions and chances graphs provide vital, forward-looking information which can help teachers, parents and students:

- To set realistic and challenging targets
- To motivate and encourage
- To guard against complacency

The predicted grades are not set in stone or a foregone conclusion, and cannot be used to label students. They indicate an expected outcome based on a statistical prediction.

Which results should I use?

In short, use both.

We would not expect any school to rely solely on the Alis feedback. It makes sense for schools to triangulate all available data on the students, for example admissions tests, language tests, and reports from staff.

The Alis feedback from the GCSEs and baseline assessment may not tell you anything different, but it is powerful and supportive for teachers in giving evidence which confirms their judgements and instincts.

However, as in Lucy’s case, the feedback may reveal disparities and discrepancies in the profiles that allow her school to see where she may need further support. The information from Alis can help schools ask the right questions, be aware of possible issues and gain another layer of understanding of each student.

Used in conjunction with professional judgement and regular monitoring, the Alis feedback is a powerful tool that can give students like Lucy a better chance of staying on track and achieving their best.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Points</th>
<th>Grades</th>
<th>Points</th>
<th>Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics</td>
<td>118</td>
<td>A</td>
<td>100</td>
<td>B</td>
</tr>
<tr>
<td>English Literature</td>
<td>122</td>
<td>A</td>
<td>105</td>
<td>B</td>
</tr>
<tr>
<td>Spanish</td>
<td>115</td>
<td>A</td>
<td>105</td>
<td>B</td>
</tr>
</tbody>
</table>

The chances graph to the left is based upon GCSE scores, whilst the graph to the right is based upon the Alis baseline assessment.
Find out more about Alis at www.cem.org/alis