



Department
for Education

Effective practice in the delivery and teaching of English and Mathematics to 16-18 year olds: case studies

November 2017

**John Higton, Rachael Archer, Diane Dalby,
Sarah Robinson, Guy Birkin, Alex Stutz, Rob
Smith, Vicky Duckworth**

Exeter College Case Study for 16 to 18 English and mathematics: Raising expectations

Leadership context

Leaders from Exeter College started thinking about the strategic development of English and mathematics GCSE provision in 2013. In practice, this means they took several key decisions, including recruitment of English and mathematics teaching staff who predominately had a degree in the subject they were teaching. Furthermore, teachers were recruited as early as possible in anticipation and putting in place piloting activity to gauge what types of provision were more effective. For example, the college piloted the iGCSE English qualification with Hospitality, Hair and Beauty students so they could make an assessment as to whether iGCSE led to better quality outcomes compared to a traditional GCSE route. The College therefore had direct evidence from testing to make decisions about the subsequent direction of teaching and learning. Following the theme of early adoption, the College also made the decision to follow the new 1 to 9 GCSE grading scheme early in order to have longer to manage the transition and design suitable teaching and learning programmes. This evidence-based approach is important because it means the leadership team can use comparative evidence to inform decision-making.

Designing provision to support E grade students on GCSE

College leaders said not all changes to the Functional Skills qualifications benefited target learners and that Level 2 varied in equivalence to a GCSE. Some elements of Functional Skills were closer to a D grade rather than a C.

However, in the case of maths, leaders felt some requirements were higher than a C. The language used in the scenarios made it harder for learners to show their level of numeracy. Through piloting different types of activity with students and asking for feedback about their experiences, the College iteratively designed their new Echo and Delta pathways in response.

- The Echo pathway is for E grade students. They get 2 hours of lessons a week over the course of an academic year, and are tasked with a “realistic” ambition to reach a D/3 grade by the end of the year. It is then expected that they will move onto the Delta pathway.
- The Delta pathway applies to D grade students. This group gets three to four hours a week over the course of an academic year, leading to the GCSE examination and the minimum target C/4 grade.

Both pathways undertake an initial assessment with the student to identify gaps in their knowledge. This allows the teaching staff to set bespoke and realistic targets for each student to achieve. One staff member summarised it as diagnosis to “*find out what* [the

students] *don't know and fix that.*" The central requirement for this approach is for the right amount of time to allow students to progress. The leadership team feels that the current policy design can place a constraint on potential progress but the Echo programme design fits well with their organisational ethos of students achieving as high as they possibly can. The leadership team's early view of the programme based on observation and discussion is an increase in student aspiration due to a positive shift in perceptions of the subject. This is supported by teachers and students. In particular, several teachers were effusive of the Echo programme. One teacher noted "*the Echo groups are a complete eye opener to me. They love Maths, it's changed their view on it.*" Students also note the different qualities of their teachers, especially compared to school. One maths student said the teacher fully explains ideas rather than going at speed through content. Another noted that learning algebra is different because it is broken down into smaller pieces of learning; referred to as chunking. This is where teachers break lessons in smaller components so that students learn a manageable amount and get a sense of achievement. Chunking is often associated with primary level mathematics pedagogy. However, it is also useful for those studying at a higher level when they lack a grasp of fundamental, underpinning concepts.

Impact on teaching, learning and outcomes

Because the College takes an evidence-based approach towards assessing the impact of programmes, it is confident it will be able to measure impact after the programme has been running for two years. They have undertaken some early, qualitative assessment of the Echo and Delta pathways which provides encouraging findings which they were able to do as they made the changes described a year earlier than required. Specifically, they find that many students are more motivated by the Echo / Delta approach. This is because the learning on the Echo pathway is at a steadier pace and is focused on their needs identified through diagnostic processes and through conversations with teachers. The onus on fixing areas of misunderstanding / no knowledge is also thought to lead students to recognise the progress they are making. Progress is also set at a realistic level for the individual. The recent student feedback and observational work suggests that they are challenged in the right way by the approach. This makes them more positive towards English and mathematics and builds their aspiration to achieve as high a level as possible.

Solihull College & University Centre Case Study for 16 to 18 English and mathematics: Supporting students

Leadership context

Senior management of Solihull College & University Centre have a strong commitment to improving English and mathematics. The active involvement of senior leaders, including governors, ensures issues are raised and addressed with a well-supported strategic approach. The college has also used its strong financial position to provide extra resources for English and mathematics.

Faced with an 81% increase in students taking mathematics and a 31% increase in those taking English as a result of conditional funding, college leaders assessed the situation carefully and identified the need for additional staffing as a high priority. For example, The College's approach to recruitment includes advertising posts throughout the year rather than concentrating on late spring and summer. The college also made changes to improve retention such as consolidating hourly paid contracts into permanent, more substantive teaching positions.

The increase in the number of students led to embarking on an on-going project to scale up the staffing resource for English and mathematics and the distribution of these teachers into vocational departments. Through this distributed approach, the involvement of every section of the college is encouraged and the message about the importance of English and mathematics is consistent across the whole college. College management are however mindful they do not want to compromise strong subject leadership of English and mathematics by this placement of these staff into separate departments. These teachers are therefore supported by a bespoke CPD programme to meet their subject-specific pedagogical needs.

Providing the support students need to succeed

The college recognises students benefit from support both inside and outside their English and mathematics classrooms in order to make progress with these subjects. A multi-faceted approach is taken to providing this support, which includes, in addition to the subject teachers for English and mathematics, the involvement of vocational teachers and support staff. The college has worked hard to ensure vocational teachers understand how English and mathematics can be embedded within their own subjects through regular CPD sessions and have a toolkit ready to help them make the most of these opportunities. As a result, they are better equipped to spot the opportunities to link English and mathematics to their own subject, and their confidence with embedding has grown.

Individual diagnostic assessment at the beginning of the year informs planning, and subsequently monitors progress in the vocational area and highlights where extra support

may be needed for vocational content that relies on particular English or mathematics skills or knowledge.

Extra support and resources for English and mathematics are provided for students through well-organised English and maths Hubs¹. These centres, run as workshops, allow students to access additional help with English and mathematics from experienced support tutors outside their scheduled lessons. Many of these tutors are qualified teachers who also support students in classroom. This provides a personal link that encourages students to attend the workshops and effective communication with the English or mathematics classroom teacher.

The Hubs have a range of resources students can use for supported self-study, and the staff also run competitions for prizes in English and mathematics to promote enjoyment of the subjects. In a more recent initiative, supplementary learning resources are provided on Moodle, and students are expected to undertake an additional 30 hours of study over the year using these materials, outside their scheduled lessons. The importance of English and mathematics is a consistent message across the college which provides students with a reason to take the subjects seriously, and this is accompanied by the promotion of enjoyment and relevance, both of which provide effective intrinsic motivation.

Students are supported and encouraged to engage with English and mathematics in their timetabled lessons through activities that are relevant, enjoyable and align to students' interests. For example, Computing students were asked to design and pitch a computer game in a Dragons' Den activity used in GCSE English to practise speaking and listening. In this way, generic activities can be included on a shared scheme of work but contextualised for different vocational areas to make them relevant and interesting.

Impact on teaching, learning and outcomes

Solihull College & University Centre regularly gathers feedback from students, examines student progress and studies the impact of their strategies to improve students' learning of English and mathematics. The commitment of the senior management team ensures there are regular reports on progress and issues are addressed in a timely manner, with an appropriate financial investment if necessary. This strategic and reflective approach is successful due to the active involvement of senior managers who are keen to invest the necessary time and resources. The strong leadership promotes an inclusive 'whole college' approach, in which all staff are expected to take some responsibility for encouraging and supporting students in their learning of English and mathematics.

¹ This is the nomenclature used by the college and is not to be confused with maths hubs sponsored by the Department for Education, the National College for Teaching and Leadership (NCTL), and the National Centre for Excellence in the Teaching of Mathematics (NCETM). <http://www.mathshubs.org.uk/about-maths-hubs/>

Stoke-on-Trent Case Study for 16 to 18 English and mathematics: Peer-led learning

Leadership context

The college employs Senior Leaders for Humanities, Languages & Literature and for Mathematics, as well as Heads for English and mathematics. The English department is aware that the cohort of students undertaking their English GCSE experience a number of barriers that affect their ability to achieve the required grade in the subject. Core contextual factors that can act as significant barriers include a high prevalence of English as a second language amongst students, poor socio-economic conditions, and low levels of recognition that education may be a route to a better future. These factors can lead in some cases to: slow progress with language acquisition, particularly if English is not the language spoken in the home; poor attendance; low motivation; and limited engagement in learning. The college has implemented a combination of peer-led learning and technology to help to address these barriers.

Peer-led learning

In order to encourage and utilise peer-led learning, the English department uses a class set of chromebooks, which provide access to various applications, in particular file sharing platforms. This shared resource is used for all subjects, not just English. This technology enables each individual to open up a file sharing drives document and work collaboratively on a task, often with individuals they would not normally elect to 'sit with' or 'work with'. As each individual contributes to the document, the other students can see what changes they have made. This enables them to observe the ways in which other students approach tasks and encourages them to appreciate that everyone is learning and making mistakes too.

The practical advantages of using chromebooks and the file sharing technology are that students have consistent and permanent access to their work at home and in class, irrespective of whether they are working on individual or collaborative group projects. Prior to the introduction of this technology students, particularly at Level 2, would regularly forget to bring in their written work, which would subsequently inhibit their ability to progress at the same speed as the rest of the class. This issue is resolved by using the technology as it does away with the requirement for students to remember to bring in their written work.

In addition to the technology and classroom-based group learning, the college introduced 'accelerated learning coaches'. These coaches are volunteer university undergraduates who are able to rapidly build a rapport with students because they are closer in age to them than the staff. They provide one-to-one support, in particular with the development of students' skills in spelling and grammar. In addition to improving the confidence and

abilities of students, the coaches gain valuable experience and the college benefits from additional resource.

Impact on teaching, learning and outcomes

There are some significant impacts to using the chrome books as a tool for peer-led learning. Staff are able to immediately see who, in a group, is doing the work and who is not. This observation can occur in 'real time' in the classroom and the teacher is then able to directly address the students who are not contributing to the exercise. This method ensures that group work activities, a favoured approach to motivate students, are engaged in equally, by all students and that one student does not 'carry' an exercise.

The technology also allows staff to observe which students are making mistakes and on what. This allows them to focus on improving individual weaknesses and is particularly useful for students who have higher support needs. Teachers are able to implement 'track changes' to documents so that students can observe where the errors have occurred and how to address them. Seeing exactly where they went wrong helps students improve more expediently. In English, the staff believe that this collaborative approach helps students to consider their 'thinking process' and the way they construct written work. The latter is particularly helpful for students for whom English is a second language.

This technological approach does require specific staff responsibilities. Teachers review and work on shared resources in class and outside of formal lessons. This forms part of a wider set of online monitoring systems the college uses to track attendance and progress towards learning targets and forms an integrated electronic approach towards student tracking across all lessons.

Warwickshire College Group Case Study for 16 to 18 English and mathematics: Cultivating a more positive attitude

Leadership context

Leaders from Warwickshire College Group reacted quickly to the new policy direction and employed a 'whole college' approach. The team that have worked on this comprises 58 English and maths teachers including senior curriculum leaders for English and maths GCSEs and Functional Skills in English, Maths and ICT. Support for the new approach has also come from senior administrative staff who track student performance and attendance, so that teachers can focus on the curriculum and teaching.

The senior management team has prioritised English and maths subjects by timetabling them first when planning the academic year. In addition, the Group have taken best practice from the Ofsted good practice document, 'Increasing provision in English and mathematics through strategic planning'. One aspect of this guidance involved creating specific areas dedicated to English and maths to ensure teaching rooms are available to showcase subject-specific content. Students' work and learning materials are displayed on the walls, which clearly denotes that the corridor and rooms focus on these subjects. This approach gives these subjects greater prominence, which helps students within the college group to recognise they are important.

College management are also aware of the challenges posed by low student motivation. Teachers acknowledge that low motivation is often a consequence of prior learning experiences, where students previously achieved low grades and / or repeatedly had to retake exams, in some instances as many as five times. A key aim for the teaching staff has been to address this issue by cultivating more positive student attitudes.

Cultivating a positive attitude amongst maths students

College staff acknowledge the importance of cultivating self-belief and self-motivation amongst their students. The primary strategy taken by the college to cultivate positive attitudes comprises four steps: i) recognise the positives; ii) work to address the weaknesses; iii) set realistic targets; and iv) improve students attention spans. The teachers have employed a number of approaches to implement these steps.

Students are given encouragement by showing them what they can do, for example, working through a maths problem and describing what was done correctly as well as mistakes. In response, staff reaffirm their students' abilities through the use of simple motivational phrases, such as '*I believe in you*' and '*I knew you could do it*'. For example, it is highlighted as a positive step forward when students get part of a calculation right. This approach is bolstered by staff asking students to self-grade on individual topics from 1 to 5; with a score of 1 representing a perceived weakness and a score of 5 representing a perceived strength. This encourages students to recognise and

acknowledge that there are elements of the subject that they can do and understand. The college has worked hard to ensure that students do not dismiss an entire subject purely because they have a weakness in a specific topic area within it. Teachers also plan lessons so that all students are able to demonstrate some successes or strengths at the start of each lesson, to build students enthusiasm and increase motivation.

In order to overcome individual student weaknesses teachers provide time within each lesson for students to focus on the topic(s) that they individually find challenging. Teachers also relate the mathematical topic to its vocational application, either using real world examples or a format the students understand. For example, construction students are encouraged to measure pieces of wood as a means to convert centimetres to metres.

99% Failed! Can you solve it?

$$\begin{aligned}
 \text{😊} + \text{+} + \text{😊} + \text{+} + \text{😊} &= 45 \\
 \text{❤️} + \text{+} + \text{❤️} + \text{+} + \text{😊} &= 23 \\
 \text{❤️} + \text{+} + \text{🌙} + \text{+} + \text{🌙} &= 10 \\
 \text{🌙} + \text{+} + \text{❤️} + \text{+} + \text{❤️} + \text{✖️} + \text{😊} &= ?
 \end{aligned}$$

Figure 1: Example of a picture-based algebraic equation test

Another teacher made use of social media memes; in particular, picture-based algebraic equation tests, see Figure 1 for an example. The college found that students quickly learn how to complete the equations and then transfer this knowledge to their letter-based algebra in college. Where students continue to struggle to see the practical relevance of the subject, teachers also explain the importance in terms of employability.

The college provides one-to-one support and coaching set on a realistic (often two year) timetable for students that struggle most. During this period, curriculum content is broken down by concept and students focus upon just one concept until their understanding is deemed to have sufficiently improved. Teachers providing this support have found that kinetic learning is most successful and consequently implement hands-on teaching techniques using items such as blocks, clocks, weighing machines and rulers. A particularly successful example involved the use of sweets to calculate means, modes and medians.

The college currently dedicates a substantial amount of time to English and Maths; with one three-hour period a week currently allocated to each subject. To maintain levels of concentration, class activities are broken up and varied significantly over that time. Teachers are also encouraged to use innovative approaches to manage the attention span of the class. One teacher commences each academic year by carefully co-producing 'classroom rules' with the students as this helps create a bond between the students and the teacher on an adult level. Having agreed these rules collaboratively with students upfront, they can then be applied throughout the year in a way that gives students a greater degree of accountability. Other teachers within the college use a mix

of didactic measures, specifically timed exercises, and interactive sessions, the most popular of which require students to stand up and move around the room.

Impact on teaching, learning and outcomes

Teaching strategies, such as the co-production of classroom rules or interactive sessions, have been found to directly impact on students in a positive way, resulting in improvements in attitudes and motivation. Moreover, through their whole college approach, staff have successfully cultivated positive attitudes. This is particularly true when students are encouraged to recognise that their weaknesses are often only topic specific, and hence should be considered in the context of their wider strengths in a given subject. As a consequence, students self-belief has been found to increase and their motivation improve. There are wider positive impacts resulting from this, including more stable attendance and reductions in disruptive behaviour. College staff also unanimously agree that one of their most effective strategies to boost students motivation and concentration is for the teachers to develop the best classroom presence they can and display a very enthusiastic attitude towards maths which rubs off onto the students.

Richmond-upon-Thames College Case Study for 16 to 18 English and mathematics: Identifying the gaps to achievement

Leadership context

The leaders of Richmond-upon-Thames College recognised the importance of having an effective diagnostic and monitoring system that would enable members of staff to track individual students and be aware of the difficulties any of them may be facing when progressing with their studies. They assessed the college's monitoring needs and decided to switch their software to a system that would better support teachers to identify and address individual student weaknesses in the class. Although this change in systems and processes was substantial, members of staff and students have felt the benefits of personalisation.

Identifying the gaps to achievement

The new monitoring software was introduced at the start of the 2016/17 academic year. Since then, it has been used to undertake initial assessments of students' academic levels as well as a diagnosis of their support needs. The software generates profile information on each student, which is then made available to relevant teachers so that they are aware of their students' support needs and can prepare their lessons and the learning environment accordingly. A member of staff creates an individual learning plan for students experiencing a barrier to learning, so that they can access additional support to overcome the barriers.

Teachers access student profiles to help them understand the support needs of students and adapt either the learning environment or their lesson plans. One member of staff noted the importance of the diagnostic system in personalising learning towards students based on gaps in their knowledge:

We don't want people doing loads of lessons on percentages if students are really good at percentages. We've had to really personalise and break down the syllabus criteria to meet the very different needs of all of our students. Personalisation and differentiation has been a real change.

Furthermore, the information collected helps members of staff put together individual learning plans for any student who may need additional support. These learning plans are linked to personalised targets being set for each pupil. One teacher noted that pupils who needed extra support could get help additional tutoring from a reader or writer, along with extra time to do the work and meet their set targets:

We've really increased tutoring support for them as well. English and maths are included in both group and one-to-one tutorial. Target setting has increased but improved, and is very specific around targets that students need to improve their English and maths

Impact on teaching, learning and outcomes

After installing a new assessment and diagnosis tool that is more suited to capturing and tracking students' support needs, there has been a noticeable improvement in how teachers work with students and plan lessons to remove identified barriers to their learning. One member of staff noted a change in teaching styles, where they are now able to *"look at where the strengths and areas for improvement for each individual student is"*. Furthermore, another member of staff similarly observed how helpful it has been where *"students get an individualised study plan, which highlights the area that they specifically need to improve on"*.

The diagnostic system is used to help design study plans on an individual basis and to work with other colleges resources. In this way, study packages can be tailored to target specific needs and help the student develop areas of weakness.

The diagnostic gives students an ... individual study plan. Then we have resources on our Virtual Learning Environment [and] our learning resource centre are really good at supporting English and maths as well. [The learning resources team are] trained in the diagnostic tool so they know how students can access it. Students can also book into our additional learning support centre if they need specific help.

For the pupils, they spoke highly of the support they get from teachers. One pupil noted that *"everything that (my teacher) has done in lesson is to help me"*. This experience appears to compare well with the students' experiences of being at school – where many of them felt that their school teachers were not as attentive to their learning barriers as the members of staff at Richmond-upon-Thames College.

The College has rolled the software out alongside a number of other initiatives and reports a significant increase in all functional skills results (averaged to over 20% per level and subject). For GCSE, the College reports pass rates 20% above benchmark for high grades for English and above benchmark for maths.

Stanmore College Case Study for 16 to 18 English and mathematics: Thinking differently about English and mathematics

Leadership context

Over the last few years, Stanmore College has made a concerted effort to tackle the low attainment rates of students in English and mathematics. This effort has been led by the senior management team, who have adopted a fairly '*hands on*' approach to dealing with the issues. There is close communication between the senior leadership and middle managers with specific responsibility for English and mathematics. Regular meetings take place and there is a high level of accountability for student progress.

With the introduction of conditional funding, Stanmore College anticipated large increases in the numbers of students studying English and mathematics and took appropriate strategic action to ensure all students would be able to access suitable classes. A number of actions were taken to make this possible. For example, the college fixes English and mathematics sessions on the college timetable before other departments schedule their classes. Vocational managers then build their programmes around these sessions. As one member of staff explained, "*it's making sure there's always a maths and English class available to accommodate the needs of the vocational areas*". In terms of staffing expertise, the college has upskilled all teachers so that they can teach up to Level 2 functional skills. This frees up specialist English and maths teachers to cover GCSE classes.

There is a strong student-centred approach to identifying and dealing with issues that may affect student learning of English and mathematics. Students take part in focus groups and the outcomes of their discussions are taken seriously, influencing both the ways in which the subjects are taught and also some of the more strategic decisions made by the college leadership. For example, the college timetables English and mathematics in three one-hour sessions a week for each subject. This approach to timetabling reflects feedback from students who suggested that this helps them concentrate and learn more effectively. Similarly, the college policy on class sizes is adjusted for different ability levels, so that the students with the lowest ability and highest associated need are in smaller classes.

Thinking differently: contextualisation and relevance

Stanmore College has no A Level provision and primarily caters for students who are undertaking vocational courses at Level 1,2 and 3 or higher. In common with many providers in the further education sector, English and mathematics teachers use opportunities to relate their subject content to students' vocational areas. Where possible,

vocational teachers make reverse links to English and mathematics to support the skills development of their students.

A weekly email informs vocational teachers about the current theme for English and mathematics so that they can embed links to the topic into their vocational teaching. This connects English and mathematics to the students' vocational studies and demonstrates the usefulness of the subjects to their vocational areas. A member of the college observation team reported how this had been beneficial within a sports lesson. Firstly, the teacher drew the students' attention to the circles and semicircles on the pitch. After referring to these and their diameters, the teacher then embedded questions about shapes into a discussion about sport, thereby making a clear link to the mathematics topic of the week, which was two-dimensional shapes.

The subject leaders for English and mathematics explain how their aim is to make these subjects as interesting as possible for students. This includes emphasising the application of such skills in 'real life' settings and the connections between subjects. For example, during a GCSE English lesson about a Christmas appeal, students were asked to solve a mathematics problem about donations, in addition to discussing the issues about such appeals and writing an article. By considering both the English and mathematics that naturally occur within a context from everyday life, students find it easier to understand the usefulness and relevance. Highlighting connections across the curriculum also avoids the impression that English and mathematics are isolated subjects.

Feedback from students is frequently obtained at the end of lessons and used to revise the approaches used. By regularly considering feedback from a student perspective in this way, the college is well-placed to maintain a focus on material that is relevant and interesting for students.

Teachers also use digital technology to vary their teaching approaches and encourage independent learning. For mathematics, one of the three weekly sessions involves individualised computer-based learning using a package of materials. For some groups, however, the computer-based session is split so that students work on computers for half the lesson and then undertake group work for the remaining time. The approach depends on the capability of the students within the group to learn using this individualised computer-based work and, again, reflects the importance placed on maintaining a student-centred approach.

Impact on teaching, learning and outcomes

The College has adopted an approach that places students at the centre and their feedback is used to inform decision-making. By listening to students during focus group discussion and responding to what they say, the leadership have been able to take appropriate and timely action to respond to issues affecting students' learning of English

and mathematics. This approach also incorporates careful tracking of individual student progress in English and mathematics. The attendance monitoring system is thorough and leads to swift action regarding non-attendance. This combination of efficient monitoring, responsiveness to student needs and timely action has led to an effective strategic approach and significant improvement in student pass rates for English and mathematics. The college says GCSE results for both English and maths increased by 20 percentage points since implementing the changes described herein.

New College Swindon Case Study for 16 to 18 English and mathematics: Differentiation

Leadership context

New College Swindon addresses personalisation and differentiation of teaching both inside and outside the classroom. The main approaches include: teachers adapting their lessons to varying student levels; the presence of a Quality Team that observes some lessons to support the teacher in identifying student support needs; and the availability of additional tutors to provide in-class and out-of-class support for English and maths.

Personalising the teaching

In terms of the teachers **adapting** their lessons to the varying needs in their class, one member of staff explained that *teachers know all the information about each of those students so they can tailor-make their lessons to suit the needs of the student*. Therefore, although there is a centralised scheme of work, teachers are given a great deal of flexibility in terms of how they plan and deliver their lessons, in order to enable them to respond to the needs of students with varying levels of academic ability and eagerness to learn. Certain teachers at New College Swindon have found that the most effective way to engage students is *to keep switching topics and introducing discussions, to keep them going*. One teacher kept the lessons for one class informal because the students have not responded well to a formal approach:

[We are] *quite flexible... quite relaxed in the class*. [We try] *to make it different to school, because they've all not done well at school, so you've got to make them feel like it's a little bit different here*.

The **Quality Team** attends certain lessons to assist teachers in identifying student support needs. They assess lessons and how well students cope with the learning through observation and discussion with teachers. Their observations then help to inform the development of appropriate teaching methods and resources to benefit the students. This is regarded by college leaders as one way to ensure that teachers are supported in making their classes responsive to the students' learning needs.

In addition to receiving tailored, in-class support from teachers and the Quality Team, students with additional support needs can also access help from the college's **personal tutoring system**. This system replaced the previous approach to supporting students where teachers were also personal tutors. The college made this change by gradually reducing teachers' hours that freed-up time and space to create personal tutor roles. Under this new system the role of a personal tutor has been separated out and is now a dedicated role. In addition to personal tutors, academic instructors provide additional learning support in English and maths classes – working with those students who have been identified as experiencing barriers to learning. They also work with the teacher to develop appropriate in-class resources for certain students. Outside of lesson time, personal tutors offer a range of additional support. They run smaller classes that focus on

English and maths, as well as one-to-one support sessions with students. One member of staff said that *they work very intensively with a lot of the young people to see what it is, to try and unpick those barriers, and to try and support them through the difficulties*. The college also has a Wellbeing Team and counsellors who the personal tutors can liaise with if a student requires further support.

Impact on teaching, learning and outcomes

The Quality Team has effectively helped teachers to plan and adapt their lessons to the varying needs of their students. One member of staff explained that it has helped to *'improve the differentiation and the assessment for learning within the lesson, to get more ideas for developing resources... so if we do spot that there is a deficiency, we do something about it, we put something in place*. So in addition to supporting teachers to plan and adapt their lessons according to individual student need, they support teaching staff to identify and react quickly to presenting issues.

The main benefit of having a personal tutoring system for teachers, is that it frees up more of their time to focus on planning and delivering lessons. Furthermore, it provides much-needed help in managing classes and monitoring achievement to ensure that no students fall behind. One teacher cited an example of an academic instructor who was on hand in a class where two students were falling behind in their learning. The students were taken to one side by the tutor who worked them to understand where they needed help and to bring them up to speed.

These developments at New College Swindon have led to improved performance. For example, GCSE pass rates in 2017 for A*-C/ grades 9-4 increased by 26 percentage points to 56% in English and by 3 percentage points to 44% in maths. The College would welcome contact from colleagues in the sector to discuss their approach and to learn how others deliver English and maths provision.

Petroc College Case Study for 16 to 18 English and mathematics: Adult to Adult Relationships

Leadership context

One of the common themes that emerged from conversations with teachers and learners of English and maths across the whole study was how the classroom relationships in Further Education differ from those at school. Petroc College is used here as a good example of practice, although a similar case study could have been written based on many of the Further Education Colleges visited for the study.

Petroc College had approximately 1800 students studying English and maths in 2016/17. Petroc teaches English and maths functional skills and GCSEs by vocational area and has a dedicated team of 28 English and maths teachers. Their strategy has been to utilise these staff to develop an approach to managing counterproductive behavioural patterns of students with varying levels of need. One emphasis of this strategy is to promote a “growth mind-set” which encourages positive behaviours and aspirations in students. This aim is reflected in college messaging and the use of communications. Where possible, students are encouraged to think beyond a C towards higher grades. Emphasis is placed on promoting learning and avoiding situations in which students are “just in a resit class”.

Senior staff at Petroc acknowledge it is critical teachers of English or maths take a different approach in establishing and maintaining rapport with students compared to school. Simply having excellent subject knowledge will not guarantee the students engage in class. The need to proactively manage behaviour and student engagement is magnified by large class sizes, which are a typical challenge for most colleges. The approach adopted by Petroc focuses on classroom management, the interpersonal skills of the teaching staff and their interactions with their students.

Establishing adult to adult relationships and a positive classroom culture

Teachers at Petroc seek to establish adult to adult modes of interaction with students. The concept of adult to adult communication stems from the work of Eric Berne, whose book *Games People Play*, introduced the notion of ego states in the context of communication. Berne suggested that every mature person has in their personality three parts: a child-like part, an adult part, and a part that imitates parents. This means that during communication at any given moment a person could respond by adopting one of three modes of relating, as: a Parent, an Adult or a Child.

Teachers at Petroc aim to ensure that an adult-to-adult mode of interaction is maintained during communication with students at all times. The key motivation is to establish mutual respect between student and learner. By treating students as adults and communicating

with them in this way, the teachers find that students usually respond in a similar manner and mature communication will ensue. Teachers use an adult conversational tone by, for example, asking students about their sporting and recreational interests outside of college and building rapport through discussing common / related interests.

However, whilst this may sound obvious, it is not always straightforward to achieve. For instance, if a teacher slips into a parental tone when communicating with students, they risk casting the student into the role of Child which is likely to result in displays of childlike behaviour, which could be disruptive, uncooperative, needy, and or dependant. The objective in a classroom context is, therefore, to instigate and maintain adult to adult communication by encouraging students to put any feelings aside and to communicate in a rational, logical way. Petroc staff spend time building classroom relationships with students to ensure they feel comfortable raising personal or subject-specific questions with staff. By enabling students to articulate issues while keeping their emotions in check, classroom disruption is minimised or avoided all together.

In practice, an adult relationship means teachers use first names for both staff and students. This helps to establish the adult nature of the relationship and a peer-like, mature communication style from the outset. This helps to differentiate the staff/student relationship in the Further Education College from the teacher/pupil relationship that students were likely to have experienced in school, where teachers are rarely referred to by their first names and a more traditional hierarchy prevails. Petroc's more relaxed approach also involves staff actively showing a curiosity in the students' interests both inside and outside the classroom. This often involves simply asking students about their day or week or remembering their personal interests, such as music and sport. Where possible this informs lesson planning to ensure all learners are engaged. In addition, teachers and students describe the level of humour that is frequently exchanged between them. Teachers note this type of relationship is more likely to be achieved in classes where students feel comfortable with each other. Therefore they also have a preference for scheduling English and maths by vocational subject.

The approach is effective in promoting a spirit of achievement, equity and camaraderie, essential for a motivated classroom. Furthermore, students at Petroc acknowledged that what differentiated study here from their learning experiences at school was the opportunity to be treated like an adult. This is most clearly demonstrated by the change in dynamic in the teacher and student interactions, however for adult relationships to flourish students' goals, responsibilities and expectations also need to be understood.

Whilst the culture of adult relationships is created primarily through responsive and perceptive communication strategies teachers also encourage students to take ownership of their own learning. They acknowledge the need for students to understand very clearly what is expected of them. Students are encouraged to email teachers via college systems for clarifications regarding lesson content outside of class. This type of communication is useful as it is comparable to that experienced in a professional work environment. As students can clarify expectations and raise concerns it also means they

can request support in a more private and reflective way. Students found this to be an excellent way to seek clarifications and help without needing to highlight their lack of understanding to the wider class. Petroc students also acknowledged they often receive quick responses.

Impact on teaching, learning and outcomes

The primary impact of implementing adult-to-adult relationships between staff and students is the environment within the classroom and the college as a whole is more positive, relaxed and focused. Beginning a class with personal discussion and humour, has allowed more disruptive students to 'let off steam' then calm down and concentrate on their work. In order to maintain this students will often 'step in' and police their more disruptive peers if they continue to disturb the class by asking them to 'stop it', 'calm down' or 'leave'. The requests from peers provides support to the teacher but are also heeded by those being disruptive. Where adult to adult communication strategies have been adopted, the benefits have included reduced behavioural issues, better communication, and more engaged learners.

A further impact of the adult-to-adult approach is students exhibit greater confidence in expressing their lack of understanding or difficulty with a subject. In turn this allows them to access additional support if required and provides a greater opportunity to grasp a concept that will lead to improvement.

New College Durham Case Study for 16 to 18 English and mathematics: Motivation and positive mental attitude

Leadership context

Having experienced challenges in encouraging students to do well in English and maths, the leaders and teachers of New College Durham recognised that a different approach was needed to nurture the motivation and positive mental attitude of pupils towards their studies. The leaders and teachers of the college recognised that a positive attitude is an important factor for pupils in order for them to make academic progress. However, teachers of English and maths have found it particularly challenging because pupils are likely to be at college to focus on other subjects. One English teacher observed that *we're second place to the main course in their mind; they're here to do health and social care, childcare, and not maths and English.*

In addressing these issues, the college first re-defined how staff members and students understand the terms *progress* and *achievement*. One member of staff explained redefining as “*moving away from the achievement of the qualification being the end goal*” to an approach where teachers “*identify an (achievable) measure of progress*” that they then use to point out to the pupil how they are improving. This change was accompanied by teachers re-designing some of their teaching methods to make the learning experience less onerous for pupils. One teacher talked about making their lessons more engaging by introducing the learning in a different way:

We start off with all kinds of riddles, quizzes, brain things. I do short, focused tasks, and build up their reading and writing stamina ... as the course goes on they are a bit more trained, they've built up their stamina.

Teachers would also endeavour to connect the English and maths pupils were learning with their career ambitions. They did this by linking Functional Skills to the career goals of a pupil. One member of staff noted that linking Functional Skills in this way led students to embrace learning rather than question why they had to learn certain topics within English and maths.

Motivation and positive mental attitude – personal goals and targets

The college was of the view that the pressure of trying to attain a grade C or above in GCSE English and maths is often counter-productive in terms of motivating young people and can lead to some pupils disengaging from their learning. The college, therefore, took the decision to shift the focus away from attaining a grade C or above. Teachers now use an initial assessment and diagnostic tool to capture where a student is at when they first enter the college, set realistic goals, and track their progress. The tool identifies what the student is able to achieve and helps improve their general attitude to learning. As one

member of staff explained, *a student may not improve their overall grade, but we will aim to demonstrate that they have made progress in maths and English.*

Along with the shift in how *progress* and *achievement* is viewed within the college, teaching methods have been developed to foster motivation and a positive mental attitude in students. English and maths teachers recognise the value of making tasks shorter. Tasks designed to be completed within a short time period give students a sense of achievement and ensure concentration is maintained. In addition, teachers have found it beneficial to understand what type of jobs their students aim to do after they have finished college. One teacher observed that a lot of students are motivated by the prospect of earning money after college. Teachers, therefore, endeavour to relate what the student is learning in English and maths to the type of work they aspire to pursue after college. One example of practical actions taken by the college is the use of small rewards to reward learning which can include direct interaction with employers, trips to workplaces and/or work placements. As well as rewarding attendance, such activities help learners make a positive connection between English / mathematics and the world of work.

Impact on teaching, learning and outcomes

Subsequent to these changes, the college has achieved high scores in recent English and maths exams. One member of staff said that they *were very successful, our achievement rates were higher* [compared to other further education colleges] for all Functional Skills programmes and GCSE English. They put a lot of this success down to how they now work with students in terms of fostering their motivation and supporting them to achieve realistic targets.

In terms of the learning experience for students, one teacher reported a positive change in how they make progress with the smaller tasks they are now given: *they're working on small tasks so they can see that they have achieved, rather than give them something that's going to take them a long time to do, because otherwise they just end up getting bored, lose concentration.* Overall, this appears to create an engaging and positive learning environment for all students, where they feel they are making real progress in their studies.



Department
for Education

© Crown copyright

Reference: DFE-RR742A

ISBN: 978-1-78105-841-1

The views expressed in this report are the authors' and do not necessarily reflect those of the Department for Education.

Any enquiries regarding this publication should be sent to us at:

Vikki.McAuley@education.gov.uk or www.education.gov.uk/contactus

This document is available for download at www.gov.uk/government/publications