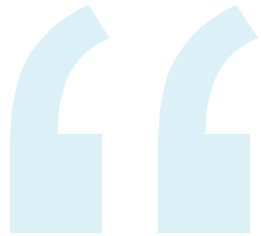**Cambridge Assessment**
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Using data to create a positive learning environment

Sarah Turner, Suzanne Crocker, Hema Mistry

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The culture of a school impacts on student achievement. Typically, schools that foster high expectations for all, provide an environment conducive to learning, improve the confidence of students' efficacy as learners, and ensure an ordered and safe place for growth and development are more likely to have a positive impact on student learning outcomes.

Marks, 2001

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Data has the potential to transform education from a model of mass production to a personalised experience that meets the needs of individuals and ensures that no student is lost along the way
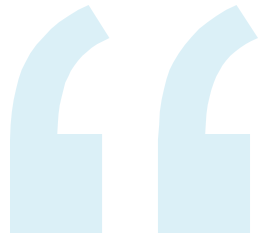
Data Quality Campaign, 2016

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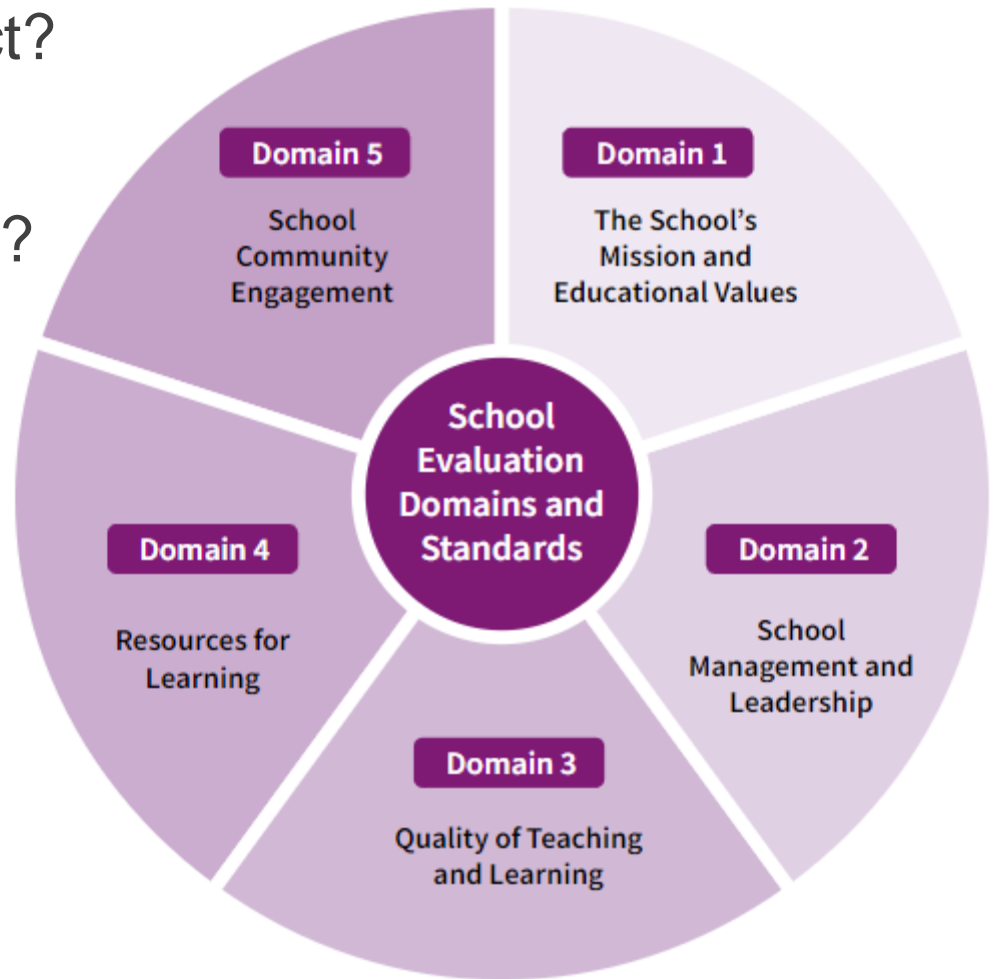International Education

Whose narrative?

Whose narrative?

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We should be looking at ways to increase teacher confidence and knowledge in interpreting the data …. so that teachers can be empowered to work together for change and improvement

Fullan, 2015

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Whose narrative?

▶ What data do we collect?

▶ How do we collect data?

Activity

List the following in order of importance to you, in relation to creating a positive learning environment

- A compelling vision,
- Promoting core values,
- Effective leadership,
- Engaging the school community,
- High quality teaching,
- Good school management,
- Provision of specialist support,
- A safe learning environment

Cambridge can help with:

Gathering data from Learners, Teachers, and Parents

▸ CEM Assessments and Wellbeing Check

▸ Teacher and School Leader Standards (RAG grids)

▸ School Self-Evaluation Surveys

School

Classroom

Student

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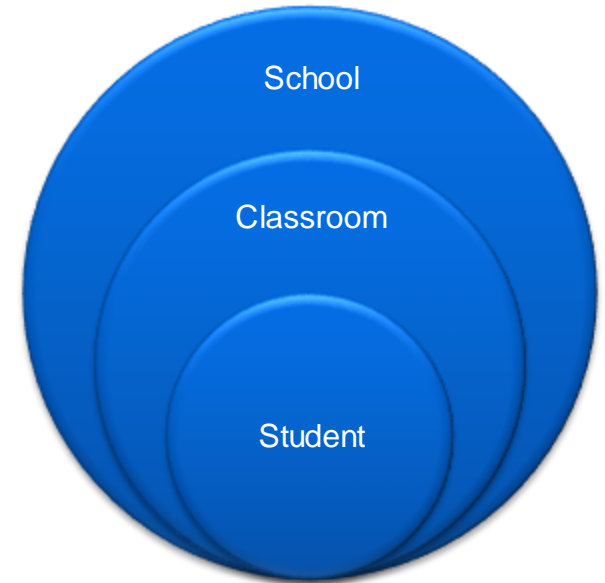
# Gathering data on student level factors

How can we use Cambridge CEM?

▸ A quick and reliable way of monitoring student intake regardless of prior learning.

▸ A holistic view of the student including wellbeing which is linked to academic performance – want to learn and progress, and engagement.

▸ It can be used at school, cohort or individual level to target and shape teaching and learning and to evaluate the performances of specific groups of students.

▸ Support the professional judgement of teachers and senior leaders so that they can measure if students are fulfilling their potential.

▸ Check whether the school is using its resources effectively on the right priorities and the right strategies.

▸ Confirm which departments are performing well and which are not.

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Examples

## Age Comparison Charts – a useful starting point

- Box and whisker plots give a picture of the **range of scores for each class**.

- 50% of children are within the box, and the horizontal line is the median score – the middle scores when all scores are placed in order.

- The top 25% are in the top whisker and the bottom 25% in the bottom whisker.

- Exceptionally high or low scores show as **outliers**.

- The **width** of the box shows the **age range** within the class.

- The **green line** shows the **average** for children in that age range.

- Each child is a **dot**.
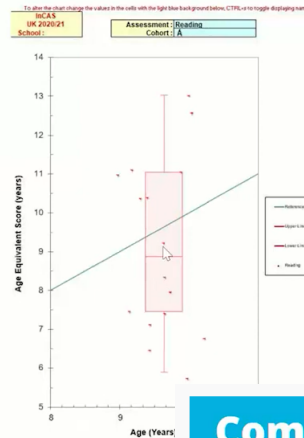
Comparison of classes in one year group e.g. for Maths

Useful for year leaders in particular…

- Are the classes broadly equivalent?

- How does the range of attainment differ?

- Are there any outliers (i.e. very high or very low attainers)?
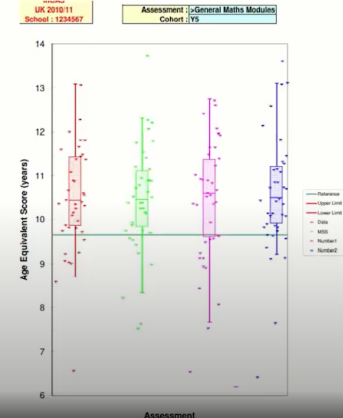
Cambridge Wellbeing Check

Students rated their feelings on scales from 1 to 5. The data below show which responses were selected in a group for four areas of wellbeing	
Competence Wellbeing: the extent to which students experience competence, self-confidence, fulfillment, and purpose	

I feel good about myself

20%	60%	20%

● No response　● Never　● Not often　● Sometimes　● Often　● Always

I feel healthy

40%	60%

● No response　● Never　● Not often　● Sometimes　● Often　● Always

I feel I am doing well

20%	40%	20%	20%

● No response　● Never　● Not often　● Sometimes　● Often　● Always

I feel confident

20%	20%	40%	20%

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Gathering data on classroom factors

▸ How can we use the Cambridge School Leader and Teacher Standards?

Cambridge School Leader Standards
- 1. Leadership knowledge and understanding
- 2. Skills and practices of leadership
- 3. Leadership values and attributes
- 4. Professional relationships in leadership
- 5. Leading teaching and learning
- 6. Leading innovation and improvement
- 7. Establishing management systems
- 8. Community engagement

Cambridge Teacher Standards
- 1. Demonstrate knowledge and understanding of students and how they learn
- 2. Know subject and curriculum content and how to teach it
- 3. Establish professional relationships to develop and support learning and teaching
- 4. Implement effective planning, teaching, learning and assessment practice
- 5. Demonstrate innovative and effective classroom practice
- 6. Demonstrate professional teacher values and attributes
- 7. Create and maintain a safe and inclusive learning environment
- 8. Engage professionally with parents and communities

Examples

STANDARD 6   Leading innovation and improvement

6.3	make sure that the school curriculum and other programmes are evaluated cyclically, using input from teachers, students and other stakeholders, as the starting point for school improvement planning			
Ask yourself and your team:		R	A	G
• Do you review the curriculum regularly to make sure that it meets the needs and challenges faced by individual students in the 21st Century and in the school's national and international context?				
• Do you have a recognised and embedded structure for the cyclical review and evaluation of the effectiveness/ impact of the curriculum?				
• Is your review and evaluation evidence based and data-driven to guide improvement and measure impact?				
• Are teachers, students, parents and members of the governing board routinely consulted and involved in your review and evaluation processes?				
How do you feel you are doing overall?				

STANDARD 7   Establishing management systems

7.2	review the school's management processes and procedures to make sure that they are appropriate for the needs of the school, evaluating and making adjustments to achieve positive impacts on student outcomes			
Ask yourself and your team:		R	A	G
• Do you lead and influence others to critically analyse and evaluate their own practice in relation to relevant policies and procedures?				
• Do you include a review and evaluation of management processes and procedures in your annual self-evaluations for the school and its parts (e.g. subject, department, year)?				
How do you feel you are doing overall?				

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Gathering data on school level factors

How can the School Self-Evaluation Surveys help to:

▸ gather perceptions from your school community.

▸ provide a holistic view of the school's performance.

▸ understand what else should be prioritised
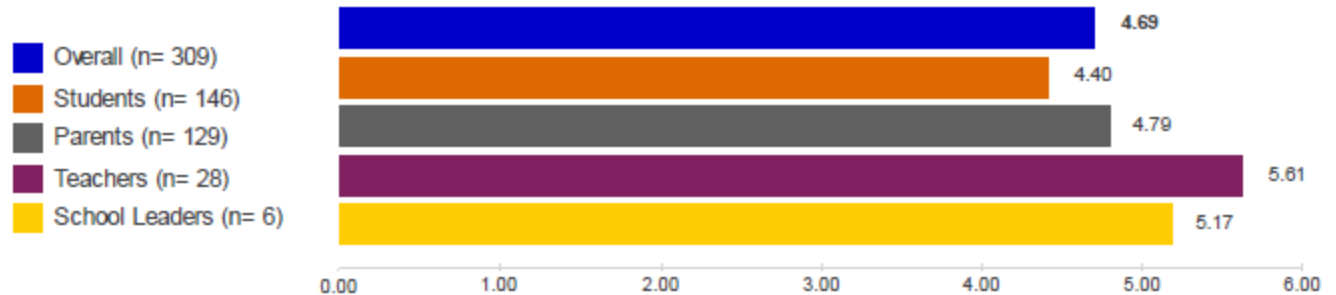
Examples

S3. The school culture is inclusive and supports all students and staff in their learning and development.

| Group	Value
Overall (n= 309)	5.06
Students (n= 146)	4.96
Parents (n= 129)	5.12
Teachers (n= 28)	5.29
School Leaders (n= 6)	4.77
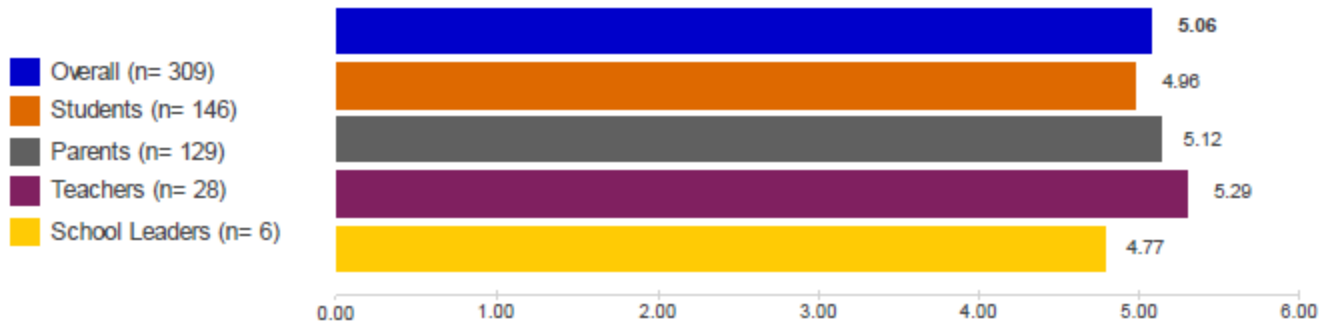
S4. The school promotes intercultural understanding, celebrates diversity and actively develops in students a deep appreciation of other people's views and perspectives.

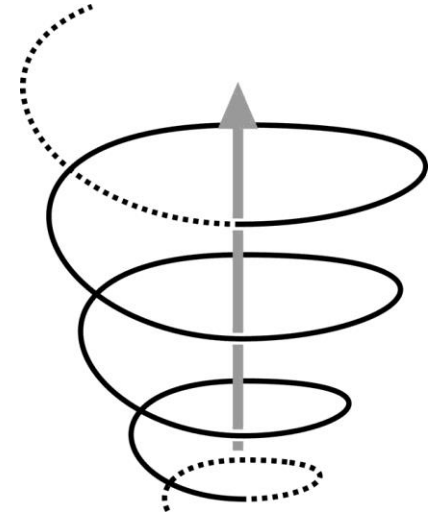| Group	Value
Overall (n= 309)	4.69
Students (n= 146)	4.40
Parents (n= 129)	4.79
Teachers (n= 28)	5.61
School Leaders (n= 6)	5.17

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Where are the gaps and next steps?

▸ What data do you want to collect that you are not already collecting?

Connect **Extend** **Challenge**

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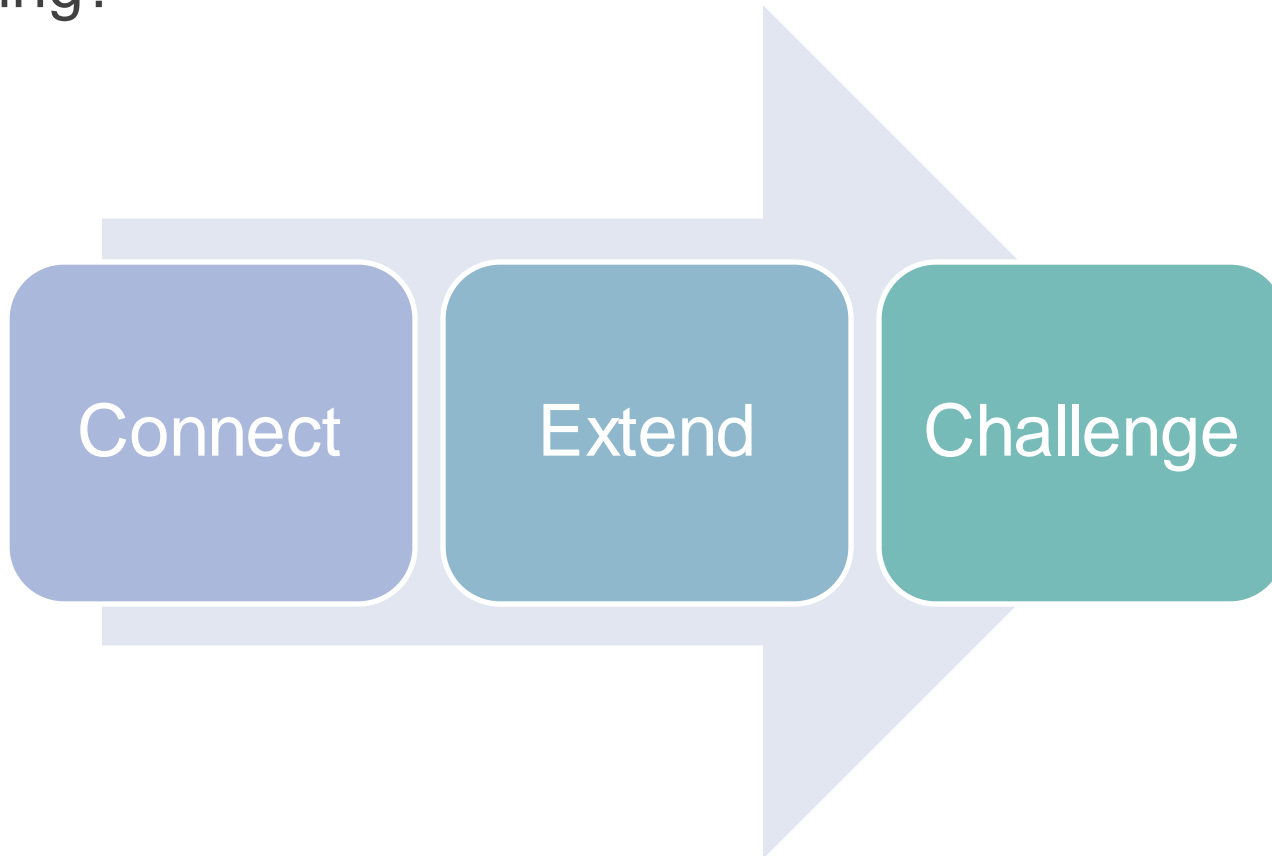
Self-evaluation is a process of reflection on practice made systematic and transparent with the aim of improving pupil, professional and organisational learning.

Macbeath, 2005

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Thank you