



# Engaging with data using Pupil Progress: Effects on educational leaders and learners

**Evaluation Report (October 2024)** 

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# We're NCFE. We're shaping smarter learning.

We're NCFE: an educational charity and leader in vocational and technical learning. We combine over 170 years of education experience with deep insight, working with a network of expert collaborators to shape smarter solutions around the greatest learning needs. In doing this, we're working for a fairer education system for all learners to power inclusivity and choice.

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- → Moving towards a smarter education eco-system
- Using our influence to shape real change
- Promoting the idea that potential is personal.



We empower educators to see the person behind the data to inform teaching and support students in reaching their true potential; driving progress for all.

Pupil Progress are dedicated to supporting the progress of every pupil – not just for school but for life. Providing one central point of truth for data, from the Student to the Trust CEO, we are on a mission to deliver this impact on a global level and are aware of the focus on innovation, digital transformation and quality assurance in education.



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# **Executive Summary**

The aim of the pilot was to investigate the impact on learners' performance of providing timely and easy to understand, course and skill specific granular data to aid agency and motivation.

We investigated how learners were affected by their engagement with the granular, course-specific reports, and teachers using tools to improve identification of common underperforming skill areas and providing targeted support to students.

We hypothesised that learners' achievement will improve when learners, teachers, and parents have the tools and granular, course-specific reports to improve identification of underperforming skill areas to address in order to raise attainment outcomes.

# Methodology

12 schools with a high proportion of disadvantaged students opted into the pilot. Granular data in the form of Question Level Analysis (QLA) marks from December mock exams were entered into Pupil Progress for all year 11 students providing baseline data to identify skill gaps.

Teachers and students used the tools in Pupil Progress to identify areas of strength and weakness and take strategic actions. Some departments used the Pupil Progress tagging to track and monitor targeted students, others exported the data and created separate intervention lists. Schools chose to either not give a granular report (3 schools), or given a printed version (4 schools) or app-based version of the report with QLA (5 schools).





Figure 1: An example of the exam-board specific trackers used for QLA to record and analyse mock data

A second mock paper sat in March-April was used to record change in QLA marks. Questionnaires and interviews provided insights into the teachers' use of the granular skills data and its impact on closing gaps.

Students and teachers gave feedback on the relative impact of the reports with granular data on learner agency. Anonymised data was analysed to see if there was a significant difference in achievement between targeted and non-targeted students identified by tagging.



# **Pilot Findings**

The pilot found that reliable question level analysis data from formal assessments allowed leaders and teachers to derive accurate insights from data analysis, thereby allowing them to plan changes in course and curriculum delivery with confidence. Across the 12 schools involved, 100 teachers and over 2000 students, this resulted in:

- improved student and teacher wellbeing
- cost and time savings
- improved communication with students, parents and across the school.

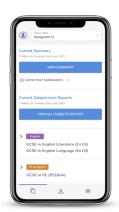
The tagging feature in Pupil Progress allowed for enhanced teacher and subject leader engagement with data, resulting in tagged students matching or making greater progress than their peers in 3 months. These students, who were previously underperforming, demonstrated significant improvement, helping close achievement gaps. This was attributed to improved efficiency of learning time, improved conversations and higher engagement and motivation.



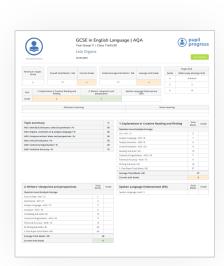
Targeted students
matched or
significantly
improved their
grades compared
to their peers

Using student reports based on the same one point of data significantly improved communication between staff, students and parents. Following the release of their reports, the majority of leaders and teachers surveyed experienced improved Learner Agency, awareness of areas to improve, engagement in lessons and motivation to achieve targets.





Granular reports
motivated students
and improved
engagement to
address areas of
underachievement



Overall the use of tagging and reports with Question Level Analysis led to **improved** wellbeing of staff and students as they felt confident with where they were at, and what their next steps were to improve.



# Introduction

Learners' performance, agency and decision-making is negatively impacted by a disconnect with data, with parents and learners receiving broad overviews of current attainment and likely outcome, but lacking detail on how to improve it.

The pilot addressed the lack of timely, detailed and easily understandable assessment data provided directly to learners during their courses. It investigated how providing assessment data-related tools can support the engagement of learners, teachers and parents, thereby raising attainment and closing gaps.

Teachers currently have limited tools to evaluate and share detailed assessment data within an effective time frame to provide effective feedback to students;

- Test data collated on time-consuming, individual spreadsheets
- MIS systems that are designed to only collate whole grade or a single mark
- Analysis tools that work at grade level and are not linked to the underlying raw data

Each of these lead to multiple systems and/ or spreadsheets being needed resulting in double data entry and time delay from data entry to analysis and action. Raw assessment data is disconnected from analysis too, making it challenging to identify the underperforming students' common skills or knowledge barriers.

Whole School data collection for reporting and analysis has to be synchronised at data points and is very time consuming, so the analysis is rarely acted on or is so slow that it can only be reviewed once or twice a year.

For parents and students, getting this information can be time-consuming and often comes weeks after the assessment, reducing its effectiveness. Reported data is too macro; it only shows expected end-point grades, often along with some behaviour and effort comments. This lack of detail can disempower learners and means they often lack the information needed to focus and direct independent study.



Pupil Progress aims to address these fundamental challenges with data and provide teachers, learners and parents with the tools and information from a single source that helps them to raise attainment.

# Using Granular Data to raise attainment through targeted action

The pilot aimed to investigate the impact on learners' performance of providing timely and easy to understand, course and skill specific granular data to aid agency and motivation.

Our innovative assessment approach utilises Pupil Progress to provide timely data and reports with detailed skill breakdowns and QLA (Question Level Analysis), enabling targeted interventions, resource access, and collaboration for learners, teachers and parents, ultimately enhancing teaching quality and student achievement.

Making evidence-informed decisions using robust data to inform tightly focused interventions is widely recognised as essential to close gaps, raise attainment and improve the quality of teaching (The EEF, 2019 and DfE, 2015).

### From the DfE (2015)<sup>1</sup>:

- Schools which are successful in raising attainment of disadvantaged pupils:
  - o "make decisions based on data and respond to evidence, using frequent, rather than one-off assessment and decision points."; and
  - "have an individualised approach to addressing barriers to learning and emotional support, at an early stage, rather than providing access to generic support."

<sup>&</sup>lt;sup>1</sup> Macleod, S., Sharp, C., Bernardinelli, D., Skipp, A., & Higgins, S. (2015). Supporting the attainment of disadvantaged pupils: articulating success and good practice: Research report November 2015.



- "Good and outstanding schools are committed to closing the attainment gap by targeting interventions and using robust tracking systems"
- To close the attainment gap, schools need to "address individual pupils' learning needs; [and] help all staff to use data effectively" then focus on "improving their effectiveness in response to data on individual pupils' progress".

From the <u>EEF's Implementation (2019)</u><sup>2</sup> guidance:

Implementation should begin with:

- "Identify a tight area for improvement using a robust diagnostic process."
- "Make evidence-informed decisions on what to implement."

Black and Wiliam, 1997<sup>3</sup> showed the importance of improving the role of assessment in helping "low achievers more than other students" and reducing "the range of achievement while raising achievement overall". This can result in the achievement gap between high and low performing students widening. It is possible that this could be happening if teachers are not provided tools that support them to use data for evidence-informed decisions on teaching and intervention strategies. By providing these tools in Pupil Progress we may see this closing of this achievement gap.

# **Purpose of the pilot**

Providing the tracking tools and processes to engage with assessment data informs teachers with next steps, but will it have a similar effect on students? From this pilot we aimed to evaluate the impact of having granular feedback on learners:

- Does providing timely, detailed feedback improve student agency and motivation to engage with action steps to address areas of weakness?
- Does the identification of specific learning gaps for students through live, granular attainment tracking and reporting enable teachers to provide better support and resources to close gaps for underperforming students?

<sup>3</sup> Black, P., & Wiliam, D. (2010). Inside the Black Box: Raising Standards through Classroom Assessment. Phi Delta Kappan, 92(1), 81-90.

<sup>&</sup>lt;sup>2</sup> Education Endowment Foundation. (2019). Putting evidence to work: A school's guide to implementation.



 Does having reliable granular data improve communication between teachers and senior leaders through more supportive, collaborative and action focused conversations regarding student attainment?

Pupil Progress supports both teachers and learners by providing them with tools to efficiently engage and communicate current attainment to inform future learning. We hypothesised that;

- knowledge of learning gaps would enable teachers to support students in a more streamlined and efficient manner.
- providing teachers useful, timely analysis allows them to plan effective actions.
- providing students and teachers with the skill and topic areas they needed most would support them in closing achievement gaps.
- students will make better-informed decisions and increase engagement with their learning if they are provided with granular attainment data at the appropriate times during their courses.

Providing these tools to teachers and learners would improve engagement and communication, thus improving students' opportunities to raise their attainment.



# Methodology

Twelve schools<sup>4</sup> were selected from our current user base, with a high proportion of disadvantaged students. We chose schools including one or more of the following criteria, to cover a representative range and minimising extreme contexts:

- One with a recent Ofsted grading of Requires Improvement, Good or Outstanding
- A progress 8 score in 2023 between -0.5 and +0.5
- Included 7 schools with between 20% and 40% Pupil Premium students

QLA (Question Level Analysis) data from December mock exams was entered into Pupil Progress for all year 11 students providing baseline data to identify skill gaps. All schools involved were advised to use the same 2023 papers for English and Maths, although there were some variances in this due to contextual requirements. All schools sat the papers in exam hall conditions.

A second mock paper sat in March-April was used to record change in marks with full QLA. The QLA layout for past papers is pre-loaded by Pupil Progress and linked to skills and topic summaries, giving a unified access to granular analysis across schools. Snapshots were taken and compared to investigate any changes in data throughout the pilot and compare progress between Maths and English, and to compare relative progress across schools. We have assumed that exam papers are standardised every year, therefore we can compare the changes in raw marks.

For each subject, analysis was performed using schools which had data for both sets of mocks. Any individual students' change in marks that was higher/ lower than 2 standard deviations from the sample mean were classed as outliers and not included in the final analysis.

<sup>4</sup> 

<sup>&</sup>lt;sup>4</sup> Barnwell School, Cardinal Newman Catholic School, Castle Mead Academy,, Great Academy Ashton, Hampton Gardens Secondary School, Northfleet School for Girls, Nottingham University Samworth Academy, Sacred Heart High School (Hammersmith), The Stockwood Park Academy, The Stonehenge School, Thurston Community College and Treviglas Academy



### **Engaging with Granular Data**

Pupil Progress ran workshops and provided 1-2-1 support for teachers on using the platform, to maximise the opportunities for teachers to use the data to take strategic actions.

Some departments used tools like Tagging in Pupil Progress to track and monitor targeted students, others exported the data and created separate intervention lists. Where schools had used tagging in one subject or course, but not another, we were able to make direct comparisons of attainment between the two mocks. This helped to narrow down contextual variations as it allowed differences to be seen within the same cohort in the same school, with the focus being how the department used data.

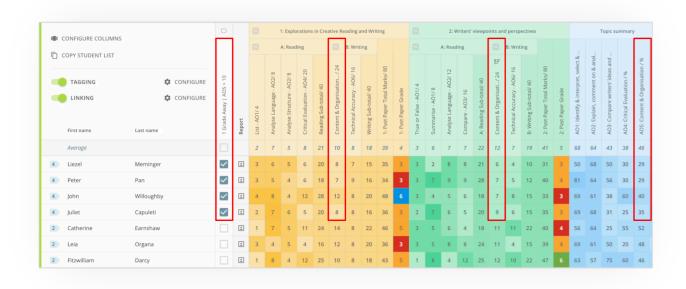


Figure 2: An example of underperforming students identified as having a shared progress opportunity in AO5 tagged as an intervention group to address skill gap



### **Leadership interviews**

We were able to conduct 1-1 interviews with senior leaders for 7 of the 12 schools involved, focusing on:

- Benefits of instantaneous analysis
- Effectiveness of using data to identify needs and actions for the learner
- Examples of the actions taken to raise achievement after analysis
- Timings for sharing reports with students
- Perceived impact on students by receiving detailed reports
- Ways that the reports & data were used in supporting learner engagement and agency

These were discursive interviews with a list of questions, but with additional prompts to delve further to get better clarity and understanding. We also used this as an opportunity to gain some better understanding of contextual information and address potential anomalies. For example departments that had papers that were not representative or comparable as the paper was edited, or the marking was inaccurately marked by an external company. Data results from these departments were excluded from data analysis, but not teacher surveys.

### **Teacher Survey Results**

Questionnaires were used to gather insights into the teachers' experience on the same points as the interviews. From the 12 participating schools the teacher survey was sent to, 51 submissions were collected. Whilst efforts were made to ensure the survey was only completed by teachers relevant to the research group (English or Maths teacher for Year 11, or member of the senior leadership team), 3 submissions were excluded from analysis due to the respondent not falling into one of these



categories<sup>5</sup>. Therefore 48 submissions were used in analysis; in the "Discussion" section these figures are denoted by n=48.

Some of the surveyed teachers said that they didn't use Pupil Progress 'to identify specific gaps in my students' learning'. Some questions required teachers to have used the tools on Pupil Progress to give effective feedback for the research. In these cases, only responses from the 37 teachers across all 12 schools that used the tools and QLA for analysis; in the "Discussion" section these figures are denoted by n=37.

# Reports to support learner agency

Schools were given the option to provide students with a report with the following:

- only the grade achieved in the exam no QLA<sup>6</sup>
- a printed report with QLA with highlighted strengths and progress opportunities<sup>7</sup>
- a report via the Pupil Progress app with QLA with highlighted strengths and progress opportunities<sup>8</sup>

See the following figures for examples of the reports with QLA shared with students using Pupil Progress. For reports with just the grades, schools used the grades from Pupil Progress in their standard MIS (e.g. SIMS, Arbor, Bromcom) reports.

<sup>&</sup>lt;sup>5</sup> Two were teachers who did not teach either Maths or English, but used Pupil Progress for their subject, one taught a relevant subject but did not teach year 11

<sup>&</sup>lt;sup>6</sup> Claverham Community College, Castle Mead Academy, The Stockwood Park Academy

<sup>&</sup>lt;sup>7</sup> Northfleet School for Girls, Hampton Gardens Secondary School, Cardinal Newman Catholic School, Nottingham University Samworth Academy

<sup>&</sup>lt;sup>8</sup> Thurston Community College, Treviglas Academy, The Stonehenge School, Great Academy Ashton, Sacred Heart High School



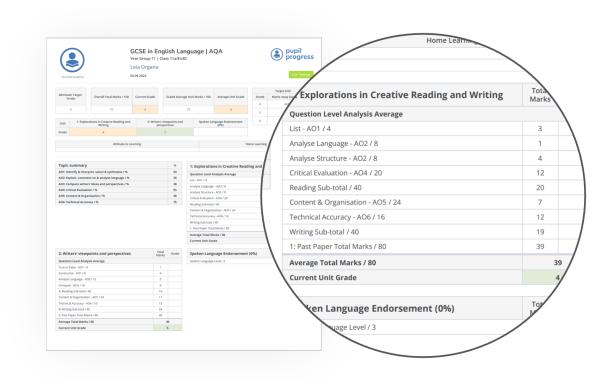


Figure 3: Example of granular detail for one past paper on English report for students

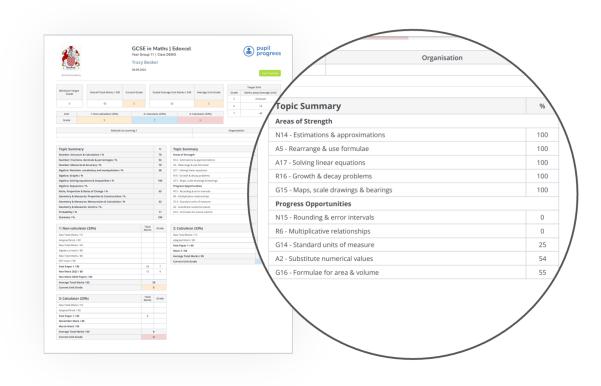


Figure 4: Report showing identification of areas of strength and progress opportunities in Maths



Students and teachers gave feedback on relative impact of the reports on learner agency, including:

- Benefits experienced by the student by having detailed marks breakdown specific to their course
- How motivation to engage with targeted support was affected by awareness of the areas for development
- Confidence and awareness of how they can improve their grades
- Examples of the actions taken after reports to raise achievement
- What further information on the reports would help them take appropriate actions

Due to time constraints, only a limited number of schools were in a position to send the survey out to their students and collect results. We received 85 responses across three schools, but with the majority of responses from one school. Of the respondents, 10 said they didn't receive a report, therefore only 75 were able to progress through the survey to give feedback on the reports. This is reflected on the figures presented in the discussion, which are labelled with (n=75). All 75 included respondents had the report shared either as a paper copy of the student report, or via the Pupil Progress app, or both.

# **Further Insights**

Anonymised data was analysed to see if there was a significant change in marks achieved between the mocks by students across all schools. The same data was also analysed within schools comparing targeted and non-targeted students identified by tagging.

Surveys and interviews provided insights into the teachers' use of the granular skills data and its impact on closing gaps.

Student questionnaires explored the impact of reports on student motivation, engagement and agency

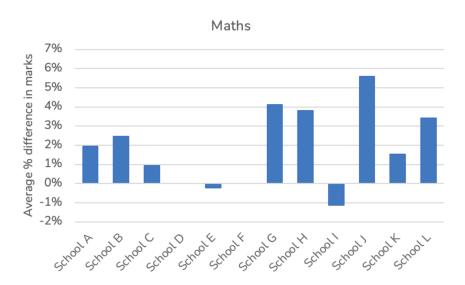


# **Findings & Discussion**

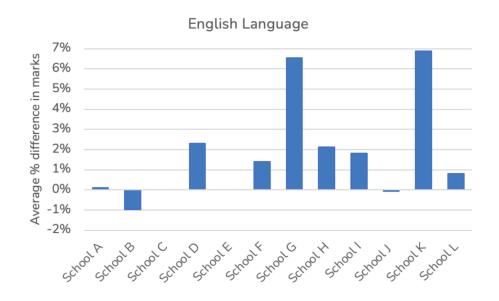
In terms of achievement, across all 12 schools there has been variation in how students' marks changed between Mock papers in November and March - some students' marks increased, some decreased. We know progress is not necessarily linear, as recognised by Ofsted, DfE and this was as expected. In Maths and English Language, the majority of students increased their marks, and the average across most cohorts increased. Out of the schools that had comparable data in two mocks:

- Maths Eight out of the ten schools showed improvement in average cohort marks.
- English Language Eight out of the ten schools showed improvement in average cohort marks.
- English Literature three out of eight schools showed improvement in average cohort marks.

### Average % difference in marks between two mocks







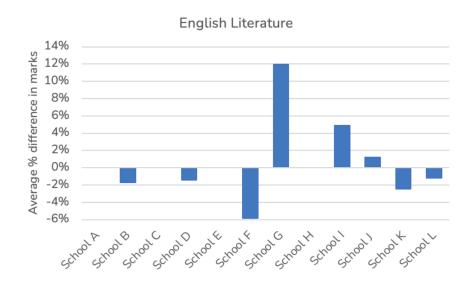


Figure 5: Change in students' marks between Mock papers in November and March (n=2161 students across 12 schools). N.B. All school letters have been randomly assigned.

In English Literature many of the schools used a unit 2 paper in November, then a unit 1 paper in March, therefore assessed slightly different skills making direct comparison more complex. This also may partly account for the bigger differences between mock 1 and 2 seen in some schools. In some cases marks did decrease between the mocks, but conversations with the leaders revealed contextual nuances



may have had a larger impact on this, such as in School F where a much bigger focus was put on English Language than English Literature.

Across English and Maths, further analysis found that more students increased their marks by the equivalent of half a grade than decreased by half a grade. This was because where students increased their marks, they did so by a significant amount. Where students' marks went down, it did so by a smaller, less significant amount, but occurred for more students.

In this study, as the schools context and application of the Pupil Progress tools varied so much between schools it makes difficult to make direct comparisons of the data between schools and the ways they utilised Pupil Progress. However, by comparing students *within* a school, the number of variations are more limited e.g. papers used, curriculum delivery, quality of teaching, quality of marking, available interventions. This allows for some comparison in achievement changes between the two mocks. This was seen with the use of tagging and comparing students who were tagged with those that were not (see Theme 2 below).

Our analysis of the data across two mocks, surveys for both students and teachers and interviews with senior leaders allowed us to identify five key themes that were consistently seen across each of our schools.

- Theme 1: Combining use of Granular Data and Tagging in Pupil Progress allowed for improved targeting of students and raised the effectiveness of intervention sessions.
- Theme 2: Insights from Granular Data combined with tagging reduces staff workload, improves targeted support, resulting in closing achievement gaps for students.
- **Theme 3:** Provision of timely and detailed student reports, along with focused targeted resources improves student motivation & learner agency.
- Theme 4: Using Pupil Progress to identify learning gaps facilitates communication between teachers and senior leaders, thereby improving overall functioning of schools through increased accountability and informed decision making.



 Theme 5: Challenges leaders faced when introducing new data systems and processes.

Here we will examine each of these themes and the underlying data that supported their identification.

Theme 1: Combining use of Granular Data and Tagging in Pupil Progress allowed for improved targeting of students and raised effectiveness of intervention sessions.

"Teachers are using granular data to extract insights, allowing them to effectively identify students and focus groups which require support."

- Mike Holly, Assistant Principal, Great Academy Ashton

By having access to breakdown of marks at QLA, teachers were able to reliably identify specific areas of weakness for each individual student. Using the tagging feature, teachers were able to precisely group together students struggling with similar topics, or aiming for a similar grade for their second set of mocks.

This was further supported in all the senior leaders interviews across 7 schools, and also in the staff survey sent to all 12 schools, see Figure 6:

# QLA section on Pupil Progress helped me to identify students for intervention groups

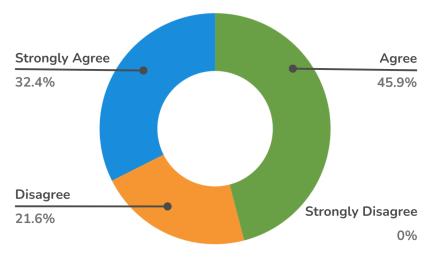


Figure 6: Staff survey results of whether QLA section on Pupil Progress helped teachers to identify students for intervention groups (n=37).



In total, 78.3% of respondents who used Pupil Progress to identify specific gaps in their students' learning were in agreement with the above statement, with almost a third of respondents strongly agreeing with it. Of the 21.6% who disagreed, all of them still felt Pupil Progress gave them confidence to address areas of underachievement with their students, and 6 out of 8 of them also felt their conversations with leaders was more supportive and action focused This suggests even those that disagreed with the statement, they still felt other benefits.

Senior leaders reported that greater accuracy in grouping together students with similar curriculum needs resulted in planning more focused sessions for targeted students. For example, rather than attending a 2 hour long intervention session which covered all topics at surface depth, teachers were able to deliver in-depth sessions on specific topics which students most required support on.

The intervention sessions' focus was also highlighted to the targeted students and so resulted in higher attendance and engagement as students' felt it was more personalised. Another outcome was the shift from large, cohort-wide intervention groups to smaller, more filtered groups. This enabled teachers to dedicate greater time and attention to each individual student and support them more effectively. Many of the senior leaders were able to support teachers and Heads of Department to effectively engage with their students' data;

"We encourage staff to use topic summaries, to identify how many marks away from next grade. [We] used granular data to find gaps - created targeted resources to address the areas they identified as underperforming. This included forming 1-to-1 and small group intervention groups, really targeted and focused on specific questions/areas. This resulted in improved intervention efficiency - more groups and more targeted resources delivered. Attendance improved as students were better supported and motivated [to increase their grades]."

- Francesca Huskisson-Moore, Assistant Headteacher, Nottingham University
Samworth Academy



Teachers felt that Pupil Progress had a big impact on their lesson planning and confidence in addressing areas of underachievement. 75.6% of respondents agreed or strongly agreed that Pupil Progress helped teachers plan their lessons. A remarkable 97.3% of respondents felt that Pupil Progress provided teachers with the confidence to address areas of underachievement with their students, the results of which are displayed in Figure 6:

# Using Pupil Progress gives me confidence to address areas of underachievement with my students

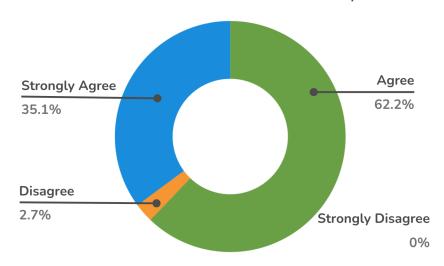


Figure 7: Count of whether using Pupil Progress gave teachers confidence to address areas of underachievement with their students (n=37).

Below are some quotes taken from our in-depth interviews that further validate these findings:

"Having QLA has helped teachers understand what their class is not good at.

What is lacking? As a result, they are bunching together students that struggle with the same topics......has made life easier for teachers and has increased efficiency with what topics are taught to what students and helping with planning intervention sessions. We also used QLA reports to give feedback to students, to help them understand what they are struggling with."

- Kevin Prior, Data & Assessment Lead, Thurston Community College



"Pupil Progress helps staff to plan their lessons more effectively. Before every milestone assessment, we do not teach any new content. Instead, we retrace our steps and teach material that requires revisiting...... Students focus on their individual areas to improve within curriculum time rather than attending intervention sessions in after-school hours."

- Jamie Braddick, Deputy Headteacher, The Stonehenge School

The quotes above are indicative of not just improved efficiency at targeting students, but also at an increased drive in ensuring that the targeted actions are delivered effectively.

Theme 2: Insights from Granular Data combined with tagging reduces staff workload, improves targeted support, resulting in closing achievement gaps for students.

Another recurring theme across the course of these interviews was the reduced workload experienced by teachers as a result of using the Pupil Progress platform. With real time insights for QLA breakdown, topic summaries, distance to target grades and much more, feedback suggests that the platform saves teachers the time and effort that would otherwise be spent on admin tasks or moving data between different systems. Furthermore, using multiple systems to analyse student data can lead to a long turnaround time, which often lessens the impact of the insights gained from the data and hinders the teacher's ability to provide effective individual feedback for students;

"Pupil Progress has reduced workload associated with data entry and increased quality of what they get out of it - the turnaround time is weeks faster, not having to move data between systems means teachers and students can take action much sooner."

- Jamie Braddick, Deputy Headteacher, The Stonehenge School

The availability of time which was previously expended at mundane admin tasks, along with a greater sense of confidence in the data and the insights derived from it



led to an increase in teacher engagement towards developing robust solutions addressing key areas of concern;

"Pupil Progress enables teachers to effectively cultivate individual and group-based solutions. It helps them save time on admin tasks, so that they can expend more energy towards understanding problems and developing solutions. Teachers are more confident with data analysis and have a clearer picture as to why they are getting the results they are and [this allows them to] cultivate solutions which are directed towards the areas which require improvement."

- Mike Holly, Assistant Principal, Great Academy Ashton

With greater confidence in their actions, motivation to implement them in an efficient and fruitful manner also increased at both staff and senior leadership level across several schools. Teachers started holding more frequent intervention sessions, with a greater focus to make teaching time as efficient as possible. As a result, some schools incorporated these sessions within teaching hours, something which greatly contributed to staff well being and student attendance. More measures were introduced to improve attendance, such as greater communication between teachers and parents, incentives for attending sessions and deterrents for missing them.

"[Our teachers introduced] 1-to-1 and small group intervention groups, really targeted and focused on specific questions/ areas. [To manage student workload] we decided to take students out of PE & PSHE classes to go to intervention for a few weeks at a time. Teachers' well-being improved as it reduced their workload."

- Francesca Huskisson-Moore, Assistant Headteacher, Nottingham University Samworth Academy

Below is a quote from a school that used additional intervention sessions and still saw improved efficiency as attendance and engagement increased, whereas previously time was spent on session that had low attendance and engagement:

"We saw an uptick in the number of intervention sessions for maths, with 8 out of 10 teachers offering after school sessions. As a school, we communicated



more often with our targeted students and messaged their parents if they did not attend these sessions. For maintaining good attendance figures, they were given rewards. This improved the relationship between teachers and students."

- Mike Holly, Assistant Principal, Great Academy Ashton

The increase in attendance is indicative towards a shift in student perceptions towards intervention sessions. With improved communication between students & teachers, focused teaching within smaller groups and added incentives, schools have made intervention sessions less of a chore and more of an opportunity to improve performance. Many of the leaders reported that the students felt the sessions were more personally designed for them and their needs, thus improving motivation to attend.

We wanted to check if targeting students and focusing on areas of underperformance actually translated to improvements in student performance in exam conditions. To investigate this, we compared the average percentage difference in marks between mock 1 and mock 2 for students who were tagged vs not tagged across 6 schools. Figure 8 displays our findings:

# % Difference in Marks obtained: Tagged vs. Non-Tagged students

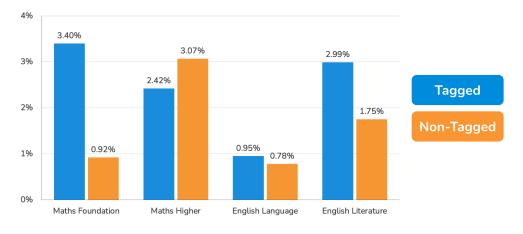


Figure 8: A comparison of percentage difference in marks obtained between Mock 1 (November) and Mock 2 (March): Tagged vs Non-Tagged Student (n=1060 students across 6 schools).



Tags were used to identify target students who were underperforming and struggling with course material. Tagged students across **all 6 schools** significantly improved their outcomes compared to non-tagged students. This was seen most significantly in English Literature and Maths foundation. For Maths higher tier, we observed that in 3 out of the 5 schools, non-tagged students outperformed their peers on average, but only very marginally. There were tagged students within these groups that individually did still progress more than their peers. English Literature all schools showed an increase in attainment for tagged students; this is particularly pertinent considering the cohort average marks for the cohort decreased as seen earlier in figure 5.

# Average % difference in marks for tagged vs non-tagged peers

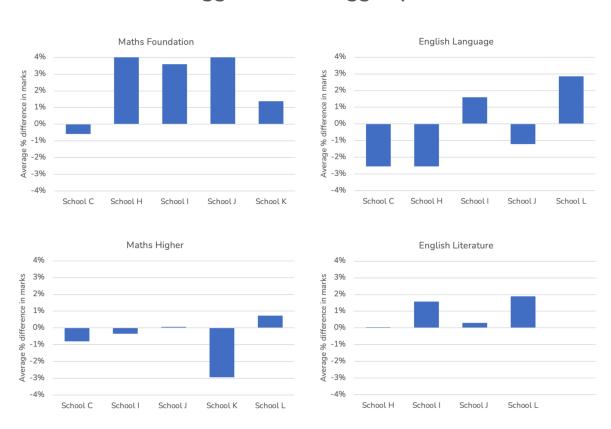


Figure 9: A comparison of percentage difference in marks obtained between Mock 1 (November) and Mock 2 (March) broken down by subject: Tagged vs Non-Tagged Student (n=1060 students across 6 schools).



Considering these were previously underperforming students, it is commendable for these students to not become demotivated resulting in the gap to widen. In fact, targeted students didn't just match the improvement shown by their non-tagged peers but made better progress and closed the gap across Maths Foundation, English Language and English Literature. This provides us with strong evidence suggesting that effective targeting and planning of intervention sessions has a strong influence on raising student attainment, even within a few months.

# Theme 3: Provision of timely and detailed student reports, along with focused targeted resources improves student motivation & learner agency.

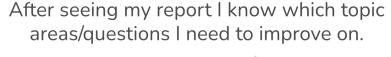
Through both qualitative and quantitative data, we received a strong amount of confirmation that timely & detailed feedback improved learner motivation & agency. Similar to how teachers were able to cultivate more effective solutions upon receiving insights through granular data, students were able to identify their strengths & weaknesses upon receiving their individual reports. These feedback reports included a full QLA breakdown of their performance across all subjects, allowing them to gain an in-depth understanding of their learning gaps (see figures 3 and 4, page 13).

When combined with detailed and targeted intervention sessions, along with driven teacher engagement and improved communication between staff and students, the ideal conditions for pupil progression are put into place. Several schools reported that student motivation increased just by virtue of having a tangible record showing them how close they were to their target grade and where marginal gains could be made. Furthermore, engagement with intervention sessions increased as students were aware that these sessions were focused on areas they could improve upon. Communication between teachers, students and parents became more streamlined and productive, since all parties could work together towards implementing solutions, rather than expend time and energy on identifying the problems. As a result, students would look forward to receiving their next set of reports to compare their performance and track their progress.



When asked whether student awareness regarding areas of improvement shifted following the release of their reports, 75% of the teachers who had sent out student reports (n=32) said that it had a positive impact on student awareness. Furthermore, 59.4% of teachers reported that they observed a positive impact in student motivation to achieve their targets.

These figures were consistent with students' feedback. The purpose of this was to understand whether engagement with student reports had any influence on students' awareness of learning gaps, motivation to improve and achieve better results. Our findings are displayed in Figures 10, 11 and 12 below:



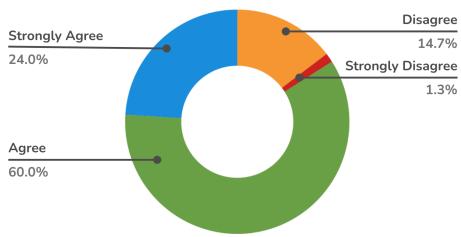


Figure 10: Count of whether engaging with student reports influenced awareness regarding learning gaps for individual students (n=75).



# I feel more motivated to work on those areas to improve my marks and grades

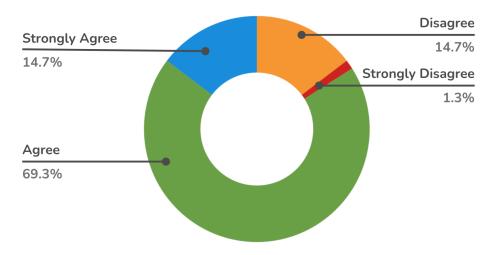


Figure 11: Count of whether engaging with student reports influenced student motivation to improve marks and grades (n=75).

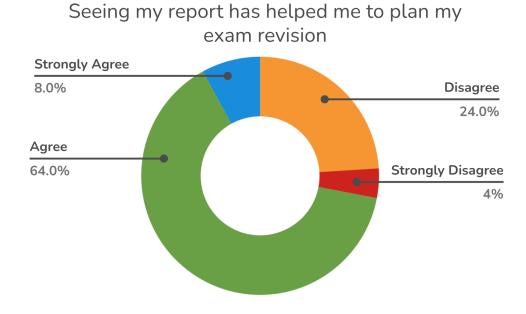


Figure 12: Count of whether engaging with student reports helped students plan for exam revision (n=75).

These results show:



- 84% of student respondents agreed that seeing their reports helped them
   understand the areas they need to improve upon
- 84% of student respondents agreed that they felt more motivated to work on areas of improvement after engaging with their reports
- 72% of student respondents agreed that engaging with their reports helped them plan better for exam revisions.

Considering these results in conjunction allows us to look at the bigger picture and assess the effects of timely and detailed feedback on learner motivation and agency. When presented with their reports, students become aware of the areas within different subjects where marginal gains can be achieved. With a greater sense of clarity and direction, they find themselves motivated to improve their performance, since they know exactly where to focus their efforts. Lastly, due to the detailed QLA breakdown on the reports, students are able to devise more effective plans that are aimed towards improving performance and achieving a higher grade.

Following are some quotes we received regarding the perceived school-wide impact of student reports:

"Student engagement & motivation increased a lot because now they knew exactly what they were not good at. Through this awareness, they were more engaged because they knew they were studying exactly what they needed to improve upon."

- Kevin Prior, Data & Assessment Lead, Thurston Community College

"We have been using student reports in class to allow students to assess their learning gaps. [As a result] attendance for interventions has improved and students have been proactively asking what is planned for their upcoming sessions."

- Jamie Braddick, Deputy Headteacher, The Stonehenge School

"A single piece of paper that provides insights into individual student performance is absolutely brilliant. Teachers use the reports at parents'



evening, the procedure is embedded in our school. Our Head of Science calls it a 'One Page Wonder'. We have already seen students asking for their QLA breakdown in class and working hard towards improving their areas of weakness, since they know that their reports will be brought up at parent's evening."

- Paul O'Sullivan, Vice Principal, The Stockwood Park Academy

Multiple senior leaders gave feedback related to students taking assessments more seriously when they knew they were going to be receiving a breakdown of it shared with parents on their Pupil Progress report. An increased sense of accountability is noticed when students are provided with the tools to assess their performance in a timely and reliable manner. Furthermore, taking steps towards improvement is made easier when students have a clear understanding of their strengths and weaknesses. Guided by the supportive engagement of teachers, the process of addressing areas of weakness transforms from a daunting task into a constructive one.

Theme 4: Using Pupil Progress to identify learning gaps facilitates communication between teachers and senior leaders, thereby improving overall functioning of schools through increased accountability and informed decision making.

The implementation of Pupil Progress had a significant positive impact on school culture and data engagement at all levels. Senior leaders noted that having access to real-time, reliable data led to an increase in data-centric, objective, and solution-oriented discussions. With data readily available to all leaders, the focus shifted from mere accountability to action-driven and supportive conversations. This shift allowed for more solutions-focused dialogue, as the time previously spent identifying issues or underperforming areas was now used more effectively to discuss actionable steps.

"As a school, we have been very relaxed with the way we collect data in the past. That is changing now, as we are revamping our assessment process to be more rigorous with data. The vision of the school is changing and data is right at the top of this vision to see whether the changes you are making are



beneficial or not. As a result, conversations are shifting and culture is changing at the school. More questions are getting asked, such as: What are we doing with these sets of students? What are we doing about these assessments? Are they beneficial or do they need changing?..... We are not where we want to be in terms of how we use data to inform our decisions, but we are surely getting there."

- Kevin Prior, Data & Assessment Lead, Thurston Community College

By identifying patterns in learning gaps, senior leaders engaged in productive, data-driven discussions with subject leaders to develop strategies for addressing areas of underachievement. This process included re-evaluating assessment methods, making adjustments to the curriculum, and better understanding student needs. This was even seen with departments and leaders who have previously shown resistance to engaging with data.

"Using Pupil Progress allowed for better communication. We [senior leaders] understood the need to work with middle leaders and teachers to understand how to use assessment data to inform teaching. We encouraged them to use tags to identify students of concern and support them with additional resources. It has also made an immense difference in the clarity of communication and making conversations more collaborative. As a line manager, I have found it easier to guide and support my teachers. For senior leadership, there is a cultural shift as we are now actively engaging with data to assess decisions and policies. We are starting to put into place long term action plans based on the insights."

- Jamie Braddick, Deputy Headteacher, The Stonehenge School

"Having Pupil Progress has provided a tool for leaders to support teachers and departments that are not used to engaging with granular data. Leaders are having more data driven conversations that they were not able to have before. These conversations are supporting class based and department wide strategies to raise achievement."



### - Paul O'Sullivan, Vice Principal, The Stockwood Park Academy

The nature of communication at a school-wide level significantly improved as a result of engaging with the platform, with a quarter of responses strongly agreeing with the statement, and 83.8% of respondents agreeing overall.

# Using Pupil Progress enabled me to have more supportive, action focused conversations using data with teachers and senior leaders

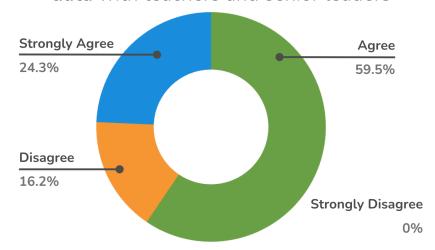


Figure 13: Count of whether using Pupil Progress enabled teachers and senior leaders to use data to have more supportive and action focused conversations (n=37).

Interestingly, of the 6 people that disagreed that they had more supportive conversations, 5 out of the 6 agreed or strongly agreed that using Pupil Progress gave them confidence to address areas of underachievement with my students. So even in the absence of a supportive conversation, they were still able to take confident actions to raise achievement.

Whilst we have explored how using Pupil Progress individually benefits students, teachers and senior leaders, it is important to consider how these changes feed into the bigger picture. By providing the optimal tools required for teachers to improve targeted actions and efficiency, detailed feedback to students to acknowledge learning gaps and robust data to drive decision making by leadership, Pupil Progress allows each of these groups to flourish within their roles. Provision of accurate and



real-time granular data allows for improved channels of communication which are centred more towards cultivating solutions rather than identifying problems.

"Conversations around data are a lot more robust now. Rather than interrogating why students' performance is not up to par, efforts are focused towards using actionable insights to improve their performance."

- Jo-Anne Gough, Assistant Headteacher, Treviglas Academy

Therefore, not only are schools able to tackle immediate challenges, but they are also able to plan ahead of time to improve functionality and adopt efficiency in their procedures. A culture of support and understanding develops between staff and students as both parties undertake informed actions to achieve shared goals.

"Conversations between staff members are looking stronger, we are looking to introduce some curriculum changes in the upcoming academic year and also using QLA to assess whether any specific changes are needed for specific classes."

- Mike Holly, Assistant Principal, Great Academy Ashton

Having a purpose-built tool to support everybody to engage with one central point of truth for data made it easier for all leaders to engage with data effectively to impact curriculum and identify teaching and learning needs. Transparency of the single point of raw data and having more time to discuss actions for targeted students and curriculum areas allowed for more supportive conversations. The clarity on necessary actions, combined with a collaborative approach to implementing solutions, fostered a thriving, solutions-focused culture in all observed schools.

# Theme 5: Challenges leaders face when introducing new data systems and processes

Any change causes turbulence when certain systems and practices have been followed for a considerable period of time. This is especially true for schools or departments that have struggled to place objective data as a pivotal factor in driving their strategic decisions in the past.



The 12 schools participating in the pilot would have differed in their resources and capacity and therefore in the extent to which they have implemented the use of Pupil Progress across the school. So long as the QLA breakdown of marks was entered on the English and Maths trackers, the same tools and level of data analysis was available to all schools. The uncontrollable factors between the schools were the extent to which these were utilised by teachers and senior leaders, to inform the actions they took with regards to teaching, assessment and intervention.

"The biggest challenge for leadership has been to get teachers to interact with the data. They are currently using the platform as a data entry tool, and there is a body of work, like in most schools, to consider using data such as the topic summaries and identifying areas of misconception and targeting aspects of the curriculum for improvement. Saying that, we are making marginal gains. Our conversations are shifting from being about accountability to making progress of learning. Heads of subject have scheduled time with class teachers to discuss students of concern, although this is an on-going body of work that we are looking at for the future."

- Paul O'Sullivan, Vice Principal, The Stockwood Park Academy

This was more pronounced for teachers that had little to no experience of dealing with data in the past, as they displayed reluctance to engage with the platform. Those that did have experience working with data opted to stick to old and familiar methods of analysing it, even if they produced inferior insights compared to what is generated through Pupil Progress. However, asking staff to engage with the platform without proper training or communication may cause it to be perceived as burdensome and time consuming, even when a tool can speed up processes and be easy to use (Figure 14).



# How did you find **using Tagging** on Pupil Progress **to identify targeted groups** of students?

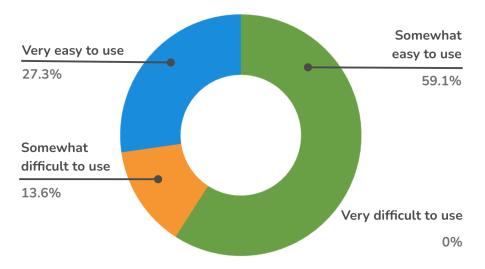


Figure 14: Count of how teachers found using the tagging feature to identify target groups of students (n=22).

With 86.4% of teachers rating the tagging feature as easy to use, it is evident that with proper training, the platform itself is easy to navigate and does not require much technical knowledge.

There is also a big difference between using a tool for data entry, and actually engaging with the data to inform targeting and teaching practice. Teachers who only used Pupil Progress as a data entry tool, without using the further analytical tools or engaging with the data to identify weaknesses, did not feel the same benefits.



# Using Pupil Progress enabled me to have more **supportive**, **action focused conversations using data** with teachers and senior leaders

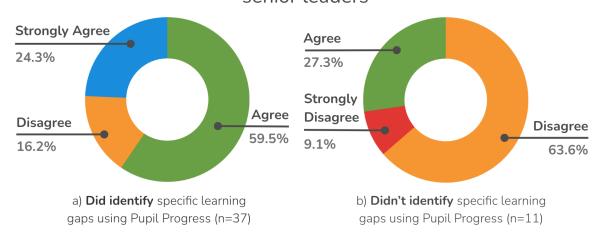


Figure 15: Comparison of survey question results based on whether or not the respondent said they did or didn't use Pupil Progress to identify specific gaps in their students' learning.

Interestingly, 27% of staff that didn't use the tools to identify learning gaps themselves still felt benefits of using it with supportive, action-focused conversations. With 84% teachers saying using Pupil Progress led to supportive, action focused conversations, this helps schools to move from data entry being seen as just an admin task or accountability tool, to a formative tool to impact strategy and planning to help raise attainment.

Therefore, it is important to help staff understand the beneficial impacts on time, achievement and strategic impact associated with engaging with the data, both in the short and long term.

"[For these sets of mocks] our headlines for English and for Maths were not exactly where we wanted them. English were able to address underachievement within lessons by targeting key skill areas whereas maths relied on classwork as well as additional morning, lunch and after school intervention sessions. These adaptions and interventions were targeted more by subject, class and student."

- Paul O'Sullivan, Vice Principal, The Stockwood Park Academy



Whilst having data at hand is useful, it is imperative to analyse it in order to derive information which can inform decisions, help in re-evaluating policies and increase both teacher and student engagement.

Not dedicating time to analyse and target students led to more time spent further down the line on non-targeted, poorly attended interventions or requiring more money and time spent on motivating students. This highlights the importance of focusing staff on the long-term benefits of adopting a data-oriented approach.

All of the leaders we spoke to recognised that no tool will ever be a silver bullet; how it is used by staff was key. There was also a strong empowering feeling amongst leaders saying that using Pupil Progress benefited their role as a leader to support staff with engaging with their data. Many cited a positive culture-shift in staff and student attitudes to data that they had struggled to achieve previously without Pupil Progress.

"Our conversations around data are a lot more robust now. Rather than interrogating why students' performance is not up to par, efforts are focused towards using actionable insights to improve their performance."

- Francesca Huskisson-Moore, Assistant Headteacher, Nottingham University Samworth Academy

"The only way to know whether you're doing something right or wrong is through some form of indication, which is what data is doing for us.

Conversations are changing, culture is changing. More questions are getting asked; What are we doing with these (EAL) students? What are we doing about these assessments? Are they actually useful?

Kevin Prior, Data & Assessment Lead, Thurston Community College

Many attributed this to having one source of data that everyone is using, so if another teacher or subject-leader was not sure who to target, the senior leader could use the tools on Pupil Progress with them to help them identify learning gaps. It's worth noting that many senior leaders will have been doing this out of their own subject specialism, i.e. a Senior Leader with a history specialism advising a Head of English on the learning gaps. Many of the leaders said they could then ask "what could we



do with this group of underperforming students with these skill gaps in common". This then allowed subject leaders to use their experience and their subjects-specific pedagogical knowledge to make suggestions for suitable next steps.

This theme highlights that introducing any new data system, including Pupil Progress, presents significant challenges for school leaders, and can benefit from changing staff perceptions from data entry to data-driven decision-making. With effective training, using Pupil Progress can lead to cultural change with staff experiencing the long-term benefits of engaging deeply with the data to inform teaching and intervention strategies. When successfully implemented, these systems have the potential to create a more collaborative, strategic approach to improving student outcomes, ultimately transforming the conversations around data from accountability to actionable insights.



# Conclusion

### Impact of engaging with granular data

This study looked at the ways in which granular, QLA (Question Level Analysis) data, could be used by education leaders, teachers and learners to identify skill gaps and address areas of underachievement. In doing so, we wanted to see the overall impact on attainment over a 3 month period. All schools chose the level to which they engage with the data, including how to utilise tools like tagging to indicate underperforming students, and the types of reports they chose to share with students.

Overall increase across English and Maths in the majority of schools, we wanted to delve into what leaders, teachers and students perceived as the relative impact that engaging with granular data had to support raising achievement between these two points.

Our focus in the interviews and cross-referenced with the surveys was to see the perceived impacts felt by leaders and teachers.

### Leaders reflected:

- having more granular data supported school leaders to understand why students grades changed in the way they did
- Each mock assessment highlighted new areas to focus on and address before the final assessments
- Just relying on the most recent assessment gives a less accurate reflection of the overall expected grade, and using papers covering all units across the course is more representative
- **conversations were more supportive** rather than holding to account using mock results; "where can we make our next improvements, rather than why have we only got X% of students at grade 4+, what are you doing about it".



The large majority of teachers agreed that Pupil Progress gives them confidence to address areas of underachievement with their students, and that it helps them to:

- identify specific gaps in their students' learning
- plan their lessons
- use Question Level Analysis to identify students for intervention groups
- save time when interpreting their students' data
- have more supportive, action focused conversations using data with teachers and senior leaders

Overall, having granular data which is reliable allows leaders and teachers to derive accurate insights from data analysis, thereby allowing them to plan changes in course and curriculum with confidence. This saved teachers time, additional money spent on interventions and improved communication.

# Targeting Students using tagging closes achievement gaps

With variation in application of the tools within Pupil Progress across the schools it was difficult to isolate increases in attainment to one factor or application of a tool, however common trends in closing gaps were seen across the schools where tagging had been used for some of the cohort when compared to their peers under similar conditions.

Schools used tagging to support conversations with teachers and subject leaders to engage with their data. In all schools that used tagging, on average tagged students matched or made greater progress than their peers. This is particularly pertinent considering these students were considered previously underperforming and not making expected progress, so this is a real turn-around in closing achievement gaps.

Key impacts observed included:

• Teachers were more targeted with additional support



- As a result, students were **more motivated** to attend intervention sessions
- Students were **more engaged** in those sessions
- Teachers were more confident and it improved their wellbeing

Overall this led to improved wellbeing of staff and students as they felt confident with where they were at, and what their next steps were to improve. This benefit to well-being was still felt and in the long run significantly outweighed any negative feelings towards data entry.

Where granular data was not used or the assessments were not rigorous enough, this resulted in

- having to have more open invites to all students for intervention
- running more additional support sessions
- spending more money on extrinsic motivation to join sessions e.g. "chicken and chips night"
- teachers were more uncertain and had more pressure on them

Overall staff felt more overworked and less confident on the impact of the interventions, having a negative impact on wellbeing. These students did not make as much progress as students targeted with tagging.

### Using student reports with granular data

Using student reports based on the same one point of data significantly improved communication between staff, students and parents. The majority of leaders and teachers felt that students behaviour and attitude towards their learning improved following the release of their reports in the following ways:

- Improved Learner Agency students using their own initiative to improve underperformance as they had better awareness of areas to focus on
- Improved engagement in lessons as students were more motivated to achieve targets



- Students were excited to get updated reports, took assessments more seriously and were more focused
- Teachers reflected that at parents evening, parents felt they had better insight and ability to support with detailed reports

In many schools, reports often only give the latest mock grade. This can often only give part of the picture as for most subjects it only covers one unit or less than 50% of the final grade. Using only a grade also lacks detail on what next steps or areas a student can focus on to improve.

Including detailed QLA, then summarised in a topic or skill summary supports the students to identify their progress opportunities. This provides students with an understanding of why their lessons or interventions are focusing on key skill gaps and therefore students recognise that it addresses their specific needs, improving motivation and engagement.

# **Detailed reports supported learner agency**

For students who were targeted using tagging as they were underperforming, the reports also include areas of strength in addition to progress opportunities. If given just a grade, these students would just consider they are underperforming which can be demotivating.

Breaking the data down and showing areas of strength shows there is something to build on. It also breaks down the course into smaller areas that they can actually address within the 3 months between mock exams. Many students were excited to see the reports as they wanted to see if they had improved in those areas they had focused on, thus building confidence when they did.

This combination of using granular reports to highlight areas of improvement, combined with strategic planning for interventions and resources to target the identified areas gave greater learner agency to engage and address the areas and ultimately improve attainment. This also benefited the well-being of staff and students, improved efficiencies and cost-effectiveness of interventions.



### In Summary

This study has shown evidence that learners' can close gaps and raise attainment when learners, teachers, and parents have the tools and granular, course-specific reports to improve identification of underperforming skill areas to address in order to raise attainment outcomes. Having access to the tools and granular data is the first step, but that the benefits were mainly seen when these tools and granular data were used in effective ways and to take action. Using Pupil Progress to support reliable data analysis through tagging and student reports, combined with Question Level Analysis, has significantly enhanced the educational environment.

It has led to more accurate insights for curriculum planning, saved time and resources, and improved communication among teachers, students, and parents. This approach not only helped underperforming students catch up with their peers within a short period but also boosted overall engagement, motivation, and learning efficiency.

As a result, both staff and students experienced greater confidence and well-being, underscoring the effectiveness of these strategies in closing achievement gaps and fostering a more supportive learning environment.



# Thank you!

A huge thank you to all of the schools that took the time to be involved in this pilot. We really appreciate your valuable insights, feedback and support you have given in making sure this pilot was successful.

Special thanks to the leaders in the schools who have provided additional support and given their own time to support us with the pilot.

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Mike Holly, Great Academy Ashton

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Graeme Hellyer, Northfleet School for Girls

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Charlotte Key, Sacred Heart High School (Hammersmith)

Paul O'Sullivan, The Stockwood Park Academy

Jamie Braddick, The Stonehenge School

Kevin Prior, *Thurston Community College* 

Jo-Anne Gough, *Treviglas Academy* 

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