

GL Assessment Written Evidence to the All-Party Parliamentary Group for Education Inquiry: “Do schools prepare young people for their future careers?”

GL Assessment is the leading provider of formative assessments to UK schools

- i. We specialise in SEN, literacy, numeracy, reasoning and attitudinal assessments, and have relationships with over a third of primary and two thirds of secondary schools in the UK. Our tests are nationally standardised, giving measures such as standard age scores, and include parental reporting where appropriate. We have delivered over 7 million online tests to schools in the UK and worldwide.
- ii. We provide training and continual professional development for teachers in the most effective use of formative assessments and the interpretation and analysis of assessment data. A particular emphasis is placed on the ‘triangulation’ methodology of assessment which combines the use of summative and formative assessments alongside teachers’ experiences to most accurately assess the progress of pupils.
- iii. We believe that it is vital to make effective use of the standardised data which emanates from formative assessments. By using standardised data, teachers and schools can compare the progress of pupils taking into account factors such as their age within a year group. Without this standardisation process, data is less reliable and performance cannot be benchmarked nationally.

Philosophy of Assessment

- iv. GL Assessment has a distinct philosophy of good assessment practice. We believe in a ‘whole pupil’ approach, examining an individual’s attitude, ability and attainment to provide a complete understanding of their needs. This enables schools and colleges to get to know each pupil as an individual, appreciating their strengths, identifying areas where they might need support and intervention, and removing any obstacles that are impacting negatively on attainment. Crucially, this philosophy places the individual pupil at the heart of a school’s programme of assessment.

Preparing students for their future careers

- v. A young person’s success in employment is closely related to their success in education. A good education will provide children with the reasoning and problem solving skills and knowledge necessary to contribute productively to the economy. It is therefore important to maximise each pupil’s attainment and achievement during school to give them the best opportunity to flourish in the world of work. To ensure that this is achieved, it is important that teachers and schools are able to identify the strengths and weaknesses of their pupils and then direct students down the educational pathway that is most appropriate for them. This approach must leave no pupil behind.
- vi. A common issue in our education systems is that while we are able to spot and challenge the high achiever, we find it much more difficult to identify those who, often due to a barrier to learning, are not achieving all they are capable of. A school that can identify and address these barriers as soon as possible is best placed to prepare children for their future careers. We have developed an approach to formative assessment which provides schools with the information necessary to fully understand their pupils’ learning preferences, and therefore tailor their learning in a way that takes advantage of their strengths.

- vii. Formative assessments can measure a pupil's underlying ability which can then be compared against actual attainment. Where there is a gap between underlying ability and actual attainment, the pupil is not achieving their potential. Teachers can use this knowledge to identify areas where a pupil is struggling and put in place targeted interventions to address these shortfalls. Assessment used in this way can identify pupils that might otherwise fall under the radar; those that are doing enough to avoid coming to the attention of their teachers, but are in reality not working to the best of their ability.
- viii. Often it is not clear why pupils are not reaching their potential in certain areas. Attitudinal assessments such as our *Pupil Attitudes to Self and School* (PASS) can be used alongside teacher judgement to identify reasons for these shortfalls which may stem from a pupil's attitude towards learning or from low self-confidence. It is important that these issues are addressed directly so that pupils remain invested in their education, which will deliver better outcomes for them in terms of future employment and life chances. Tackling attitudinal issues also means that children leave school with the right character to succeed; motivated, self-confident, and prepared to overcome any challenges that they encounter.
- ix. We advocate a whole child approach which accounts for all aspects of a child's learning that contribute to their achievement at school. This includes underlying ability, attainment, and attitudes. By ensuring that a child's needs are understood and met in all of these areas, a school can tailor their teaching individually to each pupil so that they enter the world of work having achieved all that they are capable of at school.

Different Assessments for Different Purposes

- x. Different careers demand different skillsets. In order to fully understand a pupil's aptitudes and strengths and how these might translate into the world of work, it is important to use a variety of assessments that explore different aspects of a pupil's ability. Traditional mathematics and English tests can provide a good and reliable indication of current achievement in the two subjects, but these are most effective when combined with reasoning tests that reveal overall ability and potential.
- xi. There are two broad categories of reasoning question: verbal and non-verbal. High performance in verbal reasoning questions is indicative of an aptitude for subjects that rely on strong verbal skills, such as English, History, Languages and Arts. These questions draw out the writers, journalists, politicians and historians.
- xii. Non-verbal reasoning measures reasoning processes that are applied in maths and science based subjects. Examples of skills tested include the ability to deal with unfamiliar material, to distinguish the relevant from the irrelevant and to manipulate information at a cognitive level without forgetting crucial details. It is particularly important to assess these skills because students that have the potential to excel in this area are often hampered by the strong verbal bias of testing and teaching, even in the sciences. By identifying such pupils, teachers can support them to build confidence in their ability to succeed in other subjects, such as STEM subjects.

The STEM Gap

- xiii. Aside from verbal and non-verbal reasoning, it is also possible to assess a pupil's spatial ability, which has been identified as the basis for success in STEM subjects and careers. It is therefore extremely valuable to include discrete tests of spatial ability in order to be able to identify and develop these skills. A propensity for spatial tasks is not often borne out in traditional testing, despite its proven value in STEM disciplines, so it is important to identify pupils that have an aptitude in this area and nurture their ability.
- xiv. Recently, there has been a heavy focus on the 'STEM gap', particularly regarding gender imbalance. While only 21% of pupils entered for a Physics A Level are female, 76% of female candidates achieve an A*-C

grade as opposed to 71% of their male counterparts¹. Clearly there is a significant shortfall in female entry into STEM subjects, a discipline which is of vital importance to improving the UK's position in the global economy. This is an area that requires a coordinated response from teachers, schools and industry, to ensure that children with an aptitude for STEM subjects are encouraged and supported to pursue these subjects.

- xv. The latest edition of our Cognitive Abilities Test, CAT4, is an example of an assessment that includes measures to uncover a child's aptitude for spatial tasks alongside the other three main types of reasoning ability that are known to make a difference to learning and achievement: verbal, non-verbal, quantitative reasoning. An underlying ability in spatial reasoning is not always identified or reflected by their general attainment. Low self-confidence in this area can prohibit children from following a career in STEM. By using an assessment that uncovers underlying spatial awareness ability, teachers can help pupils to gain confidence and achieve their full potential, which may create a productive pathway into employment.
- xvi. The Studio, a University Technical College in Liverpool, is an example of a school that uses CAT4 in this way. The Studio is the first school in the UK to specialise in technology, digital media and gaming for 14 to 19 year olds. The school caters for many children who are not typical academic learners and has an excellent record of furnishing them with the skills to succeed in employment. Because the school takes on students at age 14, it essential that the school leadership team can immediately establish the learning profiles of the new intake.
- xvii. Using CAT4, The Studio can quickly establish the methods of teaching that will most benefit their pupils. This is especially important for The Studio because of its technical focus. By cultivating an understanding of each pupil's learning preferences and tailoring teaching to reflect those preferences, the school ensures that all its pupils are gaining confidence in their abilities and making good progress. This approach means that no pupil is left behind. All pupils, even those from non-traditional backgrounds, are engaged in their learning and are set on a pathway into successful employment.

Conclusion

- xviii. Every child has the capacity to flourish in the adult world. Education can help them find the right pathway into employment based on their strengths and aptitude, and to ensure that they have the confidence and motivation to achieve their full potential. Some skills, including spatial awareness, are particularly important to the UK's position in the global economy. There is more potential for non-traditional learners to excel in these areas than is currently being identified by the education system. By identifying these traits early on, a child's education can nurture and develop these abilities. Using appropriate formative assessment to reach hard to spot children early on allows teachers to harness their pupils' underlying abilities so that they are best placed to succeed in the world of work.

¹ Women in Science, Technology, Engineering and Mathematics: The Talent Pipeline from Classroom to Boardroom, UK Statistics 2014

