ANTHECOLOGY

Lesson Study Journal
SAMUEL WHITBREAD ACADEMY

ANTHECOLOGY

Lesson Study Journal

Issue 3 | Summer 2017

CONTEXT

Samuel Whitbread Academy is a large rural upper school (Years 9-13) of 1750 students which includes 450 in the Sixth Form and is the largest school in Central Bedfordshire Local Authority. We have come a long way in the last few years and we are now one of the highest ranked schools in the local area for results at both GCSE and post 16 levels.

We are part of the Bedfordshire Schools Trust (BEST). BEST offers exceptional all-through educational provision across Bedfordshire. Provision begins at our BEST Nurseries and culminates at the SWA Sixth Form, from where students enter either HE or employment. We aim to enable all to be the BEST they can be, have enjoyed their time in our schools and be well-prepared for life.

We have been using Lesson Study at Samuel Whitbread Academy as our primary vehicle for improving teaching and learning for the last five years and we are confident that it has significantly raised the standard of teaching in the school. This Anthecology is a collection of all of the work completed by the Lesson Study triads this year at Samuel Whitbread Academy.

ACKNOWLEDGEMENTS

We would like to thank the SUPER network and Curee for their support in helping us develop a research culture throughout the academy.

We would like to thank Chloe Watts (Year 11 student) for supplying the internal photographs of bees.

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FOREWORD

About three years ago, Dave Goode and Nick Martin excitedly mentioned to me that they had come up with the metaphor of bees pollinating flowers in a lush meadow to represent the sharing of research ideas from department to department in the Academy through the use of lesson study. They wanted something tangible that would record this and Anthecology, which means the study of pollination, as a journal was mooted. Little did I know then that this particular flower would be pollinated and bloom so beautifully but here we are with the third issue, which is going from strength to strength.

Lesson study has been successfully deployed as one of the main vehicles for teacher professional learning and development at Samuel Whitbread Academy for six years now and its introduction is at least partially attributable to the fact that Samuel Whitbread Academy is part of the long-standing SUPER (School-University Partnership for Educational Research) network. SUPER, set up some twenty years ago when a couple of Principals approached the Faculty of Education in Cambridge and said they would like to work together with the Faculty on research of mutual interest rather than just being researched upon, has research-based professional learning at its heart. One of the questions that has driven SUPER's work since the start has been to ask how the conduct and findings of practice-based research can be both rigorous and at the same time couched in a language that is meaningful and accessible. Lesson study has proved a useful mechanism for conducting practice-based research that is rigorous and the findings of which are practical, meaningful and accessible, which allows practitioners to learn professionally and grow. Not surprisingly lesson study has been discussed extensively in the SUPER partnership and subsequently adopted by a number of schools and has also been a key theme at our annual conference in recent years when school colleagues have been able to exchange views and experiences across the partnership. By being part of the SUPER partnership, the bees from Samuel Whitbread have been able to expand their range of pastures and bring back pollen to their lush meadow to hopefully create even more beautiful blooms.

The stories in this volume are clearly a testament to the success of the work here at Samuel Whitbread Academy. But we do also need to pause a little and think carefully about the claims and justifications made about how lesson study contributes to the enhanced learning of our students, via professional learning; another key question (i.e. the link between research claims and student learning) that the SUPER partnership has grappled with over the years. Several colleagues at Samuel Whitbread Academy, who have undertaken the SUPER Masters programme at the Faculty in recent times have considered what makes for effective professional learning and at least one has specifically considered the role of lesson study and it is to be hoped the key messages of their work have acted as pollen in the growth of lesson study over the past five years. Last year Frank Cornelissen, a Dutch researcher working with SUPER, David Hall, your Teacher Research Lead for the SUPER network, and myself conducted some research funded by the Spencer Foundation to examine the impact of school research networks and although lesson study wasn't the main focus of this research, we were interested in hearing your stories about the value of sharing and using the ideas/findings from research through lesson study and other initiatives. Whilst we haven't yet fully analysed our data, it is clear that Anthecology, is a really important feature in helping that pollination process that is in itself evolving and developing. In the words of one teacher I spoke to:
"So the first one (Anthecology) - maybe people didn't quite understand why it was there, what it was there for. But when we look at the second one you'll see there's a lot more, there's a lot more sort of conversations and you can tell that people have taken bits from other people. You can see that from the reference list, it's like 3 or 4 times the size as what it was last year, so it's definitely more uptake that way".

Once our research concludes we hope our findings will act as pollen to help your flowers bloom further. In the meantime you have the bounty of the pollen in these pages. It just remains for all of us to think how we can be 'more bee'.

Ros McLellan
Coordinator of the
SUPER Partnership

Faculty of Education,

University of
Cambridge

CONTENTS

Key:

RES Resilience
IND Independence
ENG Engagement

MRI My Response Is
QST Questioning
GMS Growth Mindset
WRT Writing extended answers

INTRODUCTION

This is our third Anthecology and each year it has improved; both in terms of the quality of the write-ups and the impact the work is having on our practice. When we stumbled upon the word 'Anthecology' we knew we had the perfect title for our booklets – what we didn't realise was just how powerful a metaphor it would become.

Visitors and metaphors

Over the last 12 months we have had visitors from all across the country and from Sweden, Norway, USA and Kazakhstan. In each case we have tried to describe what we are doing as a school to develop and transfer practice across the academy - focussed on improving outcomes for our students. It's always difficult to talk to someone from another country about complex ideas, but once we describe how the bee represents agents of change that transfer ideas (pollen) across the academy that then merge with other ideas to create something new and often more powerful – you can see the lightbulb switch on in the eyes of our guests. Every visitor, from whatever country and speaking whatever language, instantly understands the metaphor of pollination and practice transferal across a system.

Our Lesson Studies

The academy has a long history of collaborative professional development and Lesson Study has been part of what we do for over 6 years. Working with people such as Pete Dudley, Hiro Kuno and Cambridge University has certainly helped to move our thinking forward and each year the model has improved. As school leaders we have a duty to provide professional development opportunities for us and our staff, Lesson Study is the perfect vehicle for this.

School improvement

The big step forward for the school over the last two years has been putting Department Lesson Study (DLS) at the heart of our school improvement cycle. The process is as follows:

Step 1 The school analyses all the information available and identifies any underperforming groups and any barriers to achievement, as part of our Self Evaluation (SEF). Sources of information include: lesson observations, learning walks, work scrutiny, student voice and assessment data. Heads of Department (HoDs) conduct a similar analysis on their own department data and identify a 'case' group of pupils.

Step 2 HoDs identify a focus for their DLS that they believe will address the underachievement identified in their SEF and linked it to their Department Development Plan (DDP) and Appraisal targets. Foci include anything from improving analysis skills via writing frames for six mark questions to improving resilience for students with anxiety.

Step 3 DLS leads (usually UPS teachers) and our Head of Research find all available research related to DLS foci through our links to Cambridge University and the references in previous Anthecologies.

Step 4 Staff identify 'case students' for the DLS, from the underperforming group(s), which must include at least one PP student.

Step 5 Staff conduct at least two rounds of DLS. Between each round they meet with staff with similar foci and both share and critique each other's findings at half termly Twilight Sessions.

Step 6 Each triad writes a two page summary of their findings for the Anthecology and the 'Market Place' - where staff have an opportunity to find out what other staff are doing.
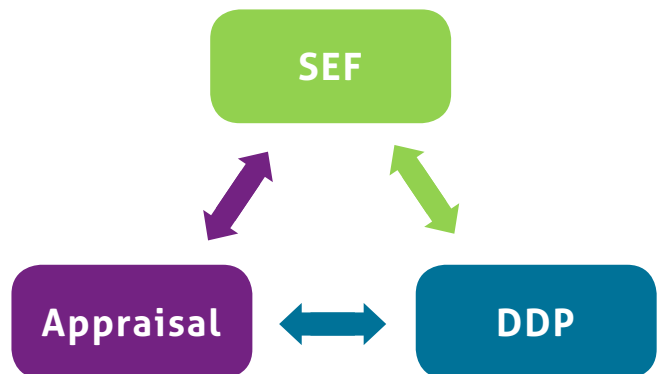
Self-improving system

If schools are ever to become what David Hargreaves called 'self-improving school systems' (2010). Then we must move away from top down centrally driven school improvement initiatives towards networks of practice that constantly evolve and innovate using the latest research. We believe Lesson Study holds the key to improving the quality and impact of our pedagogy through evidence based collaborative enquiry and informed action. We hope you enjoy reading about what we have been working on this year!

Nick Martin

COLLABORATION

At the heart of Lesson Study at Samuel Whitbread Academy (SWA) is the need to collaborate. Collaboration, according to the Collins English Dictionary, is the act of working together to produce a piece of work, especially a book or some research.

According to Leonard and Leonard (2003) a successful organisation must have collaboration as an essential characteristic where "its members come together regularly to share ideas and develop common understandings of goals and the means to their attainment." It is the 'regular coming together' where teachers can share and develop their ideas that Lesson Study at SWA provides. It is through these planned development times that a powerful vehicle is created for improvement across the Academy.

Whilst many teachers and schools appreciate the need and advantages for collaboration, a lack of time is usually given as a reason why it does not take place in a form that truly reflects the essence of working together as given above. Providing time for teachers is not a new idea as Raywid (1993) stated more than 20 years ago that they "must have time for sustained collaborative reflection on school practice, conditions and events" if they are to improve.

Due to the constraints of time it is possible that some create a pseudo-collaboration which can be described in this way: Someone identifies a problem and a group meet together to solve the issue. After discussion, the group simply divide up the tasks and complete them independently without further consultation until an agreed finish time. This may sound familiar but it is not real collaboration. What it fails to have is the rich discussions and professional dialogue that would otherwise be engaged in, which then work towards a much better and more complete solution to the issues previously identified.

The development of Lesson Study as a central part of CPD within the school, linked to targets and development plans has been critical in providing opportunities for collaboration and professional development amongst teachers. It is well known that integrating time for such endeavours is crucial and Raywid (1993) explains this with clarity and precision when she writes "the time necessary to examine, reflect on, amend, and redesign programs is not auxiliary to teaching responsibilities – nor is it "released time" from them. It is absolutely central to such responsibilities and essential to making schools succeed."

If making time for teacher collaboration is so important then the benefits of devoting resources to it must be apparent. Cordingley, Bell, Rundell and Evans (2003) considered five positive outcomes for teachers from their studies on collaborative professional development. These are:
- greater confidence amongst the teachers, for example, in taking risks;
- enhanced beliefs amongst teachers in their power to make a difference to their pupils' learning;
- the development of enthusiasm for collaborative working, notwithstanding initial anxieties about being observed and receiving feedback;
- a greater commitment to changing practice and willingness to try new things; and enhanced knowledge and practice.

It is clear that the teachers' involvement in Lesson Study this year demonstrates these positive outcomes with evidence of changes in practice which have come about from a deeper knowledge of how our students learn. It is this which ultimately makes a difference to student's progress and attainment and there is growing belief and confidence by teachers that this way of collaborating is being effective.

As teachers at SWA, we have become used to experiencing and relying upon the joint effort and support of our colleagues to help identify and solve real issues within our context, in our classrooms. Long may this continue!

David Hall

MARKET PLACE

The Department Lesson Study (DLS) sharing event was an opportunity for triad members to present the research they had been undertaking to members of the academy. It also gave them a chance to discuss possible future lesson studies.

" This is a fantastic opportunity to show case what teachers can achieve when they collaborate. Sharing good practice is the best professional development as we learn the most when we learn from each other. "

EMMA FOREMAN

"Finding out about all the best practice around school was great. From assessment in Music to feedback in IT there is a lot to take away."

ALAN STUPPLE

" GREAT! REFLECT AND PROGRESS! "

ISSUE

With 60% controlled assessments, Year 11 students struggle to engage and perform in their written and spoken work. The ability to be a self-reflective learner is something that is also needed for the new specification.

CONCLUSION

Students found it hard to understand the task and the subtle hints given to include a wide range of details. Positive teacher behaviours combined praise and positive encouragements to inspire achievement. Creating resources supported student reflection, and submitting a questionnaire addressed blanks left by poor reading of the task and understanding of key learning strategies.
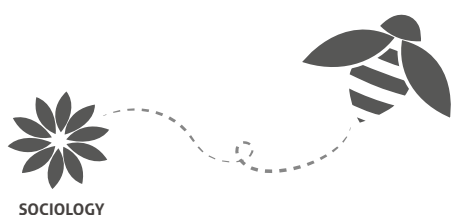
SOCIOLOGY

LESSON STUDY HIGHLIGHT
Case students have been identified and their responses to the planned activities are anticipated and observed

MEMBERS:
Victoria Fletcher, Abby Hampstead
& Marion Reydet
(Modern Foreign Languages)

RES

RESEARCH QUESTION:

To what extent can language learning strategies encourage self-reflective learners to improve their performance?

ACTIONS:

Evidence from the 2015 GCSE results led us to enquire about student learning and application of language to result in meeting their target grade, and reach FFT(20). After initial research online, we introduced an online platform via Google Classroom to trigger student reflection and "facilitate a learning task" cooperatively. The platform was mainly used by HA students as they were able to "develop metacognitive awareness of their own learning processes and strategies". To follow up, we introduced the SILL questionnaire to whole classes to identify methods of learning –which increased their independent skills too. The document was presented to them in lessons, and homework was published. Initial conversation with case students took place to determine areas of improvement, and agree on individual targets. Further, we realised the necessity to target our case students by issuing an Individual Progress Plan (IPP), developed within the department and our SLT Link.
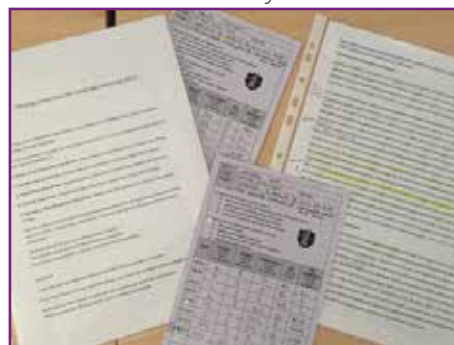
FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS - Through internal moderation we realised that out of 31 students on an IPP, 42% improved their attainment in written and spoken work. During lesson observations we interviewed the case students as part of the Big 6 and most were able to articulate the reasons why they were on an IPP and the impact on their work. The A*/A borderline students were able to describe and give examples in their work. This had the most impact on student attainment and was well received as praise from parents.

IMPACT ON PEDEGOGY - Re-visiting learning methods through the SILL questionnaire had teachers thinking about the relevance of guiding independence skills and revision with the creation of a revision booklet. Designing and issuing IPPs challenged teachers to suggest small and achievable targets that would allow students to make progress in every single lesson.

EMBEDDING IN DEPARTMENT - The IPP are part of the Department Developing Plan now and will be in next year 's too. All teachers in Year 10 are now using the IPPs to develop self-reflective skills and boosting student's confidence. In the future we aspire to have students recording their own progress on IPPs comparing with their tracking skill sheet at the front of their book.

FURTHER RESEARCH:

The IPP has been a successful tool for supporting KS4 students, and therefore is an intervention strategy. Class teachers have started using it with Year 10 students in approach to the end of the first year assessments in June 2017.

RESEARCH:

Dörnyei, Z., (2005), The Psychology of the language learner: Individual differences in second language acquisition. Mahwah, NJ: Erlbaum.
White, S., Schramm, K. & Chamot, A.U., (2007), Language Learning Strategy Instructions Current Issues and Research.
Jackman, R., Johnson, P. & Bridge, K., (2016), Anthecology: Lesson Study Journal, Affordable Print, 2, p.11-12

"REMOVING BARRIERS TO PROBLEM SOLVING QUESTIONS"

ISSUE

The majority of students find the multi-stage, contextualised problem solving examination questions difficult to answer, some not even attempting them.

CONCLUSION

The conclusion so far is that a student's confidence in engaging with Mathematics multi-step problem solving can be influenced by scaffolding the question to enable a start to be made. The challenge remains, however, to get to a point whereby students can be self-reliant enough to be able to 'engage and scaffold' for themselves.
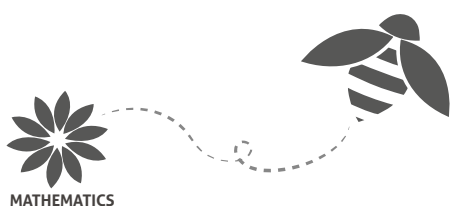
MATHEMATICS

LESSON STUDY HIGHLIGHT
Members have read previous research literature to inform planning

MEMBERS:
Aaron Beckett, Peter Fernandes,
Justin Togher (Mathematics)

RES

RESEARCH QUESTION:

To what extent can scaffolding problem solving questions build students' confidence when tackling multi-stage contextualised problems?

ACTIONS:

Evidence from previous examination papers and mock data led us to research how to demonstrate scaffolding techniques to students and break down multi-stage problems. We chose 3 groups of different abilities and presented the problem solving questions in different ways. The high ability group were using AQA AO2/AO3 questions with only hints and open ended questioning techniques (Socratic) from the teacher. In contrast the middle ability group were presented with Bronze, Silver and Gold questions with varying amounts of scaffolding to help them process and solve the problems. Gold had no prompting and no scaffolding; through to Bronze that were fully scaffolded by breaking down the necessary steps in to questions that were achievable. During the lessons the teacher asked probing questions to help the students develop strategies to tackle the questions. All materials and questions were GCSE examination questions.

Gold A
The diagram shows a regular hexagon and a regular octagon. Find angle x

Bronze A
The diagram shows a regular hexagon and a regular octagon. Find angle x

Find angle x.

Information you need:

For all polygons the external angles total 360
To find the external angle of any polygon calculate
$360 \div n$ (where n is number of sides)

a) Calculate the external angle for the hexagon (x) and the octagon (y).
(1 mark)

Information you need:
The internal angle for any polygon is: 180 – external angle

b) Calculate the internal angle for the hexagon (a) and the octagon (b).
(1 mark)

c) On the diagram label angle a and angle b. Use this information to find angle x.

FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS - It is difficult to measure the long term impact of this study, as more time and more frequent sessions would be needed. However, from the classroom observations students did gain in some confidence. This is evidenced by students opting for questions with less scaffolding as the lesson progressed or by students attempting questions before asking for help.

IMPACT ON PEDEGOGY - The activity has helped the teacher consider the use of scaffolding to encourage students to attempt problem solving questions independently.

EMBEDDING IN DEPARTMENT - The materials used in the study will be put in to the department resources and SoL alongside other materials.
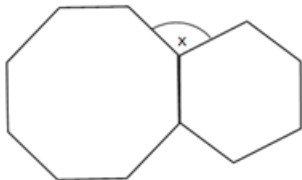
FURTHER RESEARCH:

How do we reduce the need or reliance on scaffolding for weaker students?

RESEARCH:

Martin, N., Hall, D., Ash, C. & Wall, C., (2016), Anthecology: Lesson Study Journal, Affordable Print, 2, p29-30.

"GO ON, GIVE IT A GO!"

ISSUE

To increase levels of resilience in students that will encourage them to make a successful attempt on examination questions, particularly on the longer questions.

CONCLUSION

The lesson study showed how the students successfully attempted longer answers without support. The timings imposed by the teacher, the explicit expectations conveyed by the teacher, the opportunities to review their learning and provision of reflection time had a positive impact on the willingness of students to give something a go (despite finding it challenging). Furthermore, students themselves demonstrated satisfaction at how close they were to a more developed answer. Whilst this is not always then replicated in the assessments, the lesson study inspired further actions by members of the triad including the creation of resilience goals, a resilience tree, postcards home and other strategies to improve resilience.
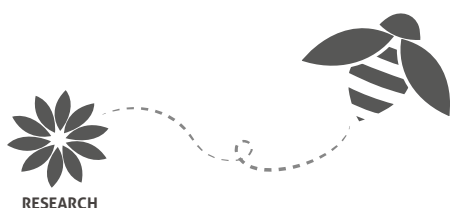
RESEARCH

LESSON STUDY HIGHLIGHT
Members have read previous research literature to inform planning

MEMBERS:
Katie Bridge, Stephanie Little
and Flo Oetgen (Sociology)

RES

RESEARCH QUESTION:

To what extent do teachers' expectations (a can do attitude) and planning for resilience create a growth mindset and resilience in students?

ACTIONS:

Evidence from test and mock papers that longer answer questions can go unanswered or students can make one point only. The lesson was introduced with a writing task 'answer this question as best you can in 5 minutes' to be challenging and different from the usual preparation time given to 'build' answers. The main body of the lesson was peer work on looking at what else could go into the answer and how to build onto what was done initially.

FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS – Some students are able to write some content for longer answers where before they may have left a blank. Year 11 Sociology students were given independent resilience goals in the lead up to their examination. This had an impact on revision techniques and behaviours of the students e.g. trying something new, downloading past papers independently.

IMPACT ON PEDEGOGY – Teachers can build in expectations that students have learning from the course to apply in an examination skills lesson, rather than approaching the lessons with caution towards those perceived to 'not like' writing longer answers. Teachers are more cautious or even mindful now of the problems with over-scaffolding challenging tasks.

EMBEDDING IN DEPARTMENT – Lessons are being developed with this back to front approach – 'what do you already know that is relevant?' to writing longer answers, rather than a starting from scratch approach. This is building a 'student as expert' model rather than 'teacher as leader' model of preparing for longer examination answers. It embeds an expectation that students have already learnt the content and so have something relevant to say – building their resilience and belief in their own prior learning when practising application to the examination.

FURTHER RESEARCH:

In view of the Lesson Study, the department are considering fine-tuning the strategies which provide the biggest impact on resilience. It was hard to measure the evidence against the impact and understand which part of the actions had greatest impact as some of the strategies employed were intangible e.g. tone of voice, body language.

RESEARCH:

Archer, J., (2010), State of the science in health professional education: effective feedback. Med Educ 44:101-108.

Artino, A., (2012), Academic self-efficacy: from educational theory to instructional practice. Perspect Med Educ 1:76-85.

Bandura, A., (1977), Self-efficacy: Toward a unifying theory of behavioral change. Psychol Rev.; 84: 191-215.

Dyrbye, L. et. al., (2010), Factors associated with resilience to and recovery from burnout: a prospective, multi-institutional study of US medical students. Medical Education: 44: 1016-1026.

Howe, A., Smajdor, A. & Stockl, A., (2012), Towards an understanding of resilience and its relevance to medical training. Medical Education: 46: 349-356.

"USING SCAFFOLDING TO DEVELOP RESILIENCE"

ISSUE

Middle ability students are becoming more familiar with problem solving questions but still struggle to access the problems and give up too soon.

CONCLUSION

Using a starter to engage students and helping them solve the problem by modelling the use of a help sheet went some way to developing the students' resilience as they kept trying for longer on multistage problem solving questions.
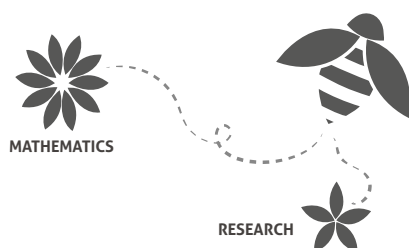
MATHEMATICS

RESEARCH

LESSON STUDY HIGHLIGHT
Case students have been identified and their responses to the planned activities are anticipated and observed

MEMBERS:
Rebecca Nunan, Alan Stupple,
David Hall (Mathematics)

RES

RESEARCH QUESTION:

To what extent can the use of a starter question help students develop their resilience when solving multistage problem solving questions?

ACTIONS:

The first lesson was designed around a starter question which would enable the students to engage by discussing how the problem might be solved and asking questions about the things they needed to know in order to solve the problem. The discussion brought together some of the key problem solving skills in preparation for the main activity where the students could apply the skills discussed. Although the use of questions printed on cards gave students a choice of which order to answer the questions in it was apparent that many students were unable to transfer the skills discussed from the starter in order to attempt them. On reflection we decided more scaffolding, in the form of a help sheet, would be needed to help students and the starter question needed to be answered and discussed before moving onto the main activity. The second lesson was more successful as students were able to discuss the problem more coherently using the help sheet provided as they had a way of being able to move forward when they were stuck. Being sat in groups helped the students try the question more quickly and the case students were more engaged due to these changes. They also found that being able to work on scrap paper helped them try out more things and therefore stay focused longer and have more success on the questions.

FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS – The Lesson Study has helped identify one type of support that students need in order to learn how to solve problems. Students are more confident at giving questions a go when there was a help sheet available and the working out could be completed in rough. Students displayed greater resilience on complex problems because of the help sheet, support from working in pairs or small groups and being able to work in rough.

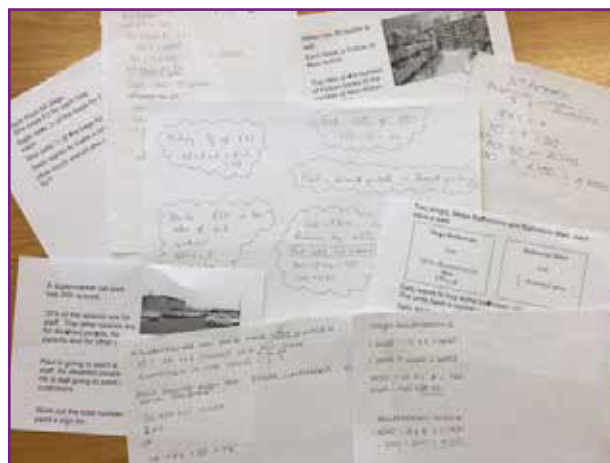**IMPACT ON PEDEGOGY** – We were able to identify one area of support needed to help students improve their problem solving skills and develop their resilience. Being more aware of the difficulty students have of transferring skills to similar problems in different contexts helped us provide useful support to students to help them make progress.

EMBEDDING IN DEPARTMENT – The problem solving cards which have been written and are already in the SoL can now have scaffolded starters and help sheets added to them.

FURTHER RESEARCH:

It would be good to be able to relate these to past examination papers and see if the students can also transfer their skills on these.

RESEARCH:

Martin, N., Hall, D., Ash, C. & Wall, C., (2016), Anthecology: Lesson Study Journal, Affordable Print, 2, p29-30.
Stice, J., (2006), "Teaching Problem Solving" [Online] Available: http://wwwcsi.unian.it/educa/problemsolving/stice_ps.html/ (Accessed May 2017)

"QUESTIONING SKILLS FOR RESILIENCE IN THE LOWER ABILITIES"

ISSUE

The new Mathematics specification has more on problem solving questions which some lower ability students find hard to access and so often do not attempt.

CONCLUSION

The students would have preferred an A4 prompt sheet as, rather than encouraging them, some felt daunted and put off by the A3 size. However, the students made progress although we still have a long way to go and a lot more research to do.
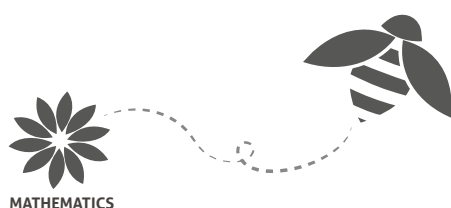
MATHEMATICS

LESSON STUDY HIGHLIGHT
Feedback from students about the lesson has been gathered and used in the review

BOYS	GIRLS	KS4	KS5	HA	MA	LA	PP	SEND
•	•	•				•		

MEMBERS:
Chris Wall, Lyn Minker,
Georgina Beard, Tony Edwards
(Mathematics)

RES

RESEARCH QUESTION:

How can we develop the questioning skills of lower ability Mathematics students and so help them to access problem solving questions in Mathematics?

ACTIONS:

We planned to provide a starter that ensured that the prerequisite knowledge was in place and then an initial scaffold of questions that they could ask themselves when trying to answer such questions. Following this they could then use this in groups to solve a mixture of problems. This was tried out with two different classes and the focus students were then spoken to in order to ascertain their views on what they had experienced, what they felt worked and what they did not like or what could be improved upon for next time.
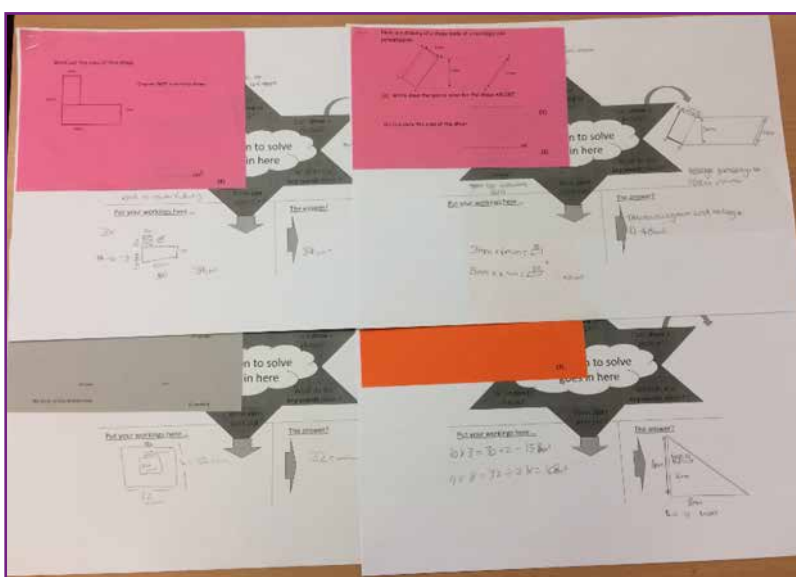
FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS – Students were more ready to attempt questions starting them even if they did not know the full route to the answer from the outset. They were, however, somewhat reticent about giving a critique when spoken to.

IMPACT ON PEDEGOGY– Rather than telling students how to work the problems out teachers fed back with questions which caused students to probe still further.

EMBEDDING IN DEPARTMENT– Problem solving activities have their own slots on the SoL so the A4 prompt sheets can be included as an extra resource to be used with them.

FURTHER RESEARCH:

Although some progress was made in getting students to access the tasks more research is needed to fully identify their areas of concern and the styles they prefer. Getting students to be open when interviewed after the lesson was more difficult than anticipated as they were more interested in giving what they perceived to be a valid response.

RESEARCH:

Martin, N., Hall, D., Ash, C. & Wall, C., (2016), Anthecology: Lesson Study Journal, Affordable Print, 2, p29-30

ISSUE

Our PM2 was to produce ways of making students revise, take on board homework more positively using Show My Homework (SMHW) and also revising for examinations by having access to all the information on an internet site which had been put together by the subject teacher.

CONCLUSION

Students found it easy to access the information which helped with them complete their homework and it was also helpful because it was marked online. Examination questions could be put on there for revision purposes. Students could see how the site would help them in examinations although they needed to do more of them before any real difference might be seen.

LESSON STUDY HIGHLIGHT
The lesson study demonstrates an impact on pedagogy

MEMBERS:
Design Technology

IND

RESEARCH QUESTION:

How can we get students to use a website and Show My Homework effectively?

ACTIONS:

Using evidence from poorly answered examination questions from last year led us to research how we can use SMHW combined with using the internet, as students are good at using technology, to help them revise more efficiently. We chose to use the Year 11 Electronics students to see how they used the set and how they liked the feedback given on line. Examination questions were put onto both the website and SMHW. We directed students to online sources of revision material developed and created by the Design Technology department that specifically addressed the examination theme criteria.
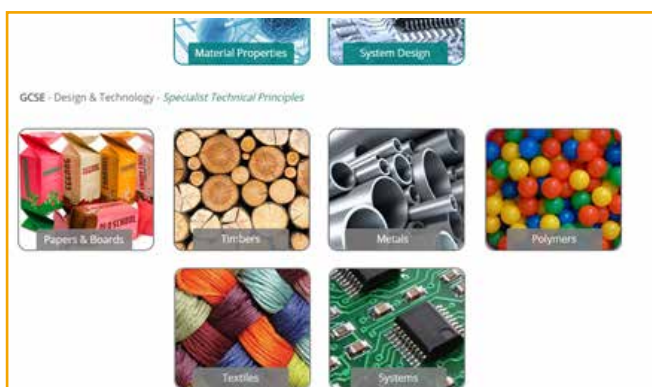
FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS – Students have commented that having a single, concise and easy to access online source of material has meant they are more likely to revise. Mock examinations and practice questions taken by Year 11 Electronics groups have shown that student responses are improved. Impact on this years' groups may be better assessed when examination results are released and more so over a longer period of time.

IMPACT ON PEDEGOGY – Uploading lesson resources such as PowerPoints and/or worksheets to SMHW or a specific website can serve as a useful accompaniment to student generated notes. Getting students in the habit of using this resource along with reading over lesson notes on the 'same day' can help solidify knowledge and where understanding is poor, offer greater opportunity to address it early. This is ideal for homework tasks.

EMBEDDING IN DEPARTMENT – Knowing that resources may be accessed or viewed by students outside of the classroom means more care should be taken in producing them. Slides and content delivery aids should be suitably written and explained so all students find benefit in using them. The content includes media links in addition to text and image allowing different learners to access information in different ways.

FURTHER RESEARCH:

As we have only put it together fully with Electronics, we now need to put a site together for all the other subjects and keep it updated with regular information that needs to go on there because of all the new courses.

"PARENTS AS MOCK EXAMINERS"

ISSUE

Trying to develop the students' independence in conducting their own rehearsals and meeting deadlines, specifically a mock examination performing for their parents.

CONCLUSION

It was a very positive experience; all students met the deadline to finish their choreographies in time to perform to their parents. All parents were very appreciative of the evening and the opportunity to see their daughter's work. The only drawback may be that the parents' feedback wasn't always qualitative as they aren't familiar with contemporary dance and its elements.

LESSON STUDY HIGHLIGHT
The pedagogy developed in the lesson study is being embedded in the department

MEMBERS:
Liz Major (Dance)

IND

RESEARCH QUESTION:

To what extent can parental intervention support the independent development of students during their rehearsal time?

ACTIONS:

Year 11 dancers were struggling to plan and stick to independent rehearsal slots with their dancing group (out of lesson time) in order to create their own choreography for Unit 4b of the course. The girls lacked focus and struggled to commit to regular weekly rehearsal time which hindered their progress in the unit (which is the largest percentage weighting on the course). By implementing this deadline with their parents being the audience and mock examiners it gave them a new focus and drive to meet the deadline and most of them improved in their effort levels and rehearsal discipline. All parents gave written feedback on a 'parent friendly' criteria sheet for their daughters to use in their improvement process. I was also able to provide detailed feedback for each student that was probably more useful for them during the improvement process.

FINDINGS, IMPACT & EMBEDDING:

Impact on Student Progress – All students met the deadline which meant they had progressed in terms of physically creating a first draft of their dance. This gave them more chance to improve and develop it for a second draft in time for the examination day.

Impact on Pedegogy – Due to its success teachers can model rehearsal discipline in lesson time over Year 10 so by Year 11 they understand how to be disciplined and use rehearsal time effectively.

Embedding in Department – This will be repeated every year with each Year 11 class to improve standards and independent learning.

" TAKE A DIP INTO THE PIT "

ISSUE

We wanted to help students to build independence in attempting an extended evaluation question.

CONCLUSION

Students were able to show good levels of independent learning when shown how to use the learning PIT effectively and this was a strong differentiation tool for the more able but challenging for some of the underperforming students.
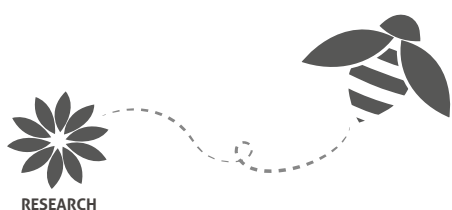
RESEARCH

LESSON STUDY HIGHLIGHT
Members have read previous research literature to inform planning

MEMBERS:
Lauren Nye, Annabel Priano,
Michelle Ward, Phil Johnson
(Psychology)

IND

RESEARCH QUESTION:

To what extent can scaffolding be used to increase student independence and resilience in attempting an extended assessment question?

ACTIONS:

We wanted to design a resource to tackle student's inability to structure an effective response to the higher mark question in their Unit 2 Psychology paper. Many students were struggling to know the level of detail, the structure and the key questions they needed to be able to answer to demonstrate a good level of understanding. They also tended to struggle with either AO1 (description) or AO2 (evaluation) in their answers, where the marks were split evenly for assessment. We decided to use a whole lesson where students would select their focus (AO1 or AO2), depending on what they thought was their weakness and then use the learning PIT to help them with their planning and then their overall response. The learning PIT is a scaffolded resource with key questions on it to stimulate and deepen thinking on areas of the assessment question.

FINDINGS, IMPACT & EMBEDDING:

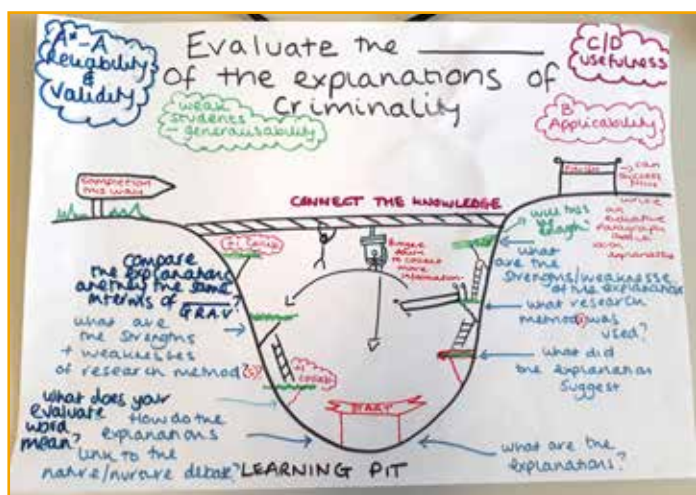Cycle 1: We found that the higher attainers found it easier to use the learning PIT as they were clear on what they had to focus on as they had a good understanding of their strengths and weaknesses on 10 mark questions. Mid and low attainers struggled somewhat with the freedom to identify their weakest part of their previous answers to 10 mark questions and in many cases only picked to use the "evaluation" part of the learning PIT when it was their knowledge that they should have been focusing on. We also found that the clarity of explanation of how to use the learning PIT was a problem – i.e. to use it as a scaffold/ladder, working their way up from the bottom to reach the top by answering different questions to help layer their knowledge or evaluation.

Cycle 2: The second cycle, we were much more prescriptive with the students, explaining explicitly how to use the learning PIT to climb up. We also made students focus on a particular skill rather than letting them choose. We found that this allowed more successful use of the learning PIT and students this time found it a more valuable resource to help structure their responses to 10 mark questions.

RESEARCH:

Nottingham, J., (2010), Challenging learning. JN Pub.
Artino, A., (2012), Academic self-efficacy: from educational theory to instructional practice. Perspect Med Educ 1:76-85.
Bandura, A., (1977), Self-efficacy: Toward a unifying theory of behavioral change. Psychol Rev. 84: 191-215.
Dyrbye, L. et. al., (2010), Factors associated with resilience to and recovery from burnout: a prospective, multi-institutional study of US medical students. Medical Education: 44: 1016-1026.
Howe, A., Smajdor, A. & Stockl, A. (2012), Towards an understanding of resilience and its relevance to medical training. Medical Education, 46: 349-356.

"PRACTICAL SELF-ASSESSMENT FOR GCSE STUDENTS"

ISSUE

Trying to get all students to assess their practical ability against the GCSE practical specification.

CONCLUSION

In conclusion the Year 9 pupils are more aware of their practical specification within their chosen sports, however they won't be taking their examinations until Year 11, so we won't see the overall result until then. We look to input this across all years and top set groups next year.

LESSON STUDY HIGHLIGHT
The pedagogy developed in the lesson study is being embedded in the department

MEMBERS:
Emma Wisson, Edd Rhodes,
Kate West (Physical Education)

ENG

RESEARCH QUESTION:

To what extent does practical assessment improve students' practical scores in GCSE Physical Education?

ACTIONS:

Prior to the booklets we made for this lesson study, students had an insight into the practical specification for GCSE Physical Education within their chosen sports. However from the first 6 practical lessons with all GCSE groups it showed a lack of knowledge with regards to fitness levels and their sports and what they have to do practically to get the highest possible grades. Top groups were given the booklet to self-assess themselves against the practical specification. After each block of sports the students were able to identify their strengths and areas of improvements explaining what they needed to improve before they get to their Year 11 practical examinations. Questioning and group discussion was used to draw out more detailed knowledge from the students.

FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS – The lesson study had an impact on student predicts, particularly those on the C/D borderline.

IMPACT ON PEDEGOGY – The lesson study has allowed us to explore new ways of teaching topics to suit different learning needs within practical lessons.

EMBEDDING IN DEPARTMENT – We have now included the practical teaching within top groups so pupils understand the practical specification for GCSE Physical Education.

FURTHER RESEARCH:

How can we put practical interventions in place for the B/A borerline students?

"LEAGUE OF THEIR OWN"

ISSUE

We identified that A/B students were needing to be stretched and challenged in relation to theory and practical Physical Education.

CONCLUSION

The project led to A/B students pushing themselves to get the most amount of short answers correct in the shortest amount of time with 100% success rate.
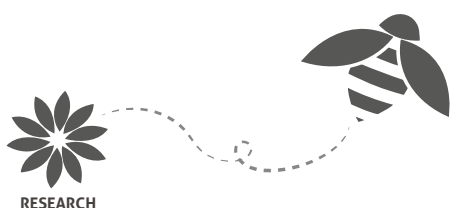
RESEARCH

LESSON STUDY HIGHLIGHT
The pedagogy developed in the lesson study is being embedded in the department

MEMBERS:
Jason Goldman, Oliver Daniels, Paul Henwood
(Physical Education)

ENG

RESEARCH QUESTION:

To what extend can competition be used to stretch and challenge high performing students?

ACTIONS:

Initially we designed a set of 100 short answer questions that would act as a 'quick fire' database of questions to ask students under challenge situations relating to practical theory. From here we devised practical situations to challenge the students whilst answering questions. Students were split into groups of four to make teams of two. Competitions were two vs. two. Two students asked questions whilst one member of the other team performed a physical challenge in order to gain time for the other team member to answer questions. This would be rotated amongst the four students and scores would be compared.

Q19	What are the three components of a high quality warm up?
A19	Pulse raiser, dynamic stretches and game specific activity
Q20	What are the characteristics of an ectomorph?
A20	Narrow shoulders and narrow hips (thinness)
Q21	Define health.
A21	A state of complete mental, physical and social wellbeing, with the absence of disease and infirmity
Q22	There are many influences impacting on involvement in physical activity. Name 2 influences that are linked with **CULTURAL** factors
A22	Race, gender, age, disability
Q23	What is the name of the scheme initiated by the Youth Sport Trust aiming at increasing lifelong enjoyment and participation in sport?
A23	TOP programme
Q24	How does Sport England help local authorities with their sports planning?
A24	Give advice on what facilities should be provided, where they should be and how to maintain them

FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS – Students really enjoyed the challenge and practical relation of this due to the similarity of the game show 'A League Of Their Own'.

IMPACT ON PEDEGOGY – Students were able to secure knowledge and answer questions quickly and efficiently under pressure.

EMBEDDING IN DEPARTMENT – This can become a key part of all students securing lesson knowledge content and can be planned into the schemes of work.

FURTHER RESEARCH:

Alternative challenge opportunities in the future

RESEARCH:

https://en.wikipedia.org/wiki/A_League_of_Their_Own_(UK_game_show)

> # IMPROVING STUDENT RESPONSE FOR MRI IN ART

ISSUE

Improving students' response rate and involvement in their MRI – an area where the lower ability with lack of homework and sometimes disorganisation hinders progress.

CONCLUSION

Different strategies were tried to get the students to review their EBI feedback and their engagement with MRI was assessed in response. We found that students reviewed their EBI feedback much better when working in pairs. When they were asked to look at their EBIs individually as a group or in response to teacher instructions, they were less likely to engage with the task.
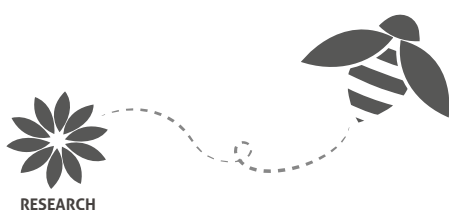
RESEARCH

LESSON STUDY HIGHLIGHT
Members have read previous research literature to inform planning

BOYS	GIRLS	KS4	KS5	HA	MA	LA	PP	SEND
•	•	•			•	•		

MEMBERS:
Cheryl Burgoyne, Julie Blake,
Jane Redcliffe and Anna
Williamson (Art and Textiles)

MRI

RESEARCH QUESTION:
Which method of identifying MRI has the most impact when set in lesson time?

ACTIONS:
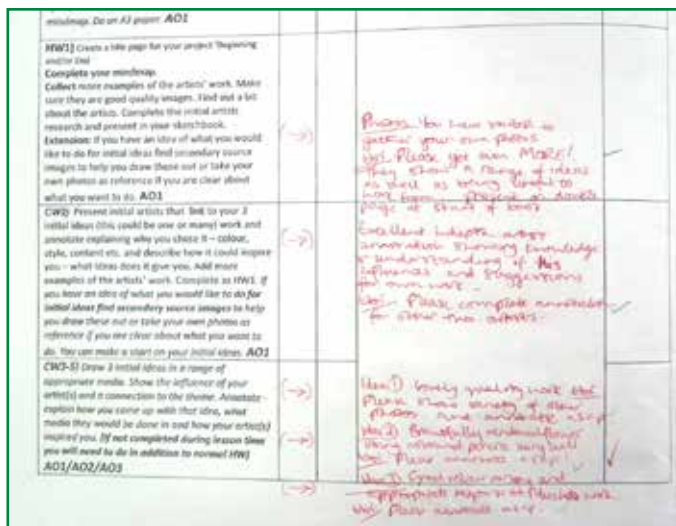What we have done, linked to their mock, was to organise and plan MRI as a lesson and homework in four different ways:
1. Self MRI – where they identify their own MRI to complete
2. Peer MRI – where their peer identifies the MRI that is needed to complete
3. Group MRI - where one specific thing is tackled
4. Teacher instructed MRI – given specifically as the first thing to improve

FINDINGS, IMPACT & EMBEDDING:
IMPACT ON STUDENT PROGRESS – Students are able to identify areas for improvement and act upon them through MRI confidently. By making improvements to their work they are able to get close to meeting their target grade. The most successful feedback was Peer MRI, where students felt they knew what they needed to do. Their peer partner was explicit and wrote exactly what they did need to do, and by identifying the obvious made them action it straight away.

IMPACT ON PEDEGOGY – Teachers use peer review to allow students to identify areas for improvement. Students take more responsibility for the task when they are working with a peer.

EMBEDDING IN DEPARTMENT – Time to begin MRI in lessons will be written into SoL as well as for homework, this will allow students to fully understand what they need to do to improve their work before they work on it independently at home.

FURTHER RESEARCH:
We still need to investigate a way to encourage more students to regularly complete MRI and to create a mindset/culture where students want to improve their work.

RESEARCH:
Dweck, C., (2006), Mindset: The new psychology of success. New York: Random House

"MAKING VERBAL FEEDBACK SUPPORT PROGRESS IN PRACTICAL EXAMINATIONS"

ISSUE

Verbal feedback is an important tool in Drama due to the vast amount of performance. We needed to ensure that this was documented in a way that does not deter students from their creativity but supports their progress and understanding of what they need to do to enhance their skills for the examination.

CONCLUSION

Creating the Unit 3 Performance booklet improved the structure of the development of approaching a play. Students were able to monitor their progress, evaluate their ideas and understand/respond to the Big 6. The booklet guaranteed that we improved the tracking of half- termly assessment ensuring that verbal feedback is consistent and evidenced.
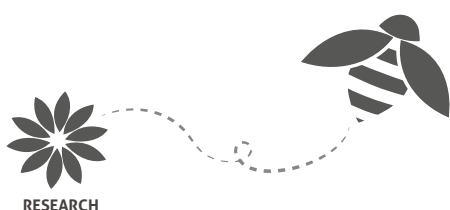
RESEARCH

LESSON STUDY HIGHLIGHT
Members have read previous research literature to inform planning

MEMBERS:
Amy Rolleston, Nicola Kelly
and Mark Gibbs (Drama)

MRI

RESEARCH QUESTION:

To what extent can effective, guided verbal feedback and focused progress tracking improve student attainment for the performance examination in order to support FFT(20) students?

ACTIONS:

We have developed and trialled a number of different forms of how to give written feedback and how to track student MRI. Using these we have created a booklet to be used as of Spring Term 1, to monitor verbal feedback and assessment, ensuring that students have the opportunity to evaluate the performance rehearsal process, in preparation for their practical examination. The booklet has a range of assessment tools which can support student attainment such as: target setting, target modelling, success criteria, self- assessment, peer and teacher assessment with MRI opportunities. The booklet emphasises the Big 6 and offers the students the opportunity to track and understand what they need to do to achieve their target grade. This will be experimented with in this first term and will be regularly monitored throughout.
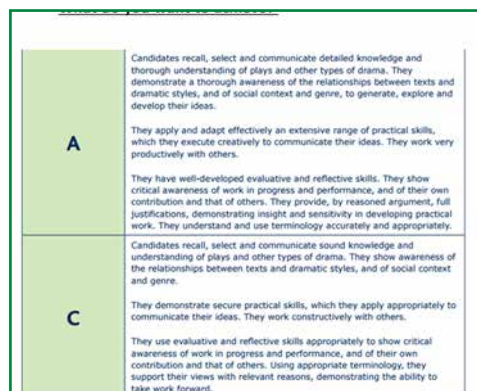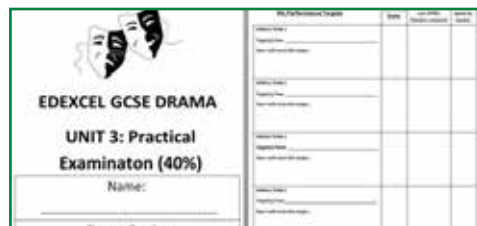
FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS – Students have clear target setting which can be derived from self, peer and teacher assessment using a simple success criteria, edited from the examiners marking criteria. Regular assessment and feedback has ensured that student understanding of skills improved, as evidenced though coursework, which has helped with our new DLS focus.

IMPACT ON PEDEGOGY – Teachers need to ensure that self, peer and teacher assessment is regularly used throughout practical lessons and that students create a journal of progress to show developments within the rehearsal process and of skills. Teachers must complete a half-termly assessment which is seen as important to the students, reflecting on what they have done and how they can improve. Teachers must ensure that targets are set through verbal feedback and that students have a range of material to understand how to improve and what to focus on in order to respond. The booklet can be flexible but the teachers must ensure that it is referred to at the end of every week and that at least one peer and one teacher assessment is completed per half term.

EMBEDDING IN DEPARTMENT – Through using this booklet, the lessons have more structure and focus with clear assessment to be implemented.

FURTHER RESEARCH:

Through discussion, the booklet could have been structured in a different way and a content page would have made it easier to use. To aid the students with this we will use tabs/post-it notes to make it easier to use. If this is successful it will be adapted next year for the new GCSE curriculum performance unit. Learning Walks will be taken out to ensure that the booklets are used correctly and will therefore be effective.

RESEARCH:

Merry, S., Price, M., Carless, D. & Taras. M., (2013), Reconceptualising Feedback in Higher Education: Developing Dialogue with Students. Abingdon: Routledge.
Frankland, S., (2007), Enhancing Teaching and Learning Through Assessment. The Netherlands: Springer

"SENDING VERBAL FEEDBACK USING HEARMYFEEDBACK APP TO IMPROVE MRI"

ISSUE

There is realisation that despite its usefulness, verbal feedback is often forgotten and difficult to evidence.

CONCLUSION

Students responded well to the verbal feedback and MRI engagement increased significantly. Years 11, 12 and 13 showed significant progress and increased resilience. Teachers reported that their feedback was more individualised and higher quality feedback was given in a shorter time than alternative methods.
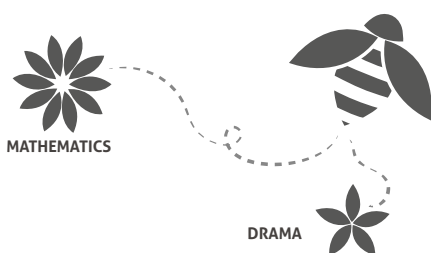
MATHEMATICS

DRAMA

LESSON STUDY HIGHLIGHT
Case students have been identified and their responses to the planned activities are anticipated and observed

BOYS	GIRLS	KS4	KS5	HA	MA	LA	PP	SEND
•	•	•		•			•	

MEMBERS:
Ben Clark, Lee Starkey,
Dean Rayner
(ICT and Computer Science)

MRI

RESEARCH QUESTION:

To what extent can recorded verbal feedback increase MRI engagement, resilience and independence with KS5 boys?

ACTIONS:

A web app (www.HearMyFeedback.co.uk) was co-developed by Lewis Hadden (Year 13), Ben Clark and Carl Tonking which was supported particularly by Rob Robson and Nick Martin. The students were given the success criteria for each section of the coursework prior to their first draft. Upon submission, the teacher would mark it and record feedback on the web app (www.HearMyFeedback. co.uk), personalised and focussed on the success criteria mentioned above. During the following lesson, each student was required to listen to their own feedback and make notes to aid their MRI. They then responded, using the app to state what they would now do to improve their work. This provided evidence of feedback whilst ensuring that the students processed it and set out their action. The focus of this methodology was on the style and quality of the feedback.

FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS – All students were able to link their feedback to the success criteria. This was evidenced by their MRI responses on the app. Some of the students re-listened to the feedback at the beginning of the following lessons to stay focussed on the important improvements. Very few students (2) required additional clarification on the feedback. This was down significantly from written feedback methods.

IMPACT ON PEDEGOGY – In order to embed this, there needs to be a yet simpler way to record verbal feedback. The app, though useful for teachers who had co-developed it, proved challenging for others to use regularly. Further research is required to improve this.

EMBEDDING IN DEPARTMENT – Used in line with the department assessment policy, this method could change the long term plan to focus more on MRI and success criteria. It is important that the success criteria is prepared appropriately so that students can access it in 'bite-size' parts.
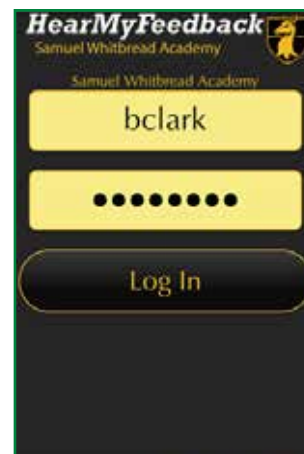
FURTHER RESEARCH:

Are other institutions trialling similar ideas? Can this be applied to examination style assessments rather than coursework sections where MRI time is limited?

RESEARCH:

Kelly, N. & Gibbs, M., (2015), Anthecology: Lesson Study Journal, Halcoyn-Press, 1, 43-44

Nunan, R., Bartlett, T. & Hall, D., (2015), Anthecology: Lesson Study Journal, Halcoyn-Press, 1, 47-48

" STUDENT PROGRESS TRACKER (SPT)

ISSUE

We wanted to facilitate the tracking of progress across the new GCSE syllabus, particularly with a five year GCSE plan in mind (Years 7-11).

CONCLUSION

At a preliminary stage, teachers have found it useful to have clear, defined criteria for the entire syllabus and to use key targets as part of intervention strategies. Having defined criteria also allows for faster teacher marking and feedback, and promotes student independence in that they monitor their own progress.

LESSON STUDY HIGHLIGHT
The pedagogy developed in the lesson study is being embedded in the department

MEMBERS:
Dave Hetherington, Sarah Sinclair,
Jodie Vallance, Amy Rolleston
(English)

MRI

RESEARCH QUESTION:
To what extent can effective skill tracking support student progress across English?

ACTIONS:
Students could identify specific skills relevant to assessment. Students proof-read their own assessments and identified areas of strength and weakness. Students then conducted MRI using specific tasks depending on their SPT tracker, and self-assessed progress using RAG.

FINDINGS, IMPACT & EMBEDDING:
IMPACT ON STUDENT PROGRESS – Students are able to clearly identify attainment and areas for development using straightforward language.

IMPACT ON PEDEGOGY – Ensure use of tracking sheets for key MRI lessons.

EMBEDDING IN DEPARTMENT – Review tasks/MRI tasks now incorporate direct references to SPT.

FURTHER RESEARCH:
Trial using marking coding based on the SPT in order to speed the process. Embed into KS3/5 SoL to ensure consistency.

RESEARCH:
Black, P. & Wiliam, D., (1998), Inside the Black Box: Raising Standards Through Classroom Assessment, School of Education, Kings College London, UK

"USING QUESTIONING AS A CHALLENGING STYLE OF WRITTEN FEEDBACK"

ISSUE

Students were not showing progress through MRI, often seeing it as a laborious repetitive task. This was to focus them on specific areas that needed improving.

CONCLUSION

Questioning is a more engaging way of delivering EBI to students. The focus is not on repeating the task but answering the specific question that we have identified. The question challenges them in a specific area of their work and learning that needs developing. These can therefore be differentiated.
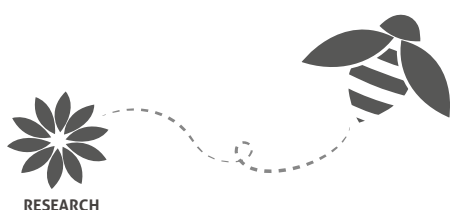
RESEARCH

LESSON STUDY HIGHLIGHT
Members have read previous research literature to inform planning

MEMBERS:
Carl Tonking, Leanne Cross and
Claire Dainton (Film)

QST

RESEARCH QUESTION:

To what extent can questioning be used as a form of feedback to challenge students effectively when responding to feedback?

ACTIONS:

We delivered feedback to students using differentiated questioning and found that with more creative work it was appropriate and challenging for both top and bottom end. Within the packs we had designed, the issue was that the MRI was not always easy to evidence as the creative work was always developing. When applied to our written work we found it particularly effective. We would read through an essay response and number in the margin at particular points. We would then write the corresponding number and question as their EBI. For each student it was individually focussed on what 'thinking' was missing at specific points in their writing and questioning then in order to draw that learning out. They then wrote their MRI after. They could use the numbers to find where that question had come from and understand the thought process of a teacher/examiner.

FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS - Although difficult to measure until examination results, it was clear that students written responses (particularly at AS/A2) were improving. This was clear through their response to the EBI questions but then also in subsequent written tasks. An accumulative effect was developing. With creative work it was certainly challenging and effective (particularly with verbal) but we are still working on how to evidence the MRI when the work is ongoing and in a medium not fit for book work.

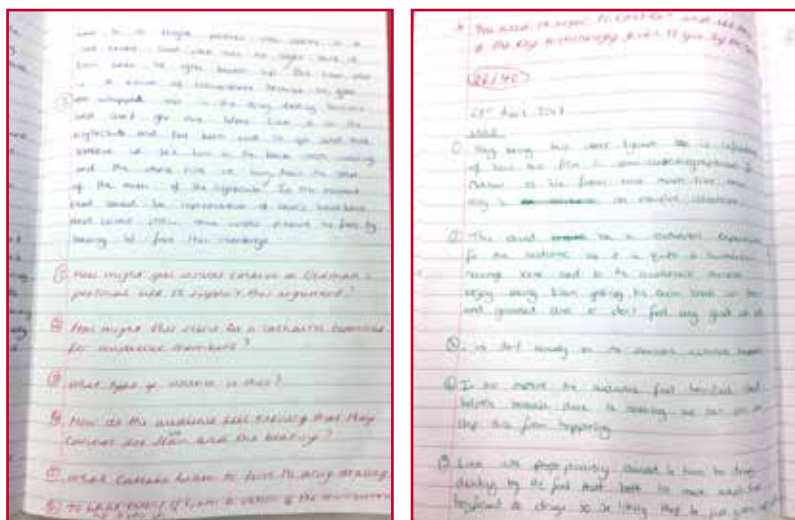IMPACT ON PEDEGOGY - The development from cycle 2 is that the questions can be more challenging than we had expected, but support needs to be provided also. We developed an MRI help sheet that acted as an aid to the written question so that students could refer to it for support. Again this is most effective in 6th form and will need adapting for the new specification and GCSE cohorts. Our questioning style has developed and effective conversations have happened with staff about the intricacies of this.

EMBEDDING IN DEPARTMENT - More work is needed to develop more MRI help sheets for written tasks, but this work has certainly been implemented already.

FURTHER RESEARCH:

More research into questioning styles so that we do not become stale in our approach. Further support material needs to be produced that echo the new specifications. Further adapting for GCSE cohorts needed too.

RESEARCH:

Ronayne, M., (2002), Marking and Feedback. SET: Research Information for Teachers 2, 8-11.

"IMPROVING GROWTH MINDSET THROUGH PROGRESS AND RESILIENCE"

ISSUE

A large number of students are taking Geography because they have to and are uninterested and therefore struggle to make progress.

CONCLUSION

Using 'process goals' has helped students to focus on the skills needed to answer the questions rather than the ultimate goal of hitting their target grade, therefore seeing improvements in their overall results.
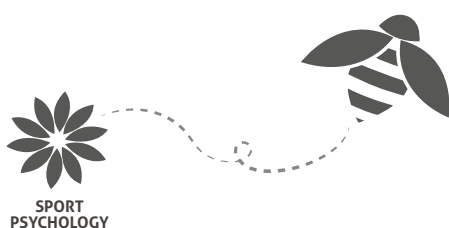
SPORT PSYCHOLOGY

LESSON STUDY HIGHLIGHT
The pedagogy developed in the lesson study is being embedded in the department

MEMBERS:
Lisa Coulson, Neil Sahai,
Thomas Rowell (Geography)

GMS

RESEARCH QUESTION:

To what extent can using 'process goals' help to improve student progress and therefore improve mindset?

ACTIONS:

Students struggling to answer question using the right skills required and therefore becoming demotivated and uninterested led to a focus on 'process goals' – the skills required to move towards a target rather than focusing on 'beating others' or 'hitting targets'. This was done through marking assessments and providing feedback on the skills needed to improve an answer, e.g. underlining key words in a question so the focus of the answer is correct. Students then used their feedback to determine which 'process goals' they needed to focus on in their next assessment to help them to improve a particular type of answer. This is kept as a log in their assessment folder with them referring to it before their next assessment so they remember what they need to focus on. When they have used a 'process goal' in an assessment they tick it off/date it and the teacher initials it. This is done 3 times to ensure that the process is sticking with them rather than being done once and then forgotten. Students are encouraged to have about 3 'process goals' they are working on at any one time.

FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS – When students apply their 'process goals', results improve as they are doing what the questions ask. This can be negated by them using the wrong knowledge or not having sufficient knowledge through lack of foc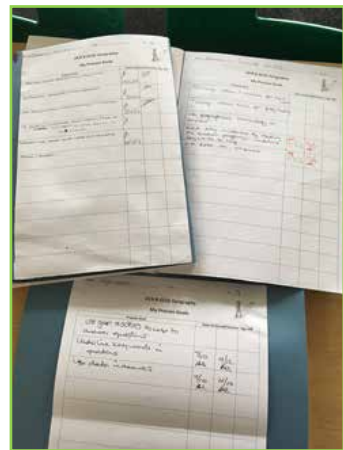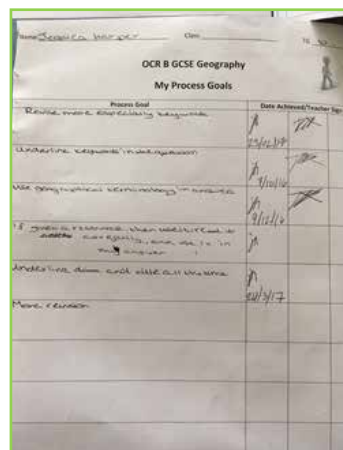us in class/revision. It is also negated if the teacher forgets to mention them as they have yet to become second nature to the student – this is the aim for their examinations. It does give them a better idea of what questions require and students have said they are using the 'process goals' from Geography in other subjects as many are generic.

IMPACT ON PEDEGOGY – Teachers need to ensure that reference is made to 'process goals' before an assessment and there is a focus on them during feedback so students can see what they need to do in order to improve. They can also be used with short assessments in a lesson, not just in examinations. A list can be kept and added to when necessary so that all teachers are working to the same standards. It also provides an answer to one of the Big 6 – what do I need to do to improve.

EMBEDDING IN DEPARTMENT – 'Process goals' need to become part of the lesson plan/SoL so that everyone is using the same terminology and using them within their lessons, for both small and main assessments. They can also be referred to in homework set.

FURTHER RESEARCH:

Some students find them easier to incorporate than others and still have a fixed mindset of what their grade is rather than what they need to do to improve. This could be overcome with time. More work can be done on the actual 'process goals' so the list is coherent, to the point, and not repetitive.

RESEARCH:

Sports psychology lecture attended at a swimming training camp. Lecture given by Dr Karen Howells, lecturer at Loughborough University

" PROGRESS THROUGH GROWTH MINDSET "

ISSUE

Department focus to give students a ladder for learning to link ideas more consecutively. Ensure reinforcement of basic learning principles.

CONCLUSION

Learning platform exercises led to reinforcement of key words and terminology and allowed staff to go over difficult principles that some students were struggling with. The learning platform has been very effective with support for revision and preparation for tests and assessments. The learning platform is also useful for cover purposes.
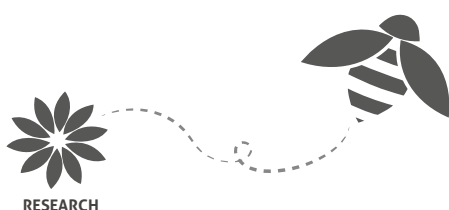
RESEARCH

LESSON STUDY HIGHLIGHT
The lesson study demonstrates an impact on student progress

MEMBERS:
Lee Huckle, Patrick Smethurst
(Geography)

GMS

RESEARCH QUESTION:
How can a growth mindset be developed through AfL to develop student progress and resilience?

ACTIONS:
5 minute starter at beginning of every lesson by all teachers – focussing on spiral of learning and growth mindset.
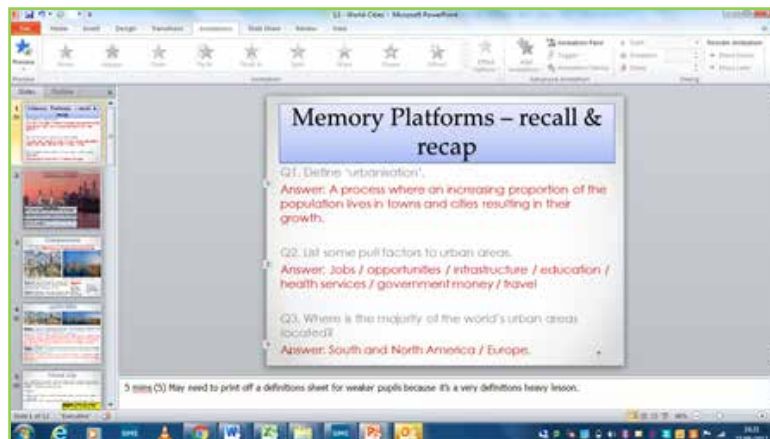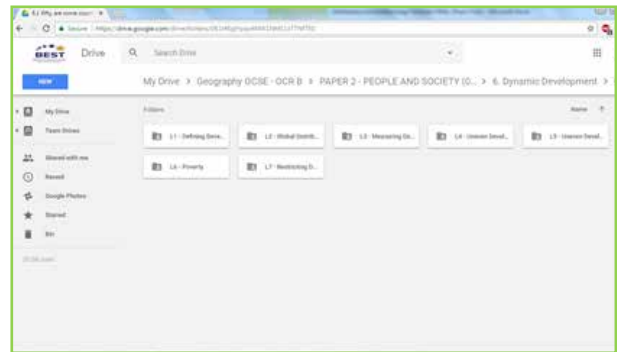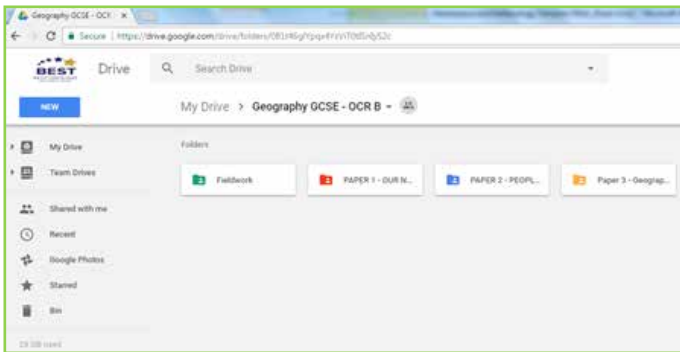
FINDINGS, IMPACT & EMBEDDING:
IMPACT ON STUDENT PROGRESS – Better use of terminology and linking key ideas together. Supported with revision on google drive learning platform.

IMPACT ON PEDEGOGY – Use of the learning platform and reinforcement of key ideas linked to a growth mindset.

EMBEDDING IN DEPARTMENT – Structure and flow of lessons along with developing SoL , incorporating growth mindset, for all GCSE classes.

FURTHER RESEARCH:
Time management was an issue especially with regards to setting up the learning platform on google drive. Further research to investigate how access to google drive enhances student progress.

RESEARCH:
Griffin, M. & Oakes, S., (2016), The A Level Mindset: 40 activities for transforming student commitment, motivation and productivity, Crown House Publishing Company, Wales

"THANKS FOR THE MEMORIES"

ISSUE

We wanted more students to remember and use the key words in their assessments.

CONCLUSION

We found that chanting the words definitely helped the students remember the words as both case students could remember three words out of five at the end of the lesson. Also having the words written down encouraged them to use them in their written work. Both students used three key words in their written work.

LESSON STUDY HIGHLIGHT

Case students have been identified and their responses to the planned activities are anticipated and observed

MEMBERS:
Rebecca Jackman, Sam Tawede,
Nicola Jones (RS & Law)

GMS

## RESEARCH QUESTION:

How can a growth mindset be developed through AfL to develop student progress and resilience?

ACTIONS:

We identified five key words which we wanted the students to remember and three key facts. We did a true/false quiz for the key facts and then asked students to chant the facts three times. Then we did a matching exercise for the key words and again asked them to chant them and also provided a list of the key words.

Heaven, key words, matching exercise

Soul----------------- lives forever

Resurrection--------- your spirit.

Eternal/immortal-------- Coming back to life after death.

Purgatory-------------place of peace and love

Heaven------------place of torment

Hell------------ place where souls are cleansed and purified.

FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS – The students used three key words in their assessment and included one fact from memory. At the end of the lesson they could remember three key words.

IMPACT ON PEDEGOGY – Using the matching exercises of words and definitions and getting the students to chant the words has helped develop our ability to prepare our students for their assessments. Ensuring that the students have the key words written means that they are more likely to use them in their assessment.

EMBEDDING IN DEPARTMENT – We plan to include similar activities to improve literacy in future lesson plans.

FURTHER RESEARCH:

We were going to try miming to help students remember quotes. We think that acting quotes out would help kinaesthetic learners.

"STUDENT KNOWLEDGE RETRIEVAL THROUGH UNDERSTANDING MEMORY"

ISSUE

The GCSE new literature closed texts present challenges for memory retention. It is generally becoming more challenging for students because the courses require them to remember a great deal in examinations.

CONCLUSION

We have found that we have had to review our SoL to allow for specific opportunities for memory to be tested, and for students to fail to build resilience. We also have had to consider how we interpret mark schemes to allow students who find memorisation particularly difficult to still be able to access the higher marks. We have also found that maximising opportunities for students to be able to transfer their skills between Language and Literature (thereby having less to 'remember') allows for greater impact, less work and SMART learning.
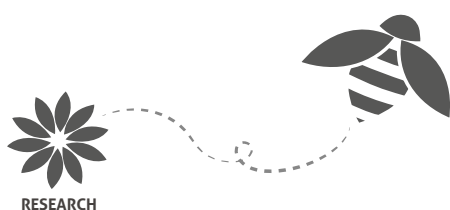
RESEARCH

LESSON STUDY HIGHLIGHT
Members have read previous research literature to inform planning

BOYS	GIRLS	KS4	KS5	HA	MA	LA	PP	SEND
•	•	•	•	•	•	•	•	•

MEMBERS:
Laura Jonson (English)

WRT

RESEARCH QUESTION:

How can a better understanding of how memory works enhance student knowledge retrieval?

ACTIONS:

We looked at ways to embed memory retention activities within schemes of learning and evaluate success of different methods of memory improvement. We also researched memory training techniques and theory surrounding memory and retention. How to improve memory by incorporating lessons learned from cognitive science.

FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS - When provided with an examination question, students were more confident in their ability to tackle it and to recall facts regarding context and key quotations. Students could apply particular quotes to many different questions (triple impact quotes) Students could develop their own questions to help them improve their understanding, and therefore remember the content (Bloom's Question Stems).

IMPACT ON PEDEGOGY - Teaching the students to stagger their approach to memory retention (like a learning ladder). Teaching the students that they do not need to remember everything, but that key areas remembered and applied intelligently will be more beneficial. Applying principles of how students remember and learn to our teaching e.g. memory platforms and using power-points effectively.

EMBEDDING IN DEPARTMENT - The embedding of a range of memory retention techniques in to schemes of learning. Encouraging an evaluative philosophy within lessons. Above is an example of how we get the students to be smart when learning quotes: each quote will have 3+ links across the text and therefore more chances of being appropriate to more examination questions, thereby minimising the number of quotes needed.

FURTHER RESEARCH:

Methodological Critique of 'Test Enhanced Learning: Taking Memory Tests Improves Long-Term Retention' (Roediger and Karpicke, 2006) Bjorke's advice on 'Testing' Bloom's theory of questioning

RESEARCH:

Black, P. & Wiliam, D., (1998) Inside the Black Box: Raising Standards Through Classroom Assessment, School of Education, Kings College London, UK.
Bloom, B.S. (Ed.). Engelhart, M.D., Furst, E.J., Hill, W.H., & Krathwohl, D.R. (1956), Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain. New York: David McKay Co Inc.
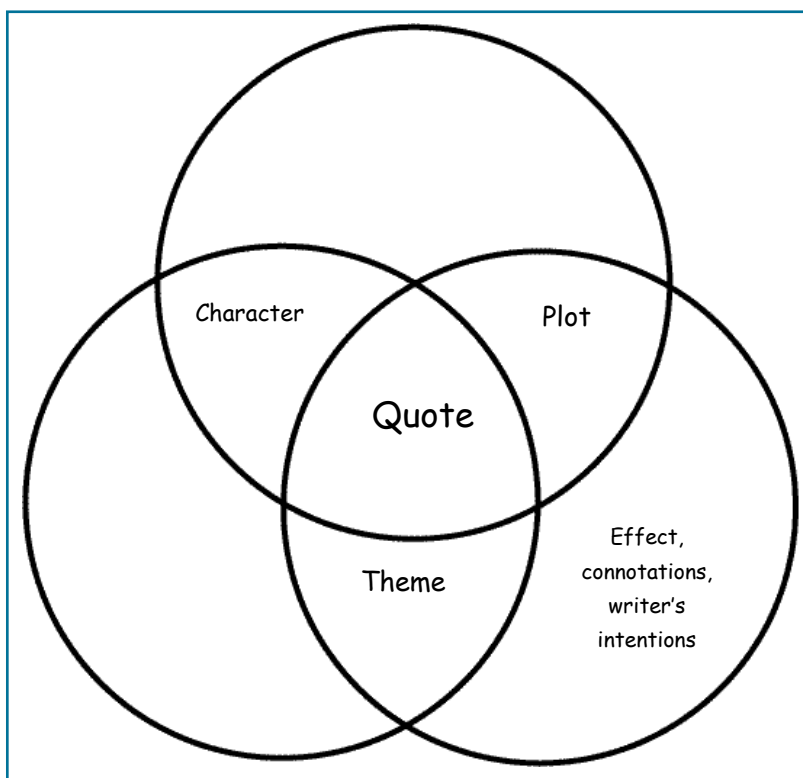
"CONVERTING THE SIX MARKERS IN SCIENCE"

ISSUE

To improve the progress of HA students in Additional Science to help the department achieve our FFT(20) target.

CONCLUSION

It is so important to focus systematic knowledge development through regular review, linked to an explicit examination question analysis strategy and a systematic approach to dealing with structuring six mark question answers.
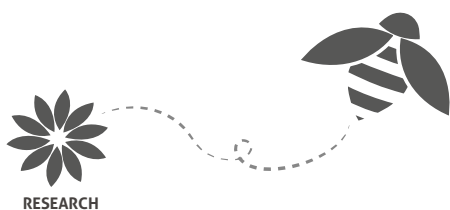
RESEARCH

LESSON STUDY HIGHLIGHT
The lesson study demonstrates an impact on student progress

MEMBERS:
Susie Hoad, Kat Allen,
Dave Goode (Science)

WRT

RESEARCH QUESTION:

To what extent can integrating knowledge development, question analysis strategy and six mark questions improve student progress, especially with HA students?

ACTIONS:

To review with the whole class their levels of confidence in dealing with examination questions in general and the six mark questions in particular. Identify the relevant key terms and definitions for each module – and set this as part of the weekly homework to learn by 'Look, Cover, Write, Check' strategy. The outcome tested weekly by a simple 'definitions' and spelling test – individual student performance tracked over time and hard work/success celebrated. Coach all students on developing a simple analytical approach to deconstruct any examination question BEFORE attempting to actually answer the question. Analyse a range of six mark questions to identify the clues that are hidden in the question to use as the start of the framework for that question – and then to use the enhanced knowledge to add the detail required for full marks (through effective formative feedback and student MRI).

The words to learn....Look, Cover, Write, Check!	
25.Neutron	A particle, mass 1 unit, from the nucleus of an atom. It is electrically neutral
26.Ohm's law	Voltage (V) = Current in Amps (I) x Resistance in Ohms (R).
34.Nucleus	The very small dense central part of an atom which contains protons and neutrons.
35.Proton	A positive particle found inside the nucleus of an atom – mass of 1 unit.
36.Electron	A very tiny negative particle found outside the nucleus of an atom.

FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS – All students have demonstrated – through their mocks, examination questions set as homework and as review points in class – their increasing confidence at deconstructing examination question and the quality of their work, resulting in higher predictions for the final outcomes as a result. By the Predict 6 (June 2017) ALL pupils were predicted to achieve their Target Grade. Feedback from these pupils following the recent GCSE examinations: 'It was great that we had two six mark questions – I feel like I have 12 marks in the bag already'.

IMPACT ON PEDEGOGY – We have changed our short and mid-term planning for Year 10 classes (and will implement the same improvements for all classes in the future) to integrate systematic knowledge acquisition, examination question analysis and six mark question analysis as a consistent element of practice – to enable students to practice and develop these higher order skills and so improve both their attainment and progress.

EMBEDDING IN DEPARTMENT –Revision sessions will be written as part of the updated SoL for next year and they will be structured these around these three key elements as they appear to have been so successful this year.

FURTHER RESEARCH:

We are testing out the efficacy of this three pronged, integrated, approach with Year 10 classes which have very different academic profiles. The students have less confidence in their capacity to deal with any examination questions. The research question is to understand how to ensure that this integrated strategy is successful for LA students in improving their progress.

RESEARCH:

Nye, L., Oetgen, F. & Little, S., (2016), Anthecology: Lesson Study Journal, Affordable Print, 2, p.61-62
Morris, B., (2017), MEd Thesis – Knowledge acquisition (unpublished)

"EMBEDDED EXAMINATION TECHNIQUE INTO LESSONS"

ISSUE

Our students were finding the three mark describe questions hard to answer on the listening examination. Students became reliant upon re-call rather than developing their aural awareness and were not approaching the examination question correctly.

CONCLUSION

Students struggled with these questions initially, but once given a structured way to tackle the question, they responded well. All students mock examinations demonstrated that they used the template given of 'start-middle-end.'
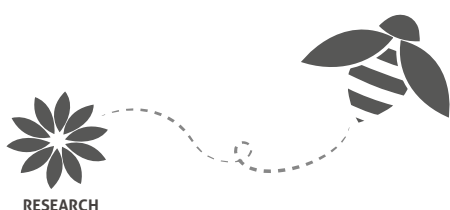
RESEARCH

LESSON STUDY HIGHLIGHT
The pedagogy developed in the lesson study is being embedded in the department

MEMBERS:
Charlotte Tabert, Hannah Meadows and Alison Coates
(Music)

WRT

RESEARCH QUESTION:

To what extent can incorporating a combination of both seen and unseen listening analysis in the examination SoL help improve the overall A*-C% from 60% to 90%?

ACTIONS:

Evidence from poorly answered 'describe' three mark examination questions led us to research why students were not securing high marks for these questions and come up with solutions to improve. We identified two issues; firstly that students didn't know HOW to structure their answer, and secondly that students didn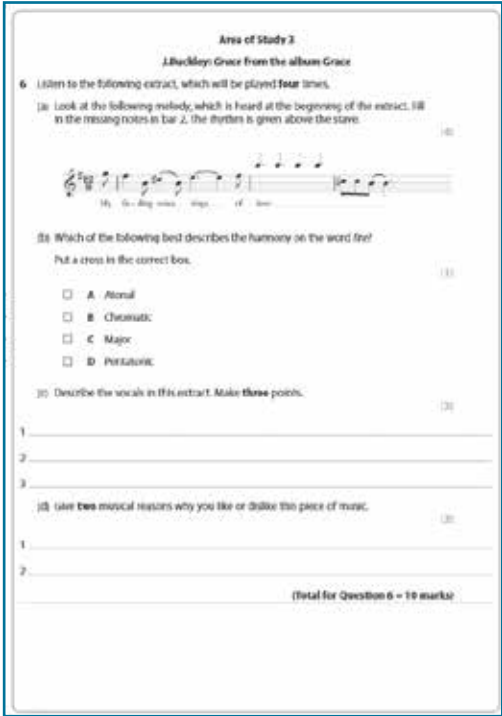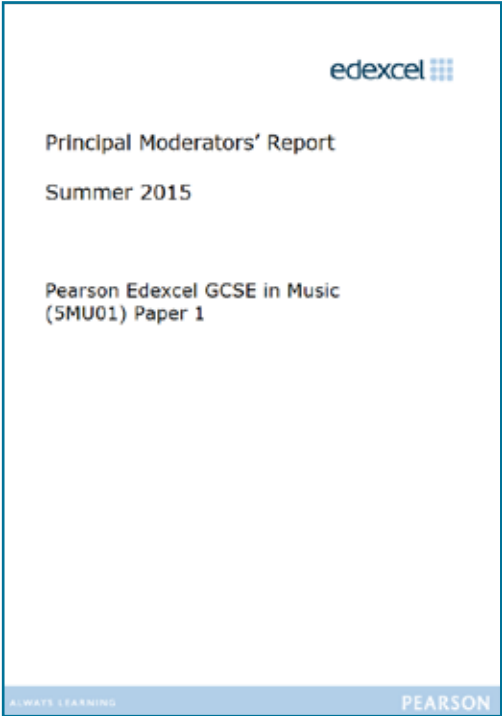't know what to write. Extensive analysis of past papers and examiners reports identified our approach for teaching this. A 'listening list' was created and students were taught to approach using 'start-middle-end'. The listening activities which were based on examination style questions are embedded into our SoL.

FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS – All students now locate the key term that they have aurally identified, either using 'start-middle-end' which allows them to access the higher marks for this question.

IMPACT ON PEDEGOGY – The DLS helped us to think about our entire approach for teaching GCSE Music. An improvement has been made between the balance of 'recall' and 'aural awareness'.

EMBEDDING IN DEPARTMENT – Regular unseen listening analysis has been embedded into our SoL.

FURTHER RESEARCH:

Developing this for the new GCSE specification, which has greater emphasis on listening skills.

RESEARCH:

Anon., (2015), Principal Moderators' Report, Pearson, London, UK.

"IMPROVING LONGER WRITTEN ANSWERS IN GCSE SCIENCE"

ISSUE

The majority of students are finding longer questions difficult to tackle and only gaining one or two marks out of six.

CONCLUSION

Students used a detailed template with worked examples initially. The question was set out in steps so that they could consider what the question was asking and what the command word meant. At the end of the activity students attempted a full six mark question themselves.
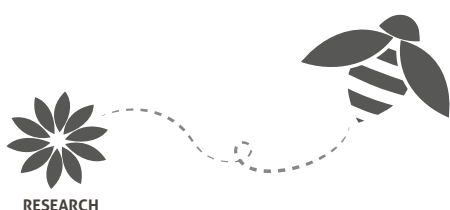
RESEARCH

LESSON STUDY HIGHLIGHT
Feedback from students about the lesson has been gathered and used in the review

MEMBERS:
Emily Adams, Sherma Joseph,
Lorrie Murphy (Science)

WRT

RESEARCH QUESTION:

To what extent will using a writing frame improve student response to six mark questions in GCSE Science?

ACTIONS:

Students were often not even attempting the longer essay style questions in Science mocks. We wanted to scaffold this with a writing frame which allowed planning of the question and consideration of what they had to do before going straight in to the answer.

FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS - Some students really liked this approach and found that it helped them tackle these questions more effectively. This was across the ability range. However, students who were poorly motivated and lacked resilience found the process laborious and of no value.

IMPACT ON PEDEGOGY - Some students needed continual teacher circulation and prompting in order to engage in the process. The process did, however, aid the teacher in their own personal lesson planning. It allowed them to understand misconceptions in longer questions and think of a logical process that students could use to solve this.

EMBEDDING IN DEPARTMENT - The science team has been working on versions of this activity all year and has been using this type of approach in lessons more frequently. It can now be added into the revision programme for Year 11 next year.

FURTHER RESEARCH:

We need to consider how to engage students more in this activity and how to promote independent study and resilience. Students often think that science questions are 'stupid' and unrelated to the course that they have studied. They fail to see connections and cannot apply what they have learned to unfamiliar situations.

RESEARCH:

Student Guide to the 6 mark question http://www.suffolklearning.co.uk/11-19-learning-teaching/science/literacy-in-science/edexcel-exemplar-responses
http://media.bloomsbury.com/rep/files/command_words.pdf

"IMPROVING THE QUALITY OF STUDENT RESPONSE TO SIX MARK QUESTIONS IN SCIENCE"

ISSUE

Across Separate Science and Additional Science our students were performing below the national average in questions that require longer written answers (LWA), even though they outperformed their peers in AO2 and AO3.

CONCLUSION

Students found it hard to access the questions initially, but with frameworks, exemplars and repeated peer assessment the quality of the extended answers have improved.
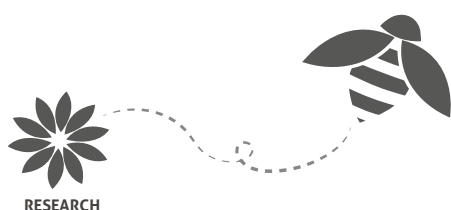
RESEARCH

LESSON STUDY HIGHLIGHT
The lesson study demonstrates an impact on student progress

MEMBERS:
Rob Graves, Ian Butler (Science)

WRT

RESEARCH QUESTION:

To what extent can using a framework and exemplar materials improve the quality of long written responses in Additional and Separate Science?

ACTIONS:

Evidence from poorly answered examination questions led us to research how to 'teach' literacy and its associated skills in context of the Science. We had a meeting with the literacy coordinator in order to discuss the most effective ways of developing higher quality extended responses. We decided that the use of exemplar material linked to the command word would be impactful as often HA students have the knowledge but misinterpret the command and go off on tangents. This would also benefit them in seeing what an answer that uses scientific terminology throughout and how they should structure their sentences for different command words. We then looked at providing a framework for the students who were less able to structure their answers, this included but not limited to a bank of key words with definitions.

FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS - It is difficult to measure any improvement in student progress in a quantitative manner, other than the initial responses were getting better. We found that the students were no longer losing the QWC mark as they were laying out their work in full sentences, paragraphs and with a suitable amount of key terminology. Answers were not improved when the knowledge had not been firmly embedded.

IMPACT ON PEDEGOGY - The largest change in mind set for our group and the science department was thinking that giving an exemplar to the students was the same as providing them with the answers before the assessment. Having taken the approach of linking the exemplar to the command word rather than the subject content this took away this fear, and as the students were HA they found applying the exemplar to their own question challenging but achievable.

EMBEDDING IN DEPARTMENT - This has been an effective way of improving the first responses to the quality of written communication (QWC) question, and has helped to illustrate the differences between describe and explain or compare and evaluate. This approach of providing exemplars has started to spread not only from the QWC question but also into formal practical write ups as the extended writing in conclusions and evaluations is another area (previously not assessed directly) in which students will be expected to demonstrate their knowledge and understanding in the reformed GCSE.

FURTHER RESEARCH:

We would look at the impact of students more regularly being required to make evidence based arguments to demonstrate their understanding. This could be achieved within the lesson by using differentiated learning outcomes and activities, as LA students would not assimilate all the knowledge sufficiently in order to provide a sufficiently detailed extended response until the end of the unit – or with a stronger frame work e.g. cloze sentences. As there are no assessment materials out for our reformed 9-1 GCSE we could develop the grade descriptors into a mark scheme for extended writing.

RESEARCH:

Whitehouse, A. M., (2014), Developing and testing a theoretical framework for assessing extended response questions in GCSE Science.

"IMPROVING EXTENDED WRITING THROUGH SELF AND PEER REFLECTION"

ISSUE

There is a language barrier when students try to use mark schemes and peer marking during peer assessment was not providing the teacher with valid data to use due to inaccurate feedback for students.

CONCLUSION

The Lesson Study has been successful – some students have improved beyond their target grade, evidenced by their end of year mock result. In Year 11 and KS5 students were able to access and use mark schemes effectively. The quality of student marking improved considerably therefore putting students in a better position for study leave using past papers.

LESSON STUDY HIGHLIGHT
The lesson study demonstrates an impact on pedagogy

MEMBERS:
Steve McReynolds, Dan Hardy,
Jo Haigh (Science)

WRT

RESEARCH QUESTION:

Can we use mark schemes to improve the quality of MRI in long written answers?

ACTIONS:

At the end of last year it was decided that the department PM objective would focus on writing longer written answers (LWA). Figures show students at SWA under perform in six mark questions against the national average in science examinations. As LWA are 10% of each paper at KS4, any improvement here could reflect positively in the results. LWA have been used throughout the year, specifically for revision sessions in Years 11 and 13 (but also built into other SoL). Lessons were adjusted for minimal content, maximum application and self reflection with MRI. Questions were chosen to allow the students to practise the skills and help them to express their understanding in a coherent, logical way gaining maximum marks. Students were presented with the six mark question, initial answers completed with time constraint (examination conditions). Students were then given access to mark schemes and highlighters, where they found and highlighted the marks they have scored in their answer and on the mark scheme. They then constructed an MRI from the unhighlighted points. For lower ability students and for some Year 9 classes, teachers marked the work, highlighting the areas that marks were gained and the MRI was then constructed from the markscheme.
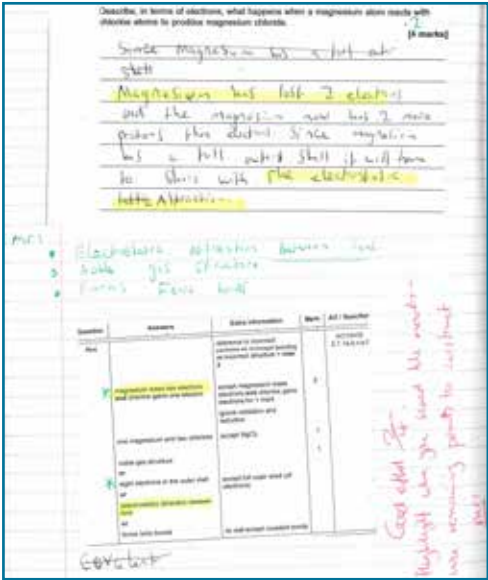
FINDINGS, IMPACT & EMBEDDING:

Impact on Student Progress – Students have hit target grades (figures from Year 10 mock where cohort were down on their target grades). A significant improvement was seen in terms of the ability of students to use mark schemes and construct quality MRI. This should translate to them being able to plan answers based on their own understanding and provide a higher quality answer to start with. Also students are better prepared to be able to use papers and markschemes for their own revision.

Impact on Pedegogy – A library of useful and appropriate questions across many topics in all three subjects is being built up using Exampro and past papers. Encouraging self reflection as a regular part of a lesson is developing skills in the students.

Embedding in Department – Six mark questions and markschemes are being embedded into SoL. The frequency of writing LWA and self reflection is increasing and seen in almost every lesson. We acknowledge that teacher marking cycles in Science is already laid out and therefore teachers struggle for time to be able to mark anymore so building the opportunity into the SoL should help along with training students to be able to assess accurately.

FURTHER RESEARCH:

Measure the impact of this practice over future years. Develop for the new specification/new style of questions at GCSE and KS5. Can we build on this and train students to be able to achieve self reflection and assessment without a framework?

"IMPROVING STUDENT RESPONSES USING THE LANGUAGE OF EXPLANATION LITERACY MATS"

ISSUE

Ensuring that students are able to explain rather than describe points which is now expected from the new History GCSE mark scheme.

CONCLUSION

89% of students found the mat easily accessible. Some noted that it helped to actually structure their answer. The range of terms on the mat expanded the language of explanation used by students. An improvement students suggested was being able to see the language in use on the mat, and on the same topic. This led to the development of a new mat.
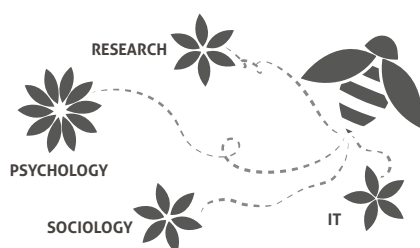
RESEARCH

PSYCHOLOGY

SOCIOLOGY

IT

LESSON STUDY HIGHLIGHT
Members have read previous research literature to inform planning

RESEARCH QUESTION:

To what extent can literacy mats improve the use of explanation in students' History assessments?

ACTIONS:

The increased emphasis placed on the students to show their ability to explain in examination answers compelled us to look into how we could improve their use of the language of explanation in History. Our initial research involved speaking to Dave Hetherington (Literacy Coordinator), using websites with exemplar language. We then examined prior Anthecology work on improvement in examination answers using literacy skills and help mats. This led us to create a literacy mat to assist students with the language of explanation.

Our work with the language of explanation mats had 3 stages of development. Firstly, we developed a mat that had 3 levels of differentiated phrases to express the language of explanation, which was used in the lesson observation. In this lesson we asked students use the language of explanation to establish change and continuity in ideas on medicine. The students then highlighted their use of the language of explanation, and add further phrases if required for their MRI. Secondly, reacting to the student responses on this mat, we developed a second mat with a smaller range of phrases used in answer to GCSE style examination questions (see image). The third action was to extend the idea of literacy mats to use in KS5 which requires consistent use of the language of evaluation to gain Level 5 answers. The Sydney University learning resource gave ideas on a range of ways evaluative language can be utilised. A range of language to differentiate this resource as well was found from the University of Kansas website.

The Language of Explanation

Green	Blue	Yellow
Because of this	Because of this	Because of this
As a result of this	As a result of this	As a result of this
This led to	This led to	This led to
This meant that	This meant that	This meant that
This resulted in	This resulted in	This resulted in
The effect of this was	The effect of this was	The effect of this was
	Consequently	Consequently
	Thus	Thus
	As a consequence	As a consequence
	In view of this	In view of this
	This is relevant because	This is relevant because
	In light of this	In light of this
		This progressed things because
		This initiated
		This triggered
		This in turn meant that
		This resulted in change because
		This is remarkable because
		The significance of this lasted for

MEMBERS:
Paul Barton, Julia Haynes,
Mike Inns (History)

WRT

FINDINGS, IMPACT & EMBEDDING:

IMPACT ON STUDENT PROGRESS - In the assessment completed in the observed lesson students were able to show the use of the language of explanation, they were also able to independently use the mats when completing a brief explanation task on the student questionnaires that they filled in after the lesson (see image). During the observation of the lesson, students were found to already be using some explanation terms, 'because of', or 'due to' for examples, however after the mat was introduced were able to use a wider range of explanatory terms to verbally give examples to observers using phrases from the mat. It is hard to pinpoint the overall impact on progress data as this has been used in a range of lessons and assessments, predict data does suggest some improvement overall for Year 11, a 4.5% increase in grades A*-C between 2016 and 2017.

IMPACT ON PEDEGOGY - Mats have been used with all year groups by the department as a whole. They are integrated into lesson plans, used and further developed for 6th form and where we have incorporated language of evaluation. We have also included the mats in our fix-it kits for improvement of assessments. The use of literacy linked to assessment objectives in history has become more of a focus.

EMBEDDING IN DEPARTMENT - With the new schemes of learning that we have created, or are developing for the GCSE and A level History courses we have been embedding the use of literacy terms on PowerPoint slides when preparing for assessments. Fix-it kits have also included use of the learning mats as part of the activities to improve students' work.

FURTHER RESEARCH:

Further research we have already started is on the language of evaluation – see below websites for Sydney University and University of Kansas in particular.

RESEARCH:

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GLOSSARY

9-1 - the new GCSE grades

A Level - Advanced Level qualification

AfL – Assessment for Learning

Anthecology - The study of pollination (See Foreward)

AO - Assessment Objective

AO3 - Analysis and synthesis type questions

Big 6 – 6 key things that students should know

CPD - Continuing Professional Development

DLS - Department Lesson Study

EBI - Even Better If - a statement which is used when giving students feedback

FFT(20) – Fischer Family Trust 20

Fix-It - A period in the lesson when students respond to feedback

GCSE - General Certificate of Secondary Education qualification

HA - Higher Attaining

HOD - Head of Department

KS2 - Key Stage 2

KS4 - Key Stage 4

KS5 - Key Stage 5

LA - Lower Attaining

Learning Walk - A short visit to a classroom to assess the effectiveness of CPD

LWA – Longer written answers

MA - Mid-Attaining

Market Place - An event where members of staff share, display and discuss their Lesson Study research

MRI - My Response Is - a statement which is used when giving students feedback

PM – Performance Management

PM2 – Performance Management Target 2

PP - Pupil Premium

PRE – Parent Review Evening

Predict 6 - The final grade prediction for Year 11 and Year 13 students prior to their examinations

PST – Pupil Skills Tracker

QWC – Quality of written communication

RAG - Red, Amber, Green - a coding system used to determine how well students understand

SEND- Special Educational Needs & Disabilities

SILL – Strategy Inventory for Language Learning

SLT - Senior Leadership Team

SMART - Specific, Measurable, Achievable, Realistic, Time-based targets

SMHW – www.showmyhomework.co.uk

SoL - Scheme of Learning

STAR - Strength, Target, Action, Remember, Response - a system used for MRI

SWA - Samuel Whitbread Academy

Triad - A group of three teachers working collaboratively

UPS - Upper Pay Spline

VESPA - Vision, Effort, Systems, Practice, Attitude

WWW - What Went Well - a statement which is used when giving students feedback

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