Bedrock Learning

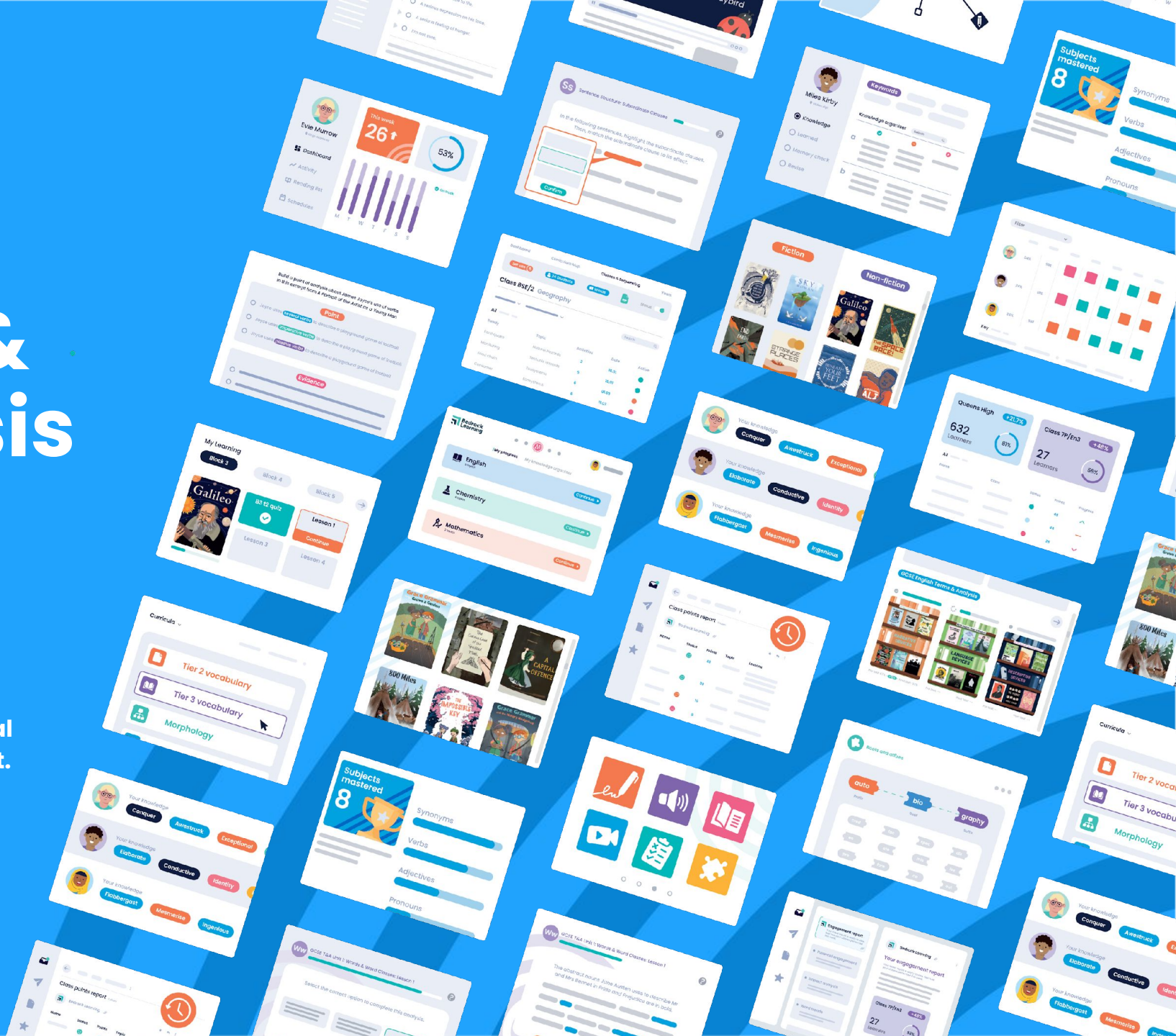Learning through literacy

Bedrock Learning

Performance & impact analysis

This is a report exploring the impact Bedrock's curriculum has had across over the last two years, prepared for one of Bedrock's partner Multi Academy Trusts.

For reasons of data privacy, the MAT and individual school names have been removed from this report. All data and statistics are real.

Language and literacy form the bedrock of all education.

Bedrock Learning is developed on a foundation of academic research and it's useful to bear some key ideas in mind when reading this analysis report.

There is a clear goal: Research shows us that as a student progresses through school, they need to be adding c. 3,000 new words to their vocabulary per year *(Beck, McKeown & Kucan, 2002; Nagy, 1980 & 1986)* if they are to keep up with the increasingly challenging language demands of the curriculum.

We need to maximise the opportunities that every learner has to be exposed to Tier 2 vocabulary: A keen and successful reader who reads for 20 minutes a day will encounter approximately 2 million words a year. A reticent reader who reads for less than a minute a day will encounter just 8000. The likelihood of learning a word incidentally after one exposure is around 0.15 *(Nagy, Herman & Anderson, 1985; Swanborn & Glopper, 1999)*

We need all learners to be meeting expectations if we want to create a level playing field. There can be no exceptions. "In vocabulary acquisition, a small early advantage grows into a much bigger one unless we intervene very intelligently to help the disadvantaged student learn words at an accelerated rate." *(E.D. Hirsch, 2003).*

A proactive approach is needed: Biemiller suggests that "If we are serious about "increasing standards" and bringing a greater proportion of school children to high levels of academic accomplishments, we cannot continue to leave vocabulary development to parents, chance and highly motivated reading."

Olivia Sumpter
Director of Education at Bedrock

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01
Vocabulary

Knowledge of language, which includes linguistic knowledge like vocabulary and grammar, as well as knowledge of the world for comprehension, underpins progression in spoken language, reading and writing.

Ofsted, 2022

Attainment growth across Bedrock's core curriculum:
‹MAT name removed›

26

of your academies are now partnered with Bedrock Learning

16,608

learners from across the Multi Academy Trust are now accessing Bedrock's core curriculum

Traditionally, schools have no means by which to track and monitor literacy improvement, other than teacher assessment and external tests.

Bedrock's extensive reporting suite allows schools to track this crucial area of teaching and learning, via progress data and engagement data. The data is all actionable, informing interventions and classroom practice, while developing a language rich culture at the school.

Learners are continually assessed through their engagement with learning activities and through pre and post tests. In this analysis, we reveal key insights into intentional and incidental language learning. This report demonstrates the extent to which your learners are being taught key vocabulary and grammar, as well as the number of words they are reading across the platform
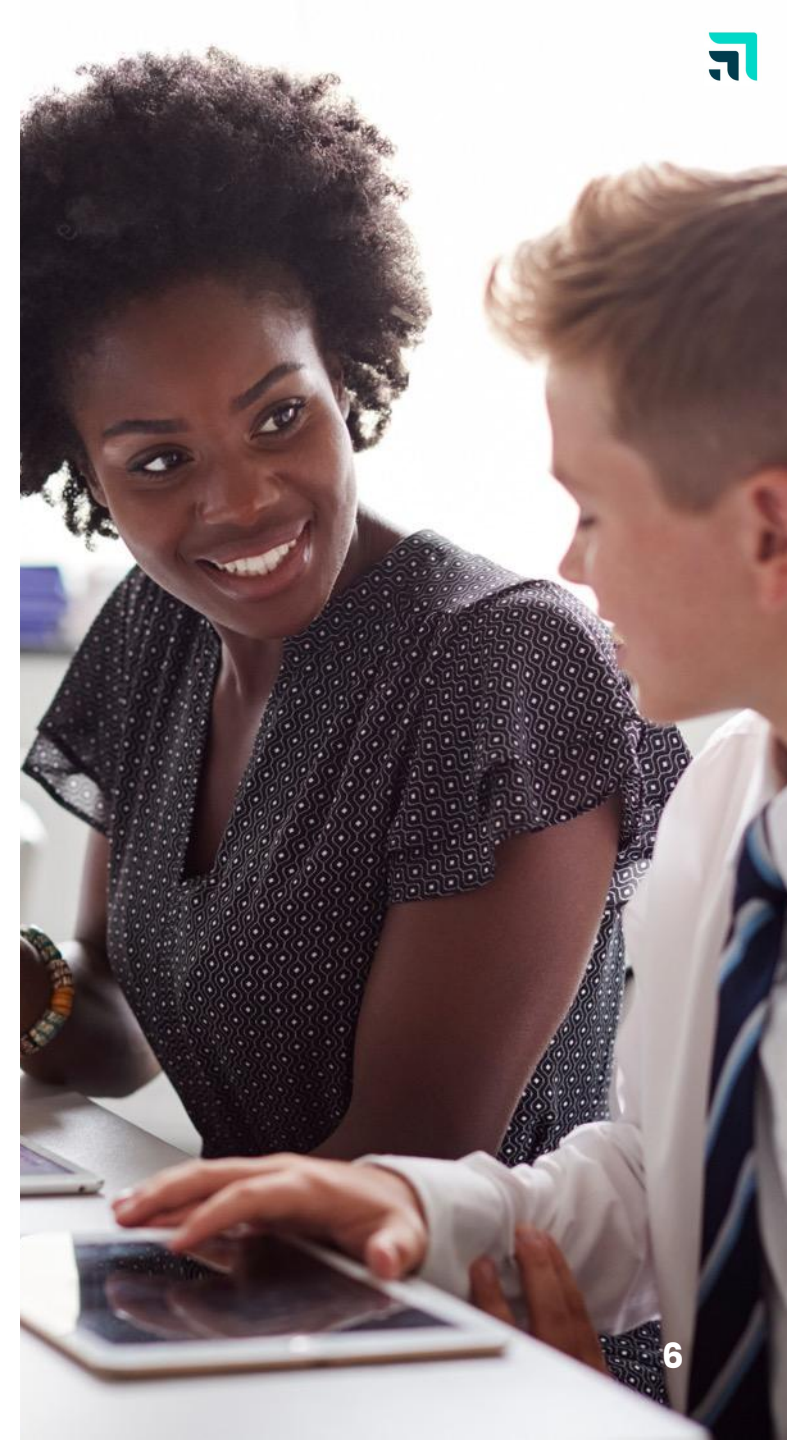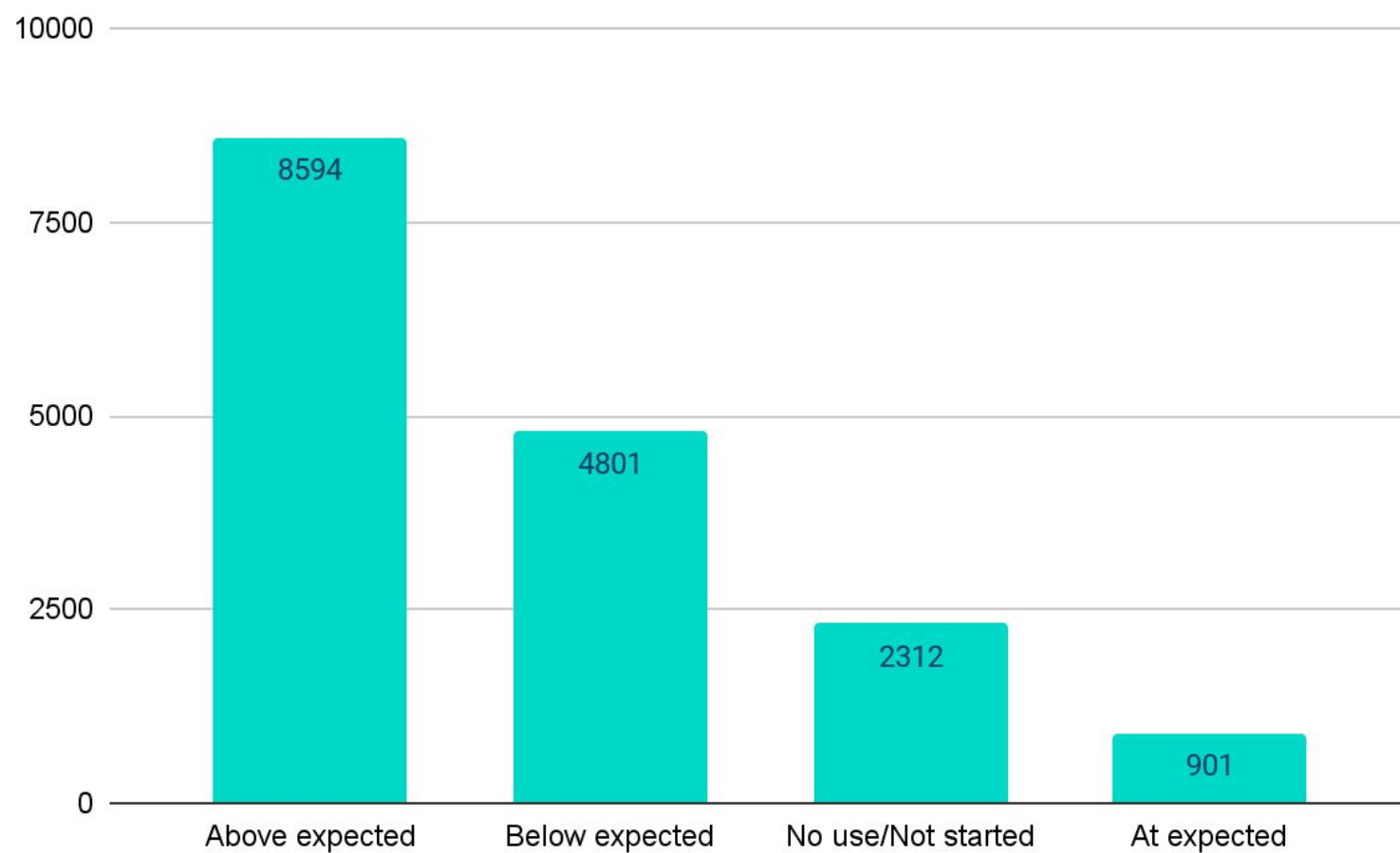
Olivia Sumpter
Director of Education, Bedrock Learning

Bedrock Learning

Setting expectations.

<Multi Academy Trust name removed> has set an expectation that all learners should complete 10 points per week. (Note: Bedrock's default recommendation is for 20 points per week.)

The below graph shows the number of your learners who fall into each category of usage.

Setting expectations.

‹Multi Academy Trust name removed› has set an expectation that all learners should complete 10 points per week.
This table shows the impact of being 'below', 'at' or 'above' expected usage on the number of words learned and the number of words read.

Usage	No. of your learners at this level	Percentage of your learners at this level	Impact
Above expected	8,594	41%	Vocabulary growth impacts reading, writing and oracy. At above expected usage, **113 words** will be **explicitly taught** to learners over the expected number of lessons. Incidental vocabulary acquisition occurs through the **exposure** to **9,500 words** in, on average, 6.3 topics. At this level, learners are making sustained progress towards a receptive and expressive vocabulary size of **15,000–20,000** words required (Treffers-Daller, 2013) at the end of secondary school. At above expected, learners answer on average **113 reading comprehension activities** at word and text level. By actively engaging with this number of words and texts consistently, learners are mastering the skills of reading fluency and comprehension that will support their access to the classroom curriculum and beyond the school gates.
At expected	901	5%	Vocabulary growth impacts reading, writing and oracy. At expected usage, **103 words** will be **explicitly taught** to learners over the expected number of lessons. Incidental vocabulary acquisition occurs through the **exposure** to **8,600 words** in on average 5.7 topics. At expected, learners answer on average **103 reading comprehension activities** at word and text level. By actively engaging with this number of words and texts consistently, learners are developing the skills of reading fluency and comprehension that will support their access to the classroom curriculum and beyond the school gates.
Below expected	4,801	21%	Vocabulary growth impacts reading, writing and oracy. At below expected usage, **93 words** will be **explicitly taught** to learners over the expected number of lessons. Incidental vocabulary acquisition occurs through the **exposure** to **7,700 words** in on average 5.2 topics. At below expected, learners answer on average **93 reading comprehension activities** at word and text level. Learners are working towards the skills of reading fluency and comprehension that will support their access to the classroom curriculum and beyond the school gates. Research is clear that poor comprehenders are at greater risk of low educational attainment. (Cain and Oakhill, 2006, Ricketts et al., 2014).
None/Not begun	2,312	14%	These learners are not being taught vocabulary and are not benefitting from the language-rich texts across Bedrock Learning. It is likely that the foundations of language comprehension are being left to chance for these learners.

Words taught.

This table indicates the total number of words that have been explicitly taught to learners on Bedrock across your schools.

A positive number in the 'additional words' column indicates that more words have been taught than the expected amount. A negative number indicates fewer words have been taught than the expected number.

School	Learners	Total words explicitly taught	Expected explicitly taught words	Additional explicitly taught words	Average explicitly taught words per learner
School name withheld	797	185,280	19,792	165,488	232
School name withheld	478	98,238	11,870	86,368	206
School name withheld	477	85,668	11,845	73,823	180
School name withheld	564	96,063	14,006	82,057	170
School name withheld	820	124,251	20,363	103,888	152
School name withheld	450	64,416	11,175	53,241	143
School name withheld	546	76,401	13,559	62,842	140
School name withheld	924	122,874	22,946	99,928	133
School name withheld	1,050	136,314	26,075	110,239	130
School name withheld	704	89,730	17,482	72,248	127
School name withheld	722	90,609	17,929	72,680	125
School name withheld	551	66,450	13,683	52,767	121
School name withheld	695	75,096	17,259	57,837	108
School name withheld	602	64,320	14,949	49,371	107

Words read.

This table indicates the total number of words exposed to learners on Bedrock across your schools.
A positive number in the 'additional words' column indicates that more words have been read than the expected amount. A negative number indicates fewer words have been read than the expected number. Reading a diverse range of texts regularly is a crucial component for incidental vocabulary acquisition, as well as the development of cultural capital and confidence with unseen texts.

School	Learners	Total words exposed	Total words expected	Additional words exposed	Average words per learner
School name withheld	797	15,440,000	6,854,200	8,585,800	19,373
School name withheld	478	8,186,500	4,110,800	4,075,700	17,127
School name withheld	477	7,139,000	4,102,200	3,036,800	14,966
School name withheld	564	8,005,250	4,850,400	3,154,850	14,194
School name withheld	820	10,354,250	7,052,000	3,302,250	12,627
School name withheld	450	5,368,000	3,870,000	1,498,000	11,929
School name withheld	546	6,366,750	4,695,600	1,671,150	11,661
School name withheld	924	10,239,500	7,946,400	2,293,100	11,082
School name withheld	1,050	11,359,500	9,030,000	2,329,500	10,819
School name withheld	704	7,477,500	6,054,400	1,423,100	10,621
School name withheld	722	7,550,750	6,209,200	1,341,550	10,458
School name withheld	551	5,537,500	4,738,600	798,900	10,050
School name withheld	695	6,258,000	5,977,000	281,000	9,004
School name withheld	602	5,360,000	5,177,200	182,800	8,904

Exploring usage expectations.

The table below shows the number of learners in each usage category per school.
Overall, this view gives an indication of the extent to which each school is meeting usage goals and therefore, the extent to which learners are being taught the expected number of words.

School	Total Learners	Learners ABOVE EXPECTED	Learners AT EXPECTED	Learners BELOW EXPECTED	Mode Category
School name withheld	850	330	42	478	Below Expected
School name withheld	797	768	4	25	Above Expected
School name withheld	477	395	23	59	Above Expected
School name withheld	407	5	0	402	Below Expected
School name withheld	210	105	21	84	Above Expected
School name withheld	594	51	44	499	Below Expected
School name withheld	598	106	26	466	Below Expected
School name withheld	695	344	46	305	Above Expected
School name withheld	704	492	38	174	Above Expected
School name withheld	664	0	0	664	Below Expected
School name withheld	367	97	25	245	Below Expected
School name withheld	478	359	29	90	Above Expected
School name withheld	551	99	39	413	Below Expected
School name withheld	722	548	33	141	Above Expected

Meeting usage expectations.

The table below shows the number of learners in each category for the number of words read.
Overall, this view gives an indication of the extent to which each school is meeting usage goals and therefore, the extent to which learners are reading the expected number of words.

School	Learners EXPECTED OR ABOVE Expected Exposure	Learners BELOW Expected Exposure	School	Learners EXPECTED OR ABOVE Expected Exposure	Learners BELOW Expected Exposure
School name withheld	772	25	School name withheld	372	478
School name withheld	725	325	School name withheld	348	102
School name withheld	695	229	School name withheld	346	205
School name withheld	611	209	School name withheld	332	270
School name withheld	581	141	School name withheld	297	447
School name withheld	571	468	School name withheld	278	244
School name withheld	530	174	School name withheld	234	448
School name withheld	474	90	School name withheld	138	413
School name withheld	451	95	School name withheld	132	466
School name withheld	418	59	School name withheld	126	84
School name withheld	390	305	School name withheld	122	245
School name withheld	388	90	School name withheld	95	499
School name withheld	372	478	School name withheld	5	402

Analysing usage
## ‹Multi Academy Trust name withheld›

This illustrates the number of learners in each school that are exposed to academic words at the expected or above expected rate, as well as the number of learners who are exposed to academic words below the expected rate.

The further towards the left of the chart a school is, the more consistently they are ensuring all learners are exposed to word learning.

Learners achieving expected/above exposure to words vs. learners achieving below expected exposure

Number of Learners per School Achieving Expected or Above Exposure to Words Compared to Learners Achieving Below Expected exposure
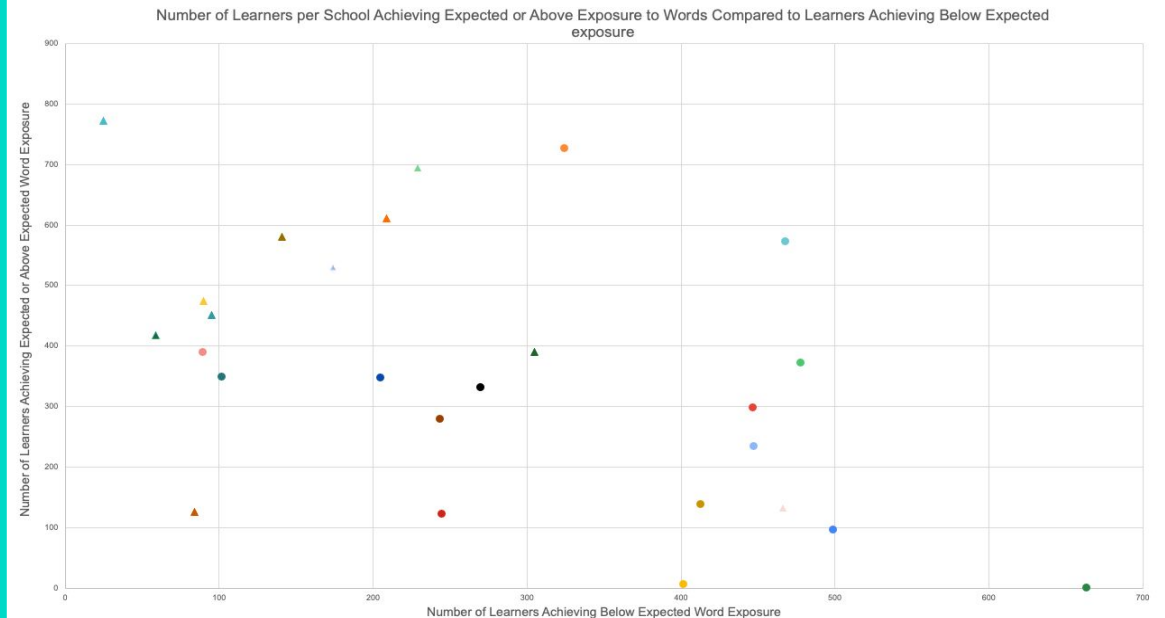
(individual school names withheld)

Analysing usage
‹Trust name withheld›

There is a **positive correlation** between total points scored by a learner (their activity on Bedrock) and total number of words the learner is explicitly taught.

The more points a learner completes, the more words they are explicitly taught.

This improves their chances of growing their vocabulary to keep up with the language demands of the curriculum.

LET'S CONSIDER...

- Who are the outliers?
- Are they moving through the curriculum at a sustainable pace that is resulting in effective learning?
- What can we do to move more learners towards the 2-3k words explicitly taught?

Total points scored vs. No. of words learner is explicitly taught
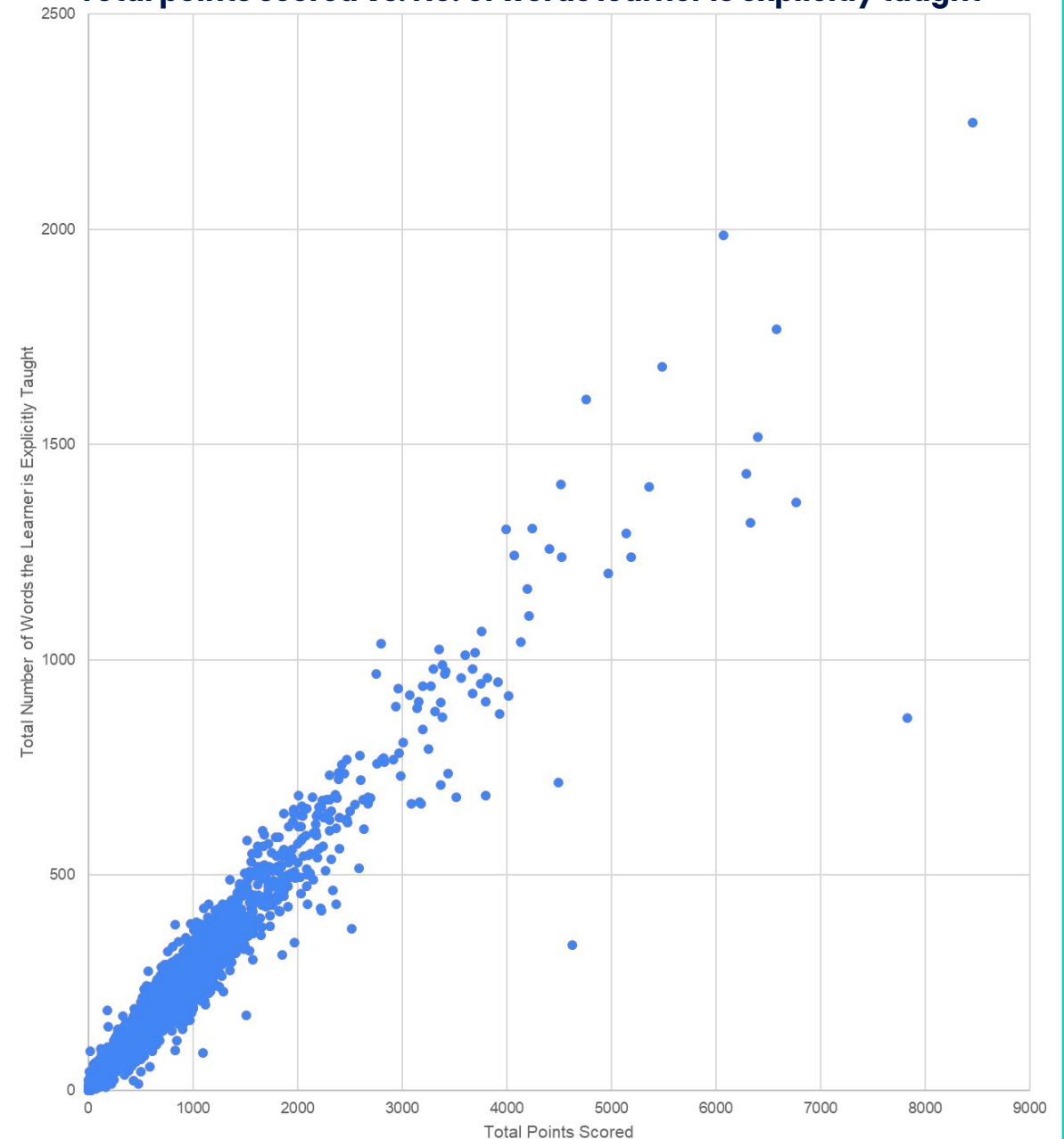
Analysing usage
‹Trust name withheld›

This chart shows a **positive correlation** between individual school usage (as calculated by the average number of points scored per learner) and the number of words each learner is explicitly taught.
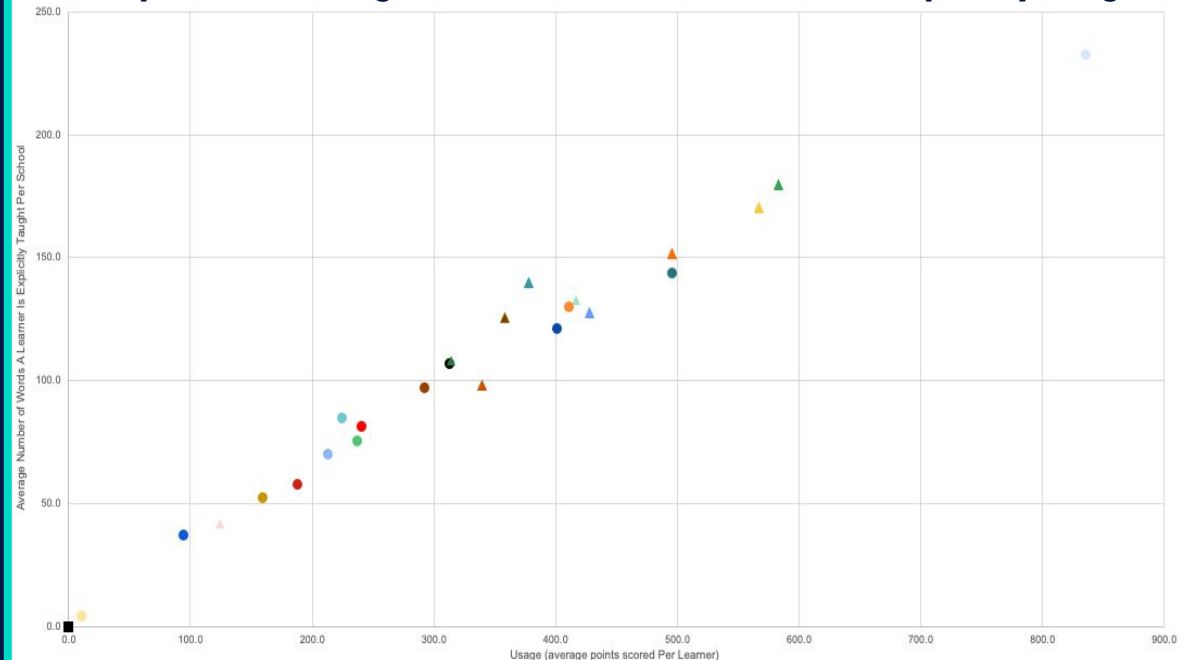
(Note: Points can be earned for starting a lesson, taking a test and recapping, as well as completing a lesson, which accounts for the variation in the number of words taught between schools with similar usage profiles.)

LET'S CONSIDER...

- How can we support you in achieving consistency of usage across your schools?

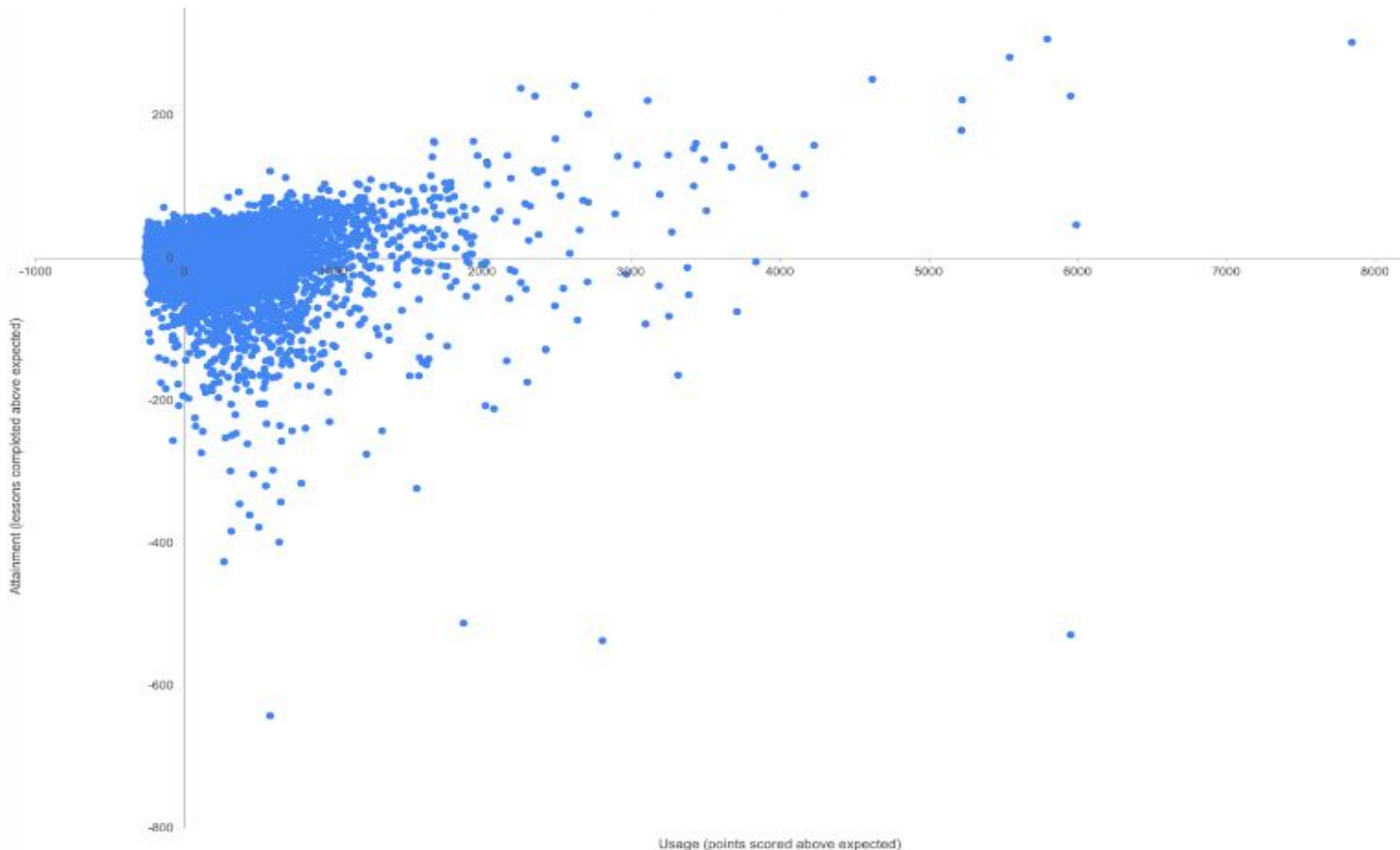**Comparison of usage and no. of words a learner is explicitly taught**

(individual school names withheld)

14

Analysing usage
‹Trust name withheld›

Comparison of usage vs. attainment*

Attainment (lessons completed above expected)

Usage (points scored above expected)

This scatter plot chart illustrates a comparison of usage (points earned) and attainment (lessons completed).

0 equals the expected rate of both metrics.

This indicates that the majority of learners are achieving expected or above expected levels.
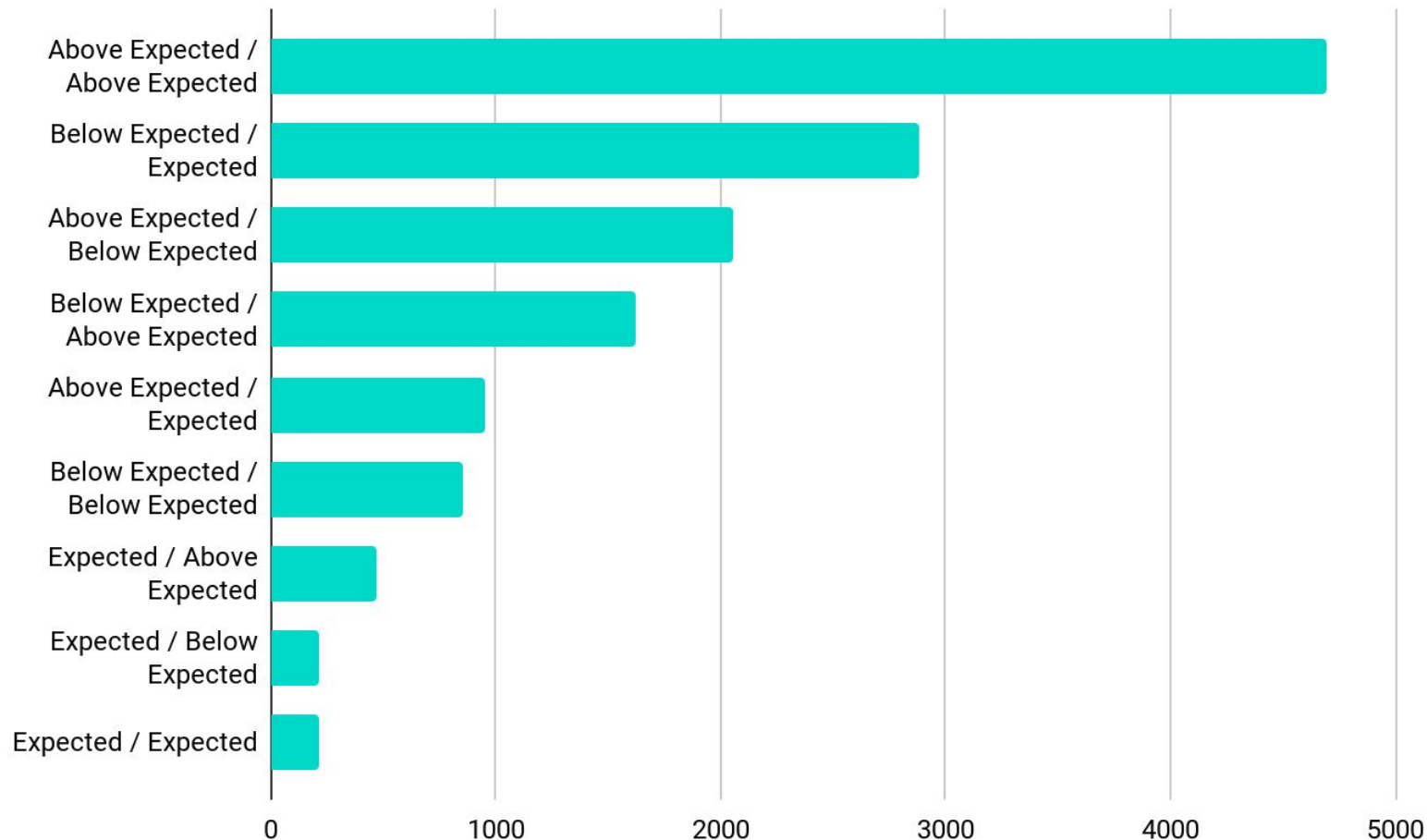
LET'S CONSIDER...

- Where a learner is towards the bottom right quadrant, it indicates that they are working rapidly through lessons but not always completing them first time. Who are these learners?
- Are they in an appropriate block?
- Are they completing learning thoughtfully?

* Attainment is the no. of lessons completed by the learner relative to the no. of lessons we would expect to be completed given the time spent on the platform.

15

Analysing usage and attainment
‹Trust name withheld›

Usage / Attainment comparison (all learners)

Category	Value (approx.)
Above Expected / Above Expected	~4700
Below Expected / Expected	~2900
Above Expected / Below Expected	~2050
Below Expected / Above Expected	~1650
Above Expected / Expected	~950
Below Expected / Below Expected	~850
Expected / Above Expected	~480
Expected / Below Expected	~220
Expected / Expected	~200

X-axis: 0, 1000, 2000, 3000, 4000, 5000

This chart indicates the number of learners falling into the different usage/attainment categories.

It demonstrates that the majority of learners (55%) are achieving at expected or above expected levels.

Learners in the "below expected" category for attainment with "above expected" usage (13% of learners) indicates learners that are spending time working on the system but are not always completing lessons first time.

Note: the first "above/below expected" on the Y axis for each datapoint relates to usage, the second relates to attainment.

Pre and post-test differences
‹Trust name withheld›

The average difference between pre and post test shows the improvement that learners are making over the course of a topic.

The graph on the previous page shows that **22%** of learners across your schools exhibit **below expected attainment** across Bedrock's core curriculum. Although completing less than expected, learners in this category are still making progress in the topics that they are completing, with an average **18% improvement** between pre and post tests.

Usage	Average difference between pre and post test		
	Below Expected (learners who have not completed and/or passed the expected number of lessons in the timeframe)	**Expected** (learners who have completed and passed the expected number of lessons in the timeframe)	**Above Expected** (learners who have completed and passed more than the expected number of lessons in the timeframe)
Above Expected (learners who have earned >10 points per week across the timeframe)	20%	20%	20%
Expected (learners who have earned 10 points per week across the timeframe)	18%	19%	16%
Below Expected (learners who have earned <10 points per week across the timeframe)	17%	18%	15%

Comparison of usage and attainment in schools
‹Trust name withheld›

Usage / Attainment comparison (all schools)

(individual school names withheld)
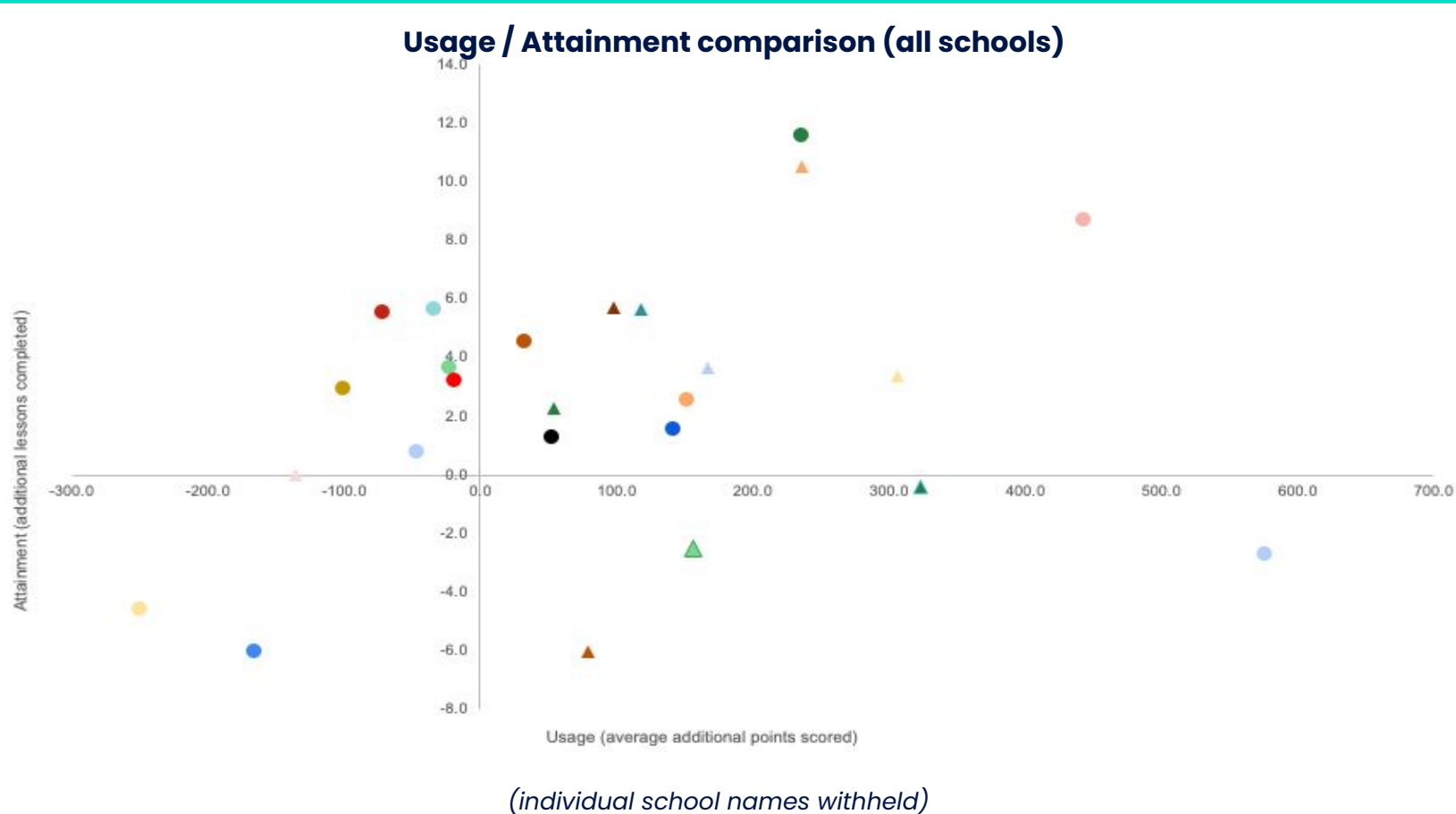
19 of the 25 schools show **greater than expected attainment**.

12 out of the 25 show **higher than expected usage and attainment**.

Schools towards the bottom-right of the graph are showing good usage but are completing fewer lessons than expected. This indicates that these schools may have a higher proportion of learners spending time on the system but not always completing lessons first time.

Schools towards the left-hand side of the graph are showing lower than expected average usage and should be encouraged to spend more time on the platform.

Targeting cohorts: EAL learners
‹Trust name withheld›

Additional points scored vs. Additional lessons completed:
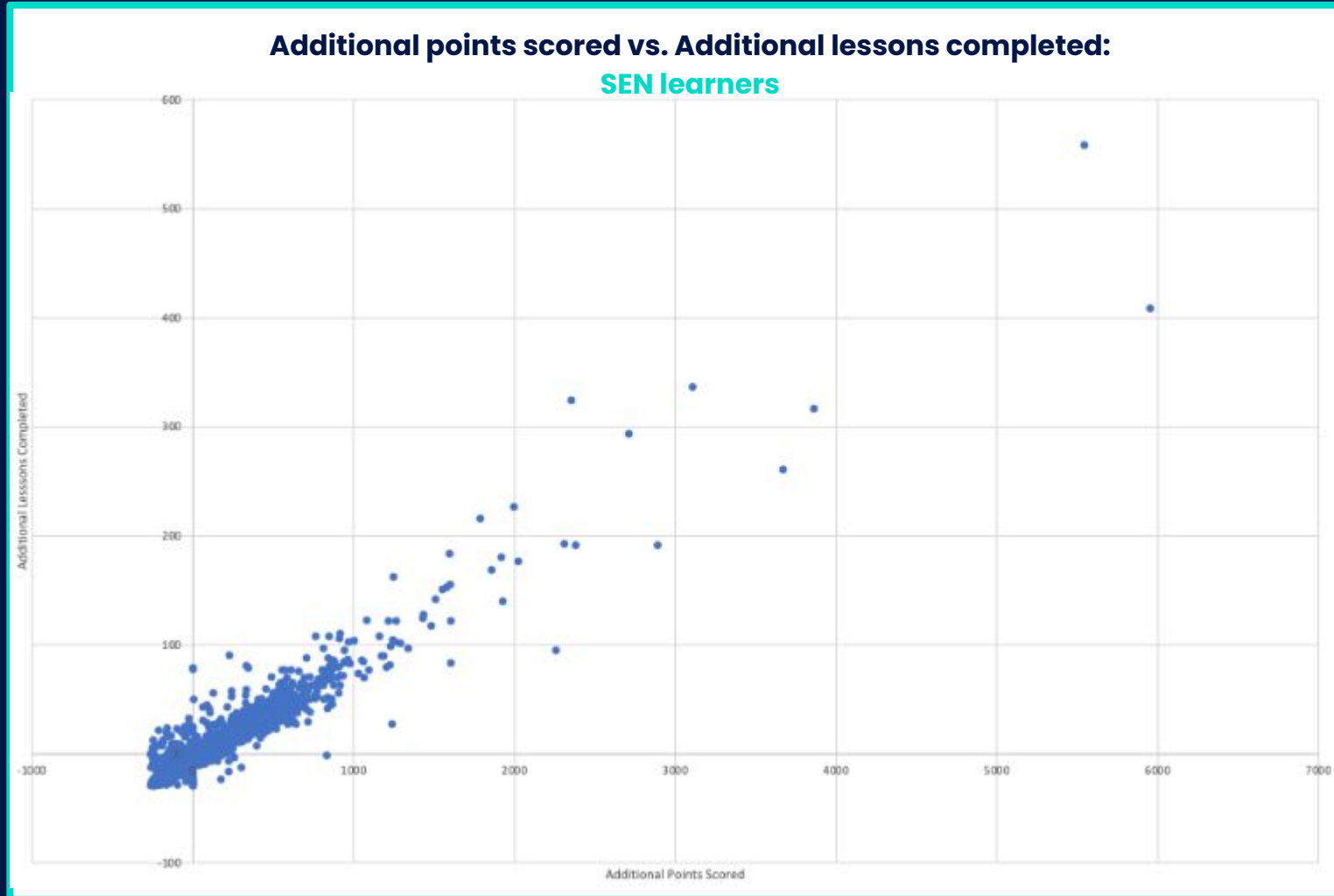**EAL learners**
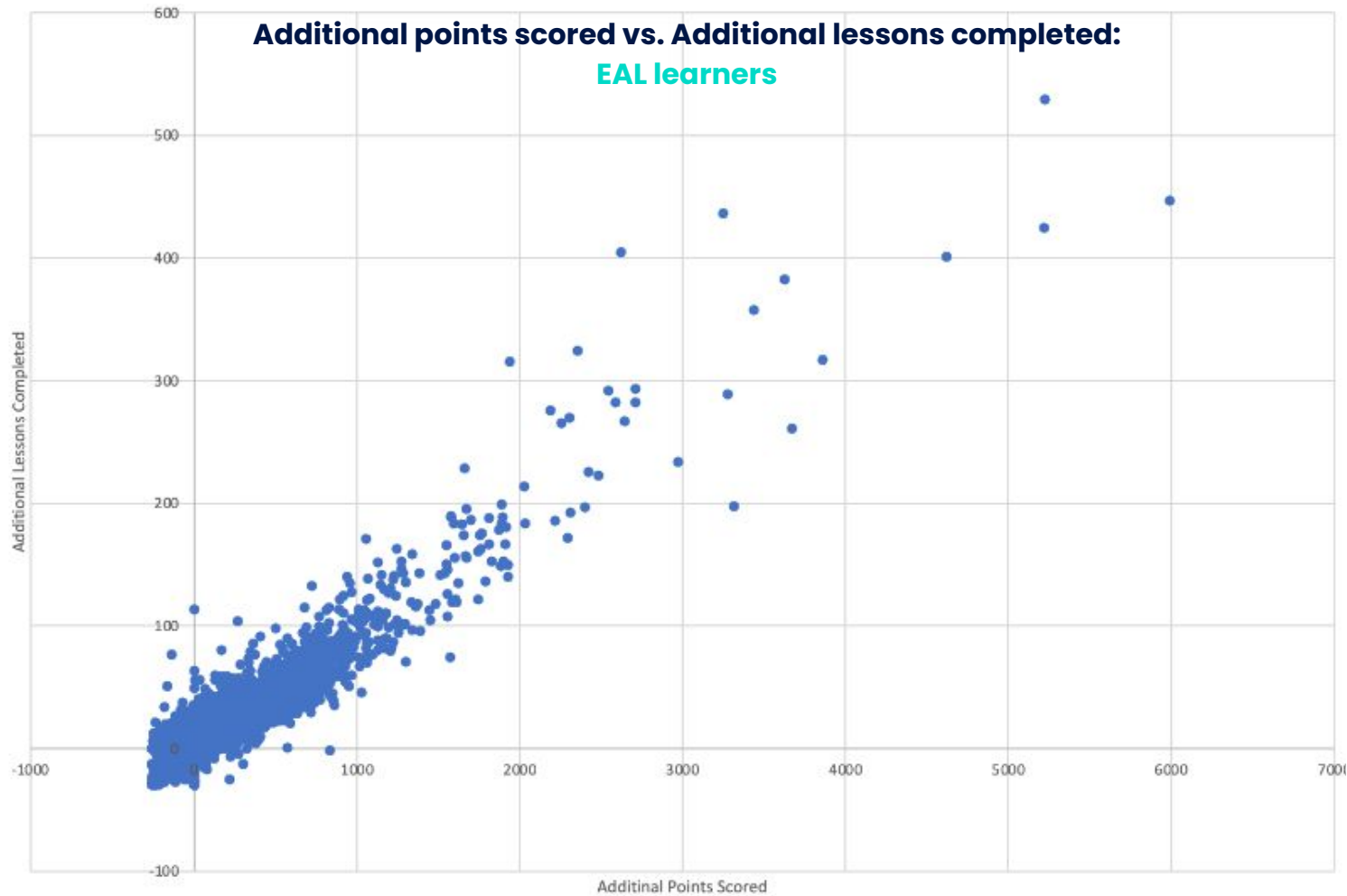
This chart shows the additional points awarded to EAL learners over and above expected and the additional lessons completed.

If learners were finding access to the system challenging, you would expect to see data points toward the bottom right of the chart as learners failed to progress through the lessons despite completing the required number of points each week. All of the learners in this chart are within the expected bounds and EAL learners are advancing on the system in a manner expected of normal progress.

The average improvement between pre and post test for EAL learners is 21%. This improvement is higher than the average across the total learner population, suggesting EAL learners are making good progress on the platform.

Targeting cohorts: SEN learners
‹Trust name withheld›

Additional points scored vs. Additional lessons completed:
SEN learners

This chart shows the additional points awarded to SEN learners over and above expected and the additional lessons completed.

If learners were finding access to the system challenging, you would expect to see data points toward the bottom right of the chart as learners failed to progress through the lessons despite completing the required number of points each week. All of the learners in this chart are within the expected bounds, suggesting SEN learners are advancing on the system in a manner expected of normal progress and are not finding accessing the learning content too challenging.
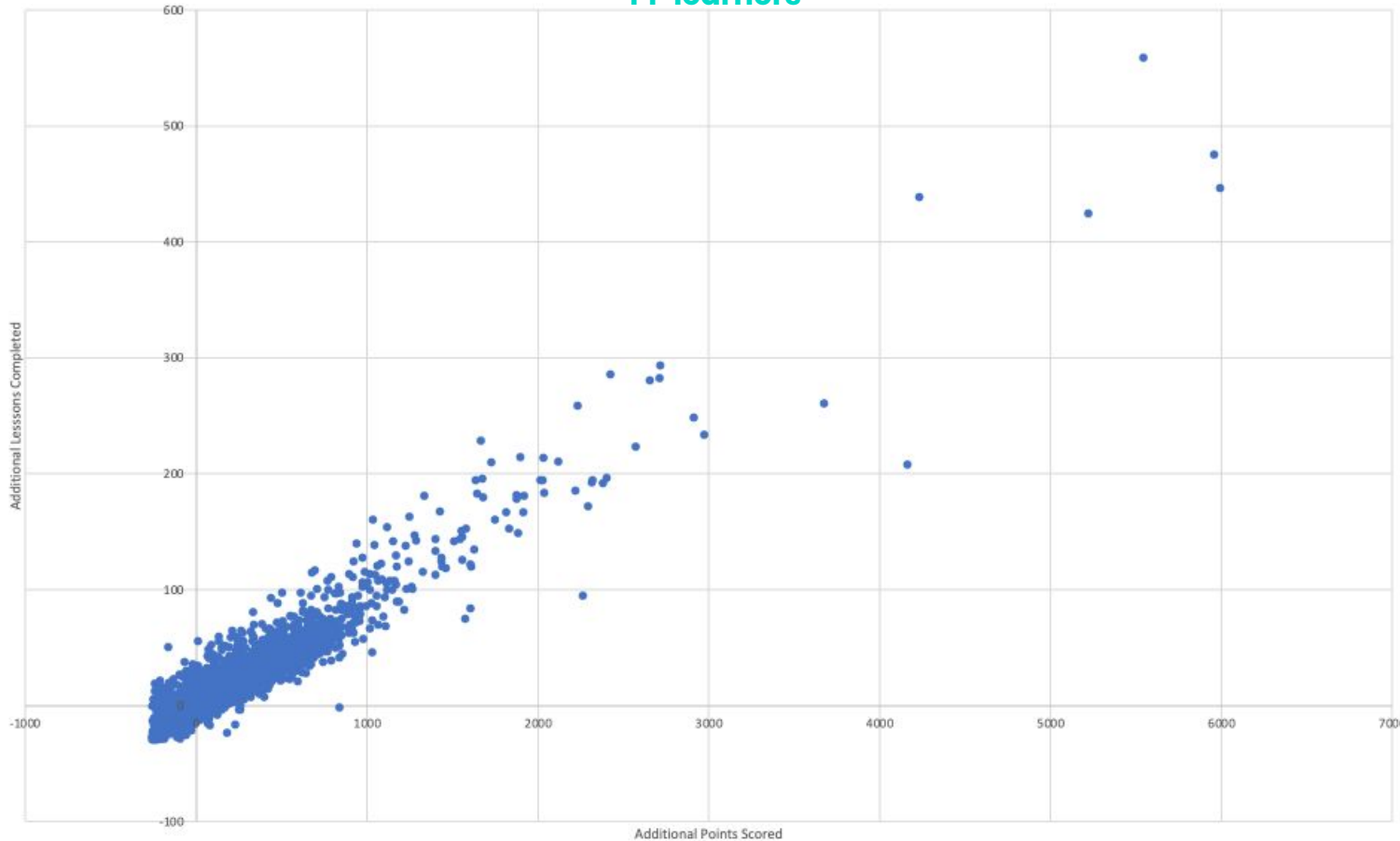
The average improvement between pre and post test for SEN learners is 21%. This improvement is higher than the average across the total learner population, suggesting SEN learners are making good progress on the platform.

Targeting cohorts: PP learners
‹Trust name withheld›

Additional points scored vs. Additional lessons completed:
PP learners

This chart shows the additional points awarded to Pupil Premium (PP) learners over and above expected and the additional lessons completed.

If learners were finding access to the system challenging, you would expect to see data points toward the bottom right of the chart as learners failed to progress through the lessons despite completing the required number of points each week. All of the learners in this chart are within the expected bounds, suggesting PP learners are advancing on the system in a manner expected of normal progress and are not finding accessing the learning content too challenging.

The average improvement between pre and post test for PP learners is 19%. This improvement is higher than the average across the total learner population, suggesting PP learners are making good progress on the platform.

02

Grammar

When children learn language, they are not simply engaging in one type of learning among many; rather, they are learning the foundations of learning itself.

Michael Halliday

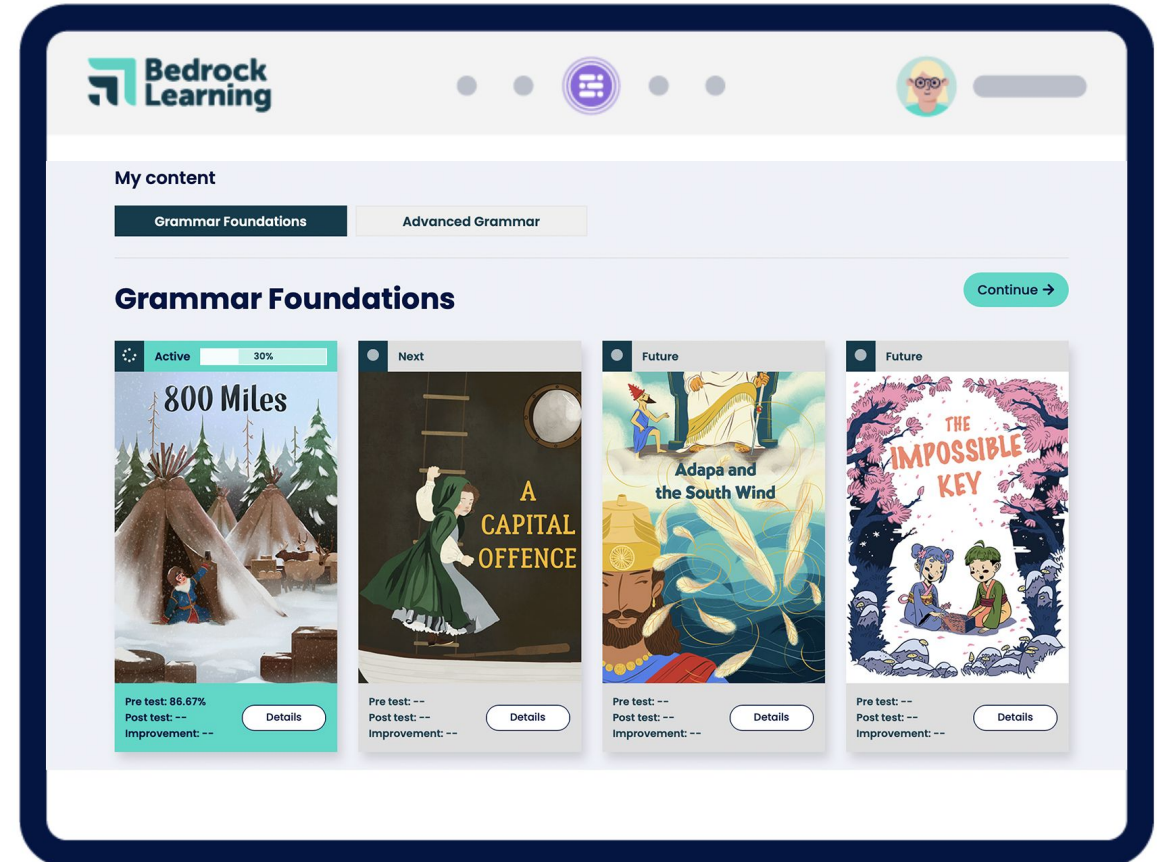# **What** is taught in Bedrock's grammar curriculum?

Grammar and syntax are just as important as vocabulary. Together they form the foundations of language comprehension.

Bedrock's knowledge-rich grammar curriculum is national curriculum aligned, covering basics like nouns and verbs and moving towards more complex structures like the passive voice and complex-compound sentences.

It provides learners with the knowledge they need to understand and analyse text, as well as judiciously and accurately select grammatical structures in their own communication.

Holistic assessment in Bedrock's grammar curriculum: <Trust name withheld>

22

of your 27 academies partnered with Bedrock have now begun accessing grammar content

5,840

learners from across the your Multi Academy Trust have taken the holistic grammar assessment

58%

average initial score from learners taking the holistic grammar assessment (see following slide for a breakdown by school).

Bedrock's grammar content is National Curriculum-aligned and teaches all of the key grammatical skills learners need to know. The curriculum is structured into two units: Grammar Foundations and Advanced Grammar, each covering around 30 skills.

Learners meet the new grammar items in the context of original fiction and non-fiction texts that are culturally enriching and hugely varied.

Learners take a 25 question holistic assessment at the beginning of all learning. This operates as a diagnostic test, highlighting areas they are confident in and areas they need to work on. This data can help personalise teaching and differentiate within the classroom.

Aaron Leary
Founder, Bedrock Learning

Bedrock Learning

Holistic assessment in Bedrock's grammar curriculum:
‹Trust name withheld›

Academy	Avg. initial holistic assessment score
School name withheld	58%
School name withheld	67%
School name withheld	59%
School name withheld	47%
School name withheld	56%
School name withheld	60%
School name withheld	54%
School name withheld	63%
School name withheld	54%
School name withheld	59%
School name withheld	61%

Academy	Avg. initial holistic assessment score
School name withheld	63%
School name withheld	61%
School name withheld	59%
School name withheld	56%
School name withheld	58%
School name withheld	60%
School name withheld	57%
School name withheld	58%
School name withheld	49%
School name withheld	60%

Exploring grammar across your Multi Academy Trust.

Bedrock's Grammar curriculum is a linear, knowledge-rich curriculum. The chart below illustrates the number of grammar topics completed, shown by school.

(individual school names withheld)
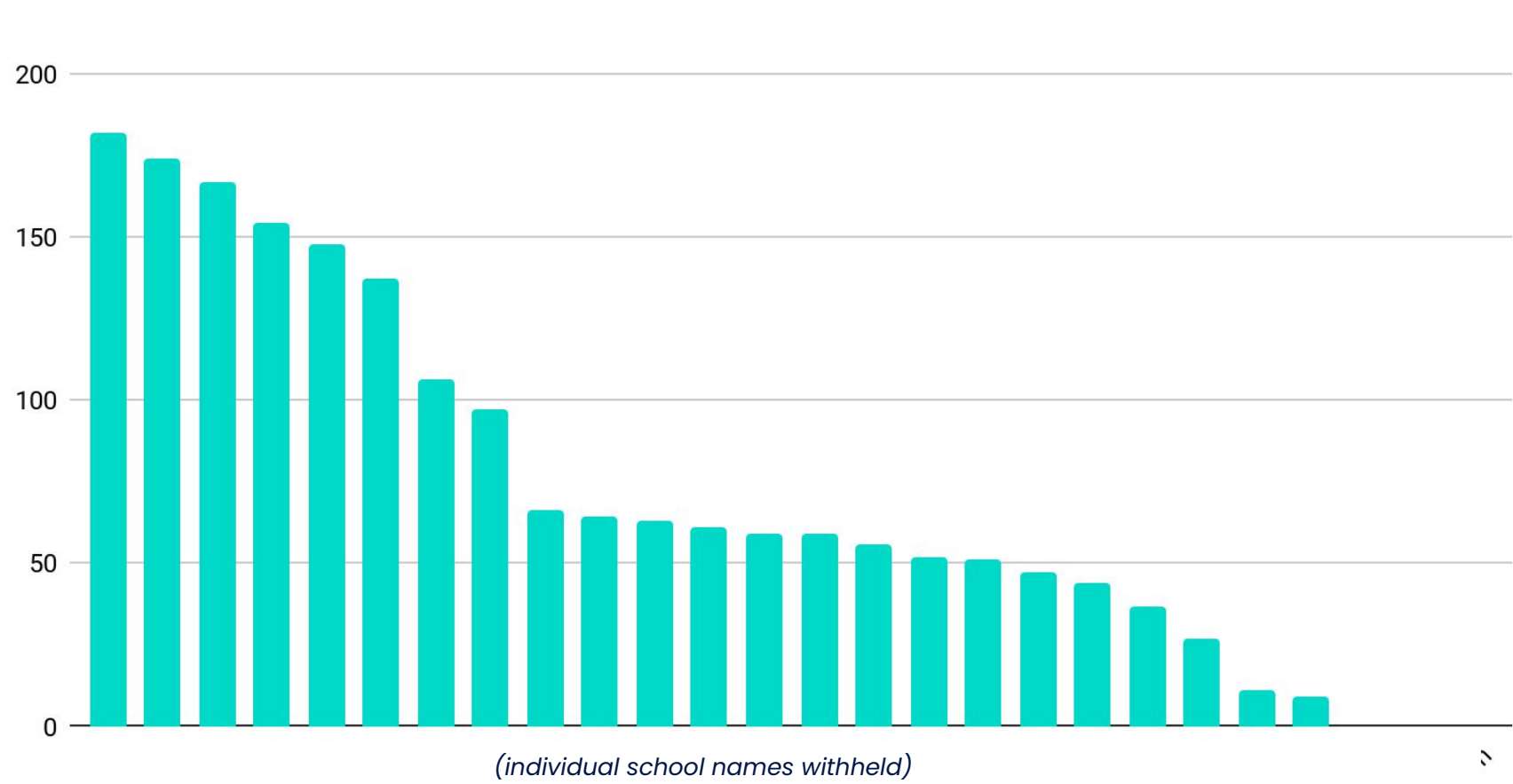
This view indicates the total number of topics completed by each school.

It gives an oversight of where the uptake of the grammar curriculum is strongest.

LET'S CONSIDER...

- How can we support schools to access the grammar curriculum more consistently?

Exploring grammar across your Multi Academy Trust.

Bedrock's Grammar curriculum is a linear, knowledge-rich curriculum. The table below demonstrates the extent to which learners at each school have made progress through the curriculum.

School	Learners	Grammar Topics Completed									Total Topics Completed
		1 FOUNDATIONS Word Classes	2 FOUNDATIONS Capital Letters	3 FOUNDATIONS Sentence Basics	4 FOUNDATIONS Sentence Structure 1	5 FOUNDATIONS Sentence Structure 2	6 ADVANCED Word Classes	7 ADVANCED Punctuation	8 ADVANCED Sentence Structure	9 ADVANCED Modifying Sentences	
School name withheld	722	52	59	44	17	9	0	0	0	1	**182**
School name withheld	602	28	26	17	15	10	1	0	0	0	**97**
School name withheld	546	52	43	34	27	18	0	0	0	0	**174**
School name withheld	924	33	35	44	36	19	0	0	0	0	**167**
School name withheld	1050	44	39	34	16	20	0	0	0	1	**154**
School name withheld	477	20	12	14	13	7	0	0	0	0	**66**
School name withheld	704	14	15	7	11	3	0	1	0	0	**51**
School name withheld	695	27	33	22	29	26	0	0	0	0	**137**
School name withheld	551	15	14	9	5	9	0	0	0	0	**52**
School name withheld	850	19	17	10	9	4	0	0	0	0	**59**
School name withheld	820	43	48	22	18	17	0	0	0	0	**148**
School name withheld	744	14	21	10	14	4	0	0	0	0	**63**
School name withheld	564	15	12	6	6	8	0	0	0	0	**47**

03

Tier 3 subject-specific vocabulary

"

Every subject has its own language and this code needs to be communicated to our novice students if they are going to flourish academically.

Alex Quigley, Closing the Vocabulary Gap

"

Learners need to be adding 2,000 to 3,000 new words a year to their reading vocabularies.

Beck, McKeown and Kucan, 2002

Tracking impact

2,153
New and custom subject-specific words are now curriculum-mapped ready to learn across your schools

1,467
words already mastered by students in Bedrock

82%
of knowledge retained on memory-checking, with **57%** of words that were not understood after initial teaching now mastered, **due to Bedrock's reteaching algorithm.**

113
topics added to your schools' curriculum map

293
learning sessions completed during Half Term 2 (Oct-Dec 2022)

69% Average lesson attainment

	Number of session in quartile	Average pre-test score	Average post-test score	Percentage increase
0–25%	53	10%	67%	**+570%**
26–50%	87	44%	62%	**+41%**
51–75%	43	60%	72%	**+20%**
76–100%	179	93%	96%	**+3%**

*Includes memory check/reteaching assessment

The impact of Mapper in Year 9
‹Trust name withheld›

1,996
words served to learners via Mapper across eight subjects

293
Sessions completed within Mapper

Following an initial assessment and teaching of Tier 3 subject-specific words:

1,073 (53%) words were already known by learners
394 (20%) words were learned by learners
529 (27%) words still needed to learned

Note:
The words that have not been mastered have all entered the reteaching knowledge organiser to be mastered later on.

*Data from the trial period from October-December 2022
**Active cohort: 82 learners

Bedrock Learning

Attainment and words mastered across the curriculum

Below are the results generated and impact seen across Tier 3 vocabulary teaching activities, excl. pre & post tests.

	Art	English	Geography	History	Maths	PE	MFL	Science
Average session score	76%	60%	85%	91%	84%	67%	70%	66%
Number of sessions completed	22	11	70	27	26	53	21	63
Number of words learned	41	8	42	27	22	56	28	40

*Data from the trial period from October–December 2022
**Active cohort: 82 learners

Highest avg. session score
History

Most sessions completed:
Geography

Most words learned:
PE

Thank you.