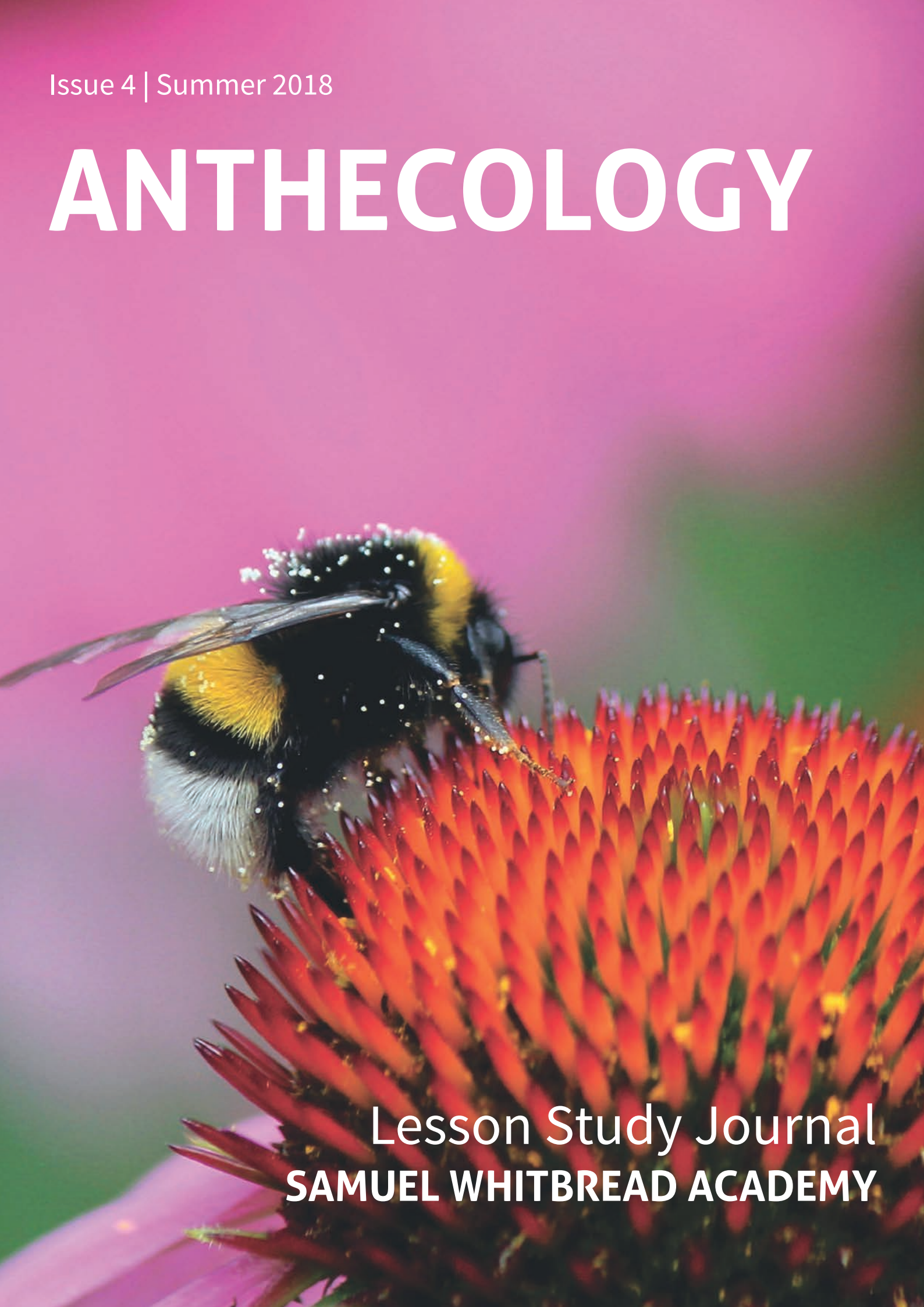
Issue 4 | Summer 2018

ANTHECOLOGY



Lesson Study Journal

SAMUEL WHITBREAD ACADEMY

ANTHECOLOGY

Lesson Study Journal

Issue 4 | Summer 2018

www.samuelwhitbread.org.uk

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 Samuel Whitbread Academy Sixth Form, from where students enter either Higher Education 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 six years and we are confident that it has significantly raised the standard of teaching in the school. This Anthecology is a further 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.

CONTACT DETAILS

Samuel Whitbread Academy
Shefford Road, Clifton,
Shefford, Bedfordshire, SG17 5QS
Tel: 01462 629900 **Fax:** 01462 629901
Email: swa-info@bestacademies.org.uk
For further information contact: dhall@bestacademies.org.uk

FOREWORD

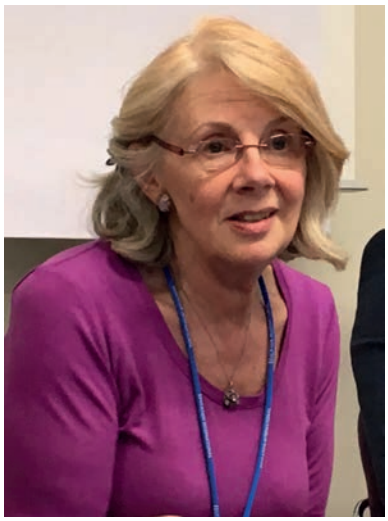
It is a great pleasure to introduce this year's exciting edition of the Anthecology! My organisation, the Centre for the Use of Research and Evidence in Education (CUREE), approaches the use of research as work based Continuing Professional Development and Learning (CPDL). We have been carrying out and making use of systematic reviews of the evidence for many years (20 years this December)! This foreward offers some thoughts about the exciting ways in which the approach to professional learning described in these articles reflects both the lessons from that research.

In CUREE we work with lots of schools paying increasing attention to the CPDL support they offer to staff. In doing so we help them to focus on the even more important work that colleagues do to put ideas from broader publications and from local evidence to work in classrooms in a systematic way. But it takes time for schools to take that next all-important step of publishing accounts of how they have put their learning to work in classrooms. This is a shame. Publications like Anthecology are an important way of respecting the effort involved in high quality CPDL and increasing schools' intellectual capital whilst enabling the benefits arising from enquiry oriented professional learning to be shared.

Because so much of what teachers do is invisible and internalised, professional learning always involves bringing ideas, understanding and assumptions to the surface to enable us to review and refine them in the light of evidence about how our students learn. Lesson study, mentoring, coaching and co-coaching are processes that integrate and help to align the complex combinations of learning experiences involved in exploring how best to learn with and for our students and pay a particularly important role in helping us to probe and think deeply about what is going on under the surface of great teaching and learning exchanges. You can find a summary of the components of effective CPDL in our report Developing Great Teaching (Cordingley et al, 2015). You can also find a very short, research based framework for thinking about the principles, the skills and the complementary contributions of coaches, mentors and professional learners in the Framework we created for coaching and mentoring here (http://www.curee.co.uk/resources/publications/national-framework-mentoring-and-coaching).

What seems to me to be particularly interesting in the context of these articles is the way that the mentoring and coaching that underpins the articles involves practising what we preach. Being a coach or mentor means that we are both experiencing and modelling the very processes we are trying to facilitate for our students. But we get to do this in a one to one context where high levels of trust arsing from reciprocal vulnerability means that things that aren't working well can be made visible, and so capable of being fine-tuned, very quickly. When we have chance to observe this happening in trios, and to explore the results together, we have chance to test and triangulate our thinking about not just how teaching and learning is moving forwards but also about what we have contributed as a professional learner, a coach/co-coach, or mentor. In this way we develop meta-cognitive control over our own professional learning. This applies to the process of learning to be skilled at drawing down support and new perspectives from coaches, mentors and co-coaching partners as well as the process of learning to be a great coach or mentor. Writing about that means exposing our thinking to the discipline of prose; imposing a beginning, middle and end to our thinking and analysis in a way that help others to benefit from our learning.

Being a coach, who provides questions to widen colleagues' thinking, a professional learner who puts questions to their coach and mentor to help them focus their support, or an enquiring teacher who takes the trouble to write about how their thinking and practice are developing through the support of colleagues, makes an important contribution to how the profession as a whole develops its own identity. These articles represent an important and visible pinnacle, but their power rests on the profound reciprocal professional learning embedded in the coaching and mentoring relationships that glue the process together.



Philippa Cordingley
Chief Executive of CUREE

CONTENTS

Key:

DHA	Differentiation for High Attainers	**MEC**	Constructing meaning, engagement and cognition
EFF	Effective formative Feedback	**EXW**	Techniques for extended writing exam questions
RES	Building resilience and a growth mindset in our students	**EXF**	Teaching and learning through examiner's feedback

INTRODUCTION

There has been lots of talk recently about the pressures of teacher workload and how we should only be doing the things that make a difference. This narrative has been taken up by Ofsted, several professional bodies and in particular by the Minister for Education. So if we are going to do less, but do it better, then surely we also have a duty to ensure that these activities are high impact.

In his ground-breaking book 'Visible Learning', John Hattie first started the debate on whether one teaching and learning strategy is better than another by examining which strategies have the most impact on student progress. Through the meta-analysis of thousands of research papers he listed which strategies are better than others. No one was surprised to see feedback and metacognition towards the top of the list, but many well-established strategies such as mentoring and homework in primary schools apparently have very little or even no impact at all. Since then other organisations, such as the Education Endowment Foundation, have also conducted a meta-analysis of available research and come up with their own lists, with similar results.

These toolkits are a fantastic resource for teachers and school leaders alike, but if we want to continue to move our practice forward then we have to keep innovating. And if we don't want to make the mistakes of previous generations and fall for the snake oil sellers, pedalling their courses on 'Mind Gym' or teaching resources for children with different 'Learning Styles', then we need ensure that our new ideas are rigorously tested and evidence based.

At Samuel Whitbread Academy we have welcomed this challenge and adopted a number of different strategies to ensure quality and rigour. Firstly we have adopted Lesson Study as our primary vehicle for action research and continuous professional development (CPD). Not only does Lesson Study have a 200 year history in Japan, as a well-established CPD strategy, it has also been shown to have a positive impact on student progress. Secondly, each year during the summer term we hold a Market Place where each triad of teachers share their findings with their fellow colleagues. This helps to share practice across the academy, but also increasingly provides peer review and challenge through invited guests such as Pete Dudley, the President of the World Lesson Study Association.

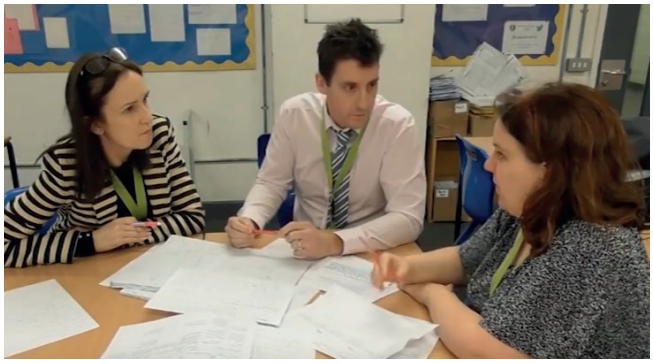
Thirdly, each year we write an Anthecology which is designed to provide discipline and rigour to our action enquiries, by providing a writing framework and highlighting the links to research. Fourthly, our links to Cambridge University, through the Schools University Partnership for Educational Research (SUPER), provides valuable critical friendship as well as a wealth of knowledge and academic research, through our Head of Research. Lastly, we have positioned Lesson Study at the heart of our appraisal process, alongside student outcomes, to demonstrate our commitment to the methodology and to the professional development of our teachers.

Nick Martin
Principal at Samuel Whitbread Academy

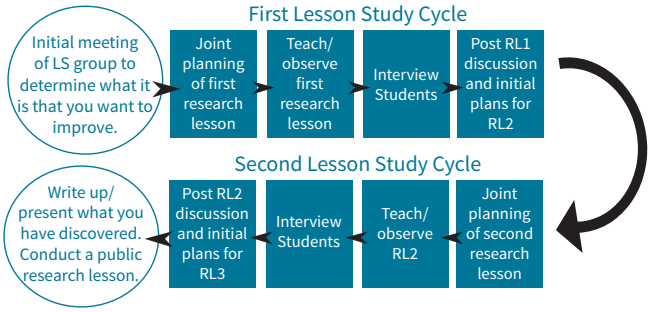
REFLECTING ON REFLECTING

As teachers we are always encouraged to reflect on our practice. Some might even say that reflection is the key to successful learning for teachers, and for learners. In our training year(s), reflecting was a key element of our daily work and development. Each plan and lesson required a reflection to think about the positives and negatives. This then helped us learn to adjust and develop to become more effective in our role as teacher and for our students to learn and make progress. This need for reflection should never be lost no matter how long we have been teaching.

Dewey (1933) wrote decades ago about the value of thinking and reflecting as a means of not being dragged along by events, unable to understand them or change them. It was his thinking that reflection starts from a point of doubt, difficulty or confusion. This is still true today, "with a profession as challenging as teaching, self-reflection offers teachers an opportunity to think about what works and what doesn't in their classroom." However, Lesson Study offers more than just the opportunity for a teacher to reflect on their own practice. One of the critical aspects of Lesson Study is the requirement for all involved to reflect. The teacher, observers, case students and the other students in the class all have important and different insight into the effectiveness of the lesson activities in relation to learning. Taking time to explore these can only add to the richness of the understanding and impact that the lesson had and any future lessons will have.



When we reflect properly, we are able to monitor our own development to see changes from our potentially unstructured knowledge and understanding into a more coherent and comprehensive viewpoint which brings about more efficient and effective practice. "Taking the time to reflect about one's own teaching is one of the most effective ways to make positive changes in the classroom. Reflection is deliberate and structured thinking about choices. It is an integral step to improving practice." (Admin, 2016). However, whilst it is effective to reflect on our own practice it is even more valuable to get others to reflect with us. Research suggests that reflection is most effective when it involves others and as a consequence the chance to collaborate and share ideas about changes, alterations and new ways of operating (Gray, 2007). This is precisely what engagement in lesson study enables us to do. To experience the full impact of development through using Lesson Study then collaborative reflection is a key element.



The lesson study process (Dudley, 2013)

However, reflecting critically, and sharing the outcomes of this, can be frightening and can cause feelings of vulnerability amongst those exposing their thoughts and findings. Therefore it is important to ensure the opportunities to share are in an environment which allows for openness and honesty without personal criticism and an understanding that any reflective discussion is to deepen our understanding of teaching and learning.

As you read through the research this year you should get a sense of the depth of reflection that teachers have engaged in with each other and their classes. This has brought about another great collection of research in our classroom and a deeper and more comprehensive understanding of how our students learn and make progress.

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 other members of the academy. It also gave them a chance to discuss possible future lesson studies and learn from what different triads had been researching.

"The marketplace gave me lots of ideas to improve my pedagogy and consequently help improve the Business Department's quality of teaching.

JENNIE PHILBIN"

"Teachers share good practice in the market place, openly discussing what has and hasn't worked for their students.

PETER FERNANDES"

CRITICAL THEORIES FOR CRITICAL THINKERS

ISSUE

We wanted to improve the conversion of Grade 7 students into Grade 8/9 students by improving their interpretation of texts via critical readings.

RESEARCH QUESTION:

To what extent can the use of A Level skills raise the engagement and attainment of High Attainers (HA) GCSE literature students?

DHA

MEMBERS:
Ashleigh Duiguid, Dave Hetherington *(English)*

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

RESEARCH:

- Anon., (2017), GCSE English Literature, AQA, Manchester, UK

CONCLUSION:

A Level challenge seemed to work more effectively with the more able students in the class through the natural process of stretch and challenge. With the less able scaff-holding critical questions by giving out key questions at the start of the lesson was effective. However, there is still work to be done to embed this practice into their critical thinking.

LESSON 1 DESCRIPTION

We decided to include A level literature theories into a GCSE lesson to enhance the students' understanding of the texts.

LESSON 1 CONCLUSION

The lesson worked well for the majority of the class, however, there were still some students that questioned the relevance of the theories in relation to the texts. Additionally, the lower attainers (LA) within the class needed more scaffholding to ensure that they understood.

LESSON 2 DESCRIPTION

We used Romeo and Juliet, which is a core text, to introduce the students to the principles of feminist theory looking specifically at Act 3, Scene 5 and the relationship between Capulet and Juliet. Focusing on one theory and making it very specifically relevant to the one scene of the text developed the boys understanding of how feminism relates to Romeo and Juliet. Unfortunately, they lacked wider contextual understanding therefore they could apply some knowledge in the exam but not enough to give a perceptive response.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - Students can engage with literary texts on a critical level which allows their AO1 marks for interpretation to improve. Students also gained a greater understanding of AO3 context by considering perspectives of writers and time periods.

Impact on Pedagogy - We differentiated effectively for HA and middle ability (MA) students by prepping them with the key critical theory question at the start of the lesson.

Impact on Scheme of Learning - We plan to embed challenge/extension questions into key parts of schemes for A Level critical thinking.

FURTHER RESEARCH:

A Level challenge seemed to work more effectively with the more able students in the class through the natural process of stretch and challenge. With the less able scaffolding critical questions by giving out key questions at the start of the lesson was effective. However, there is still work to be done to embed this practice into their critical thinking.

“FLIPPING BRILLIANT HOMEWORK”

ISSUE

The new GCSE Specification includes a heavy load on content which causes a lack of time to complete all aspects of the course. We want to increase the students independence so students focus more on application of knowledge in the lesson time.

RESEARCH QUESTION:

How can flipped homeworks be used to effectively underpin students learning and progress?

EFF

MEMBERS:
Lee Huckle,
Thomas Rowell,
Patrick Smethurst
(Geography)

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

RESEARCH:

- Bergmann, J., (2017). Solving the Homework Problem by Flipping the Learning, ASCD

CONCLUSION:

The content of the course was covered more effectively, but it could be argued that there was a little less teacher specialist input, and this would need differentiating carefully to ensure that there was equal access to the curriculum. Hinge point questions worked very well in this area, but very much need differentiating so that the class can all move forward at their own pace and make appropriate progress. Symbol marking, which was started, was used through the year and saved time, but students were not given the time to respond and change accordingly, therefore its usefulness as an improvement tool is to be questioned.

LESSON 1 DESCRIPTION

Very clear written feedback, using symbol marking was given to the students to respond to. These were linked to exam board feedback with precise process improvements, and indicative content to respond to.

LESSON 1 CONCLUSION

There was too much written feedback for lower ability students, so this needs to be reduced. The MA quiet girls found it too big a leap to find the answers themselves rather than just copy off the board, which is what they are used to in this and other areas. They have a good set of feedback for the future, but this will work better if they were given smaller pieces of feedback, with enough time to work on them. Students have been very open with me about whether the feedback is working for them or not and they are definitely more engaged in the process of improvement.

LESSON 2 DESCRIPTION

The focus of the DLS changed following research from a colleague in the department, which showed that work was needed to complete the content of the new course. Flip homework was therefore introduced to cover key ideas prior to a lesson so that we could then focus on assessing the learning in lessons as well as using hinge point questions to make sure that all students understood the work before moving on.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - The students have increased subject knowledge when entering the classroom so they can then focus on applying their knowledge. Independent learning skills have also developed and students have become more engaged with the material in the lessons.

Impact on Pedagogy - Ensure the flipped homework tasks are directed to specific resources and websites to assist students in accessing ideas. Include decision making elements (e.g prioritising). Staff need to be more judicious when we use the flipped homeworks to have maximum impact.

Impact on Scheme of Learning - More time available in lessons for application of knowledge. All staff in the department are planning and using flipped homeworks so consistency is key in the department.

FURTHER RESEARCH:

What impact might too many flipped homeworks have on developing analysis and evaluation skills which also need to be developed independently.

“MAKING THEORY CONCRETE”

ISSUE

We need to help students make connections between practical work and underlying theory in support of two written exams and also to develop the assessment books and classwork book to speed up formative assessment, which will help students understand the assessment process better.

EFF

MEMBERS:
Paul Scullion,
Lee Starkey,
Matthew Barber
(Computer Science)

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

RESEARCH:

- http://www.telegraph.co.uk/education/educationopinion/11739310/Textbooks-have-a-huge-impact-on-education.html
- https://tablets-textbooks.procon.org/

RESEARCH QUESTION:

To what extent do the practical exercises contained in the work books support understanding of theory (given the fact that 80% of GCSE Computer Science is assessed through examination (theory))?

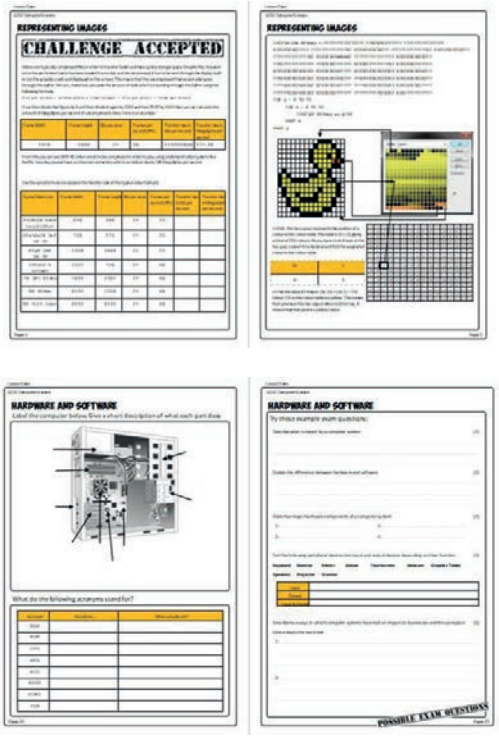
CONCLUSION:

The adjustment of the Year 11 assessment books to introduce star marking had a significant impact on speed of assessment. However, the Year 10 assessment books are not aligned to the SoL, like the workbooks are, and so it makes assessment difficult.

Many students have used the workbooks at the computers showing connection between the theory and the practice, however this is still a work in progress. Because of the level of detail in the workbooks, some students do not feel they have to write much and whilst this has been addressed in Year 10 by using a “workbook catchup” lesson where students could go back and complete sections it didn’t work for every student although for some it did have a positive impact.

LESSON 1 DESCRIPTION

Delivered revision subject content to students – allowed My Response Is (MRI) time using feedback to improve work and relate theory to practical.



LESSON 1 CONCLUSION

The work books seem to be working, however we are not sure if the students are yet connecting the practical with the theory. Students were positive about the work books themselves and the key students felt the tasks worked and they liked them. The level of feedback in the Even Better If (EBI) section does not completely fulfil the objectives of the workbook and the students are seeing them as separate to the practical work on the computers. We will adapt this for the next work book, especially as the practical element of the course is potentially going to be changing over the coming term.

LESSON 2 DESCRIPTION

An MRI lesson where students used the feedback given in their workbooks to make improvements to their work.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - On the whole the students have taken positively to the workbooks and assessment books. The HA students have taken to the books and are looking to progress further on – taking the initiative for their own learning which is positive. The LA students, however are not putting in enough detail which needs to be picked up more through MRI sessions – giving specific targets for improving detail.

Impact on Pedagogy - Experience from previous schools was that students took work at the desk as serious and work at the computers as less focussed time. This has been reflected here, however additional findings have shown that the differentiation at the academy has more of an impact on how well the students will engage with this material. If they do not understand it, they do not engage with it. This has led to limited detail being written down in the books – limited demonstration of higher order thinking skills.

Impact on Scheme of Learning - Additional MRI sessions have been added in which are more differentiated. Year 11 assessment books will now have star marking for all groups throughout the year.

FURTHER RESEARCH:

The workbooks make differentiation difficult which needs to be discussed further. The options are:

a) An online version which could be individually adapted, although this negates the point of the written work in the book in preparation for the exam.

b) The workbooks could have 3 or 4 differentiated tasks per topic in the book, however this would potentially lead to waste with significant proportions of the book not completed because it was "not at the student's level".

c) Multiple work books are created which are completely differentiated, however this would create extra cost.

d) Use a "worksheet" method which uses leaver-arch folders, however experience shows this creates a lot of mess and is expensive.

“CAN SEND DO MRI?”

ISSUE

MRI is very difficult to do when students have just one or two lessons a fortnight, especially when they find the curriculum challenging due to their needs.

EFF

MEMBERS:
Pippa Gibbs, Alison Gardiner, Sarah Jellis, Jennifer Swift
(LS / ASC)

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

RESEARCH QUESTION:

To what extent does creating a student led marking criteria in focused Learning Support lessons (eg. social skills, word processing, numeracy etc) help them to understand expectations and therefore progress?

RESEARCH:

- Bookhart. S. M., (2017), How to Give Effective Feedback To Your Students, ASCD

CONCLUSION:

Students with SEND do find MRI difficult and need practice as they don’t see the point in it (especially just ‘redoing’ work). Students with SEND tend to find peer assessment particularly hard and we have to question if it is the right thing for them. When students peer assess maths/numeracy they find it easier to do so than when they mark a more subjective subject where they don’t know whether the answer is correct or not. Students with SEND can do MRI when the approach supports their needs. However differentiating the MRI is just as important as any other part of a lesson. We plan to explore more successful techniques.

LESSON 1 DESCRIPTION

Social skills Year 9 Class: Understanding the purpose of a risk assessment in preparation for the trip they had planned. The students identified risks and how they can be prevented using discussion and role play.

LESSON 1 CONCLUSION

Students need to identify what to improve. We need to break down the target into 2 or 3 steps and refer to the MRI in the lesson. Post-its may be a good way to identify EBI. It would be better to keep LO the on board and keep referring to MRI to embed it. Students could keep own tally chart so they can visually see their progress linking the success criteria to EBI.

LESSON 2 DESCRIPTION

We tried to do too much initially. We need to narrow our focus and concentrate on one thing at a time (very important when you only have students once a week or cycle). We changed our focus from using student led marking criteria within MRI to just regularly using MRI as we needed to get the MRI embedded first before we tried something else with it. Using the MRI, we then explored using peer marking linked to the MRI.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - Students with SEND find MRI and peer assessment very stressful and difficult to achieve. They do not like to mark other people's work and lose the focus of the MRI and their own learning. There was a notable lack of self-confidence and getting them to re-engage was hard. Once students had completed one MRI they were unable to repeat that improvement when focusing on a different MRI. This meant that MRI was often one step backwards for each one forwards. It also muddled weaker students.

Impact on Pedagogy - We need to develop ways to make peer and self-marking less stressful and more productive. Otherwise there is no point. Is peer marking a good way to develop students with SEND's learning? How can we use self-marking (often just once a fortnight) so that students consistently make progress?

Impact on Scheme of Learning - Develop different tasks to try different ways to see what does work best for SEND both for learning and for stress and self-esteem levels. If you don't think you are good at something yourself, how can you bring yourself to mark others' work?

FURTHER RESEARCH:

One way we might develop is that students peer mark something that the teacher has written (as a deliberate grade 3) or mark something from a previous student. This is what we would like to research next year. Is peer assessment a useful tool for enhancing learning in students with SEND? How can we achieve this effectively? Would students with SEND make more progress if the "peer assessed" work produced by a teacher instead of their peers?

MAKING PROGRESS WITH PROCESS GOALS

ISSUE

Students aren't reaching their target grade due to one or two very specific skills they need to address in their extended answers.

EFF

MEMBERS:
Becky Jackman, Katie Bridge, Phil Johnson *(Sociology)*

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

RESEARCH QUESTION:

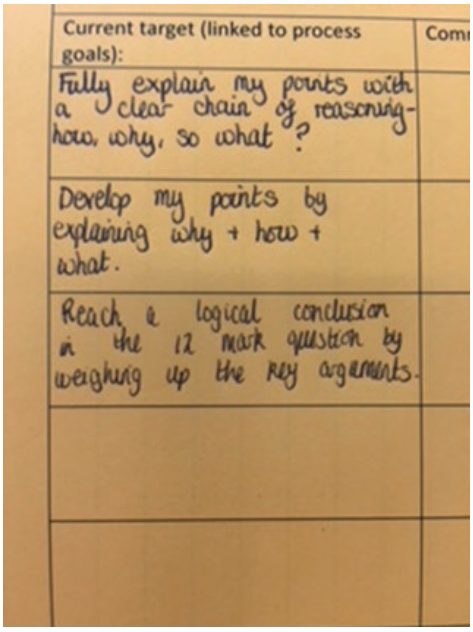
To what extent can adopting targeted process goals enable students to meet their target grade?

CONCLUSION:

Giving feedback that was specifically focused on the process goal only, allowed students to identify themselves if they thought they had met that process goal based on their feedback and mark and then either continue to work on it or set a new goal. As students started to focus on their process goals, we did notice that for some of them, the skills they were originally incorporating well were starting to slip or disappear completely from their answer. Therefore, process goals are successful but we need to build something else in for students who find it difficult develop their answer and instead just try to write differently.

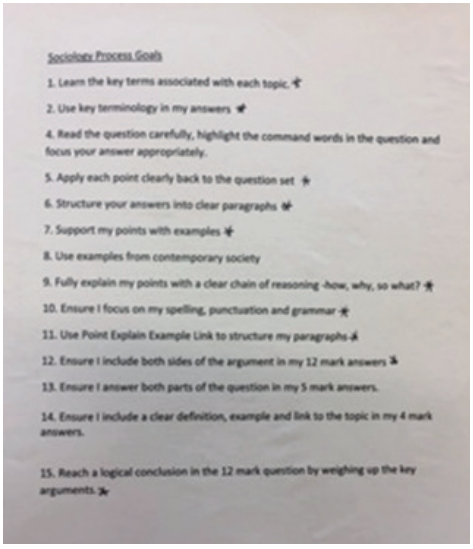
LESSON 1 DESCRIPTION

Students were given a list of specific skills/actions designed as a step-by-step process to achieve their goal and, based on feedback from an extended answer exam question, they had to identify the 'process goal' that they felt would have the biggest impact on their progress (some students had help with this in terms of very specific EBI's). We then provided model answers to demonstrate the different process goals so the students could then identify what this looked like in an answer and then they completed an MRI where they incorporated the process goal into their original answer. When students were next assessed, they were reminded of their process goal and had to focus on incorporating that into their assessment. When we gave feedback, they then identified if they had met their process goal based on a model answer. They then had to highlight it in their written work and then decide if they needed to continue to focus on that or, change their goal to something that might have a bigger impact on their progress.



LESSON 1 CONCLUSION

When speaking to the students after the first department lesson study (DLS), they all said the process goals really help them to identify the important parts of the success criteria they need to meet to improve and so they could see how it would be useful. However, they asked that it be used consistently within the department so they had a chance to develop that skill and see their progress.



FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - The students all showed a significant improvement in terms of their process goal and could verbalise what a good answer looked like, what that specific skill looks like and how to do it. When given a model answer, they could identify the process goal and then use that as an example to improve their work. All students showed progress in terms of including the process goal into their own written work and some moved on to tackle an additional process goal.

Impact on Pedagogy - In MRI lessons, teachers are now using process goals as the foundation to their lesson planning and are writing model answers demonstrating the specific process goals that students need to address. This then allows students to identify if they have met their process goal and then decide if they need to continue to work on it or, if they need to reset their target and set a new process goal.

Impact on Scheme of Learning - Process goals will be incorporated into the SoL for new specifications and new process goals will be written based on the assessment criteria for the course. Next academic year, we will use process goals more in KS5 as the focus this year has been on KS4 and Year 11 in particular.

FURTHER RESEARCH:

The focus for next year needs to be identifying the process goals that are important for the new specification and introducing them to our KS4 students. We also need to develop 'something' that helps students to continue to incorporate the skills they are good at and allows them to address their process goal.

“PROCESS GOALS: THEY CAN HELP STUDENTS IDENTIFY TARGET AND CREATE DIFFERENTIATED LESSONS!”

ISSUE

We introduced process goals as a way to help be more specific in our conversations with students about what they needed to do to improve their work and work towards their target grades in Psychology.

EFF

MEMBERS:
Lauren Nye,
Steph Little,
Annabel Priano
(Psychology)

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

RESEARCH QUESTION:

Can process goals improve how we communicate targets with students?

CONCLUSION:

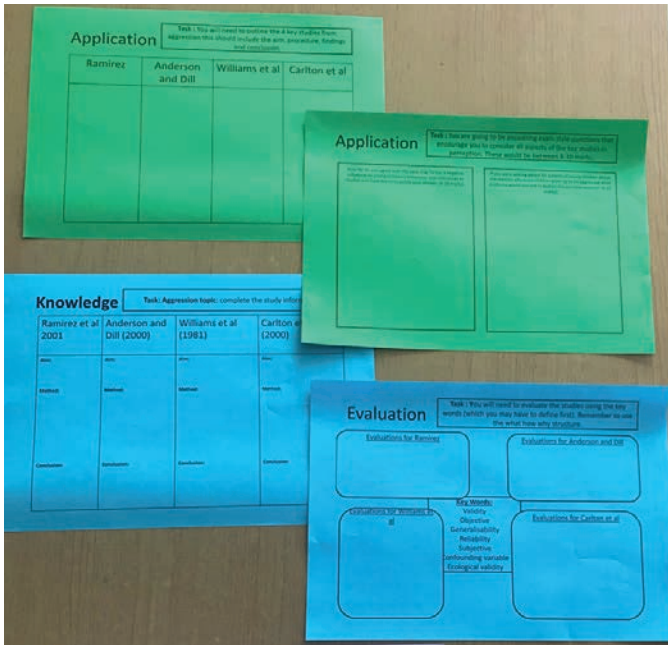
Students responded really positively to the lesson that created different tasks based on process goals for them to select and complete (see image). Students were able to articulate their selected process goal after assessment feedback. This was seen at the parents evening when some students referred to them in conversation with their parents about what area they were working on. Teachers feel that they are giving clearer direction to students about how they can improve in Psychology and are using similar strategies in A Level lessons too.

LESSON 1 DESCRIPTION

Embedded process goals into feedback following an end of topic test (EOTT) on Dreaming. Students had to select a relevant process goal to complete their MRI and by recognising which process goal was relevant to their work.

LESSON 1 CONCLUSION

It is good because the process goals are tiered, so the process is differentiated for students to select goals appropriate to the level they are working at. We felt that we needed to refer to it more outside of assessment lessons for a bigger impact. Positive impact on students who were able to identify a range of goals that they were meeting, seen as just another paperwork exercise to some in the class.



FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - Students are now able to identify from assessment feedback which of the process goals they need to work on to either improve on their grade or work towards their target grade.

Impact on Pedagogy - Teachers are starting to refer more frequently to which elements of the lesson match to the different process goals, which is a sign that the initiative is becoming embedded.

Impact on Scheme of Learning - We now need to write process goals with the new GCSE specification and roll out the process with Year 10, as it has so far been focused on work with Year 11.

“WHAT IS MY SUCCESS CRITERIA?”

ISSUE

Students were becoming too dependent on teacher’s input so we were looking at strategies for creating self-reliance and motivation.

RESEARCH QUESTION:

To what extent can motivation and self-reliance be improved by investigating different strategies?

RES

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

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

RESEARCH:

- Burgoyne, C., Blake, J., Redcliffe, J. & Williamson, A., (2017), Athecology: Lesson Study Journal, Affordable Print, 3, p30-31
- Dweck, C., (2006), Mindset: The new psychology of success. New York: Random House

CONCLUSION:

The lesson study hints that the best strategies for improving self-motivation is to put the learning in the hands of the students, by giving them responsibility and control over their learning as it seemed to engage the students better. By providing this infrastructure, students were better equipped and more confident to examine and reflect on their own work.

LESSON 1 DESCRIPTION

Looking at MRI and questioning success criteria (what makes a successful compostition and why?) Group activity discussing criteria and small groups put together. Groups decided what were strong and weak compositions and had to put them in order of merit. They then used the 'Have they fulfilled the success criteria?' sheet against the exemplars and once this was done the results were put onto the white board discussed the results. The students were then given the opportunity to change their views. The students then applied the same principals to their own work against the success criteria, deciding on what they needed to do to improve their work. We then applied different strategies to our own lessons. One teacher explained the success criteria and the students were more passive. Students were actively engaged when putting the results on the board and getting the students to do more active learning clearly worked. Using the exemplars detatched the students from being critical of their own work when working in groups before analysing their own, to identify their MRI on how to improve their own compositions. Students did struggle with identifying high grade responses, but found it easy with the low level responses. Students wanted to improve their work in line with the high level exemplar responses.

Photo from lesson 1: SC given to students

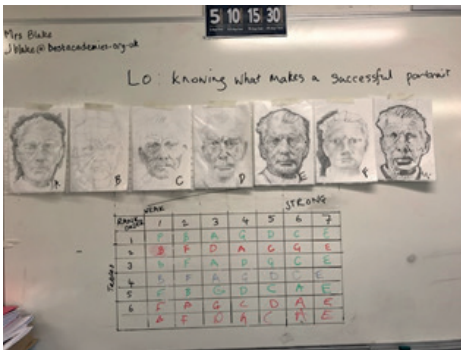


Photo from lesson 2: SC devised by students

LESSON 1 CONCLUSION

Getting students understanding the success criteria and them taking the lead for themselves in developing their own work. Meant they relied less on the teacher and became confident in knowing what to do to improve their work. They can see what to do but do they know how to achieve it? The areas we need to develop with Year 11 are their initial ideas for their real exam. This is an area that students struggle with at the start of their project and we need to motivate students through this phase.

LESSON 2 DESCRIPTION

In small groups, students looked at a range of mixed ability exemplars and arranged them in order of merit. The groups were then asked to suggest what the success criteria could be and what evidence supported this. They then used the 'What is the Success Criteria (SC)?' sheet to document their opinions. The results were put onto the white board in grid form which they then discussed. The groups were then given the opportunity to change their views, teacher added her order of merit and discussed any discrepancies. The students then applied the SC they had created against their own work, deciding on what they needed to do to improve their work. Students did struggle with identifying mid grade responses that contain different SC, (for example; was an accurate shape more important than accurate tone and vice versa). Students wanted to improve their work in line with the high level exemplar responses.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - By assessing the exemplars through group and then class discussion students gained subject confidence and were better equipped to 'grade' their own work through their own self-devised criteria. Students had ownership of the process rather than being told what was required and became more engaged with the process.

Impact on Pedagogy - Students seem to be more attentive and engaged when working with their peer group; it may be that we were reducing their motivation by doing too much for them so perhaps we should step back. It was evident that the visual exemplars modelling the SC from both lessons became useful additions to the written SC for the visual learners. They also gave students visual guidance on how target grades could be achieved.

Impact on Scheme of Learning - The department is currently using only LO in lessons and asking students to create their own SC through the use of visual exemplars and peer discussions.

FURTHER RESEARCH:

It may be worth looking at student centred learning and the work of Jenny Wellington to see if increased peer discussion can improve not only self-motivation and grades, but develop critical thinking.

PUTTING BACK OWNERSHIP OF COURSEWORK ONTO STUDENTS

RES

MEMBERS:
Phil Farmer,
Tracey Lund,
Michelle Sherman
(DT&E)

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

ISSUE

Students not taking care and ownership of their coursework, which ultimately ends up with the teacher having to chase them up to get it completed.

RESEARCH QUESTION:

How can the ownership of coursework be put back onto the students, with the non-examined assessment (NEA) looming?

CONCLUSION:

Typically during the study we found a tick sheet, which indicates where the student stands in regards to the task, with clear deadlines/ dates due worked and allowed the students to feedback more effectively with what to do next. Even with a reward system in place for hitting the deadlines in which the students set themselves, low attaining boys were still unable to meet these and even manage to keep the tracking sheet in their folders.

LESSON 1 DESCRIPTION

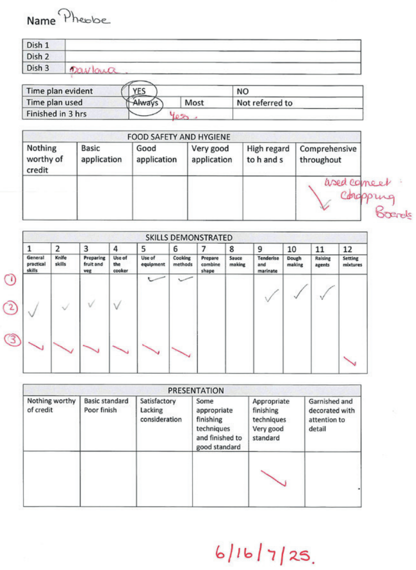
The timeline was broken down into bite size chunks for students to identify what had been achieved and what else was needed to be completed.

LESSON 1 CONCLUSION

They were good at establishing what had been done and what and how it needed to be done, but did not relate it to reality.

LESSON 2 DESCRIPTION

We used the new sheet and mark sheet to get students to identify the areas of the assessment that they had completed and being able to identify the sections that needed more information or detail. It was to make them take more responsibility for their work as we are limited in the feedback we are able to give in the new course.



Name Phoebe

Dish 1	
Dish 2	
Dish 3	Pavlova

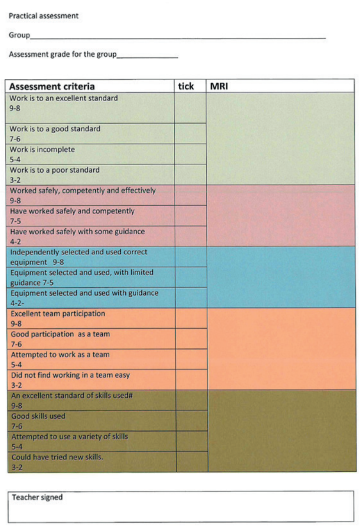
Time plan evident	YES		NO
Time plan used	Always	Most	Not referred to
Finished in 3 hrs	Yes		

FOOD SAFETY AND HYGIENE					
Nothing worthy of credit	Basic application	Good application	Very good application	High regard to h and s	Comprehensive throughout

SKILLS DEMONSTRATED											
1	2	3	4	5	6	7	8	9	10	11	12
General practical skills	Knife skills	Preparing fruit and veg	Use of the cooker	Use of equipment	Cooking methods	Prepare combine shape	Sauce making	Tenderise and marinate	Dough making	Raising agents	Setting mixtures

PRESENTATION					
Nothing worthy of credit	Basic standard Poor finish	Satisfactory Lacking consideration	Some appropriate finishing techniques and finished to good standard	Appropriate finishing techniques Very good standard	Garnished and decorated with attention to detail

6/16/7/25.



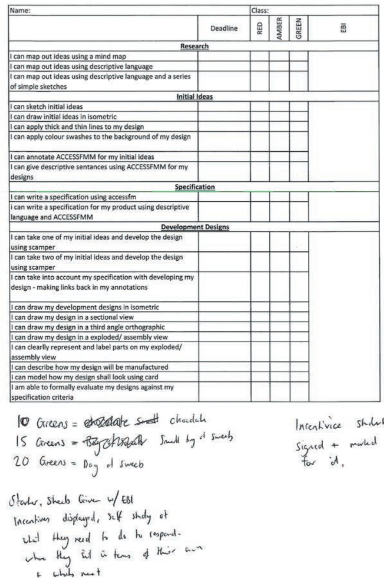
Practical assessment

Group____________________

Assessment grade for the group____________

Assessment criteria	tick	MRI
Work is to an excellent standard 9-8		
Work is to a good standard 7-6		
Work is incomplete 5-4		
Work is to a poor standard 3-2		
Worked safely, competently and effectively 9-8		
Have worked safely and competently 7-5		
Have worked safely with some guidance 4-2		
Independently selected and used correct equipment 9-8		
Equipment selected and used, with limited guidance 7-5		
Equipment selected and used with guidance 4-2-		
Excellent team participation 9-8		
Good participation as a team 7-6		
Attempted to work as a team 5-4		
Did not find working in a team easy 3-2		
An excellent standard of skills used# 9-8		
Good skills used 7-6		
Attempted to use a variety of skills 5-4		
Could have tried new skills. 3-2		

Teacher signed



Name:		Class:			
	Deadline	RED	AMBER	GREEN	EBI
Research					
I can map out ideas using a mind map					
I can map out ideas using descriptive language					
I can map out ideas using descriptive language and a series of simple sketches					
Initial Ideas					
I can sketch initial ideas					
I can draw initial ideas in isometric					
I can apply thick and thin lines to my design					
I can apply colour swashes to the background of my design					
I can annotate ACCESSFMM for my initial ideas					
I can give descriptive sentances using ACCESSFMM for my designs					
Specification					
I can write a specification using accessfm					
i can write a specification for my product using descriptive language and ACCESSFMM					
Development Designs					
I can take one of my initial ideas and develop the design using scamper					
I can take two of my initial ideas and develop the design using scamper					
I can take into account my specification with developing my design - making links back in my annotations					
I can draw my development designs in isometric					
I can draw my design in a sectional view					
I can draw my design in a third angle orthographic					
I can draw my design in a exploded/ assembly view					
I can clearly represent and label parts on my exploded/ assembly view					
I can describe how my design will be manufactured					
I can model how my design shall look using card					
I am able to formally evaluate my designs against my specification criteria					

10 Greens = chocolate

20 Greens = Day of sweets

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - The high attaining students will take ownership and rise to the challenge of project managing them. Low/Middle attaining girls, will typically follow the same route as high attaining students, whereas boys will fall off if a reward system is not in place. Low attaining boys still cease to care typically about deadlines and ownership.

Impact on Pedagogy - It seemed to go down well with the students especially the students that were high attainers as they wanted to make sure they had all the information needed to get the high grading. Also the students that struggle with the written detail could use the sheets to identify the skills that they used to be able to transfer the information into their assessment a lot easier.

Impact on Scheme of Learning - We will be continuing to use it next year to help the students take responsibility for their assessment. It has been successful and students needed the written support.

FURTHER RESEARCH:

How can we help the low attaining boys to be more responsible?

“FROM ATL TO BFL”

ISSUE

This group had experienced a number of different teachers in Year 10. They are HA but had acquired poor learning and behavioural habits as well as having significant gaps in knowledge. Individually they wanted to achieve their potential; as a class there was an unproductive learning climate and generally poor attitudes to learning and an unwillingness to take ownership of their own progress.

RESEARCH QUESTION:

To what extent can linking Attitude to Learning (ATL) and My Response Is (MRI) impact on progress?

RES

MEMBERS:
Alex Blinkhorne-Mason,
Laura Jonson,
Hannah Brookes
(English)

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

RESEARCH:

- Black, P. & Wiliam, D., (1998), Inside the BlackBox: Raising Standards Throught Classroom Assessment, School of Education, Kings College London, UK
- Nicol, D. J. & Macfarlane-Dick, D., (2007), Formative assessment and self-regulated learning: a model and seven principles of good feedback practice, Studies in Higher Education, 31(2)

CONCLUSION:

Students have very different needs and reasons for poor ATL (anxiety, feeling demoralised, lack of engagement). While they were able to explain why they thought they had poor ATL and could even describe a link between ATL and progress (or lack of!), opportunities could be provided for us to show them how to build on their ATL skills as well as their ‘learning’ skills.

LESSON 1 DESCRIPTION

In a MRI lesson the students wrote their current ATL alongside their assessment grade and EBI.

LESSON 1 CONCLUSION

Some students were able to make a causal link between a weakness in terms of ATL and a below-target grade.

LESSON 2 DESCRIPTION

Following the issuing of Predict 5 the class were asked to track their ATL from the last report. Before completing the MRI on their assessment, for students who were still receiving Requires Improving or Limiting, they were asked to explain/describe in up to 100 words what behaviour/attitude had contributed to this as a way of taking ownership for their ATL and their progress.

KS2-KS4English(9-1)TG	GCSEFEngLangPredictYr10 Yr 10 Sum	GCSEFEngLangPredict4 Yr 11 Aut	GCSEFEnglishAttitudeLear4 Yr 11 Aut	GCSEFEngLangPred5 Yr 11 Spr	GCSEFEnglishAttitudeLear5 Yr 11 Spr
8	7	7	G	5	G
8	8	7	G	5	G
8	8	6	G	6	G
6	8	6	G	4	G
8	8	8	G	5	G
7	5	5	RI	2	RI
7	5	5	RI	3	RI
8	7	7	RI	3	RI
6	6	5	RI	2	G
7	7	6	G	3	G
9	8	7	RI	5	G
6	8	6	RI	4	RI
8	7	7	RI	5	G
6	7	6	RI	4	RI
6	7	6	G	5	G
5	3	3	RI	3	RI
6	7	6	RI	3	RI
6	6	5	RI	3	L

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - Case student 1 showed massive improvements in engagement and confidence and could make clear links between his ATL and his performance; case student 2 had very specific needs, whilst he understood the links between ATL and his performance he could not consistently make enough changes to have a significant impact.

Impact on Pedagogy - When MRI lessons are planned certain students can be targeted where their ATL is more of a barrier to success than their academic ability is. We look at 'skills' in a more holistic way.

Impact on Scheme of Learning - The new SoL being designed for 2018-2019 will have opportunities for incorporating feedback on ATL as well as traditional learning/knowledge-based skills.

FURTHER RESEARCH:

Is there a way, as a school, that we can tie in student reports with MRI lessons? How can we make the links between attitude and performance more explicit? How can we encourage students to take ownership of their own progress?

ENCOURAGING DISENGAGED STUDENTS TO TAKE RESPONSIBILITY FOR THEIR OWN PROGRESS

RES

MEMBERS:
Tracy Montague,
Sian Waterhouse,
Vishalie Yadav
(English)

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

ISSUE

In English we have realised that a lot of our students do not really engage with the learning or improving process. They turn up, go through the motions and then leave. They do complete the work, but it is clear we do not always see their true capabilities. Perhaps becoming part of the decision process may help them to engage and take responsibility?

RESEARCH QUESTION:

How can we encourage disengaged students to take more personal responsibility for their learning and development?

CONCLUSION:

This strategy definitely works for struggling students who desire to achieve and I would imagine (with some tweaking and differentiation) it would work for HA students. Students became much more engaged with the MRI process and their own development when they were given the opportunity to take responsibility for some of the decisions about their progress.

LESSON 1 DESCRIPTION

MRI activity – instead of giving the students specific tasks to complete for MRI, they were given feedback (so they knew what skill needed to be improved) and then asked to choose an activity which would help them work on the area they thought most needed targeting. Students chose tasks and completed the MRI.

LESSON 1 CONCLUSION

The group chosen were not necessarily the most helpful with this question. I found that they actually already have a good idea of what they need to improve on – their issue is more about being more motivated to complete the work necessary. I found that the relaxed approach of discussing their thoughts with their neighbours and participating in the progress of their progression, was not helpful with this group – they tended to veer off task and the resulting work did not reflect a great deal of improvement. In the next DLS, this group may suit a question looking at motivation?

LESSON 2 DESCRIPTION

The previous lesson was repeated, as the group had changed. The students became much more involved with the MRI process and embraced the opportunity to decide which tasks they felt would improve their skills. They discussed the process maturely with each other and myself.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - The Year 10 students generally responded positively to the process. We found that they were having discussions about the learning process and were thinking more strategically about the skills required for their exams. The MRI process is a more positive one and students enjoy making a decision about the task they feel would help them to improve the most. It has also opened up discussions they have with me about their learning as they can explain to me why they made their choice and talk to me about what they realise they need to work on.

Impact on Pedagogy - Giving students more responsibility for their progress gives them ownership and therefore they can clearly see "the point" of what they are doing in response to marking and feedback. I found that by referring to the task they chose in subsequent lessons, also helped to embed the skills they had practiced completing the task.

Impact on Scheme of Learning - The main impact is on the lessons during which MRI takes place. The teacher has to think of stimulating and helpful skills based tasks for students to choose from, give students time to discuss their decision and then complete the task. MRI lessons now take the entire lesson, but the process has more of an impact.

FURTHER RESEARCH:

I would like to develop this further and try it with HA students and also think about how something similar may work with mixed ability groups. I think perhaps some sort of interim group-work along the same lines in between assessments may also be an interesting development.

POSTCARDS FROM THE DEAD

ISSUE

We wanted to extend reading and analysis of our Grade 7-9 students in order to access the top of the mark scheme and engage in different perspectives.

RES

MEMBERS:
Jodie Vallance,
Elizabeth Prow,
Amy Rolleston
(English)

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

RESEARCH QUESTION:

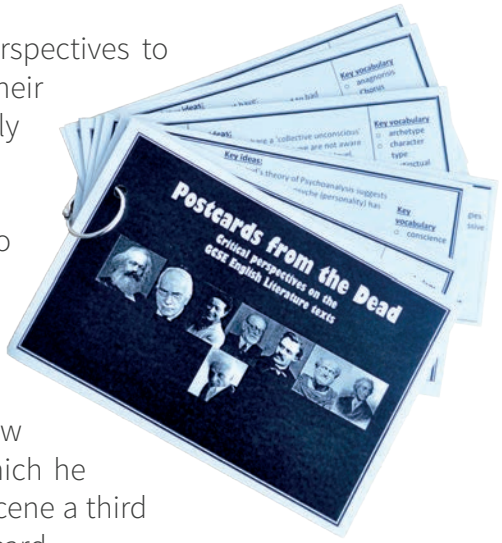
To what extent can extended reading develop interpretation and aid independence and growth mind set with year 11 students, to meet FFT(20) targets?

CONCLUSION:

The postcards have been an excellent tool for both teachers and students to engage further reading and challenge within the English classroom. GCSE students have been encouraged to access A Level thinking and ideas through a simple, yet effective independent exercise.

LESSON 1 DESCRIPTION

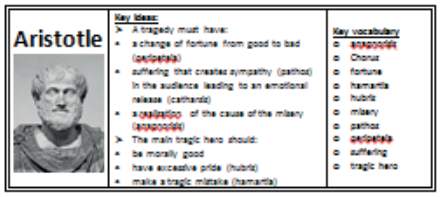
To have specific students apply the Literary theories and perspectives to analysis of a Romeo and Juliet text. To have them extend their reading, understanding and growth mind- set to think judiciously with analysis.

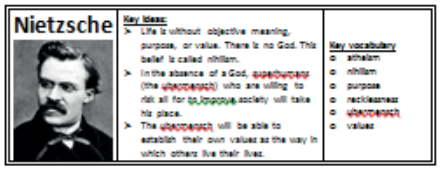


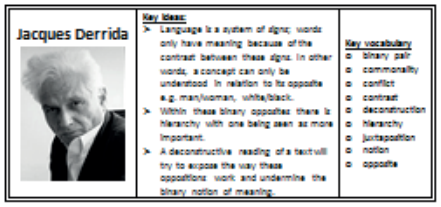
Students were to use the supported postcards (with examples) to develop understanding of meanings created through Language.

LESSON 1 CONCLUSION

Students were able to apply theory to their understanding of the play as a whole. One student needed some guidance in how to use the postcards, whereas another picked one or two which he understood and specifically applied them to ideas within the scene a third student extended his knowledge with each and every postcard, applying them to the play as a whole and specifics within the text. It was evident that theory seemed easier than Literary perspectives for every student and for some students it would be beneficial to take away the support/ guidance to ensure that independence is promoted.







LESSON 2 DESCRIPTION

The lesson was the same as the first but with focus on preparation for an assessment.

All students enjoyed using the postcards to develop their interpretations of the text. They were able to extend their ideas and apply theory and perspectives to ideas. We took away the examples on the postcards to ensure independence and growth mind set. We had used them in a number of lessons since the first observed session so students were confident in understanding how to use them effectively.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - Students think judiciously when analysing language for both Literature and Language. They have extended their understanding of meanings created whilst embedding theory and perspectives.

Impact on Pedagogy - The postcards are a brilliant tool to use when looking at extracts/ texts in class or when revising topics for assessments/ examinations, broadening knowledge and creating abstract thought.

Impact on Scheme of Learning - The postcards have ensured that challenge is specifically part of the schemes and that all students are encouraged to think innovatively alternatively and consistently across the department.

FURTHER RESEARCH:

We need to continue using the postcards with all GCSE classes and extend to LA students as expectation of how to meet AQA's top requirements. To embed within every GCSE SoL to improve retention for KS5. Ensure that the postcards are adapted for independent enquiry and support for extension.

“FLIPPING FROM KNOWLEDGE TO APPLICATION”

ISSUE

To move away from knowledge dominated lessons, the DLS looks at shifting the onus onto prior preparation for tasks.

RESEARCH QUESTION:

How can flipped homework’s be used to effectively underpin students learning and progress?

RES

MEMBERS:
Lisa Coulson,
Neil Sahai,
Yo Fleetwood
(Geography)

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

RESEARCH:

- Bergmann, J., (2017), Solving the Homework Problem by Flipping the Learning, ASCD

CONCLUSION:

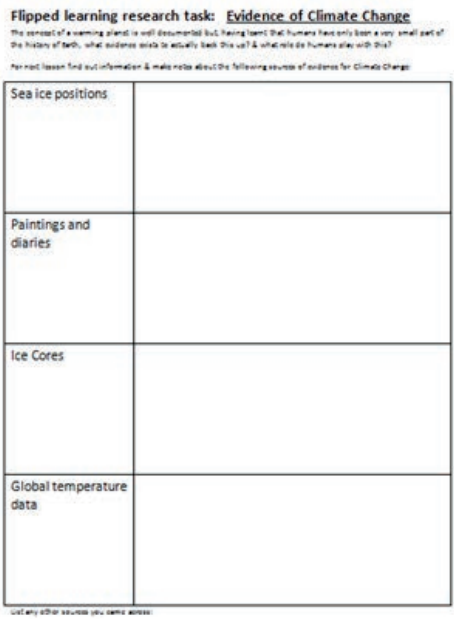
There have been a lot of positive points from the work so far, which has only included one cycle. Evidence from observing student engagement and student feedback through questionnaires shows the benefits in transferring the requirement for students to participate to their own learning and freeing time in lesson.

LESSON 1 DESCRIPTION

The first approach was to use a resit policy for assessments for the GCSE course. The purpose of this was explained clearly to students. The follow up was to give a questionnaire to the students to gather information and their thoughts of the process and to also gain feedback to develop work for the next cycle of work.

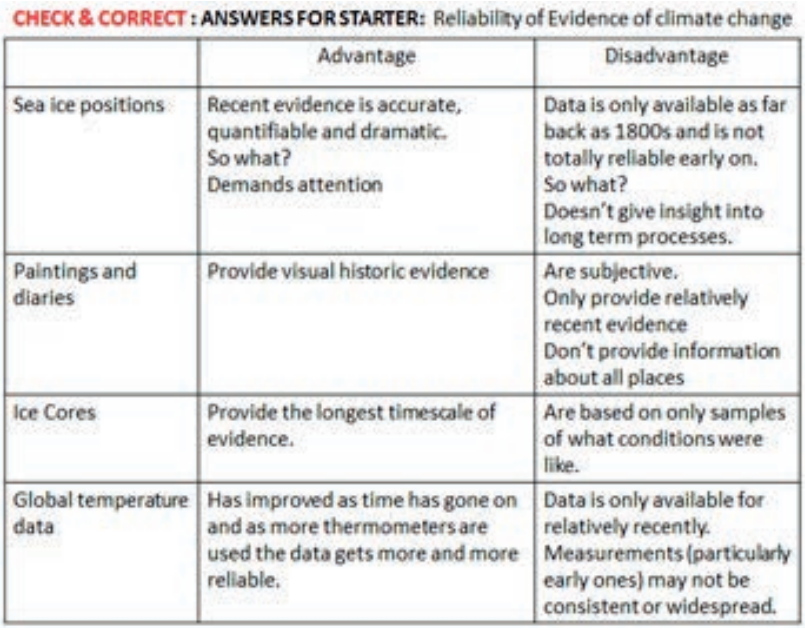
LESSON 1 CONCLUSION

Students responded well to resits and made suggestions of how MRI work would be viewed as more beneficial to them (purposeful outcome such as revision materials that can then be reused).



Flipped learning research task: Evidence of Climate Change

Sea ice positions	
Paintings and diaries	
Ice Cores	
Global temperature data	



CHECK & CORRECT : ANSWERS FOR STARTER: Reliability of Evidence of climate change

	Advantage	Disadvantage
Sea ice positions	Recent evidence is accurate, quantifiable and dramatic. So what? Demands attention	Data is only available as far back as 1800s and is not totally reliable early on. So what? Doesn't give insight into long term processes.
Paintings and diaries	Provide visual historic evidence	Are subjective. Only provide relatively recent evidence Don't provide information about all places
Ice Cores	Provide the longest timescale of evidence.	Are based on only samples of what conditions were like.
Global temperature data	Has improved as time has gone on and as more thermometers are used the data gets more and more reliable.	Data is only available for relatively recently. Measurements (particularly early ones) may not be consistent or widespread.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - Although only switching to this DLS work in January there has already been a noticeable switch in the approach of students to the flipped homework. Initial questionnaires revealed even those students not completing the work recognised its importance. It has contributed to a better understanding of independent learning, focusing them on the topic content to be covered and by encouraging better engagement.

Impact on Pedagogy - Teachers are starting to use less of valuable lesson time focusing on knowledge, moving towards more work looking at the understanding and application of the work by students. The next stage has been looking at the outcome of the flipped homework by using starters to challenge understanding and hinge questioning to assess where learning for students should go next.

Impact on Scheme of Learning - As the work is being implemented across the department it is aiding the consistency in the approach to delivering SoL. Flipped homework is freeing up lesson time so that this can be used to focus further on assessment and application activities.

FURTHER RESEARCH:

All students need to engage in the flipped homework so the quality and demands of the work set is important so everybody participates. This means the evaluation of the learning that should have taken place is fundamental to the success of the task set. Investigation therefore needs to look at the starters and hinge questioning used to inform the teacher as to if this has happened.

MAPPING MY OWN PROGRESS

ISSUE

We wanted students (MA boys in particular) to take more responsibility for their own progress.

RES

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

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

RESEARCH QUESTION:

How far can the use of 'process goals' improve the outcome for MA boys?

RESEARCH:

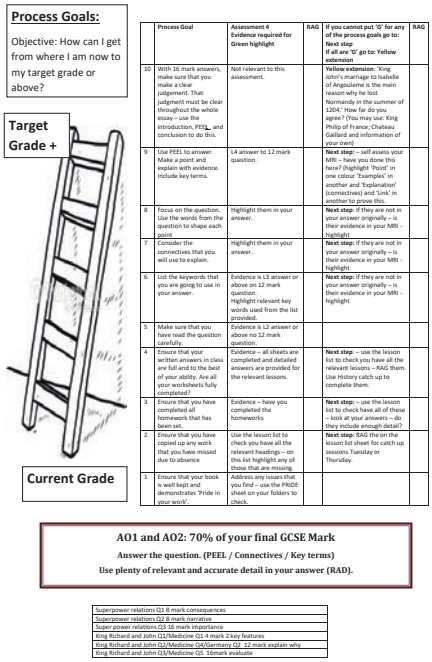
- Fletcher, V., Hampstead, A. & Reydet, M., (2017), Athecology: Lesson Study Journal, Affordable Print, 3, p10-11
- Bridge, K., Little, S. & Oetgen, F., (2017), Anthecology: Lesson Study Journal, Affordable Print, 3, p14-15
- Goldman, J., Daniels, O. & Henwood, P., (2017), Anthecology: Lesson Study Journal, Affordable Print, 3, p28-29
- Hetherington, D., Sinclair, S., Vallance, J. & Rolleston, A., (2017), Anthecology: Lesson Study Journal, Affordable Print, 3, p36-37
- Hoad, S., McReynolds, S. & Gibbs, E., (2016), Anthecology: Lesson Study Journal, Affordable Print, 2, p34-35
- Billington, A., Lucas, E., Lund, T., Chapman, C., Trenchard, C. & Wilkinson, G., (2015), Anthecology: Lesson Study Journal, Halcoyn-Press, 1, p64-65
- McHugh, A., (2016), Engaging Boys – A Practical Guide, Teaching and Learning guru
- Guriam, M. & Stevens, K., (2010), 10 Essential Strategies for Teaching Boys Effectively, ASCD Express 6 (4)
- Holland, G., (2006), Engaging boys through boy-friendly teaching and learning practices / strategies, Christchurch

CONCLUSION:

Students found the process goals and 'map' of exam questions useful in identifying their own targets and making the GCSE skills seem less daunting. High PA students were more confident using process goals than mid PA boys. The exam questions 'map' was particularly useful.

LESSON 1 DESCRIPTION

The aim is for students to take some ownership of their own progress and to create more resilience to improve results. Students were asked to improve a symbol marked piece of work that assessed their use of AO1 and AO2. They were then asked to improve their work (MRI) using their EBI symbol and the relevant differentiated fix-it kit. Next, they were asked to assess their own progress, by examining whether their MRI had actually improved their work by going through a series of 'process goals' that had been created as 'steps to success'.



LESSON 1 CONCLUSION

The HA students response to the process goals was that they were able to demonstrate deeper understanding of their own MRI and what they needed to do to improve, they were very quick to take ownership of their own progress / improvement. The MA student was not as proficient at recognising what he needed to do to improve but with the level ladder and some initial further teacher explanation, was able to realise what was missing and then identify for himself the steps that he needed to take to improve. We need to develop adapting the steps so MA students can access it for themselves more immediately, possible use with other year groups – we have already done some work on this with Year 13 students in the coursework unit.

LESSON 2 DESCRIPTION

The process goals and 'steps to success' were refined to make them more accessible, particularly to MA boys. A summary 'map' sheet of the different exam questions and which exam they come up in, was produced for students to indicate their prior and current progress. Students then performed a similar activity to lesson one, receiving feedback and completing an MRI for an assessment then plotting progress on the more accessible 'steps to success.' Additionally students then completed their exam questions map – plotting their result for that assessment.

HA students continued to be comfortable in plotting their progress and found it both rewarding and useful to identify their route to progressing. MA boys were more able to see their progress but continued to be less confident in tracking their progress. The exam question 'map' proved to be a useful concept with students valuing the overview of exam questions. Further work would be useful in improving the clarity of this so students are able to understand it quickly.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - Students were better able to identify and verbalise their 'next steps' and it was clear that students had an increased understanding of the 'big picture' and their route to progress.

Impact on Pedagogy - Giving students sight of their own route to progress enables them to identify their own targets and understand why they are carrying out certain tasks, especially MRIs.

Impact on Scheme of Learning - Giving students lesson lists, and a 'map' of the exam questions has enabled a GCSE which can seem huge and overwhelming to be more approachable.

FURTHER RESEARCH:

Further work could be done looking into how to make the exam questions 'map' even clearer for students, making the exams seem less daunting. In addition investigating ways of further streamlining the process goals and steps to success could be beneficial to help MA boys access them more confidently.

“WORKING ON IMPROVING GROWTH MINDSET – OVER TIME”

ISSUE

We were looking for ways to encourage some girls with low self-confidence to avoid saying “I don’t know” every time a question is asked by their teacher in lesson.

RES

MEMBERS:
Katrina Chamberlain,
Kim Blessing
(H&SC / Child Dev)

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

RESEARCH QUESTION:

To what extent can the use of questioning positively engage learners and be used as a means of building growth mindset?

RESEARCH:

- Bridge, K., (2017), Teaching and Learning Handbook, Samuel Whitbread Academy, Shefford, UK

CONCLUSION:

On the back of group activities carried out by students after the first twilight, which allowed students the opportunity to carry out specific responsibilities within the group and also gave the students who lack confidence the opportunity to write answers down rather than say them aloud in class, we were able to pair up the students in the second lesson. This gave more ownership to the students and helped with self-confidence as they felt more confident to share ideas and answer question posed with teacher facilitating the session.

LESSON 1 DESCRIPTION

Students were presented questions that were stuck down on their table. This allowed them to see what questions the teacher was planning on asking them throughout the lesson as well as allowed them to have greater thinking time. The teacher allowed students to 'think, pair, share', this is because some individuals self-doubted themselves and lacked in confidence. Students were initially engaged in the piece of paper stuck on their desk and seemed enthusiastic about the new idea from the start of the lesson.

LESSON 1 CONCLUSION

Group work was encouraged. One student asked if they could move to another group as they felt more comfortable with their friendship peers, however the teacher discouraged this. Specific roles were given to individuals so everyone felt like they had responsibility. Groups worked well together and it was nice to see ideas bouncing around the room. I encouraged those who lacked confidence to write their answers down rather than say them aloud.

LESSON 2 DESCRIPTION

Instead of the teacher taking ownership and delegating questions to be answered within the group, students knew that as part of their task they needed to come up with the questions to the answers in front of them. This was introducing them to something new and became a useful exam style technique. Students were at first confused as to why they were given the answers before not knowing the question, however, once instructed they were a lot clearer on the outcome of the task. They enjoyed the fact that it was like a puzzle and those who struggled were helped out with clues. This meant that everyone within the group was successful.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - As students were paired up, we were able to observe students communicating a lot more. Some pairings were a lot louder than others but this reflected upon the nature of the learner.

Impact on Pedagogy - Teacher took on the role of facilitator and this meant more emphasis was on the learners doing more. This saw an increase in levels of engagement. Some of the questions were well thought of and students were also critical of each other.

Impact on Scheme of Learning - Different questioning methods now written into SoL. Opportunity to research topic and share via speed dating activities created.

“WHY DO YOU DO WHAT YOU’RE DOING? WHY NOT?”

ISSUE

KS4 students lack confidence and demonstrate a fixed mindset, particularly in the speaking exam which they perceive to be one of the most challenging aspects of the GCSE.

RES

MEMBERS:
Victoria Fletcher, Marion Reydet, Ashleigh Simister *(MFL)*

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

RESEARCH QUESTION:

To what extent can questioning processes help reduce a student’s fixed mindset and contribute to the promotion of a growth mindset?

RESEARCH:

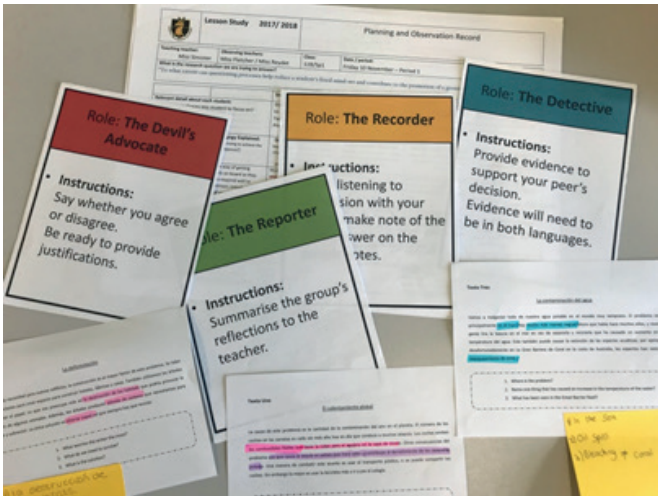
- Bridge, K., (2017), Teaching and Learning Handbook, Samuel Whitbread Academy, Shefford, UK

CONCLUSION:

Creating different roles for students provided structure and scaffolding to enable them to work collaboratively with peers to understand the expectations of a task. The student outcomes varied: in each class one case student consistently demonstrated increased confidence in participating orally within lessons, whilst the second case student’s behaviour is more inconsistent, and still demonstrates the attributes of a fixed mindset.

LESSON 1 DESCRIPTION

The lesson comprised of activities created to encourage students to work within their small group where case students were the representatives. There was also an element of competition, to encourage students to participate and stimulate engagement as it proved to be efficient by the class teacher. Subsequent activities encouraged students to undertake a range of roles intended to develop students' confidence to find the answer to a question, explain the evidence to support the response, and report it back to the rest of the group and/or teacher(s).



LESSON 1 CONCLUSION

One of the case students has consistently demonstrated increased confidence in participating orally within lessons, whilst the second case student's behaviour is more inconsistent.

LESSON 2 DESCRIPTION

The lesson consisted in challenging students to define a success criteria after listening to a candidate's answer. Our case students were two under-achieving PP students who particularly demonstrate a fixed mindset and are prone to give up at the first obstacle. We started to recall the expectations of the speaking exam and then listened to an exemplar answer in order to provide a modelled example. Afterwards, students in groups, had to determine a success criteria based on what they heard, then they had to justify their answers "What makes you think that? What evidence supports that? Give me an example." Those questions boost their confidence as they realise they could answer, and replicate for their own.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - Within the focus lessons, the activities encouraged students to work collaboratively. An element of competition was introduced to encourage students to participate and stimulate engagement, which proved to be effective. By undertaking a different role, particularly that of 'The Detective' or 'The Devil's Advocate' students have a greater understanding of strategies that can be adopted in the exams, which they are applying to good effect. Many students have made some good progress developing their skills in lessons; the November mock exams showed that students have implemented some of these strategies. They can justify and provide evidence to most answers.

Impact on Pedagogy - Revisiting teaching and learning methods allowed teachers to consider the impact of student-led collaborative work in order to deepen students' thinking skills. Following students' feedback, this is a model which has been modified and replicated in some lessons within the learning cycle. Designing the lessons encourages each teacher to reflect on the needs of the students and challenge as well as support them with subtle guidance through their peers.

Impact on Scheme of Learning - Teachers attempt to use the strategies explored as part of this research to encourage students to build resilience and further develop a growth mindset. In the future we aspire to have students who attempt all work set because they have tools for the job and confidence to do their best.

FURTHER RESEARCH:

Whilst this research was undertaken with Year 11 students, and can therefore be transferred to Year 10 students, it would be interesting to consider how the ideas and strategies explored could be transferred to mixed-ability Year 9 classes, where many students may not choose to continue studying MFL.

DEVELOPING EFFECTIVE INDEPENDENT LEARNING SKILLS TO BUILD RESILIENCE IN KS5 STUDENTS

ISSUE

KS5 students are over dependent on information from teachers and books, as a result of being unable to use research and prep time effectively.

RESEARCH QUESTION:

To what extent can independent study activities develop independent learning skills and harness a growth mindset?

RES

MEMBERS:
Jason Goldman,
Paul Henwood,
Richard Candlin
(PE)

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

RESEARCH:

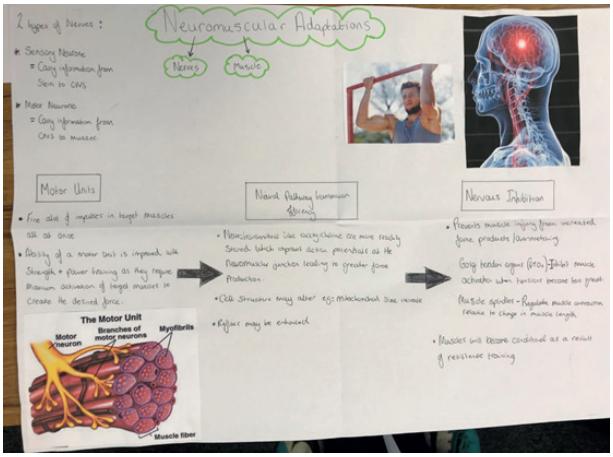
- Dweck, C., (2006), Mindset: The new psychology of success. New York: Random House

CONCLUSION:

The confidence levels and the independent learning behaviours observed from our target students gave evidence that the use of success criteria helped to guide their learning and gave specific focus for their project. Upon reflection, student 1 stated: "It's much easier when I plan what I going to research and I can then present with the confidence that I have covered all the areas". And, student 2, "When I research using google, It's hard to find the specific examples that match the criteria or that shows my full understanding. A specific focus really helps, I usually rely on the textbooks, now I can use specific keywords to guide my research and findings."

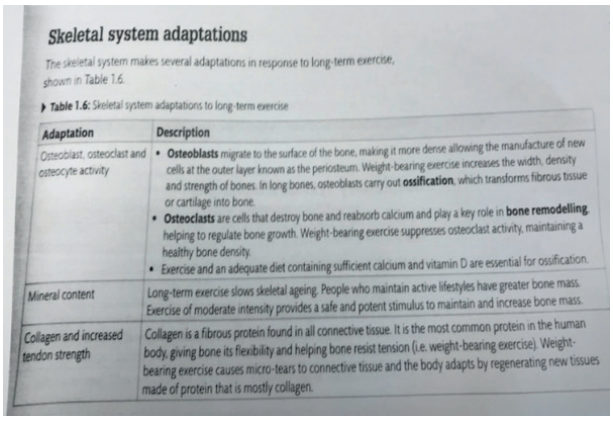
LESSON 1 DESCRIPTION

Students used a RAG sheet to identify their current area of weakness within Diet and Lifestyles and set themselves a homework based on this area of weakness.



LESSON 1 CONCLUSION

Some students chose the easy option of producing a poster, to show their knowledge, rather than looking to research into an area of weakness, or setting themselves an exam style question. Moving forwards, the students need further guidance in setting their own homework, to make sure it is as beneficial as possible rather than potentially a revision based exercise to produce a poster. Girls naturally gave themselves more difficult/ beneficial task to complete.



Skeletal system adaptations

The skeletal system makes several adaptations in response to long-term exercise, shown in Table 1.6.

Table 1.6: Skeletal system adaptations to long-term exercise

Adaptation	Description
Osteoblast, osteoclast and osteocyte activity	• **Osteoblasts** migrate to the surface of the bone, making it more dense allowing the manufacture of new cells at the outer layer known as the periosteum. Weight-bearing exercise increases the width, density and strength of bones. In long bones, osteoblasts carry out **ossification**, which transforms fibrous tissue or cartilage into bone. • **Osteoclasts** are cells that destroy bone and reabsorb calcium and play a key role in **bone remodelling**, helping to regulate bone growth. Weight-bearing exercise suppresses osteoclast activity, maintaining a healthy bone density. • Exercise and an adequate diet containing sufficient calcium and vitamin D are essential for ossification.
Mineral content	Long-term exercise slows skeletal ageing. People who maintain active lifestyles have greater bone mass. Exercise of moderate intensity provides a safe and potent stimulus to maintain and increase bone mass.
Collagen and increased tendon strength	Collagen is a fibrous protein found in all connective tissue. It is the most common protein in the human body, giving bone its flexibility and helping bone resist tension (i.e. weight-bearing exercise). Weight-bearing exercise causes micro-tears to connective tissue and the body adapts by regenerating new tissues made of protein that is mostly collagen.

LESSON 2 DESCRIPTION

Within an examined unit and using data and observations from previous examined units, teachers predicted that certain students would use poor revision notes for exam preparation. The intended actions were to build students' confidence in their own ability and also value the impact of higher levels of detail in notes. Teachers created flipped learning and independent study projects to develop students' ability to organise and structure their learning. Teachers gave a simple framework of what is expected from each task, therefore all students knew the success criteria and potential reasons for procrastination. Students worked in carefully selected pairs to research and prepare an A3 mind map, 10 questions and a 15 minute class presentation. Following their first experience of presenting, the teacher skilfully led a peer review on how effective their presentation was. Students took these action points into their next flipped learning project, which they completed on their own.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - Students 1 and 2 responded in an improved manner, but at different rates. The improved ability to research and prepare notes to work independently improved their answers to meet distinction criteria, as they were able to discuss the impact on athletes' performance levels. The two target students observed during the DLS, took an active part in the tasks and produced quality resources. Student 1, used the framework effectively to research and structure their new knowledge and understanding.

Impact on Pedagogy - Staff plan structured flipped homework that lead into specific lessons, thus ensuring that students can cover all the grade criteria needed. Less time in lesson is spent on delivering new content, thus allowing more time for application and deeper evaluation skills.

Impact on Scheme of Learning - The SoL now includes independent learning skills which allow students to plan for effective and specific research and how to present findings to peers.

FURTHER RESEARCH:

Can a block of Sixth form introduction lessons help prepare students develop higher levels of independent study skills?

HOW DO WE GET STUDENTS TO TAKE OWNERSHIP OF REVISION IN SCIENCE?

ISSUE

Year 11 students have to develop the confidence and resilience to independently practise and develop science exam technique – how can we adapt our classroom practice revision programmes to suit different personalities and levels of confidence?

RES

MEMBERS:
Emily Adams,
Dave Goode,
Joanne Ambrose,
Steve McReynolds
(Science)

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

RESEARCH QUESTION:

How can we improve student resilience in engagement in their GCSE Science revision through more effective modelling in lesson?

CONCLUSION:

Students are individuals with varying levels of confidence and resilience. This approach should support the skill development required for independent learning when at home; This strategy should promote growth mind set as students can systematically develop the skills and confidence to engage in revision and so feel more positive about their work; Lesson time is more effective as tailoring allows everybody to make good use of their time.

LESSON 1 DESCRIPTION

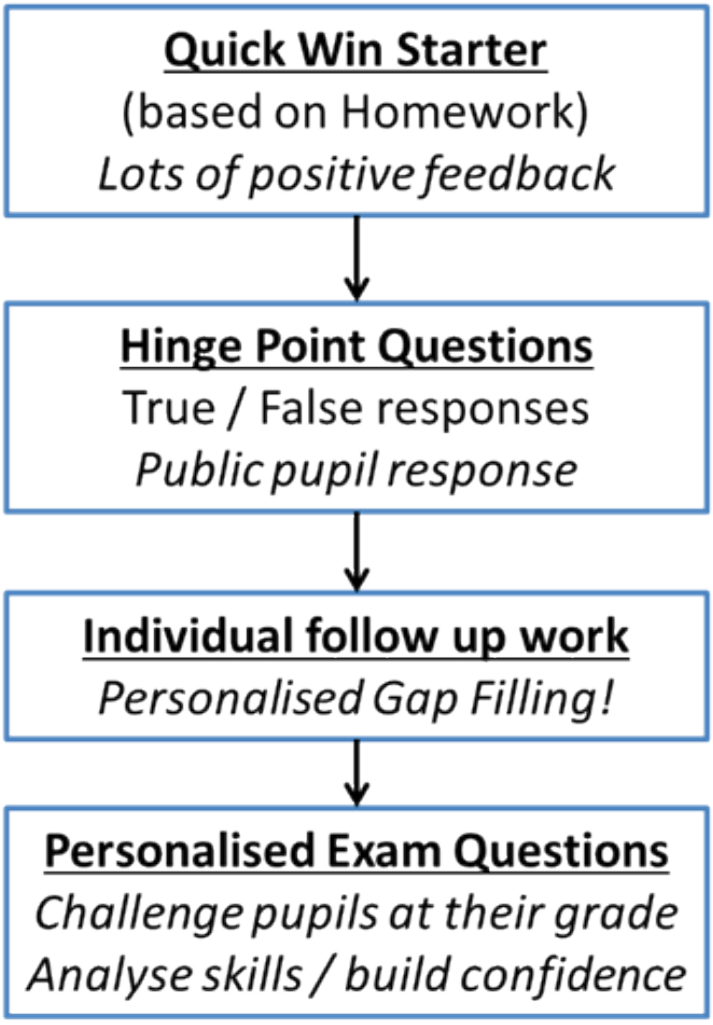
Clearly defining to students behaviours that demonstrate a growth mindset and identifying three students who displayed those behaviours and subsequently get a praise point, partly through peer review of behaviours during the lesson.

LESSON 1 CONCLUSION

Worked well but would need constant inclusion in lesson to really demonstrate the full effect and impact on student engagement and learning.

LESSON 2 DESCRIPTION

A Year 11 revision lesson designed to develop resilience and build on the growth mindset was designed through the use of easy to achieve starters – based on a homework – building to a sequence of 'hinge point' questions and then individualised activities and student selected exam questions to challenge them at their level. This should mirror the skills that students will need when working on their own.



FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - It is important to build learning based relationships with students swiftly in order to diagnose barriers to engagement for individuals. Student choice, based on students self diagnosing areas for development is a powerful device to build confidence and resilience.

Impact on Pedagogy - The department has a tight schedule for revision which – from the feedback from students – could be enhanced by the lesson structure that enables the teacher to accommodate differences as the lesson progresses and to develop the skills and resilience that students need for their indpendent work. For example a hinge point question or other cognitive conflict can enable students to identify their particular learning needs. This can lead to a specific area which a student can choose to work on. This supports students to take ownership of this. Such a lesson allows the teacher to circulate and problem solve, challenge, rectify and steer the students in an appropriate direction.

Impact on Scheme of Learning - These provide us with a clear structure so we can develop this style of lesson to model and develop the confidence and skills in our students. This will develop the resilience required to care and take ownership of their revision.

FURTHER RESEARCH:

How can we use student feedback in order to develop this approach further to more effectively support student work at home on their individual revision?

TEACHING YEAR 11 TO REVISE

ISSUE

Demotivated, apathetic and poor engagement to lessons for a wide variety of students from all abilities.

RES

MEMBERS:
Morine James,
Jo Haigh,
Jayne Moffat,
Cheryl Grover
(Science)

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

RESEARCH QUESTION:

Can identification of barriers to learning help with resilience for helping progress for Year 11?

CONCLUSION:

The students were self-motivated and began to develop a range of resources including 'did you know' facts, flashcards and spidergrams. They found this structure useful to refer to rather than copying information from IWB/Books. It is not clear to identify the impact of this style of learning as it commenced after their last mock exam in February 2018.

Q1. Where is bile produced?	Q2. What type of substances do lipases break down.	A1. In the Liver.	A2. Fats.
Q3. How is food moved through the gut?	Q4. Protease is produced by?	A3. By peristalsis	A4. Protease enzymes are produced by the stomach, small intestine and the pancreas.
Q5. What are the finger-like projections in the small intestine called?	Q6. Amylase catalyses the breakdown of starch into?	A5. Villi	A6. Sugars.

Figure 1: an example of a student produced grid based on AO1 from the specification on enzymes and digestion.

1. Which gas is needed for photosynthesis?	2. What type of energy is needed for photosynthesis to happen?	A1. Carbon Dioxides	A2. Light energy
3. What is the waste by-product of photosynthesis?	4. What is the word equation for photosynthesis?	A3. Oxygen	A4. carbon dioxide + water -> glucose + oxygen + water
5. What is the word equation for aerobic respiration	6. Where does respiration happen?	A5. glucose + oxygen -> carbon dioxide + water	A6. Mitochondria

Figure 2: an example of a student produced grid based on AO1 from the specification on photosynthesis and respiration.

LESSON 1 DESCRIPTION

After having done a SWOT analysis of the student perception of their end of Year 10 exams, several different strategies for revision have been put into place as not knowing how to revise/where to start were common problems. An activity using google classroom was set up that allowed students to share resources. Students were put into groups and told to create recall questions and answers based on the specification in order to create a revision resource for these topics.

LESSON 1 CONCLUSION

Students really enjoyed the lesson and actually were asking for more grids to be available to them to make more questions. The grids were designed so that they could be printed and folded in half so that the questions were on one side and the answers on the other (figures 1 and 2). They were excited to find a new way to use technology and to use it in their revision. Guiding them to the specification will hopefully make it less daunting when they use it to revise independently. The students did struggle with using the whole document though and using it on the chrome books while trying to write the questions on the chrome books too. An area for development would be to print off and cut up sections for them to work on so that they can focus on their bit – bitesized chunks.

LESSON 2 DESCRIPTION

The specification will be divided up into sections – an appropriate amount of the spec to be focussed on in a lesson and each group will receive a printed copy of their section to work from. Students are to create a revision resource – of their choice to potentially share with the class on their section.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - Students learnt that they were in control of their learning with targeted tasks which were tailored to meet their individual levels of interest and ability. The students worked in pairs and chose specific areas of the science specification which they wanted to develop a greater subject knowledge and exam question techniques. This ensured that they maintained an active interest and challenged their curiosity.

Impact on Pedagogy - Teachers were able to explore different learning styles and encourage the students to take control of their own gaps in their learning by sharing their findings to the class on various topics.

Impact on Scheme of Learning - If you can explore this type of learning earlier in the academic year the teacher might be able to see the evidence to prove it has a greater impact when completing past papers/assessment tests to consolidate learning.

FURTHER RESEARCH:

Deconstruct exam questions to develop clearer understanding. Review the delivery of the current scheme of learning. Review learning styles to promote greater engagement and interest for teachers and students. Greater opportunities to complete past papers/exam questions in a cycle.

“CAN WHOLE CLASS ASSESSMENT IMPROVE MOTIVATION AND ENGAGEMENT?”

ISSUE

Demotivated students in science believing that they “can’t do it”. We wanted to set up more opportunities for students to recognise their progress.

RESEARCH QUESTION:

To what extent can assessing the progress within a lesson improve engagement?

RES

MEMBERS:
Ian Butler,
Dan Hardy,
Rob Graves,
Sherma Joseph
(Science)

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

RESEARCH:

- https://www.futurelearn.com/courses/assessment-for-learning-stem/0/steps/7332;
- http://www.sec-ed.co.uk/best-practice/teaching-practice-hinge-questions/

CONCLUSION:

In this small sample, the activity engaged and motivated the students to become active participants rather than passive learners. It may have been down to the challenge of creating a hinge point question, or just the fact that they were being held accountable to their peers for their work during that lesson.

LESSON 1 DESCRIPTION

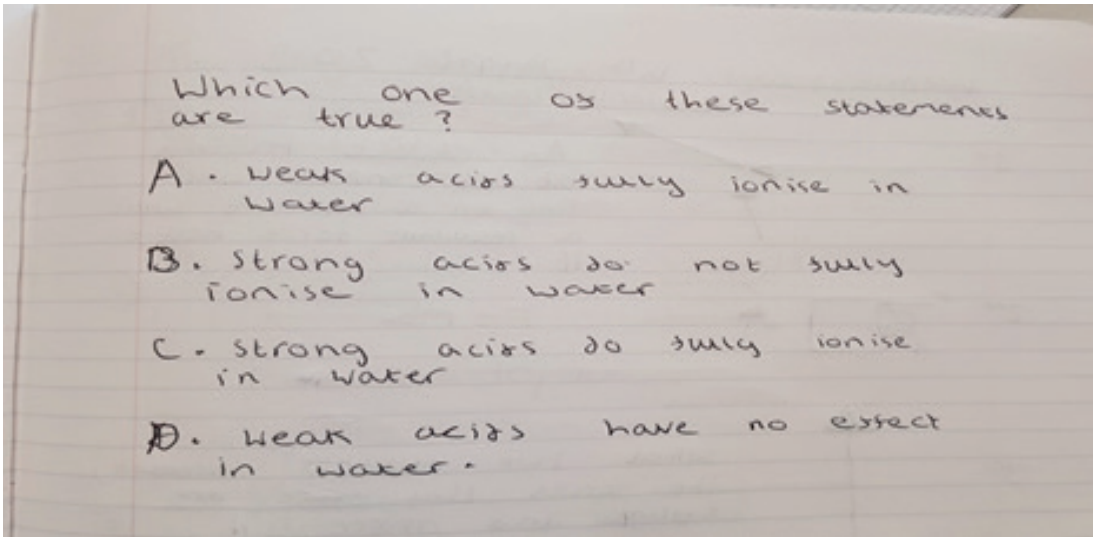
The concept of using hinge point questions for assessing progress was introduced and explained. Students completed some examples of themselves and we explained the rationale behind them and how teachers use them to assess progress.

LESSON 1 CONCLUSION

Students could see how these would be useful for the teacher but struggled to write their own to help assess each other's learning. Further examples are needed to show them how they can integrate this into collaborative revision.

LESSON 2 DESCRIPTION

Further explanations and examples were given and students were engaged in not only trying to write questions with more than one correct answer but some were trying to think of what the misconception they were trying to catch them out with as they wanted to win, which meant they were more actively engaged with the content.



FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - Using hinge point questions has allowed the students to revise in a different way by producing their own hinge point questions. The impact on progress was significant for some of the students as it gave them an opportunity to question what they knew and just the process of writing it down to be seen by others meant that they had to really focus on getting it correct and being able to justify their answers.

Impact on Pedagogy - Modelling hinge point questions to the class was key to the engagement in this activity. Pre-planned questions which allowed key misconceptions to be identified, then using wowo boards to ensure that the teacher could do a whole class assessment in 30 seconds. This allowed the students to understand the expected outcome for when they completed their own questions. A framework was given so that they kept to the same structure.

Impact on Scheme of Learning - SoLs in Science will now have a variety of hinge point questions in them to check the learning during the lesson. Also opportunities for students to create their own, either in class or for homework.

FURTHER RESEARCH:

We will look at ways in which we can incorporate the resources from the below website into our lessons.
https://improvingteaching.co.uk/hinge-questions-hub/

“WORKING WORDS”

ISSUE

To transfer learner knowledge into coursework evidence by deciphering task requirements and assigning appropriate language.

RESEARCH QUESTION:

How can we encourage students to aim for higher level skills to meet and exceed target grades and avoid “just play it safe”?

MEC

MEMBERS:
Chris Chapman, Elaine Lucas, Gill Wilkinson, Emily Caves
(DT&E)

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

RESEARCH:

- Martinez, P., (2001), Great Expectations: Setting Targets for Students, Learning and Skills Development Agency, London.

CONCLUSION:

Students were evaluating and using language more appropriately developing the key words and applying them appropriately (this was especially evident with the lower ability students). The use of the RAG system linking the key words with the pass merit and distinction levels enabling students to evaluate their work more effectively make good judgements for peer assessment. This is especially important with non-examined assessments work where teacher assessment / feedback is limited.

LESSON 1 DESCRIPTION

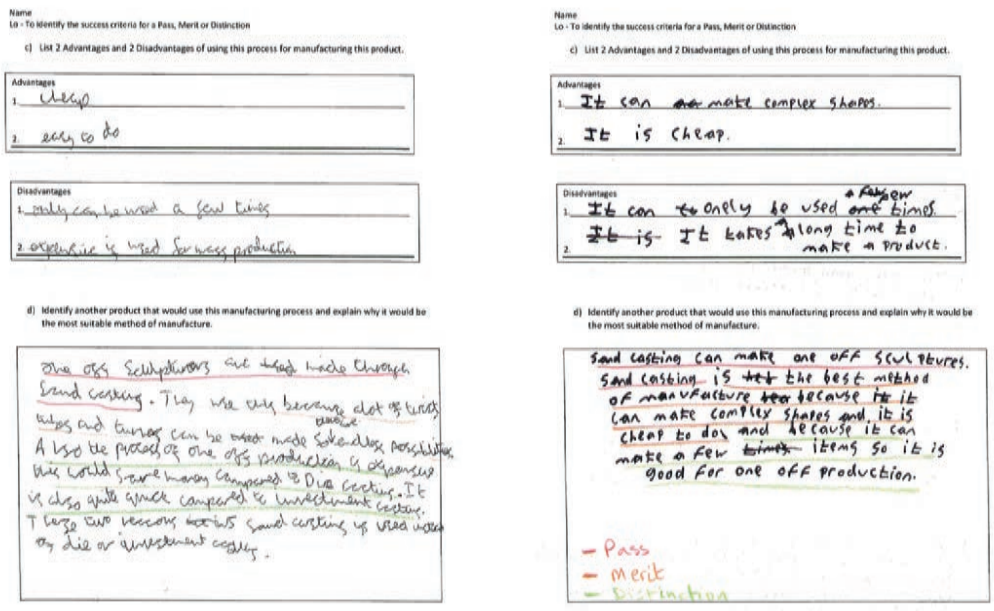
We broke down the task into Pass, Merit and Distinction (P, M and D) and identified language that indicates each level. A task with exemplars that has been colour coded was then discussed. Students then created language to cover P, M and D for a new question, which they wrote up. They then peer assessed.

LESSON 1 CONCLUSION

One student was able to cover and identify all the P,MandD points in his answer and made an attempt at all levels. The development and use of key words was noticeable. Another student was able to organise his answer a lot better and used the appropriate language more effectively. The task was completed quickly and more content was covered overall.

LESSON 2 DESCRIPTION

We again used a RAG system to analyse the task, we then got students to identify key words and complete the assessment. Students peer assess work, identify the areas of the assessment that had been completed. We used the RAG system to identify and highlighting areas for the BTEC pass, merit and distinction marks.



FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - The high attaining students wrote more concisely and included more technical language and detail. Low/Middle attaining boys followed the same route as high attaining students including more detail and attempting more. Students were on task quicker and were able to complete the task quicker.

Impact on Pedagogy - Breaking down the task into very visible sections, made them more accessible to all abilities.

Impact on Scheme of Learning - The tasks created will be incorporated into the SoL.

FURTHER RESEARCH:

The 'breaking down' process was time consuming and may need to be further differentiated to allow the higher ability students more freedom to research and experiment / apply their knowledge.

MAKE POSITIVE PRAISE A PRIORITY!

ISSUE

We wanted to ensure that Year 11 boys are engaged throughout each lesson. By making them believe that they were a key part to the class and that they were able to succeed.

RESEARCH QUESTION:

To what extent does positive praise impact upon the engagement of Year 11 boys?

MEC

MEMBERS:
Jake Cochrane, Sarah Richards, Sarah Sinclair *(English)*

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

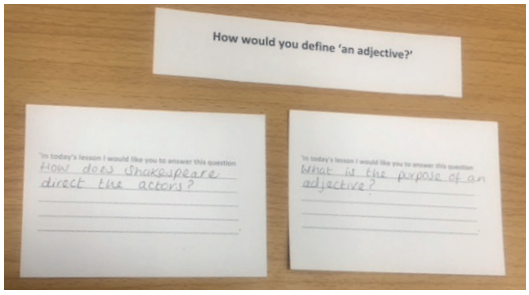
RESEARCH:

- https://markrobertsteach.wordpress.com/2017/07/03/rethinking-boys-engagement-my-talk-from-tllleeds17/

CONCLUSION:

Students responded really well to the postcards and seemed to be engaged throughout the entire lesson. Students were given the responsibility to prove to the teacher that they deserved a postcard to be sent home.

LESSON 1 DESCRIPTION



I'm a Celebrity Get Me out of Here – Eating Bush Tucker Trial task. Students were given a variety of different food to eat. They were then required to produce sophisticated vocabulary to describe the food. Postcards were used to encourage engagement throughout the lesson from the case students. An example question on the postcard is 'What word class do the following words belong to? Sour, repulsive and grotesque.'

LESSON 1 CONCLUSION

Although the students did answer the questions and were mostly engaged, we found that we used too many cards which was distracting for the teacher as they needed to keep checking which question they needed to ask to which student. Two of the case students felt that the cards did help to keep them engaged, one of the students did not completely understand the concept so just wrote the answer to their question on the card immediately and then put it to one side so they were not engaged for the duration of the lesson. To improve this further we need to ensure that the concept of the cards is fully explained to the students involved and that we do not produce too many of them.

LESSON 2 DESCRIPTION

An English Language lesson introducing Paper 2 Question 5 (persuasive skills)

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - All case students were much more engaged in class and made significant progress in their next assessment. Students appeared confident in lessons and happy to answer questions – even without the postcards!

Impact on Pedagogy - Thinking time when answering questions.

Impact on Scheme of Learning - Pre plan questions for your case students. Take the time to engage in positive conversations between student and home.

FURTHER RESEARCH:

We would like to look into embedding this into our Scheme of Learning for all classes and teachers to use in Year 10 and 11.

USING HOT SEATING TO DEVELOP CONSTRUCT MEANING

ISSUE

We wanted to experiment with a different teaching strategy that we hadn't used before to help develop the students to construct meaning of their new learning.

MEC

MEMBERS:
Ollie Pride,
Edd Rhodes
(PE)

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

RESEARCH QUESTION:

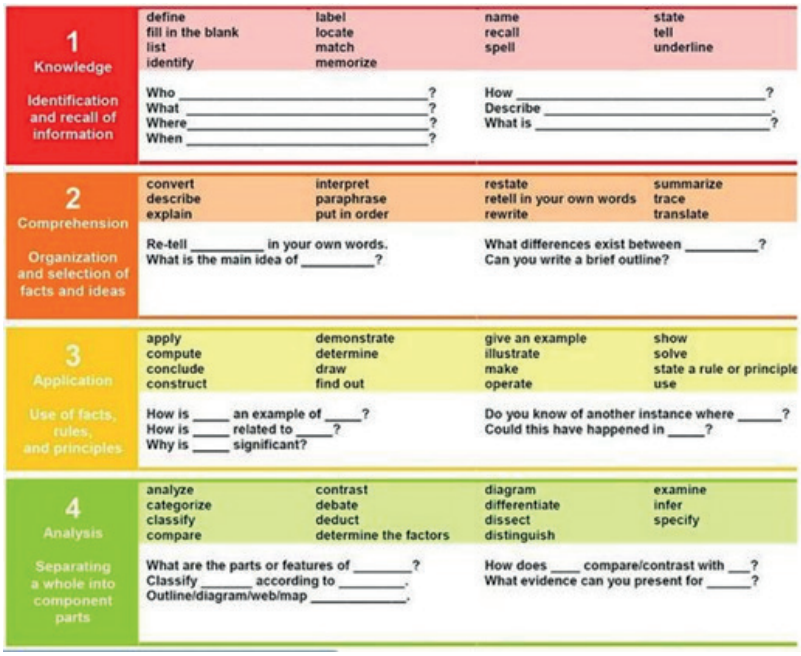
To what extent can hot seating develop construct meaning in a variety of learning environments?

CONCLUSION:

Overall, we would need to continue to use this strategy in more lessons in order to get the best outcome for our students. We found it hard to get all students to completely cooperate. It could be used a great way to start discussion amongst the class.

LESSON 1 DESCRIPTION

We delivered a lesson which used a hot seating activity with the whole class. Students were tasked with coming up with differentiated questions to ask the person in the hot seat, with the idea of them constructing meaning around the topic. Students were encouraged to all participate, ask questions and have a go answering the questions in the hot seat.



LESSON 1 CONCLUSION

We found that the low ability student did not engage and was reluctant to give ideas, ask questions or sit in the hot seat. The teacher found it difficult to get them to contribute. The high attaining student also found it quite daunting sitting in front of the whole class being asked questions by her peers. She did however offer good ideas, contributed well to discussion and answered the questions well. We found because of the reluctance from the majority of the class, it did not work and didn't really impact on the students learning or understanding of the subject.

LESSON 2 DESCRIPTION

For this lesson we decided to trial the hot seating in in smaller groups for the Year 10 students only. Our aim was to have more students contributing with questions and students to feel less pressure to speak in front of lots of people. We split them in to mixed ability groups of about 4-5 students and got them to question each other on their understanding of the subject.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - This teaching strategy would work well for students who are willing to contribute to discussion as it relies a lot of the individual's motivation to learn.

Impact on Pedagogy - If we were to do this again or recommend to staff to try hot seating, we would continue with using smaller groups, however we would try to put the high attaining students together and low attaining students together. We would then use question starter cards (an example shown in the image attached), differentiated, to suit each group to help them ask more challenging questions and stretch each individual. Following the hot seating task, we would then get them to contribute their feedback in group discussion to show their understanding and potentially start a group discussion around things that were brought up within the lesson.

Impact on Scheme of Learning - We would use this as a task to do at the end of the lesson to check for students' understanding, for example after doing a research task or after learning a new subject.

FURTHER RESEARCH:

We would want to continue using this teaching strategy, so that over time the students would feel more comfortable doing it. We would help the students with the questions they would ask so to stretch the understanding of the student in the hot seat. Finally we would look at ways of making this more enjoyable so there would be a better engagement all-round.

TACKLING THE 12 MARKER

ISSUE

The new specification has two 12 mark questions based on six professional works the students study throughout the course. This style and length of question is new.

EXW

MEMBERS:
Josh Bamford,
Liz Major
(Dance and PE)

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

RESEARCH QUESTION:

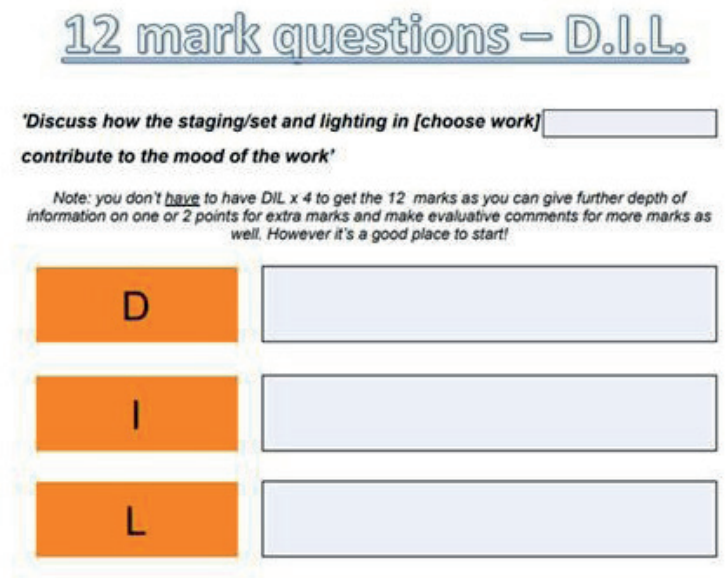
To what extent can a writing framework improve student's answers in the 12 mark questions?

CONCLUSION:

Due to time constraints of juggling theory and practical lessons in time for the February practical exam, we haven't spent enough time on embedding the formula into regular theory lessons, but this will be more happen now the practical exam is over. I am also finding at this stage that the students are falling down more on remembering the knowledge to describe and interpret rather than the DIL process itself. Six professional works is a lot of information to remember. Implementing the describe, interpret, link (DIL) structure in Year 10 will hopefully improve students progress and get them used to the process for Year 11.

LESSON 1 DESCRIPTION

We introduced the class to the Pyramid structure of how to break down their answers for nine markers. Showed them a model answer and key points to highlight. They then attempted to answer a separate 9 mark question using their planning methods. The pyramid structure was a very useful method but for these particular students, different methods such as DIL would have been more appropriate.



LESSON 1 CONCLUSION

Marks weren't always high however, as we've only just started but hopefully by May it will be helping bring marks up too. Also when showing students a model answer, it should be the same question/topic that they are about to attempt, rather than a different one.

LESSON 2 DESCRIPTION

A framework called DIL was introduced to show students how to use it in a 12 mark question. Then we showed an example of how it should look, then we wrote one together, and then they wrote one alone using their notes with. Peer and teacher marking.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - The low ability stuck rigidly to the DIL formulae, so each paragraph started with a description, then went on to an analysis and ended with a link. The higher ability started to play around with the structure so their paragraph may read DIDIIL instead of DIL. This will be further investigated in the next stage of the process. Another finding from the DIL essay answers was that mid to low ability students struggle with writing adequate descriptions so another strategy I will be trying will be to use verbal describing tasks as a starter, and then writing the description they verbalised as a plenary.

Impact on Pedagogy - DIL has helped me teach a process for writing good answers to the 12 mark examination questions which gives students of all abilities something to start their answers with but also allows for HA students to be flexible enough to reach the top marks by adapting the process.

Impact on Scheme of Learning - I have introduced DIL into all theory lessons and its starting to make an impact in terms of the mock paper, 12 mark questions were all structured using DIL.

FURTHER RESEARCH:

The low ability stuck rigidly to the DIL formulae, so each paragraph started with a description, then went on to an analysis and ended with a link. The higher ability started to play around with the structure so their paragraph may read DIDIIL instead of DIL. This will be further investigated in the next stage of the process.

“OVERCOMING THE 12/14 MARKERS!”

ISSUE

The new specification and written exam in Drama which they hadn’t had before and following the mock, students struggled with writing extended responses.

EXW

MEMBERS:
Hannah Meadows, Charlotte Tabert *(Drama)*

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

RESEARCH QUESTION:

To what extent can the use of structured writing improve the marks in the extended written answers?

CONCLUSION:

We have concluded that the PEAL mat needs to be further differentiated to have a positive impact on the lower ability learners. Posed questions will aid in supporting the right response needed when discussing the impact it has on the audience.

LESSON 1 DESCRIPTION

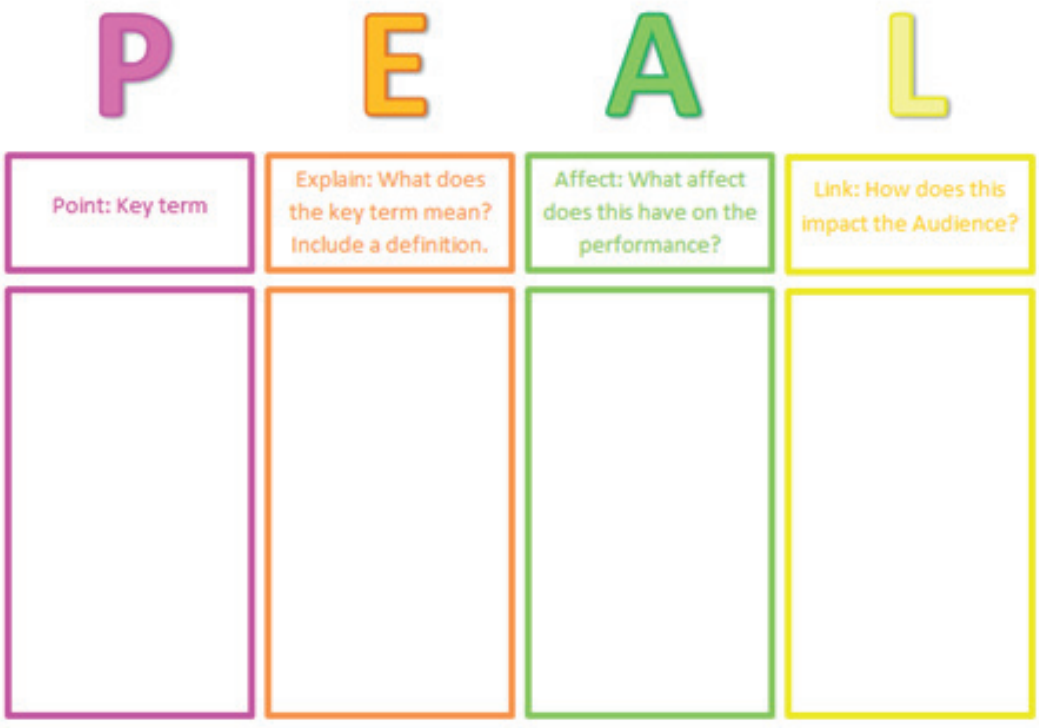
For this lesson we introduced the PEAL mat. After discussing key terms we then gave them 15 minutes to plan their extended response to the question.

LESSON 1 CONCLUSION

From delivering the lesson and speaking to students at the end we discovered that the PEAL mat helped students thinking, however they needed some more helping telling the difference between the 'A' and the 'L'.

LESSON 2 DESCRIPTION

We adapted the mat to include some support with the 'A' and the 'L' as students had requested this may help them. This was something that they then found a lot easier to do and supported them to achieve more marks in the 12/14 marker than they had previously.



FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - Students are able to link their responses to the audience, explaining the impact and emotional positioning that the point had on the audience.

Impact on Pedagogy - Make use of the learning mat, when answering exam style questions, adapting it for lower ability learners. Pose questions to further develop the affect on the performance and the link to the audience.

Impact on Scheme of Learning - By using the same learning mat every lesson which involves answering an exam style question, it creates clarity for the students. The repeat process embeds what is required from the students.

FURTHER RESEARCH:

Encourage the use of bullet point ideas on the PEAL mat to be used as a plan rather than a place to answer the question. Ongoing review as to what questions could tease the right idea's for the A and L part of the paragraph.

“BUILDING CONFIDENCE. ORGANISING KNOWLEDGE. DEVELOPING LITERACY.”

ISSUE

The demands on reformed exams were greater than before. Students are now expected to recall knowledge from lessons more comprehensively, in order to answer exam questions.

EXW

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

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

RESEARCH QUESTION:

How can we develop a literacy and knowledge organiser to aid students with extended exam writing?

CONCLUSION:

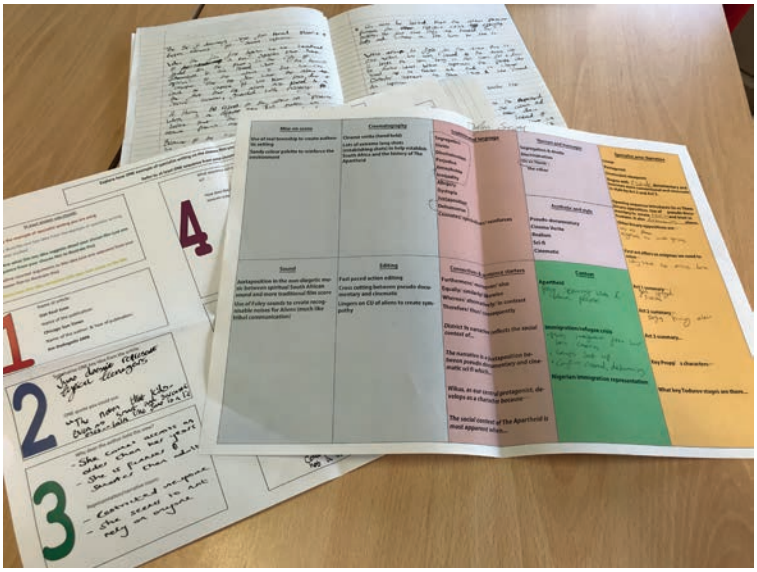
On balance, we have recognised that there is not one fixed solution for students struggling with exam writing. Spending time organising knowledge to consolidate their learning, is the first step before tackling essay structure.

LESSON 1 DESCRIPTION

For our first round of lesson study, we developed a knowledge mat that helped to recall subject knowledge and improve students' literacy; whilst clarifying an essay structure.

LESSON 1 CONCLUSION

Students found the mat too rigid and overwhelming. Moreover, as a department, we acknowledged this mat was only effective for one question of the new specification. So therefore, we would need to develop multiple organisers and this would become unwieldy for students.



FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - After reflecting on the first round of lesson study, we decided to separate our processes out. We adapted our mat so that is focussed on organising students' knowledge and made it a place for them to recall and summarise their topics. We then treated the essay planning and structure as separate issues and processes. We also reflected on the pressures of timed conditions for the students and decided to take away these constraints, until the students become more confident. We decided to spend more lesson time to organise the students' knowledge, on their organiser mats, before they begin to write their essays.

Impact on Pedagogy - By our final cycle of lesson study, our quiet and anxious case student's, have become more confident in their essay writing. Both students' have produced extended exam answers and have utilised their organising mat to make progress. In particular, their sophistication of language has developed.

Impact on Scheme of Learning - Looking to the future, we now have a knowledge organiser that we can use for future schemes of work. The organiser is more diverse and can be adapted for all questions within the reformed specification. Furthermore, we are also considering trialling the mat for year 12 students, to help improve the sophistication of their exam writing.

FURTHER RESEARCH:

The organiser needs to be reworked for different topics and different year groups. We also want to develop a generic paragraph structure that can be used for every question. We have considered developing an acronym for writing frames.

5 STEPS TO ANALYSIS SUCCESS

ISSUE

Students were struggling with extended writing, particularly finding enough depth in their analysis. We wanted to find a way to support them in their extended writing, in line with the new specification.

RESEARCH QUESTION:

How can students develop their analysis skills to include 5 chains of development?

EXW

MEMBERS:
Jennie Philbin,
Farai Mandizha,
Mohammed Jamil
(Business)

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

RESEARCH:

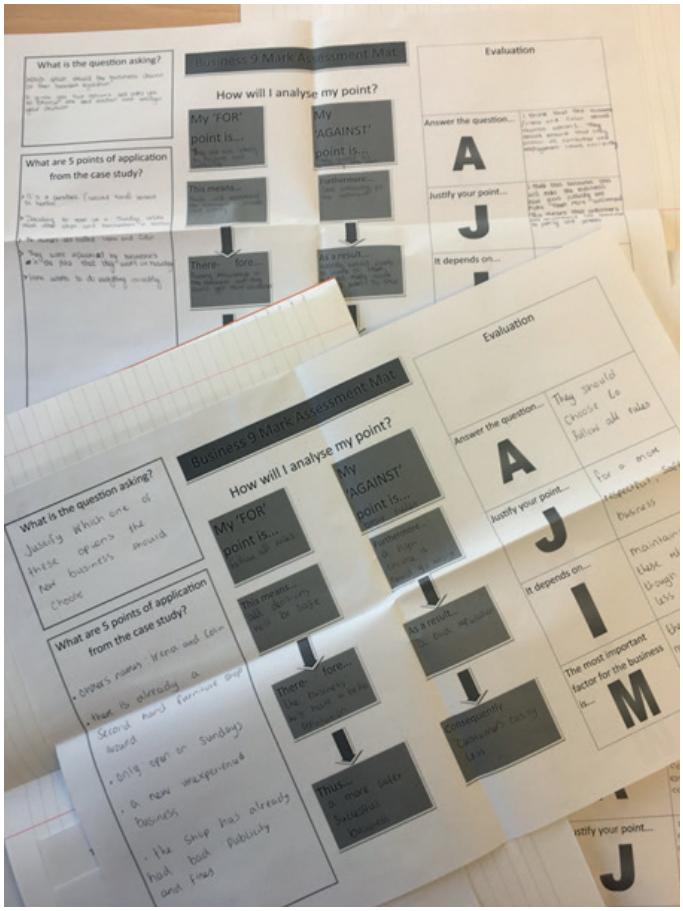
- Barton, P., Haynes, J. & Inns, M., (2017), Athecology: Lesson Study Journal, Affordable Print, 3, p58-59
- Graves, R. & Butler, I., (2017), Athecology: Lesson Study Journal, Affordable Print, 3, p54-55

CONCLUSION:

The mats allowed the students to structure their strands of analysis to reach the maximum amount of marks available, although students will still need to improve their answers related to application. We could do this by putting aspects of the mat together, like application and analysis, rather than in separate boxes.

LESSON 1 DESCRIPTION

In our first lesson we created an assessment mat that includes the structure needed to get into the top grade boundary with a nine mark question. This included 'stepping stones' with connectives to encourage students to develop their analysis. They had to plan their answer using this sheet, to make sure they included all elements needed in a nine mark answer.



LESSON 1 CONCLUSION

Our conclusions from the first DLS cycle was the assessment mats were not differentiated enough, the HA were completing with ease and they struggled to get their ideas or style of writing into the box, the PP and LA students struggled to get 5 chains of analysis. Next time we will differentiate the mat to make it double sided, to push the HA and support the weaker students with two separate points and five chains over those two points.

LESSON 2 DESCRIPTION

In our second lesson we found that our improved assessment mat allowed more creativity in the strands of analysis for our higher ability students, as it allowed them to create two points and consider the advantages and disadvantages of what the question has asked. However, we found that our LA students still struggled with the structure of how to answer longer mark answers, and they needed a lot of teacher support. Therefore our DLS for next year is going to focus on how to improve analysis and application for lower ability students.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - Students are more able to analyse their points to include 5 chains of analysis across two separate points. This has had an positive impact on their assessment marks, and their analytical skills.

Impact on Pedagogy - Teachers can scaffold learning by providing writing mats to structure their extended answers. This should allow students to ensure they are meeting criteria in the mark scheme, which will allow them to access the top grade boundary in the mark scheme.

Impact on Scheme of Learning - Assessment mats are used prior to an assessment lesson to aid the students to structure their answers. They are also used as an MRI tool to enable students to improve on their exam answers retrospectively. There is also an opportunity to use the mats as a peer/self-assessment tool, as students need to complete every aspect of the mat to ensure they reach the maximum marks available.

FURTHER RESEARCH:

How can evaluations be developed to include 'Answer, Justify, It depends on, Most important factor' (AJIM) structure? How can students include application to the case study that they are given in their analysis? How can we include synoptic learning across our specification so students can bring in different knowledge from different topics into their answers?

TACKLING THE 12 MARKER-UNDERSTANDING THE ASSESSMENT OBJECTIVES!

EXW

MEMBERS:
Clare Hood,
Charlotte Tabert
(Music)

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

ISSUE

Changes to the specification means that not only do students need to identify key words they hear, they now needed to evaluate WHY a composer uses these features.

RESEARCH QUESTION:

How can developing students' understanding of the assessment objectives support with their extended writing in the exam?

RESEARCH:

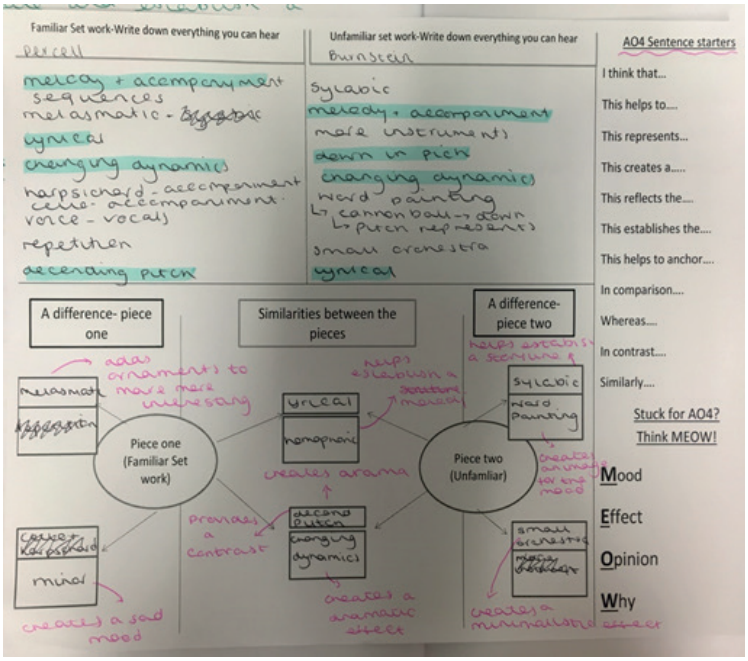
- Mock training course. Edexcel essay writing resources.

CONCLUSION:

In conclusion, we have found that our students have benefited from the structured planning mat, which encourages students to focus on AO3 and AO4 separately before writing up their essay. Our students struggled with making the AO3 points, which they must have in order to access the AO4 points. As a result of this, we have changed the way that we teach the set works to introduce and develop their aural analysis skills much earlier on.

LESSON 1 DESCRIPTION

During this lesson we focused on ensuring students understood the difference between Assessment Objective 3 (AO3) and Assessment Objective (AO4). AO3 is key terms and AO4 is the evaluation of the key term (this is a new skill). Students then planned an essay to practise these skills.



LESSON 1 CONCLUSION

Students grasped AO3 and AO4 fairly well, but did find AO4 hard. We need to reframe the planning mat to include questions to encourage development of AO4.

LESSON 2 DESCRIPTION

During this lesson, students tackled the essay question, using different set pieces. Some time was spent on model examples of A04 points to ensure that students were able to gain a deepened understanding of this. Students are confident in the differences between A03 and A04. They have a good ability to write a variety of different A04 points and found the planning mat helpful.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - As a result of the DLS, students are able to identify the differences between the skills needed for AO3 and AO4. There has been a significant improvement in their ability to evaluate (A04) the impact of the musical devices (A03) that they aurally identify. This has seen an improvement in the 12 mark essay question for section B of the exam.

Impact on Pedagogy - Due to the DLS, we have spent a lot of time focusing on the 12 mark essay question and have developed a variety of resources which support in improving the students skills needed for both AO3 and AO4. We are able to use targeted questioning throughout lessons with a focus on AO3 and AO4 to ensure students make greater links.

Impact on Scheme of Learning - The DLS has highlighted that we need to develop both aural analysis and critical judgement skills much earlier on in our teaching. As a result, we have started to embed this practice into our schemes of learning; we are focusing more on developing the student's aural analysis skills (A03) and have created tasks in the SoL which encourage students to make regular evaluative and critical judgements (A04) during the learning of the facts, as opposed to leaving it to the end. We have found, particularly with Year 10, that this has helped to develop their confidence when making evaluative comments about musical elements.

FURTHER RESEARCH:

We now need to focus on techniques to improve student's aural skills to support their unseen aural analysis. What do we do if students can't remember the key terms?

“MISS, CAN’T WE JUST SKIP THIS QUESTION?”

ISSUE

Many students find it a challenge to know where and how to start when solving multi-step problems.

EXF

MEMBERS:
Georgina Beard, Alan Stupple, Peter Fernandes, Charles Abban
(Maths)

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

RESEARCH QUESTION:

To what extent can using examiners reports help students improve progress, whilst working with practice exam questions?

RESEARCH:

- Threlfall, J., (2007), Can Maths in a test be functional?, University of Leeds, UK
- Jones, I., Swan, M. and Pollitt, A., (2014), Assessing mathematical problem solving using comparative judgement. International Journal of Science and Mathematics Education, 13 (1), pp. 151-177
- ACT (2006), Ready for College and Ready for Work: Same or Different? Iowa: American College Tests, Iowa, US.
- Toner, P. (2011), Workforce Skills and Innovation (OECD Education Working Papers). Paris: Organisation for Economic Co-operation and Development.
- Treilibs, V. (1979), Formulation Processes in Mathematical Modelling. Unpublished MPhil, University of Nottingham, Nottingham.
- https://www.ted.com/talks/dan_meyer_math_curriculum_makeover

CONCLUSION:

The use of examiners comments as hints, aided students to start the multi-step problem with a clear purpose in mind. Many students that used the hints were able to work independently and answer all or part of the question without any further teacher support. One big conclusion is surrounding the terminology we use as teachers. Students are aware of mark schemes (and to a lesser extent) exam reports however during a conversation with our second group they use different terms for these in other subjects.

LESSON 1 DESCRIPTION

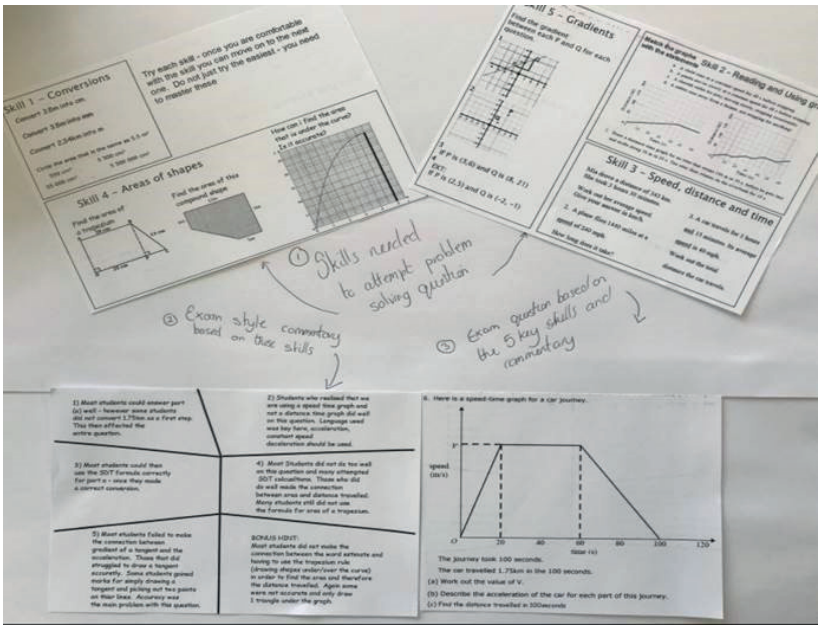
A scaffolded lesson to support students in answering a more complex question on speed/distance/time graphs.

LESSON 1 CONCLUSION

We need to reduce the number of questions on starter. More preparation on student questions and what we are looking to see.

LESSON 2 DESCRIPTION

Developing students' ability to answer multi-step exam questions by using examiners comments as hints for students.



FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - Although the findings are anecdotal, students felt more confident in starting the exam question because the hints/examiners comments were able to help them. Students that used the examiners comments felt successful in being able to solve the multi-step problem, or at least parts of it, without any further help from their teacher.

Impact on Pedagogy - We were able to find an effective way in helping students to become more independent of teacher's support when answering A02 and A03 questions in GCSE Maths. By using examiners comments we have helped us to support students to become confident and successful when answering problem solving questions. By using and adapting the comparative judgement technique and thinking in a broader sense about the ability for students to leave school with the skills needed to apply their mathematics in work based contexts (ACT (2006), Toner (2011)) we have found a method to enable collaborative and independence within students so that they are hopefuly equally successful in assessments that apply the learning to novel problem solving situations (Treilibs (1979)) as they are in the routine problems spoken about by Dan Mayor in his TED talk in 2014 (Meyer (2014)).

Impact on Scheme of Learning - While examiners comments and reports have been used by teachers in the department to inform their own practice, these have never been shared so openly with students before. In speaking to students after each of the lessons during this process, it was apparent that they would welcome using these in lessons. We will be trying to develop this with our Year 10 students when they have completed their mock exams at the end of the year – this will be tested in different classes and then shared across the department.

FURTHER RESEARCH:

How do we embed examiners reports into our teaching to help students draw on this crucial information to become more confident at attempting multi-step questions without further teacher support? What language do we need to help students develop to be able to make the most of examiners reports and comments? Can we use the comparative judgement process within higher order AO2 and AO3 questions in order to get students thinking about the skills required to solve questions in a functional/logical manner?

“SPOOF ASSESSMENT – DOES IT MAKE A DIFFERENCE?”

ISSUE

HA girls are underperforming in Maths due to disengagement and lack of understanding.

RESEARCH QUESTION:

To what extent can we increase engagement and understanding of HA girls by using spoof assessments - identifying topics and methods to focus on via the GCSE examiners report June 2017?

EXF

MEMBERS:
Arron Beckett,
Rebecca Nunan,
Charles Ash,
Michael Lockwood
(Maths)

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

RESEARCH:

- Anon, (2017), GCSE Mathematics: 8300/3H Report on Examination, AQA, Manchester, UK

CONCLUSION:

The students that we talked to had mixed opinions on the usefulness of the spoof assessments – some would have preferred the worksheet but the group that we were aiming this at – HA Girls liked the spoof assessments and knowing that they got questions right improved their confidence.

LESSON 1 DESCRIPTION

The students, prior to this, had a lesson on finding the n^{th} term of a quadratic sequence. In this lesson they were continuing to practise and improve their understanding via spoof assessments – which they did working in pairs. In the next lesson they had a test on this topic and we were able to compare the progress made/retention of the topic by the students who were in the lesson compared to those in the control group. Students found it useful to see the types of error that could be made. They also enjoyed working in pairs. They suggested that this would be a useful teaching method (for the first lesson on a topic) and not just useful as a revision aid. They liked that by reading through the spoof assessments it reminded them of the process they had been taught.

LESSON 1 CONCLUSION

We decided to continue with a control group into the next session. The results from the tests conducted showed that girls who were in the lesson improved more than any other group (boys in lesson, girls/boys in control group).

LESSON 2 DESCRIPTION

The class were split into 2 groups both of similar abilities and shared fairly by gender. One group worked through the spoof assessments and the other group worked through the same set of questions written as a worksheet. The students working on the spoof question did not all fully understand the concept and some worked through the questions like the control group and used the spoof assessments working as a check.

Test 1	Test 1	Test 2	Test 3	% improvement test 2 to 3	% improvement test 1 to 3
Boys average	1.00	1.86	2.43	31	143
Girls average	1.20	2.47	2.47	0	106

Spoof group	Test1	Test 2	Test 3	% improvement test 2 to 3	% improvement test 1 to 3
Boys average	1.00	1.78	2.33	31	133
Girls average	1.20	2.60	2.80	8	133

Non-Spoof group	Test 1	Test 2	Test 3	% improvement test 2 to 3	% improvement test 1 to 3
Boys average	1.00	2.00	2.80	40	180
Girls average	1.22	2.56	2.44	-4	100

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - On average girls who participated in spoof assessment improved their test scores compared to those that did not take part. Evidence for this is in the table above.

Impact on Pedagogy - Whilst on average girls benefitted from spoof assessments, boys benefitted more from doing lots of practise questions and therefore differentiation in lesson may need to be partly gender based and involve different types of task rather than just ability based.

Impact on Scheme of Learning - Activities and lesson plans should take into account the gender of students and use spoof assessment to help improve the outcomes for high ability girls. Due to demands of planning resources once they are trialled they should be shared.

IMPROVING STUDENT RESPONSE TO FEEDBACK WITH EXAMINER'S REPORTS

EXF

MEMBERS:
Christine Wall,
David Hall,
Karim Kurji
(Maths)

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

ISSUE

Some of the students studying A Level maths find the exam questions difficult to access making common mistakes and we wanted to use the Examiner's Reports to help them be more confident when answering their exam questions.

RESEARCH QUESTION:

To what extent can using Examiner's reports help students improve progress whilst working with practice exam questions?

RESEARCH:

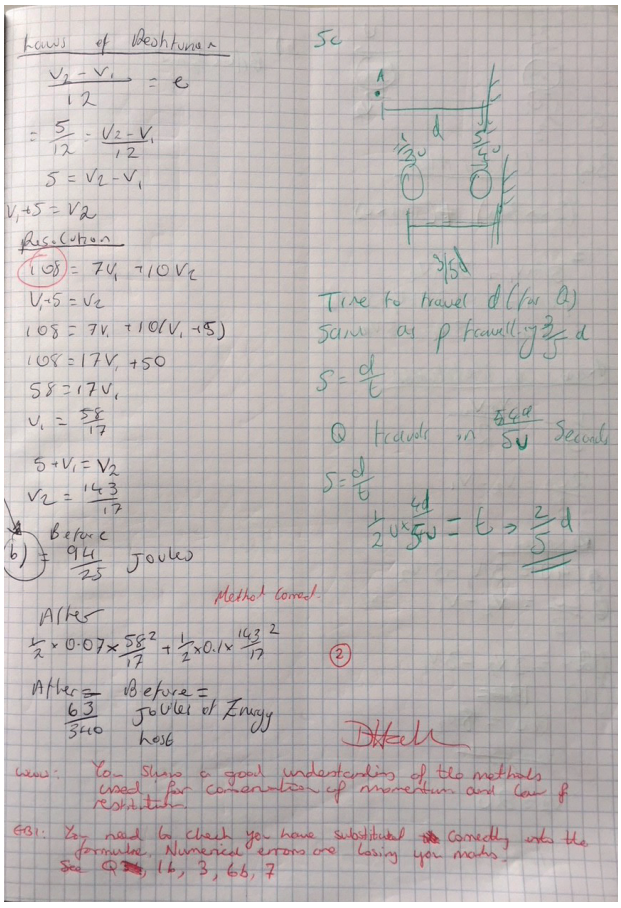
- Anon, (2017), Principal Moderators' Report, Pearson, London, UK

CONCLUSION:

Students found the combination of a similar question, the examiner's report, outlining potential misconceptions, and the mark scheme helpful in identifying where they had made mistakes previously and how to correct them. Progress was even greater with personalised feedback from the teacher and modelling solutions before they attempted to correct their work.

LESSON 1 DESCRIPTION

Students had completed a formal homework and the lesson was a feedback lesson where students would use teacher feedback, examiner's reports and mark schemes to develop their understanding on questions they had answered incorrectly. The students were given similar questions to the ones they had got wrong in their homework and completed them as their MRI. To help them they were given the mark scheme and also an examiner's report which gave hints as to the most common errors and most successful methods to use.



LESSON 1 CONCLUSION

Students found the specific feedback from the teacher more useful than the more general examiner's report. They did find the combination of a new question, examiner's report and mark scheme helpful in them making progress. There needed to be less questions as this proved to be a bit overwhelming for some students, particularly those who had most to correct.

LESSON 2 DESCRIPTION

Students were given their homework back and they read their feedback before a question that all students had answered incorrectly was demonstrated as an example to the class. Students were then given fewer questions to work on but in the same format from the first lesson and similar to the homework questions.

FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - Students were more successful in correcting homework through the use of similar questions which incorporated the mark scheme and the Examiner's report. They could see improvements in their work and understanding and therefore they were making progress.

Impact on Pedagogy - Personalised feedback, whether written or spoken, works better than more general feedback for the majority of students. The mark schemes were useful in checking and supporting the students in making progress because they have been able to think more deeply about the solutions for topics and learn about the potential misconceptions that are made. The structure of feedback lessons has helped develop this for students and given a greater sense of value and purpose in teacher's feedback on their work.

Impact on Scheme of Learning - The Lesson Study only looked at the mechanics section of the A-Level course so the scheme of learning is being developed to incorporate opportunities for feedback lessons on the pure topics as well.

FURTHER RESEARCH:

We need to investigate if this approach will work for the pure topics which are often smaller mark questions and the Examiner's reports are not as detailed.

“TO SPOOF OR NOT TO SPOOF THAT IS THE QUESTION?”

ISSUE

Examiners write reports every year on how well students have answered the exams. We wanted to know how to use them to help students identify and correct misconceptions and therefore make better progress.

RESEARCH QUESTION:

How can the examiner’s reports be used to boost the attainment of MA students?

EXF

MEMBERS:
Justin Togher,
Lyn Minker,
Tony Edwards,
Nick Martin
(Maths)

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

RESEARCH:

- Anon, (2017), GCSE Mathematics: 8300/3H Report on Examination, AQA, Manchester, UK
- Anon, (2017), Principal Moderators’ Report, Pearson, London, UK
- Tabert, C., Meadows, H. & Coates, A., (2017), Anthecology: Lesson Study Journal, Affordable Print, 3, p50-51

CONCLUSION:

As there are clear benefits to some, the spoof assessments could be used both in the build up to exams, for revision purposes, allowing students to see common misconceptions and so avoid these pitfalls as well as a follow up after tests have been completed but to be used in conjunction with complete practice questions to reinforce good practice.

LESSON 1 DESCRIPTION

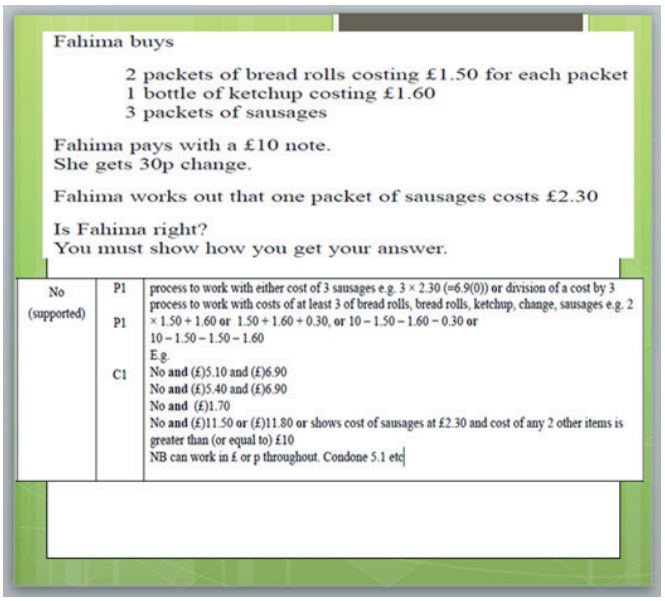
Spoof solutions were created which included the common errors and misconceptions identified in the examiners' reports. Students were asked to find out what was wrong and mark the solutions issued before solving the problems for themselves.

LESSON 1 CONCLUSION

Students would have liked to have tried out the question for themselves before looking at the solutions on offer. They would also have liked to know the marks that were awarded rather than awarding them as this would have guided them as to how much to look for. The students interviewed liked this activity and felt that it would help them to avoid these errors in the future.

LESSON 2 DESCRIPTION

Students try out exam questions before marking some spoof assessments created using comments from the examiner's report to see if they can find the common mistakes and so avoid making them themselves.



Fahima buys

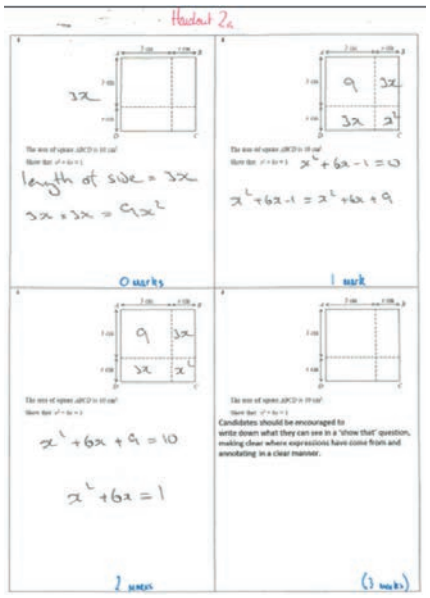
2 packets of bread rolls costing £1.50 for each packet
1 bottle of ketchup costing £1.60
3 packets of sausages

Fahima pays with a £10 note.
She gets 30p change.

Fahima works out that one packet of sausages costs £2.30

Is Fahima right?
You must show how you get your answer.

No (supported)	P1	process to work with either cost of 3 sausages e.g. 3 × 2.30 (=6.9(0)) or division of a cost by 3
	P1	process to work with costs of at least 3 of bread rolls, bread rolls, ketchup, change, sausages e.g. 2 × 1.50 + 1.60 or 1.50 + 1.60 + 0.30, or 10 − 1.50 − 1.60 − 0.30 or 10 − 1.50 − 1.50 − 1.60
	C1	E.g. No and (£)5.10 and (£)6.90 No and (£)5.40 and (£)6.90 No and (£)1.70 No and (£)11.50 or (£)11.80 or shows cost of sausages at £2.30 and cost of any 2 other items is greater than (or equal to) £10 NB can work in £ or p throughout. Condone 5.1 etc



FINDINGS, IMPACT AND EMBEDDING:

Impact on Student Progress - The progress made varied according to gender. The girls all engaged well and progressed by using the spoof assessments but for the boys progress was more erratic with some failing to see the merits of correcting mistakes made by others and so failing to engage.

Impact on Pedagogy - Spoof assessment activities help teachers encourage students to identify common misconceptions.

Impact on Scheme of Learning - As a result it would seem that in the future offering a choice of activities between simply answering questions as a means of practice and completing spoof assessments for identifying common errors identified in the report may be desirable. Create further spoof assessment for Year 11 to revise from.

FURTHER RESEARCH:

Would offering a choice of activities improve the progress of students?

GLOSSARY

A Level - Advanced Level qualification

AJIM - Answer, Justify, It depends on, Most important factor

Anthecology - The study of pollination

AO - Assessment Objective

AO1 - Assessment Objective 1

AO2- Assessment Objective 2

AO3- Assessment Objective 3

AO4- Assessment Objective 4

ATL - Attitude to Learning

AQA - Exam board

BEST - Bedfordshire Schools Trust

BFL - Behaviour for Learning

CPD - Continuing Professional Development

CPDL - Continuing Professional Development and Learning

DIL - Discuss, Interpret, Link

DLS - Department Lesson Study

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

EOTT - End of Topic Test

FFT(20) - Fischer Family Trust 20

GCSE - General Certificate of Secondary Education qualification

HA - Higher Attaining

HOD - Head of Department

IWB – Interactive Whiteboard

KS4 - Key Stage 4

KS5 - Key Stage 5

LA - Lower Attaining

LO – Learning Outcome

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

NEA – Non Examined Assessment

PEAL – Point, Explain, Affect, Link

PP - Student Premium

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

SC - Success Criteria

SEND - Special Educational Needs and Disabilities

SLT - Senior Leadership Team

SoL - Scheme of Learning

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

SWA - Samuel Whitbread Academy

SWOT - Strength, Weakness, Opportunities, Threats

Triad - A group of three teachers working collaboratively

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

INDEX

REFERENCES

BOOKS AND JOURNALS

ACT, (2006), Ready for College and Ready for Work: Same or Different? Iowa: American College Tests, Iowa, US

Anon, (2017), GCSE English Literature, AQA, Manchester, UK

Anon, (2017), GCSE Mathematics: 8300/3H Report on Examination , AQA, Manchester, UK

Anon, (2017) Principal Moderators' Report, Pearson, London, UK

Barton, P., Haynes, J. & Inns, M., (2017), Athecology: Lesson Study Journal, Affordable Print, 3, p58-59

Bergmann, J., (2017), Solving the Homework Problem by Flipping the Learning, ASCD

Billington, A., Lucas, E., Lund, T., Chapman, C., Trenchard, C. & Wilkinson, G., (2015), Anthecology: Lesson Study Journal, Halcoyn-Press, 1, p64-65

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

Bookhart, S. M., (2017), How to Give Effective Feedback To Your Students, ASCD

Bridge, K., (2017), Teaching and Learning Handbook, Samuel Whitbread Academy, Shefford, UK

Bridge, K., Little, S. & Oetgen, F., (2017), Anthecology: Lesson Study Journal, Affordable Print, 3, p14-15

Burgoyne, C., Blake, J., Redcliffe, J. & Williamson, A., (2017), Athecology: Lesson Study Journal, Affordable Print, 3, p30-31

Cordingley, P., Higgins, S., Greany, T., Buckler, N., Coles-Jordan, D., Crisp, B., Saunders, L. & Coe, R., (2015), Developing Great Teaching: Lessons from the international reviews into effective professional development. Teacher Development Trust.

Dewey, J., (1933), How We Think A Restatement of the Relation of Reflective Thinking to the Educative Process. Boston, MA D.C. Heath & Co Publishers

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

Fletcher, V., Hampstead, A. & Reydet, M., (2017), Athecology: Lesson Study Journal, Affordable Print, 3, p10-11

Goldman, J., Daniels, O. & Henwood, P., (2017), Anthecology: Lesson Study Journal, Affordable Print, 3, p28-29

Graves, R. & Butler, I., (2017), Athecology: Lesson Study Journal, Affordable Print, 3, p54-55

Gray, D.E. (2007), "Facilitating management learning: developing critical reflection through reflective tools", Management Learning, Vol. 38 No. 5, pp. 495-517

Guriam, M. & Stevens, K., (2010), 10 Essential Strategies for Teaching Boys Effectively, ASCD Express 6 (4)

Hattie, J., (2009), Visible Learning, Routledge, New York

Hetherington, D., Sinclair, S., Vallance, J. & Rolleston, A., (2017), Anthecology: Lesson Study Journal, Affordable Print, 3, p36-37

Hoad, S., McReynolds, S. & Gibbs, E., (2016), Anthecology: Lesson Study Journal, Affordable Print, 2, p34-35

Holland, G., (2006), Engaging boys through boy-friendly teaching and learning practices / strategies, Christchurch

Jones, I., Swan, M. & Pollitt, A., (2014), Assessing mathematical problem solving using comparative judgement. International Journal of Science and Mathematics Education, 13 (1), pp. 151-177

Martinez, P., (2001), Great Expectations: Setting Targets for Students, Learning and Skills Development Agency, London.

McHugh, A., (2016), Engaging Boys – A Practical Guide, Teaching and Learning guru

Nicol, D. J. & Macfarlane-Dick, D., (2007), Formative assessment and self-regulated learning: a model and seven principles of good feedback practice, Studies in Higher Education, 31(2)

Tabert, C., Meadows, H. & Coates, A., (2017), Anthecology: Lesson Study Journal, Affordable Print, 3, p50-51

Threlfall, J., (2007), Can Maths in a test be functional?, University of Leeds, UK

Toner, P. (2011), Workforce Skills and Innovation (OECD Education Working Papers). Paris: Organisation for Economic Co-operation and Development.

Treilibs, V., (1979), Formulation Processes in Mathematical Modelling. Unpublished MPhil, University of Nottingham, Nottingham.

WEBSITES

http:// www.curee.co.uk/resources/publications/national-framework-mentoring-and-coaching)

http://scriptopro.com/wp/2016/02/20/10-reasons-why-self-reflection-in-the-classroom-is-important/

http://www.telegraph. co.uk/education/ educationopinion/11739310/ Textbooks-have-a-huge-impact-on-education.html

https://tablets-textbooks. procon.org/

https://www.futurelearn. com/courses/assessment-for-learning-stem/0/ steps/7332; http://www. sec-ed.co.uk/best-practice/ teaching-practice-hinge-questions

https://www.ted.com/talks/dan_meyer_math_curriculum_makeover

https://markrobertsteach.wordpress.com/2017/07/03/rethinking-boys-engagement-my-talk-from-tllleeds17/

SAMUEL WHITBREAD ACADEMY

Shefford Road, Clifton,
Shefford, Bedfordshire, SG17 5QS
Tel: 01462 629900 **Fax:** 01462 629901
Email: swa-info@bestacademies.org.uk

CREDITS

AfforablePrint.co.uk for the Printing of the Anthecology