



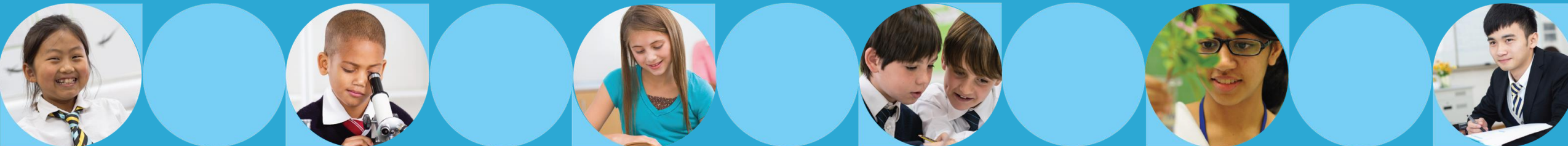
**Cambridge Assessment
International Education**

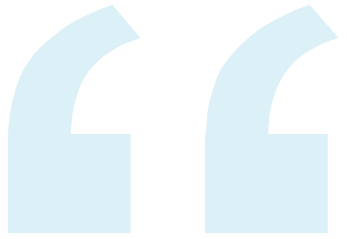
Data-directed instruction

Assessment data that focus on learning

Presenter Name: Dr Andri Nel-Rasmussen
Job title: Dean of Academics

Date: 15 June 2023





Effective instruction isn't about whether we taught it.
It's about whether students learned it.

▶ Paul Bambrick-Santoyo



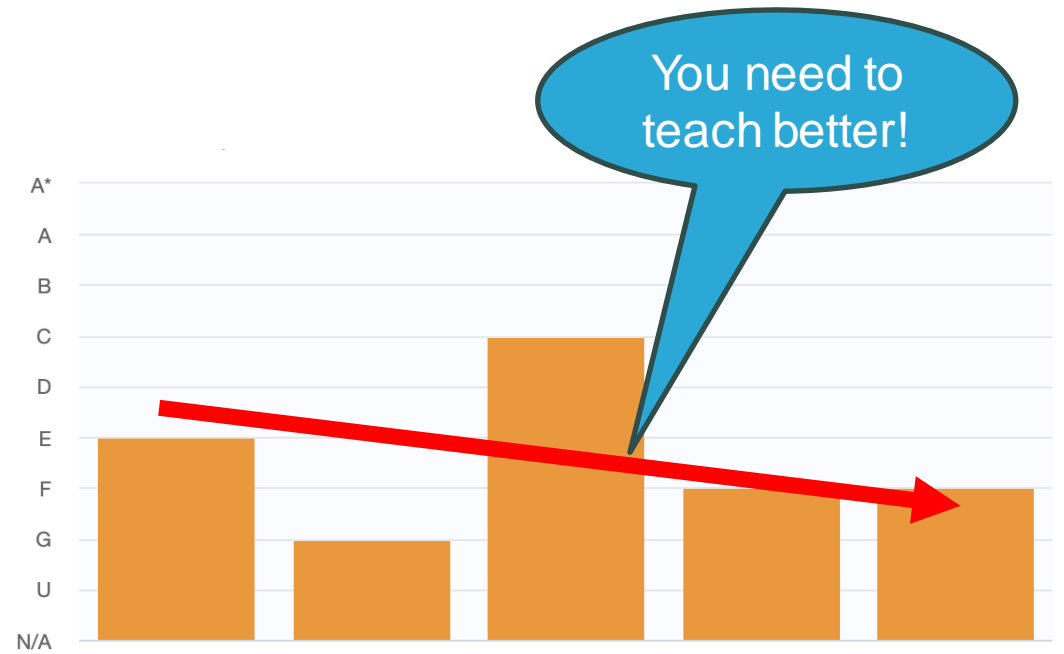
Semantics...

- ▶ UK system measures **progression** and **attainment**
- ▶ Attainment – how well do we do against our past achievements, against global results?
- ▶ Progression – how much do our learners grow from entry to exit in the course or from one assessment to the next?

Progress typically looks like this



Class A over a semester or a year



Class B over a semester or a year

Core questions that data must answer

- ▶ How do we know if our students are learning?
- ▶ And if they're not, what do we do about it?

Attainment and progression data doesn't answer these questions at a level that teachers can do something about it.



Principles of effective data analysis

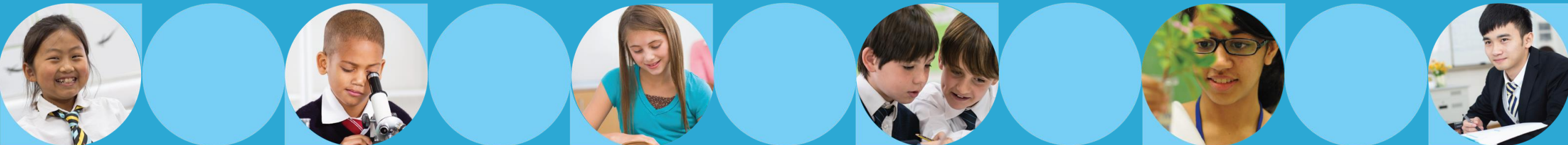
- ▶ **Active leadership investment**
- ▶ 6-week cycles
- ▶ Teacher-owned
- ▶ Engaged students





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Assessment analysis sheets



When reading the data, have the student tests in hand

IGCSE Business Studies 0450 Paper 1 Short answers and Data Response G1 End of Year Semester 1

Total marks	Q1					Q2					Q3					Q4					Total																					
	a	b	c	d	e	a	b	c	d	e	a	b	c	d	e	a	b	c	d	e																						
	2	2	4	6	6	2	2	4	6	6	2	2	4	6	6	2	2	4	6	6																						
Marks	A01	A01	A01	A02	A01	A02	A02	A01	A02	A02	A01	A02	A02	A01	A02	A02	A01	A02	A02	A01	A02	A02	A01	A02	A02	A01	A02	A02	A01	A02	A02	A01	A02	A02	A01	A02	A02	Total				
1	2	2	2	2	2	2	2	1	1	2	2	2	2	2	2	2	1	1	2	2	2	2	2	2	1	1	2	2	2	2	2	2	2	2	2	2	2	80				
2	1	2	1	1	0	0	0	1	1	1	1	1	1	1	1	1	0	2	2	0	0	2	0	0	1	1	1	1	0	2	2	4	0	0	0	1	1	1	0	40		
3	1	2	1	0	1	1	0	1	1	0	0	2	2	2	0	1	0	0	1	1	1	1	1	2	2	1	0	1	0	2	1	4	0	0	0	1	1	0	38			
4	1	2	2	0	1	1	1	1	1	1	1	0	2	0	2	1	1	1	1	1	0	0	0	0	0	1	1	1	0	2	2	3	0	0	0	1	0	0	37			
5	1	2	2	0	2	1	1	1	1	1	1	2	2	2	0	0	0	0	1	1	1	0	2	2	1	0	1	0	0	1	2	2	0	0	0	1	0	0	35			
6	1	2	1	1	2	2	2	1	1	1	0	1	2	2	0	0	0	0	1	0	1	1	1	1	2	1	0	1	0	0	1	4	0	0	0	1	0	0	35			
7	1	2	1	1	2	1	1	1	0	1	0	2	1	1	1	0	0	0	1	1	0	0	2	2	0	0	1	0	0	1	2	4	0	0	0	0	0	0	32			
8	1	2	1	0	1	1	1	1	0	1	0	2	2	1	0	1	1	0	1	1	0	0	2	2	0	0	0	0	1	1	0	0	1	2	2	0	0	1	0	31		
9	1	2	1	0	1	1	1	1	0	0	0	2	2	1	0	1	0	0	1	1	0	0	2	2	1	0	1	1	0	0	2	1	2	0	0	0	1	0	0	31		
10	0	2	1	0	2	1	0	1	1	1	1	1	1	1	1	0	1	1	1	0	0	2	2	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	30			
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12	2	2	2	0	2	1	1	1	1	1	0	2	1	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	1	0	0	0	2	2	3	0	0	0	0	0	28
13	1	2	1	0	0	0	0	1	1	0	1	2	2	1	1	1	0	0	1	1	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	
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16	0	2	2	0	0	0	0	1	0	1	0	2	2	1	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	19	
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19	1	1	0	0	0	0	0	1	0	0	0	2	2	1	0	1	0	0	1	0	0	0	1	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	14	
20																																								14		
	48%	93%	55%	10%	45%	33%	20%	100%	55%	35%	13%	90%	73%	65%	10%	28%	8%	10%	80%	65%	18%	8%	70%	98%	23%	0%	38%	8%	8%	75%	45%	8%	0%	63%	53%	53%	0%	0%	0%	60%	15%	10%
	48%	93%	33%		33%			51%				90%	73%	38%		15%			43%				70%	98%	11%		18%			32%		63%	53%	53%		0%			22%		27.8	

(a)	68%	A01	61%	Knowledge
(b)	79%	A02	25%	Application
(c)	27%	A03	13%	Analysis
(d)	16%	A04	6%	Evaluation
(e)	37%			

Part 1 – Global impressions

- ▶ How well did the class do as a whole?
- ▶ What are the strengths and weaknesses in terms of skills – where do we need to work most on?
- ▶ How did the class do on previously covered content vs. newly taught content?
- ▶ How are the results different in the different question types?
- ▶ Who are the proficient and emerging learners?



IGCSE Business Studies 0450 Paper 1 Short answers and Data Response
G1 End of Year Semester 1

Total marks	Q1										Q2										Q3										Q4										Total			
	a	b	c			d			e				a	b	c			d			e				a	b	c			d			e											
2	2	2	4			6			6				2	2	4			6			6				2	2	4			6			6				80							
Marks	A01	A01	A01	A02	A01	A02	A03	A01	A02	A03	A04	A01	A01	A01	A02	A01	A02	A03	A01	A02	A03	A04	A01	A01	A01	A02	A01	A02	A03	A01	A02	A03	A04	A01	A02	A01	A01	A02	A03	A01	A02	A03	A04	35
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How are the results different in the different question types?

Who are the proficient and emerging learners?

What are the strengths and weaknesses in terms of skills – where do we need to work most on?

How well did the class do as a whole?

How did the class do on previously covered content vs. newly taught content?

- (a) 68%
- (b) 79%
- (c) 27%
- (d) 16%
- (e) 37%

1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	2	2	0	0	1	0	1	0	0	0	2	1	1	0	0	0	0	1	0	0	0	1	0	1
1	1	1	2	1	1	0	1	0	1	1	1	0	0	0	0	2	1	0	0	0	1	1	0	0	2	0	4	0	0	0	1	0	0	0	1	0	0	
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48
48

3%

Part 2 – Deep dive – Have learner answers with you

- ▶ Bomed questions – did all learners choose the same wrong answer? Why?
- ▶ Sort data by learner scores – Are there questions that separate proficient from emerging learners?
- ▶ Look horizontally by learner – are there any anomalies occurring with certain learners' results?



Examples of good action steps

- ▶ Continue to do weekly **definition quizzes**, including current content and content from the beginning of the course.
- ▶ **Feedback loop for (e) type questions.** Every week as part of class work or homework, include an (e) style question on current topic of study. Grade the question, give constructive feedback and have learners re-write their answer incorporating the feedback. Check their re-writes for growth.
- ▶ Every week, for every case-study, let learners unpack the application points of the case-study in a **think-pair-share** activity.
- ▶ Scaffold language through posting potential **sentence starters** as a poster to help learners know how to start the evaluation aspect of their answers.

What to do with the data?

- ▶ Instructional leader and teacher meeting
- ▶ Focus on the Global Impressions and Deep dive questions
- ▶ Dig in together to find reasons – ask the teacher guiding questions
- ▶ Set up a action plan that will close the gaps

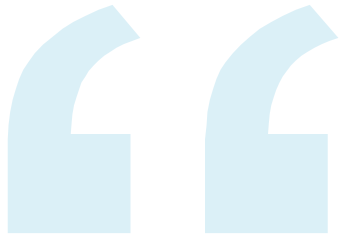
- ▶ After next assessment (6-weeks) repeat and compare to previous assessment to see progress and closing of gaps



Principles of effective data analysis

- ▶ **Active leadership investment – do it for your own classes**
- ▶ 6-week cycles – strong assessment schedule
- ▶ Teacher-owned – Find a few champions the first time you roll it out
- ▶ Engaged students – sharing data with students





- ▶ The beauty with this kind of data-directed instruction is that it focuses on the learners and helps the teacher find the gaps. It doesn't judge the teacher.

- ▶ Jake Elliot – Head of Department VCIS





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Thank you
Any questions?

