

# Quick guide for teachers



What affects educational achievement?





# The Cambridge Learner Profile - CEM's framework for a holistic understanding of students

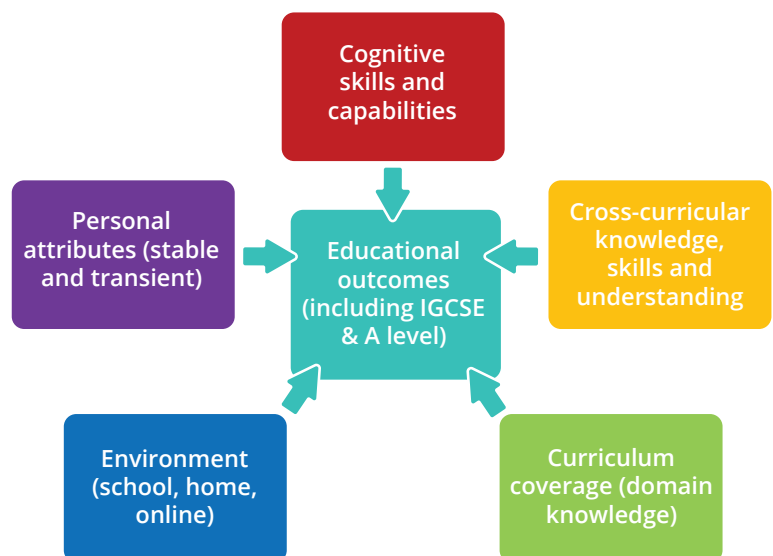
All teachers want their students to succeed at school, completing their education with the highest grades that they are capable of. But what determines success? What matters to a student's educational achievement?

Leading educationalists encourage teachers to consider the development of the 'whole child'. For example, the OECD suggests students should develop a balance of cognitive, social and emotional skills. Not only does this prepare them for the challenges of the 21st century, but these skills are needed for success in qualifications such as GCSEs, IGCSEs, A levels and International Baccalaureate.

At Cambridge CEM we want teachers to take a holistic view of their students. We think there are five broad areas that influence educational outcomes.


Teachers can gain insight into all five areas. This helps them to build up a holistic profile of every student.

The five areas affect one another in various complex ways. The better the teacher understands the five areas, the better the student's education can be tailored to meet their needs.





## Cognitive skills and capabilities


 Cambridge CEM's baseline tests assess cognitive skills and capabilities. There are test sections on non-verbal reasoning, plus skills such as perceptual speed and accuracy.

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

The perceptual speed and accuracy section (in some CEM tests) asks students to look for matches between a sequence of symbols on the left and a number of possible choices on the right. Given enough time, most students would probably get the answers correct. However, this section measures how quickly students can find a correct match.

Scores on these sections are particularly useful when assessing the ability of students with English as an Additional Language (EAL). Cognitive skills and capabilities tend to be stable and are very difficult to teach.

## Cross-curricular knowledge, skills and understanding

 CEM tests also measure cross-curricular knowledge, skills and understanding, such as vocabulary and some key aspects of mathematics. These things can be taught, and they're important for doing well in many different school subjects. Vocabulary, for example, is a strong predictor of success in many different school subjects – not just English literature.

Language skills lie within this area of insight. Students with low English language levels who are taught in English will struggle to access the curriculum and express themselves in examinations. One of CEM's sister organisations, Cambridge English, provides a variety of assessments for students with English as an Additional language.



### **Curriculum coverage (domain knowledge)**

Curriculum coverage or 'domain knowledge' is also very important for educational achievement. Students need to be taught and to learn the content on which they'll be assessed at GCSE, IGCSE or A level. CEM doesn't currently assess curriculum coverage, and many schools successfully create their own internal assessments. One of CEM's sister organisations, Cambridge Assessment International Education, offers progression tests for students following their curricula. These tests are marked by teachers and are often used to inform teaching.

### **Teaching and Learning Environment (school, home, online)**

The student's environment also contributes strongly to their educational success. There are the school and home environments, and also social media which can straddle the two. All of these can affect teaching and learning

Students' environments can vary hugely. For some students around the world, difficulties include not having a reliable electricity supply, or many books at home. For other students, there might be huge parental pressure to do well academically, pressure from classmates to behave in particular ways, poor teaching, or cyber bullying.

### **Personal attributes (stable and transient)**

Students' personal expertise in learning and their learning readiness also affect educational success. These personal attributes can be long-lasting or temporary. For example, personality traits such as conscientiousness are reasonably stable over time. Wellbeing, on the other hand, is a much more transient personal attribute. It is a combination of both feeling well and functioning well, and it can change over time. CEM has recently worked with researchers in the University of Cambridge's Faculty of Education to develop the Cambridge Wellbeing Check. This offers teachers an insight into four areas of their students' wellbeing.

### **Key message for teachers**

Our key message is that teachers need to gain insights about their students in all five areas of influence. Combining CEM test results with information from internal assessments and other sources can be really powerful. There are things that teachers can help a student with, and things that perhaps they can't. We believe teachers who work towards changing what they can in each of the five areas will have the biggest impact on their students' educational success.