The Action Research Edition

Journal of the Hatton Teaching School Alliance

Message from the Editors

It is with great pleasure that we introduce the first edition of the *Journal of the Hatton Teaching School Alliance*. The aim of this publication is to act as a bridge between the Teaching School Alliance and the wider world of educational research. The journal will promote the hard work of the HTSA's excellent teachers and enable colleagues from all of the schools in the Alliance to learn from and collaborate with one another. Using the journal as a resource, teachers will be able to:

- Read about current educational research in a way that fits into their busy schedules
- Learn about how colleagues are undertaking action research and working with one another to develop practice
- Hear the advice of academics with whom we may not get the opportunity to meet
- Be updated with the latest news of our research involving other schools and countries

Each edition of the journal will be written based on a theme with the hope that as colleagues collect editions, they will be able to easily find information needed to inform their future teaching practice. The journal is also going to be linked with RPS projects and other CPD opportunities available within the Teaching School. Writing in the journal is open to all who would like to develop their own research, this is a chance to get recognition for your hard work and develop not just your own practice, but your readers' too!

In this edition, we have articles by members of teaching staff at Sir Christopher Hatton Academy. Tanzela Ali, Head of Science explores the way in which she can best use subject knowledge quizzes to improve the way in which her pupils learn and retain knowledge. Her practical guide helps us to understand how to make the most out of quizzes and demonstrates how something as simple as a score out of ten can have a big impact on how our pupils learn. Gabriella Berrill, a Newly Qualified Teacher (NQT) in the English department shares her Masters level research exploring the ways in which formative assessment can best be used in the classroom. Hatton's Senior Assistant Principal, Gavin Stanger, writes a reflective piece exploring the ways in which academic mentoring can be developed throughout the school. Finally, my first action research piece for the journal will explore how to promote a balance of support and challenge within my Year 12 Sociology classes.

If you are interested in writing a piece for the journal in future please contact me bishopc@hattonacademy.org.uk. We are always looking for writers to review books, share their research or write reflective pieces about their practice.

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Subject Knowledge Quizzes and how to make them effective by Tanzela Ali

Research Focus

Do regular knowledge quizzes in lessons help students make progress?

Up to 40% of the Science GCSE exam questions need pupils to recall key information as well as selecting and showing an understanding of knowledge. I want to find out the best way to allow students access to this 40% and gain all the knowledge they have to learn. *We teach students a vast amount of knowledge but how do we ensure that they can recall this knowledge?*

Methodology

I carried out this research with a Year 11 Additional Science group with targets ranging from A* to B. I chose this class as my research group because the focus with exam groups becomes about applying knowledge, but if they do not have this knowledge in the first place then they cannot apply it. I first tried 10 knowledge questions based on the previous lesson. Students then read out their scores for me to record in a spread sheet. I had not told students this, but those that achieved 80% or less stayed behind after the lesson for intervention. *The Education Endowment Foundation has found that a high level of success, at least 80%, should be required before students can move onto learn new knowledge.* I also tried knowledge quizzes at the end of the lesson testing students' knowledge of what had been learnt that lesson. Instead of new knowledge questions, I interspersed questions that I had used in previous quizzes with new questions. I kept the format of the knowledge quizzes the same every lesson but changed the time at which the quiz took place; as a starter, mid-point and end of the lesson. I aimed to find out the best time of the lesson to use a knowledge quiz and what am I trying to achieve with them; are students able to retain knowledge from one lesson to the other or have they learnt the knowledge in that lesson?

Findings

I found that a knowledge quiz at the start of the lesson worked the best as it tested students' knowledge from the previous lesson and worked well to focus the students to the learning that was taking place that lesson. I thoroughly enjoyed trying different ways in which to use knowledge quizzes and had not realised that the format and time of these in the lesson could have a massive impact on students' focus and remembering key information. Students – of varying abilities – were asked for their opinions about the knowledge quizzes. Students were more willing to share when they did not like some of the knowledge quiz trials than when they did! Students said that these quizzes increased their confidence in learning the vast amount of content that we give them every lesson. It allowed the knowledge to be broken down to key facts and helped them when applying their knowledge.

How this can impact the progress made by pupils in HTSA Schools

We work with students to help them apply their skills, knowledge and understanding to different contexts to help them answer the exam questions. If students do not have the knowledge in the first place that we have taught them then they cannot access this. We use a range of assessment for learning strategies in our lesson and these seem to be getting more intricate and complicated. These very simple questions testing students' knowledge, which took no time at all to plan, were a quick and easy way to assess students.

What can we learn from this research?

- Have 10 questions on the board at the start of the lesson to test students on the key knowledge from last lesson
- Go through the answers and keep a record of students' scores
- Keep those students who achieve less than 80% behind - this allowed early intervention and maintained clear focus during and in between lessons

How has this action research impacted your teaching practice?

This research has made me realise that something so quick and simple can have an effect on students' attitude to learning. In between lessons, more students were taking their class books home to review their work ready for the next lesson's knowledge quiz. It has allowed me to intervene with those not doing this on a regular basis and address any misconceptions they have quickly.

Having done this for a term, there would be a number of things I would do differently with my other classes. I would inform students of the success criteria straight away. The first time I kept those behind that achieved less than 80% was seen as a punishment or 'detention' which was not my aim. I am still trialing different ways in retesting those that I intervene with - do they do the same test again or a different one? When I tried the quiz at the end of the lesson, students found this repetitive as they had been learning about it all lesson and saw it as more of the same thing. Therefore, I would not recommend a knowledge quiz as an assessment for learning opportunity as a plenary. Students also found the quizzes where there were questions they have done before repetitive as either they had got them right the first time or had stayed behind to go through them again. However, I do think repetition is a good thing but perhaps leaving more of a gap when using questions again. I also trialled the quiz half way through the lesson which did not work as well and more students achieved less than 80% than had done previously. Students said that they found the change in task difficult as opposed to the content of the quiz being more challenging. This is an aspect that I shall be trialling further.

References:

Education Endowment Foundation – Teacher Toolkit, Mastery Learning
https://educationendowmentfoundation.org.uk/resources/teaching-learning-toolkit/mastery-learning

What are the most effective formative assessment strategies used to help develop pupil progress over time? By Gabriella Berrill

Gabriella Berrill is an NQT in the English Department at Sir Christopher Hatton Academy

Introduction:

Positively promoting the importance of formative assessment.

Within teaching and learning, assessment plays a fundamental role in everyday classroom life. Bethan Marshall (2011) argues how 'progression is a messy business', signifying how developing internalized skills to help students to progress can take a long time, and require a range activities (Marshall, 2011). Teachers need to assess pupil's work, as well as pupils assessing their own work, hence making formative assessment crucial. Tony Lawson states that 'Formative assessment is more diagnostic, should give more immediate feedback to a student and teacher, and should be acted upon by them' (Lawson: Dymoke, 2012). Making formative assessment diagnostic is what empowers students with proficient skills to aid their progression, without which they would have a decreased chance of improvement. Although formative assessment is a very broad term, in my own research, I have chosen to focus on formative feedback from self-assessment, peer-assessment, collaborative class practice and myself. This choice arose as in line with department policy, students are obliged to complete Directed Improvement and Reflection Time (DIRT) every four lessons on their pieces of Formally Marked Worked (FMW). Moreover, this is something I feel students have engaged and responded with in many different ways, hence my initial interest to investigate this topic.

Research Methodology:

Making the change.

The classes I focused on, were a Year 8 set two class. There are several students with Special Educational Needs (SEN) and who are pupils with English as an Additional Language (EAL) in the class. The students have to complete five pieces of FMW during the term, focusing on different skills from the KS3 mark scheme for each piece. I decided to use six pupils' work, from mixed genders, target level and ability. In order to keep them anonymous, they will be referred to as pupil 1-6, Pupil 1 being the highest attaining, and 6 being the lowest. I was primarily looking at their improvements from their pieces of FMW, focusing on essay writing skills for textual evidence to select and retrieve information using Point Evidence Analysis (PEA) paragraphs. I implemented various DIRT activities, such as peer-assessment checklists into a number of my lessons. Additionally, I have used tiered success criteria that matches sentence structures for Point, Evidence, Analysis (PEA) paragraphs to build students work, and link this to their target levels, to encourage independent development and improvement. Students gained feedback from myself after their first piece, and were given a chance to reflect on their work using a Writing Worry Island[1], somewhere the student could anonymously write their own anxieties on, without any 'peer fear' or pressure. This acted as a class feedback tool I could use after their first formal piece and build on specific areas of weakness in my future lesson plans. As part of DIRT students were required to look at

[1] writing worry island is literally a piece of garden foam/ florist foam, covered in paper and then decorated and I made flags out of stickers and cocktail sticks and the students write their feedback and place in in the island and it's good for feedback and starters/ plenaries. Addressing the worries off the class and taking them off the island.

'What A Good One Looks Like' exemplar paragraph (WAGOLL), and deconstruct this, using it for inspiration in their own work. I facilitated the DIRT tasks in generic numbers on the board, gained as an overview of similar problems with pupil's writing from marking their books. Furthermore, on another FMW, I did specific feedback for students in their books as individual tasks, in order to evaluate how effective these methods, alongside class and peer strategies are at evoking improvements in future work.

Commentary:

Transforming students into the directors of their own learning.

In order to evaluate the effectiveness of the formative assessment strategies, I reinforced the need, and created time for students to self-assess and gain peer feedback on their work using checklists and success criteria as scaffolding to aid this process. As a result of this, successful students responded and completed a directed DIRT task, allowing them to take ownership of their own learning, as well as the learning of others. This had a cultural, as well as academic impact in the classroom, as students became increasingly aware of the capabilities of others around them. My findings are therefore aligned with Dylan Wiliam, who states that formative assessment is a process that enlightens learners about the goals that they are pursing (Wiliam, 2014).

Furthermore, to make productive use of formative assessment it is argued by many academics that careful planning must be implicitly evident throughout, in order to allow students to progress (Black et al, 2003). This is something I strived to follow in my practice, ensuring I am organised, alongside creating a calm and open classroom environment. I informed students after their first piece of FMW they would have an independent DIRT task they must complete at the start of the next lesson, developing an area of weakness in their writing. Pupil 1, 2 and 5 were all required to focus on including language devices in their work more explicitly. I modelled some examples of what these would be for the students in my feedback. This can be exemplified with Pupil 1, a high attaining student, who developed their answer, diligently informed by the feedback using 'noun' as a language device. Pupil 2 similarly added this into their writing with a more complex device the 'simile'. The lower attaining pupil, Pupil 5, used the language device example of 'adjective', although the work was less accurate, her development from the comments is clearly evident. The student's work shows and suggests they have acknowledged feedback from myself, and have used this to inform their DIRT task. Subsequently, and according to Bloom (1984), this suggests that one to one intervention and instruction is more effective than generic comments, in order to allow students to extend and progress (Wiliam: Andrade et al, 2010, 21). However, I have learnt as a new teacher that I need to make my success criteria more explicit, as well as referring to it throughout the lesson.

Peer assessment has been a crucial aspect of my formative assessment in class and I have offered this in a variety of ways, after realising students needed more specific guidance on how to peer assess. Despite being accurate, the peer comments were vague and do not refer to the success criteria, including comments such as, 'good clear writing' and 'write a little faster' as a target. It is clear from this example that comments from peer assessment that are developed and use the criteria, are followed, and aid students' progression, compared to those that are vague and lack focus. Modelling is an aspect I have reflected on as a critical incident, the importance of modelling and scaffolding, leading to the removal of my own naivety as a new teacher, regarding the assumption students would automatically know how to do this type of feedback. On the other hand, it is important to consider that not all students benefit from peer assessment, Pupil 1 and 3 lacked comments with any depth referring to the success criteria, and a result of this, ignored the peer comments altogether. Pupil 6, a lower attaining and less confident student in the class, has however

created valuable peer comments, such as using 'metaphors and verbs', which linked to the success criteria given. This links to Vygotsky's school of thought and allowing students' time to improve work with other students who are higher attaining than themselves, as a method of helping them to progress (Marshall, 2011). Giving critical and constructive comments is something I recognise as necessary for peer assessment to be valid and embedded within the development task students are set.

Nonetheless, pupils all had the opportunity to share in collaborative class formative feedback, as a different method to encourage their participation using a Blob Bridge. Students were able to stick post it notes on the board in the plenary after their FMW on the 'blob' they felt most reflected their attitudes about writing PEA paragraphs, and then something they want to get better at or a question. This acted an asynchronous moment of contingency, as I was able to collate the feedback after the lesson, and categorise it to inform the following lesson (Wiliam: Andrade et al, 2010). I found this an invaluable method to aid the student's critical skills, and also support their peers in class, as it was a less teacher led activity because the students were in control of sharing their ideas. Pupils 1, 2, 4 and 6 (over half) produced higher quality work as a direct result of the peer and self-assessment carried out.

How can teachers across the HTSA learn from this study?

- Dedicate time to peer reflection and feedback, do not rush the process.
- Allow students to take ownership of their own learning, making formative activities less teacher directed and more student centred.
- Model good feedback. Take time to create checklists and meaningful peer and self-assessment structures, in time this will become and embedded culture.
- Collaborate. Encourage students to share their ideas in a secure environment, change the culture of your classroom, making feedback intrinsic and a positive medium of reflection and academic progression.
- Experiment! Share ideas and try new ways to promote feedback and response. Never allow feedback to become bland, get students involved and enthused in the process.

Conclusion:

Assessment is limiting.

This investigation has allowed me to draw the conclusion that formative assessment is somewhat restrictive, it only serves to support the individual teacher and class at the time. This supports Black and Wiliam's argument stating that formative assessment is all the

> '… activities undertaken by teachers, and by their students in assessing themselves, which provide information to be used as feedback to modify the teaching and learning activities' (Black and Wiliam, 1998: Marshall, 2011).

Summative assessment is significantly more prevalent in the curriculum than formative, and will remain the dominant, and central focus. However, a key finding from this investigation, is that pupils need to understand fully, and be given time to acknowledge their mistakes. Without this, students are unable to use formative feedback effectively, and it becomes somewhat worthless and irrelevant to helping their progression.

The main issue that has arisen from my investigation is that concerning the impact of the quality of feedback. Something I have acknowledged as a problem is the amount of feedback and tasks that are directed towards a student. Too little feedback presents not enough challenge, especially for high attaining students, and too much feedback requires significantly more time to be dedicated to improvement. During my teaching practice, I would be intrigued to investigate further into the impact additional improvement tasks would have, and whether allocating more time to these would have significant impact on future progress in my subject. Furthermore, as my investigation developed, it became apparent the importance of modelling and never assuming prior knowledge that students may

have, even if they are a high achieving class. I need to consider my consistency with allowing students to become exposed regularly to different types of formative assessment, as well as allowing them dedicated time, appropriate to their age and ability to do this. Without this, I acknowledge I would be creating a barrier for my student's ability to progress in becoming self-critical learners, therefore hindering their chances of success in peer and self-assessment strategies. Students need to be challenged and motivated to drive their own learning forward, in order to develop the necessary transferable skills required for further academic study. I recognise that this requires a great deal of guidance from myself as a professional, but will ultimately lead to them becoming more resilient, independent learners and writers.

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‘Academic Mentoring’ – the use of focused student progress conversations in a comprehensive secondary school by Gavin Stanger

Abstract
The evolution of a school mentoring programme is examined over four years and the priorities of a working party improvement model are compared to that arising from literature. The author reflects on the impact and success of both the mentoring model and the working party improvement model that led to its current design.

What is academic mentoring?

The process of ‘Academic Mentoring’ has been used by staff at my school since I joined some ten years ago. The process employed is for form tutors to meet with students to discuss academic progress and set individualised targets for the students to work towards over the coming term. The practice is certainly not universally adopted by schools; indeed, for many staff joining our school the process of organised universal mentoring for students is entirely unfamiliar. In some schools, mentoring is performed on a more selective level for target students, often in higher year groups only. In our school, meetings are held three times per year, with meetings held in form time, during extended form time ‘lifeskills’ or during lesson time. It is hoped that my reflections on our own mentoring system may be of value to colleagues in other schools, both from the standpoint of examining mentoring as a provision and as an example of a provision which has undergone continual evaluation and subsequent evolution.

The school makes a substantial investment in academic mentoring – as a school it timetables one hour less of teaching to all staff. This time is split between the school’s commitment to Continued Professional Development and academic mentoring. The school therefore invests approximately 80 hours per week, or 3.5 FTE teaching staff (approximately £100,000) to these areas.

Mentoring meetings have taken place individually between students and staff members or with staff meeting small groups of students. The meetings are given a framework using ‘mentoring logs’, booklets with pre-printed pages.

CPD has been delivered on a rather ad-hoc basis with training being provided to coincide with changes to the mentoring as school leaders have sought to improve provision. The booklets have very much been relied upon to provide staff with the necessary information to conduct mentoring meetings.

Defined Aims

In 2013 an exercise was carried out within the senior leadership team to define more carefully what the outcomes of academic mentoring were.

Figure 1 details the list which was developed and then agreed.

Improvements have been made to the academic mentoring model using a ‘working party’ model where staff volunteer freely of their time to improve this area of provision. From a school leadership standpoint, the intention is to give staff the opportunity to involve themselves in school improvement and achieve a good staff ‘buy in’ as a result. This is seen as important because of the complex mentoring role which staff play, as discussed later. The model was also important because by definition, those delivering the academic mentoring (i.e. form tutors) were not members of the Senior Leadership Team (who do not have forms). Thus, experience of delivering the provision could only be utilised by engaging with staff in a process of this kind.

During working party meetings staff were encouraged to reflect on their experiences as practitioners to inform the development of the provision. In each case, discussions gave rise to proposed improvements.

School Level

- Increase the outcomes for the school
- Add to the student's experience of school
- Improve student understanding of school
- Improve student motivation in school
- Improve student's understanding of HOW TO LEARN
- Improve student commitment to school

Staff Level

- Increase the performance of my classes
- Make my students more motivated
- Increase my student's understandings of their own weaknesses
- Help my students feel more secure about school

Pupil Level

- Help me achieve
- Help me feel happier about school
- Know where I am going with my schooling
- Help me understand my strengths and weaknesses
- Make me more motivated
- Gives me skills to help me learn

Working Party 1 (2013/2014)

To date there have been three working party processes. The first of which was in 2013/2014. This was a relatively small group (four staff in total), meeting twice during the year. The principle outcome of this working party was a redesign of the supporting booklets allowing for increased differentiation for each year group (academic mentoring booklets or logs were common to all year groups until this point). A questionnaire of all staff was conducted at this time to identify the key areas for improvement, the results of which are detailed below in Figure 2.

The lowest scoring rating 'I feel I have enough time to do Academic Mentoring' was strongly linked to members of staff within years 10 and 11 who felt pressured trying to squeeze meetings in around exam time. As a result, the number of meetings per year in year 11 was changed to two from three and the third meeting in year ten became optional, depending on the need of the students and exam load.
The two next lowest, 'I feel that students take the process seriously' and 'I feel that academic mentoring works well for the school in its current format' were seen as a mandate for change, with 'I feel the booklet supports academic mentoring well' as a below median response giving a direction to the suggested improvements. Specific changes to the booklets included more structured questions in lower year groups to allow students to reflect in a more supported way prior to the academic mentoring meeting. This support is then gradually removed over the five year groups.
The final below median score was 'I feel that students genuinely commit to the process'. This question was deliberately included in the questionnaire to discover whether an effect that was expected from a review of research was apparent.

A brief literature review of mentoring

At this time I had concerns about the quality of the mentoring relationships which existed as a part of the academic mentoring programme. Students in forms were mentored by their form tutor. The process was mandatory for all students to take part in; was already by this time 'part of the way that things were done' in the school and this meant that a significant power imbalance was present as a part of the mentoring process.
There are different models of learning developed by Pavlov, Piaget and Vygotsky and taken further by Watkins (2001, 2002, 2004 and 2005) and then adapted to mentoring by Carnell (2006) where learning is categorised as Instruction (essentially Behaviourist or learning by being taught), Construction (constructivist or individual sense making) and Co-construction (social constructivist or creating and sharing knowledge by doing things with others). This widely used model, appearing in similar forms in Maynard and Furlong (1993) suggests deeper understanding and more effective learning takes place as we move from being told (instruction) to working things out for ourselves (construction) to working things out with others (co-construction). It was suggested that the power imbalance, existing staff student relationships and staff understanding of the mentoring role may result in a somewhat dictatorial discussion where the mentor 'tells' the student what to do and the students role is to be 'told'. If this is the case then these discussions would be instruction rather than co-construction and less effective as a result.
Crasborn and Hennissen (2010) propose the MERID model (Figure 3) for examining the interactions between mentor and mentee. The model is the result of an extensive literature review incorporating some quality and relevancy tests arising from the examination of 26 sources from the period 1990 to 2006, specifically those relating to the interactions between student teachers and their mentors.

Although the work of Crasborn and Hennissen is purely descriptive, we can see parallels with the earlier work of Carnell and linking the two make proposals that the 'Imperator' and 'Advisor' is less likely to achieve co-constructive learning.
It has been suggested in working party meetings that the teacher can however impart knowledge in these

'Imperator' and 'Advisor' conversations – the notion of the 'expert mentor'. However, there is little to support this view in literature and research. Indeed, the coaching model espoused Egan (1998) suggests that it is almost desirable that the mentor-coach have little relevant experience or knowledge, in order to focus purely on asking thought provoking questions which encourage reflection in the mentee. This has strong connections to the 'encourager' approach in the MERID model.

A further important mentoring model which was influential at the time of the first working party was the model proposed by Pask and Joy (2007). This model is derived from Kolb's experiential learning cycle (Kolb 1984). Even though its background is in theory, there is very little empirical evidence presented by the authors, possibly due to the individual and varied nature of mentoring relationships and experiences. Despite this, the model appealed because a reflective cycle of learning is a familiar pedagogical tool and one which I value in my own classroom practice as being suited to the co-construction/encourager approach.

The Pask and Joy model raised a significant further question relating to the relationship between the staff member and the student and the school's approach to mentoring. (See figure 4) The key feature of this model is that of the mentee taking responsibility (shown in red on figure 4). Within this model, the red indicates 'stop'. Mentoring using this model does not continue until the mentee has taken responsibility for making the change arising out of the mentoring conversation. An exemplification of this is reasonably straightforward and will not be unfamiliar to teachers – a student agrees that their mock exams went poorly and that this could probably be attributed to lack of revision and exam practice. The student agrees to do this, fills in a booklet and both student and teacher leave the meeting rerlatively happy. However, as time goes on the student does not prepare for the exams any differently and ultimately fails. The reality of the situation is that the student has paid 'lip-service' to the teacher by agreeing to the targets. Students have no choice but to participate in the mentoring process, are essentially being 'told' by an unequal partner and given the short time frame these meetings happen over, will almost certainly not have the time to come to terms with their situation. It might be suggested that those students who would most benefit from mentoring, those that are behind in their targets and receiving 'bad' reports will be least likely to take responsibility and ultimately benefit.

Thus the question 'I feel that students genuinely commit to the process' was included in the first working party questionnaire. Although not directly analogous, Stead (2005), working with Directors of Finance within the NHS has also examined some of these tensions arising from mentoring with a power imbalance in the mentoring of leaders. In particular, comments made around power and influence, and trust resonate. "Issues of power and influence also raise concerns of overreliance, in that the mentee may feel obliged to comply with the mentor". Given this, the below median rating of 2.9 from the teaching staff questionnaire concerned me and although it was not addressed in the first working party, it gave me much cause for thought in the second working party.

CPD delivered in September 2014 provided staff with an insight into the findings of the working party, as well as a brief taught synopsis on the Pask and Joy model. The staff were informed of the changes to the structures in place, new booklets were distributed and the next year of mentoring commenced.

Working Party 2 (2014/2015)

Given my concerns, the focus for the second working party was the quality of the conversation that staff members were having with students.

The working party was very popular with staff, with eleven staff members being involved over the three meetings in the year. Initial discussions showed that staff were very diverse in their approaches to mentoring but could be crudely categorised into two groups; those whom believed strongly in an individualised approach and those who wanted further support and structures to increase the

efficiency of the process. Such was the disagreement of the two diametrically opposed factions that a decision was made that each staff member would investigate one aspect of mentoring with their form groups and feed back at the next meeting – these areas of investigation are listed in figure 5.
Of these areas, four (1, 2, 4 and 7) concerned themselves solely with the mentoring relationship. Three (6, 10 and 11) were purely administrative – producing crib sheets or lists of suggested targets. These would impact the mentoring meeting in terms of providing a support to teachers conducting the meetings. The remainder investigated the use of other students in mentoring, in, pairs, small groups or student to student mentoring.
At the second meeting the feedback from staff members and ensuing discussion resulted in a focussing on lines of enquiry. This resulted in four specific areas being reported on. The outcomes of the working party were on this occasion shared with the staff body as a whole using a briefing sheet, reproduced in figure 6. The original also had staff members names on for mentors to approach for more information.

Although none of the four address the core issue identified from research directly of student buy-in because of the mandatory nature of the involvement in mentoring and the allocation of mentor, the 'group mentoring' research area appeared to be very positive in allowing students to move towards a place where they were more comfortable in the mentoring relationship and might perhaps be more likely to co-construct learning and achieve the responsibility acceptance outlined in the Pask and Joy model. Key to using the idea of mentoring in groups were these observations:

- For some students, 1:1 mentoring was intimidating and group mentoring could overcome this
- That groups of 2 or 3 were effective but much larger than this resulted in students being 'silent partners' in the process or contributions being unrecorded.

The outcomes also mark a key policy change within the leadership of the mentoring programme. Rather than strive towards consistency of approach, the diverse methods and individual preferences of the mentors were embraced giving staff license to adapt the process to suit their own personality and the relationship that they had with the student within the bounds of the mentoring conversation.

Working Party 3 (2016-2017)
At time of writing the third working party is ongoing. The move towards more individualised mentoring continues, although discussions at leadership team meeting have resulted in a clear desire to offer the provision to all students. Although no working party was used in the academic year 2015/2016, ongoing discussions with staff did give rise to the suggestion that the school RAG rates (red, amber, green) all students. The intention is to give a deeper, more meaningful mentoring process to those who need it most and utilise those students who are less needful of mentoring in mentoring pairs or small groups.
The working party is small – only four members. The proposed areas for development are shown in figure 7 and the actions from the first working party meeting given in figure 8.

Themes from the previous working party are clearly evident. The 'important question' clearly links to the Pask and Joy model and the student's required acceptance of responsibility.

Reflections on the effectiveness of Academic Mentoring as a provision
The question of the value for money which academic mentoring offers has been raised many times in leadership team discussions and working parties. While the approximate cost to the school can be reasonably calculated, the impact of this provision has been extremely difficult to measure directly as it cannot be disentangled from other interventions and provisions within the school. Should an empirical study be designed with the intention of calculating an effect size, it is likely that the arising ethical issues would be unpalatable for

the school's leadership. Broad support for the programme from staff in the survey conducted as a part of the first working party is encouraging, however new data arising from the second staff questionnaire and crucially the student questionnaire in the most recent working party will shed much needed further light on this and provide the opportunity for triangulation of multiple data sources.

Reflections on the effectiveness of the Working Party improvement model

While there has been some development within working parties which appear to align with priorities arising from literature, much of the improvement work has been focussed on the support materials rather than the conversation itself. Much of this has been driven by the frustrations of staff members putting the mentoring programme into place. Their need to deliver the mentoring effectively but also efficiently given the school's demand on time within the school day has led to many staff members seeking to create prompt sheets or similar support materials which can be used to create a more efficient process. There is therefore a conflict of priorities, where much of the working party development has been directed at areas of improvement which may not have as much impact as focusing on the conversation itself and student 'buy-in' to the process. The 'important question' in the student questionnaire may well shed some important light on this.

In terms of allowing staff ownership of the process, the working party model has been successful in bringing change and at the same time increasing staff buy-in. Monitoring exercises have shown that there is significant variation in the way that staff deliver academic mentoring, but that a significant proportion of it is of good quality and the best quality mentoring, as judged from written records, appears to be from staff who have been involved in the working parties and staff who have served the school for the longest time.

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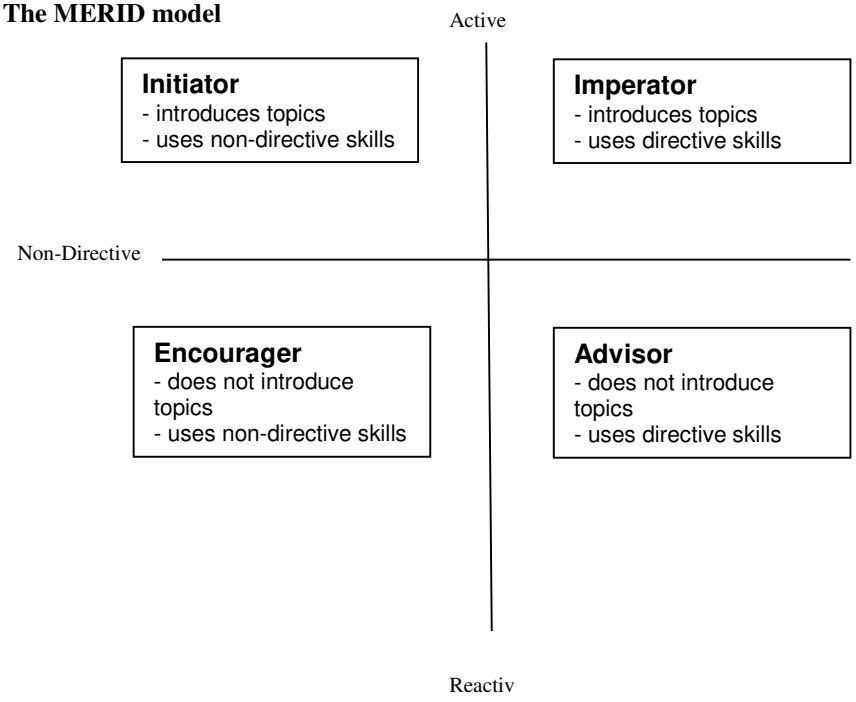
Figure 2: The results of the 2014 staff questionnaire

All scores are reported using a five point Linkert scale where 5=strongly agree and 1=strongly disagree.

I feel well I am able to do Academic Mentoring well	**3.5**
I feel the booklet supports Academic Mentoring well	**2.9**
I feel I have enough time to do Academic Mentoring	**2.4**
I feel that current school arrangements for Academic Mentoring enable me to do a good job	**2.8**
I feel the academic mentoring: - Helps pupils make more progress - Helps pupils be more motivated - Helps students to evaluate their own shortcomings - Helps students feel more emotionally secure about school	 **3.0** **3.2** **3.4** **3.3**
I feel that students genuinely commit to the process	**2.9**
I feel that students take the process seriously	**2.6**
I feel that academic mentoring works well for the school in its current format	**2.7**
I feel that academic mentoring as a general idea is worthwhile	**4.0**

Figure 3: The MERID model



From Crasborn and Hennissen (2010)

Figure 4: The Pask and Joy Model

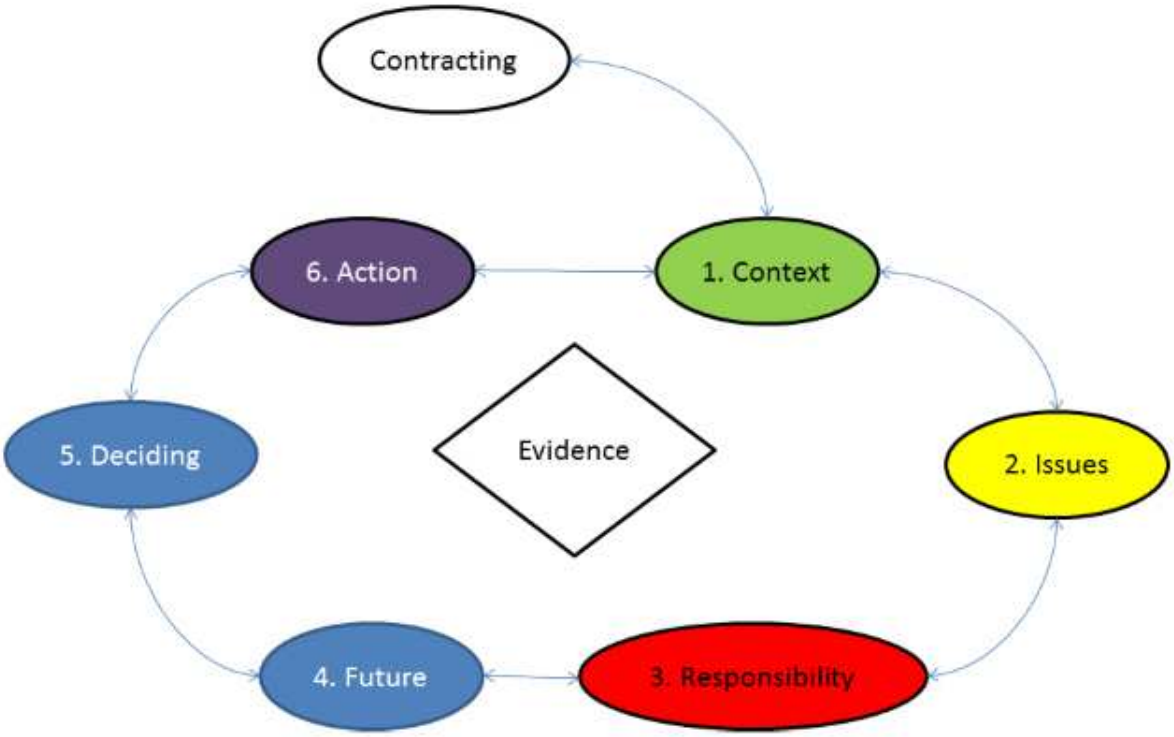


Figure 5: Areas of research in working party 2

1	Directors of year taking on mentoring of key students
2	Different methods for engaging less enthusiastic form members
3	Pairing students to look at homework and organisation as an exercise before mentoring
4	Methods to build relationships to improve mentoring
5	Trialling group mentoring
6	Target bank for year 8
7	Rewards systems linked to mentoring
8	Student pairing within mentoring meetings
9	Student-student mentoring
10	Formalised checklist of points to cover
11	Year 9 question bank

Figure 6: Working Party 2 outcomes briefing sheet

Here are some ideas from the academic working party this year which you may wish to use to further your own academic mentoring…

Pre-loading

The idea:	**Cut down on discussion time and deepen mentoring conversations by asking students to consider key questions before the interview. Staff trialling this have used question sheets, stickers in booklets and student led 'key goals' to discuss.**
Watch out for…	**Most students appear to benefit from this approach, but less able (and less well motivated) students found it more difficult**

Crib Sheets

The idea:	**Some interviews are more difficult than others and staff can sometimes find it difficult with certain types of learner. A crib sheet of points to cover in each meeting is an ideal solution for experienced staff in key interviews and as a support for less experienced colleagues. Some staff used crib sheets of targets too.**
Watch out for…	**All students benefited from this approach but some mentors found the approach restrictive. Danielle's crib sheet is attached.**

Group Mentoring

The idea:	**Students find it difficult to 'open up' in the unfamiliar 1:1 context. Careful selection of students to work together, either as friendship groups where the dynamic is positive, or pairing a more successful/less successful student in mentoring meetings has been shown to be hugely positive.**
Watch out for…	**Limit the group sizes – staff trying this found sizes larger than three made recording the conversations very difficult.**

Target Bank

The idea:	**Less able students find it difficult to pick a target. A bank of suitable targets makes this easier.**
Watch out for…	**Restrictive with more able, a mix and match approach is advised. An example is attached.**

Figure 7: Proposed areas for development, working party 3

- What is the impact of the changes in implementing the RAG system?
- How can the new RAG system be most effectively monitored
- What further training do staff require to make the most of academic mentoring?
- What are the next steps in the development of the system?

Figure 8: Actions arising from the first meeting

1. Staff1 and Staff2 will work together to survey students and staff. Need to ask a question about when they have been done (new an old). Sample from the four different levels and different years but randomly within those parameters. Important question: 'Have you ever changed something about your school life as a result of mentoring?'
2. Staff3 will return to DM's crib sheet from previous working party and look to develop a bank of targets for the targets for improvement.
3. SLT1 chase RAG list year seven

Fostering Independence in Sociology A Level to Improve Pupils' Understanding of Assessment Criteria by Claire Bishop

Purpose of the Study

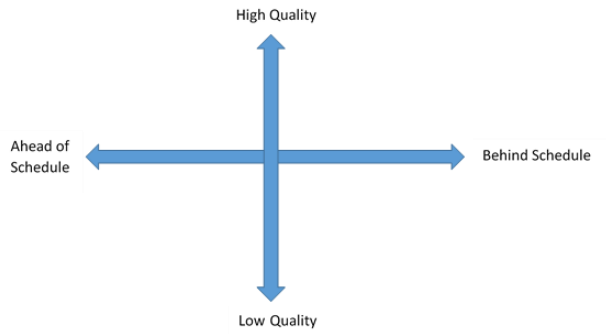
As the newly appointed Head of Sociology and Politics, I am currently getting to know my new students and develop department strategies to support pupil learning. From discussions I have had with teachers within the department and members of the Teaching and Learning Team, it became clear that there is an issue with pupils taking ownership of their learning and working independently to achieve in their A Levels. I decided, therefore, to research the ways in which I could challenge pupils to become more independent learners, whilst also ensuring that pupils feel a sense of support given that they had a new teacher starting just as they were taking their first mock exams of the year.

There is research to support the idea that a greater level of independence has an impact on pupils' ability to cope with the pressures of A Level and pride in their work. Some teachers may know the techniques used to foster independence as 'flipped learning'. Flipped learning is not a new concept to A Level teaching and one that I have used in my previous school to varying degrees of success (NFER, 2015). Rather than focusing on content in lessons, teachers assign reading for pupils to undertake at home and they apply that knowledge in lesson time. 'Tools for independent learning include: e-portfolios; peer mentoring schemes; study skills sessions (goal setting, time management, working to deadlines, self-appraisal, reading)…' (Mota and Scott, 2014). I looked into the importance of pupils asking questions in the lessons and found a useful article about the topic aimed at primary school age pupils (Stokhof, Vries, Martens and Bastiaens, 2016) that supported my idea that in order to access the higher order thinking skills that my pupils will need to reach top marks in their 30 mark questions, they would need to be able to *ask* questions as well as *answer* them. As I reviewed the data for Year 12, I wondered if instilling a sense of independence and ownership of learning could improve performance in Sociology, but how to do this in a classroom? If I created the right environment in the classroom, would pupils be able to question more and reach better grades? How quickly should changes be implemented? What is the right balance of support and challenge in a Sixth Form lesson?

Research Methods

The class I am working with is a group of 16 pupils in Year 12. Three of the class are boys, and the remainder of the group are girls. Their target grades range from a C to an A grade by the end of next academic year whilst their current grades range between D and B. 6 of the class have been identified as currently underachieving (Term 2 data), two have identified SEN needs and two have been identified as bring Gifted and Talented (G&T). Three are Pupil Premium pupils and one has English as an Additional Language (EAL). To determine how independently driven pupils are, I initially asked them to take part in a self-evaluation of their revision for their mock exams which took place in January. I intentionally asked pupils to determine their own success criteria which was then discussed and each aspect they identified as important was place on a graph on the board (see below). This is taken from Steve Oakes and Martin Griffin's (2016)

The A Level Mindset; 40 Activities for Transforming Student Commitment, Motivation and Productivity which is intended to reflect on their current progress.



I asked pupils to identify where they were in terms of their revision (before or ahead of schedule), but most importantly, to assess as a baseline what pupils' believed was high quality and low quality revision. It was during this discussion that the G&T pupils told me they mainly write out the text book as their main means of revision. Some would use flash cards or practice exam questions, but most read through PowerPoints provided by their teachers. I decided that although the resources they were using are very useful and full of key information, I do not think that the pupils are using these resources as effectively as they could.

I then triangulated my data with pupils' recent mock exam papers. Reviewing these papers identified that whilst pupils have a good level of subject knowledge, they are not applying to the question in an appropriate way to attain their target grades; some were not using their time in exams correctly (spending too long on shorter answers and not enough time of essay questions) whilst others were simply not evaluating the arguments they are discussing in their answers. This strengthened my belief that independent learning and the ability to question/critique needed to be embedded in all Sociology lessons.

As a result of this discussion in the lesson and an in-depth analysis of their mock exam papers, I structured my research question:

How can I best ensure a good balance of challenge and support to ensure that Year 12 Sociology students make better than expected progress by using a variety of independent learning techniques?

I have included my planning sheet at the end of this article to show the process through which I made my research plans. To support pupils, I am ensuring that pupils are praised in the lesson when sharing their ideas and let them know that it is OK to make mistakes. I also support pupils by using my own subject knowledge at the beginning of lessons. To challenge pupils I decided to use peer teaching in the lesson and the set a homework task where pupils use information in a journal article to answer my questions. My lesson planning was informed by Paul Ginnis' (2002) *The Teacher's Toolkit; Raise Classroom Achievement with Strategies for Every Learner* and Stephen Chapman, Steve Garnett and Alan Jervis' (2001) *Spoon feed No More; Improving Classroom Performance – Practical Applications for Effective Teaching and Learning* as these books have identified practical activities that can used in the classroom that take focus away from 'teacher talk' and towards pupils' exploration of the topic independently.

To collect my data, I asked pupils to identify ways in which they felt supported and challenged in the lessons. Their views were written on post-its at the end of each lesson. I then recorded by own views on the lesson in my teacher planner. I reviewed both sets of data at the end of each week.

Findings
Although I am still new and the class are adjusting to my teaching methods, I can see that I am going to have to work quite hard to foster independence in my Year 12s! Pupils have a 'just tell me what I need to know' attitude and have expressed a wish to return to PowerPoint led teaching in all lessons.

Peer Teaching – Failures in the Lesson
My use of peer teaching in the lesson was ambitious and unfortunately did not go as I had planned. The lesson before the set peer teaching activity, I put pupils into groups and gave them their area of the topic, giving them plenty of time to prepare their subject knowledge for the lesson. When they arrived the next week, it became clear that pupils had not prepared for the lesson as most had forgotten which group they were meant to be working with. Throughout the task, 'experts' taught the rest of the group about their area of the topic (ethnicity in education), whilst others made notes. Pupils were resistant to this task and so I spent much of my time having to remind pupils to focus and listen to their peers. Frustratingly, when reading through the feedback given by pupils, most said that they did not like learning from their peers who 'did not know what they were talking about'. I could not help but think that if the group took collective responsibility of their learning, this would not be the case. The group did say, however that they like that I do not ask for hands up or pick the same pupils over and over again. Pupils stated that they felt challenged in the lesson as they never knew who was going to get asked a question next or what it was going to be about, whilst at the same time feeling supported as I would guide them to an answer if necessary.

Homework using a Research Journal
This part of my research was much more successful. I gave pupils an interesting sociological study that is written in a peer reviewed journal and aimed at university students. This challenged them to read a piece of evidence of a higher academic standard than the textbooks they usually used. To support this, I provided them with questions, telling them to not just simply *read* the text, but *search* for the specific answers in the article. Pupils were much more open to this task and I had some very interesting answers to read in their homework. To open up pupils' minds away from just 'what we need to know', I asked them to read through the references at the end of the article and pick another piece they would be interested in reading. I hope that over time, this type of homework will spark an academic curiosity in the group.

Key Findings
Fostering independence is not a fast process and I do not believe there are any 'quick fixes' that will help us to instill independence in our sixth form. Although it was not the focus of my study, I have learnt the importance of questioning in the lesson and am now working on how to develop my skill in using Socratic questioning in the classroom to develop pupils' answers. There are pupils in the lesson who seem very open to the ideas put forward in this study, but there are many who are unhappy with the changes being made in their lessons. Interestingly, pupils cannot differentiate between something they 'like' in the lesson as opposed to something that helps them learn. I read many comments such as 'I like it when you read through a PowerPoint at the front and I can make notes.' In further discussions with pupils I will talk about how

perhaps they like that way of teaching because it is easy, not necessarily because it is effective.

What can be learnt from this research?

- Questioning is central to developing pupils' sense of support as well as challenge in the lesson
- Year 12 pupils do not differentiate between what they 'like' and what helps them learn
- Even at A Level, there are pupils who will not complete homework
- Copying work from a PowerPoint makes pupils feel 'safe' but does not provide them with the appropriate challenge to make expected progress
- Peer teaching cannot be rushed and instead I would suggest starting out with a very clear structure and teacher involvement, then slowly removing the 'stabilizers' as learners adapt

Conclusion

Although it was not an explicit goal of this research, I think that conducting this study has helped me get to know my pupils much quicker than I would have otherwise. I understand that my class feel nervous, particularly now that they have a new teacher and are unsure of the outcomes that they will have at the end of next year. By explaining my research to them, I made it very clear to my pupils that teaching them in the best way possible is something that is really important to me and although they may not be fully on board with my style of teaching, I think that they appreciate that I am developing my practice for their benefit. At the ends of lessons, pupils were actually reminding me to hand out the post-its and so although we had a bad lesson when I attempted peer teaching, I think pupils are now engaging with the concepts of challenge and support as a result of the study.

I plan to continue my study, implementing a series of further independent learning tasks to develop the challenge in Sociology lessons. However, I think I will work with pupils more gradually in future, given them time to get use to me and the new techniques we are using in lessons.

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How can I best ensure a good balance of challenge and support to ensure that Year 12 sociology students make better than expected progress by using a variety of independent learning techniques?

What I intend to research

WHO is going to be involved

HOW I am going to make a difference

18 January 2017
10:39

- An emotional feeling of support from their teacher
- Feeling that it is OK to make mistakes
- Having structure in the lesson/over a period of time to ease pressure to 'do well' and prepare for exams

- Using journal articles as reading for hwk
- Using questioning effectively to challenge learners
- Planning lessons with a variety of activities that encourage independent learning
- Independent research activities in lessons
- Applying AOs to work being completed in lessons

- Stretching pupils to learn more than usual in a lesson
- Ensuring that pupils are focusing on key concepts needed to succeed in sociology

Things I need to find out:

1) What are the MEGs of my class?
2) How challenged and supported do they feel in sociology compared to other lessons?
3) What research is there on supporting students under a lot of pressure?
4) What research is there about challenging pupils in the classroom?
5) What link is there between challenge and working independently?
6) What independent learning techniques do I think will challenge pupils?

Step 1:
Using the WHAT-WHO-HOW structure, I decide what my research question is going to be
Step 2:
I breakdown what my aims are and what I am intending to research in each area
Step 3:
I look at what my next steps are, what do I need to find out before I start my research project
Step 4:
Determine which research methods best help me find evidence for my study

I have decided that recording how pupils' feel about their experiences in lessons is the best way to determine if they feel supported and challenged. My aim is to collect qualitative data from the students by asking them to write their views about their lesson on two different coloured post-its, pink for challenge, yellow for support. I will then read their feedback at the end of each lesson to gauge whether I have the right balance. I will cross reference this with their CWG and classwork. If they develop a better understanding of key, difficult sociological concepts, I will know they are being challenged; if they are confident applying this to an exam style assessment well, I know they are feeling supported. I will use this information to inform my future planning, use as evidence for lesson observations and performance management and share results when sharing ideas with other teachers of Sociology

Interview with Andrew Townsend *University of Nottingham*

Dr. Andrew Townsend is an Associate Professor in Education Leadership within the School of Education at the University of Nottingham. Starting his career as a teacher and Head of Department, Andy now lecturers at the university and is coordinating editor of the journal *Educational Action Research*. He is also a member of both CARN (the Collaborative Action Research Network) and BELMAS (British Educational Leadership Management and Administration Society)[2]. In the past he has edited the SSAT's resource packs. His research interest span much of the issues affective educational leadership including action research in schools, leadership and change.

Tell me about your career so far…

My job at the moment is Associate Professor in Educational Leadership and Associate Head of School for the School of Education in the University of Nottingham. So my research interests, very broadly speaking, have been around how you change schools and people and how you achieve that change and development though participatory means. It does go inevitably broader than that as we work in quite competitive times and no one person works in one single interest, but that's the heart of it.

A lot of my research interests come from my work as a Head of Department and teacher in schools. I was able when I was I was in my second school to get involved in an action research network and the idea of the network was to establish a number of researchers in schools who could then develop their own work, their own practice, their own organization and identify a means for which to improve them. This was a programme called IQEA which at the time was organized by the University of Cambridge and from then, what I've done is built on that over the years, dealing with research as well as facilitating it and evaluating it.

So I'm going to ask you about how teachers within the Hatton Teaching School Alliance can engage with research. In your opinion, are teachers engage with educational research enough and what do you think are the major barriers to teachers using research in their day-to-day practice?

I think the generally answer would be, basically not enough, or not as much as I would like. As an action researcher I would like to see all teachers having research as a component of what they do and that certainly is not happening at the moment. But it is in some people's practice. Some people are very much engaged, others less so. I think it's a systemic problem. The way that teaching is thought of, is not really having a research component to it. That means that the way that people's practice and employment don't include research as a part of the system. That's why I mean by it being a systemic failure.

I think where it happens is dependent on whether people find themselves at the right place at the right time, like I did when I got involved in action research whilst teaching, as well as having the drive to do it. There are pockets of where it is happening, things like teach meets and ResearchEd conferences are helping to promote that. Although these do have a different flavor to what I have been involved in, sometimes they can miss some of the history of researchers trying to involve teachers also.

I'd like to see more involvement, more teacher learning communities, and more research in classrooms, more active

[2] Both of these organisations are open for teachers and school leaders to join

partnerships between schools and universities or independent researchers.
International links as well, there are some organizations are attempting to do this, but the challenge is that the way that teaching is 'set up' doesn't have research as a component to support that work.

Some people say that teaching and research can be problematic 'a little knowledge is a dangerous thing' – how can we overcome this as a profession?
Everyone who works in educational research has a limited understanding of research. No one has a complete and comprehensive understanding of research, it's impossible to have as its too big, too diverse and too varied. I sort of understand the point, but a part of me feels distinctly uncomfortable talking to a group of teachers and telling them not to do it unless you have a full understanding of research, because no one does! Everyone has their own specialism. What I think probably is needed is to foster an environment of skepticism and doubt, a reliance of systemic and sustained inquiry. Being critical of context and setting to overcome the problems of bias that are common in all forms of research. I think as a principle that helps and it stops people from latching on to their favourite little bit of information and promoting it at all costs.
These issues are true for all researchers, not just teacher researchers, but all kinds of researchers. It would be good to have teachers more heavily involved in training and part of research communities to give them a greater and wider understanding of methodology. I do understand why people may be concerned, but I don't think that's a reason to say, OK so we aren't going to do any research because we don't have a full understanding of it. *Where would we draw the line? Should people with a PhD do it? Well I know people who have a doctorate that have some fundamental and concerning misunderstandings about research in my view. The same is true for some senior professors, whilst there are teachers who have a much more sophisticated understanding of research than people with research qualifications.*

I think that systematic and sustained inquiry with skepticism, doubt and inquiry is important, but it's not easy as it requires people to live with uncertainty. Now education, as a system, does not want people to live with doubt or uncertainty, they try and legislate them as much as they can.

That's a really good way of putting it, 'being comfortable with uncertainty' or saying that we don't know the answer to something. In the current educational climate, you'd have to be very brave to say you're not sure yet.
Absolutely, or we're going to try this initiative and when we've completed it, we'll evaluate it to see if it has worked because the pressure is for everything to work. You might be asked why would you do it if might not work? Well, the point is, if there isn't the chance that it isn't going to work, then you're not really undertaking an inquiry, are you?

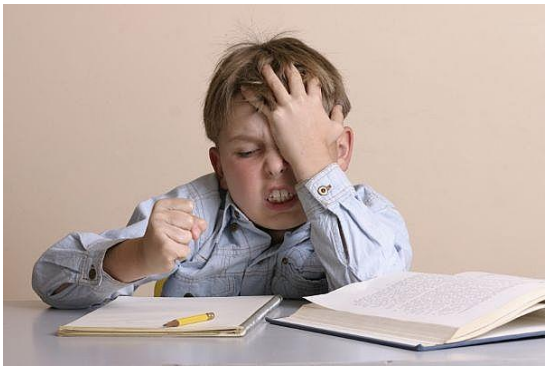
You have to positively welcome failure, because you may learn something from it.

I think it's a problem at the minute, education does try to mitigate and control against failure.

Sometimes teachers can be deterred from carrying out action research because they are unsure about using large amount of data, numbers, graphs etc. What other data/ research methods can teachers collect to help improve their practice?
I think that the first thing to say is that the reason why research makes use of tables, graphs and other kinds of data is because the researchers are people

undertaking research in a setting they don't understand. For people actually working in the same place that they want to research and understand, they are actually embedded in that and there are heaps of data, anything can be considered to be data, that can inform on the workplace or practice you want to understand. The question is, how do you think of data? You could say that everything that happens in a classroom could be considered data, it just depends on how you look at it. The difficult thing is collecting that information in such a way that enables to step back from it and cans see it 'with fresh eyes'. But you can do that, you can build this stuff into your daily practice, you don't have to say "right, what we need here is a separate form of data collection, the kind of things researchers would do if they came into schools." Instead, you look at how we can find out the kinds of information we need from what we do daily that would allow us to understand how we can deal with these issues and develop these practices.

The point is, there are already opportunities for people working in schools which aren't available to researchers, so we have to find out ways of getting that data or information.



I think sometimes people are put off with what is seen as 'proper research' and how to record data. I told a trainee teacher once to record how she felt at the end of a particular lesson over a period of time. She didn't seem to think it was 'real research', but if you do that for a while with a focus, you actually have quite a lot of data to work with.

I think that's a good point I mean, something like sustaining a series of observations and recording it, and that could be video recording or an audio journal, recorded somehow – it could be anything, will allow you to build up a set of data over time which is what Bridget Somekh referred to when she talked about the teacher *being the research instrument* as they are the person in there, doing all of this all the time anyway. It's about how you formalize that process and produce something that is useful to [teachers], in a way that helps people develop what they're doing.

So, journaling, when you are journaling, what you're doing is you're recording observations. If you record observations and reflections and you continue to do this over time, it gives you the chance to see how your own observations have changed, as well as the things you are observing. What is the difference between that and having an attitudinal scale of a questionnaire? If you do an attitudinal questionnaire, what you're doing is turning someone's attitude/ideas in to a number. If you are writing in a journal, you are recording the attitudes and perceptions then. It's the same kind of data. It's just that numbers seem to have a currency beyond comments or quotes. You could take a journal, and then analyses it quantitatively, you can still convert it into numbers doing the same job as an attitudinal scale. That would achieve the exact same thing, but it is done after the event, after the data is collected.

There is this problem, I think, in education, that if it's not a number, it's not meaningful.

Ideally you need to be thinking about what those numbers represent, that opens up lots of new opportunities about data.

How can schools such as Hatton ensure that the action research we carry out can hold up to academic scrutiny and make a difference to learning?

Those are two slightly different things, of course. To hold up to academic standards of research, you need to be engaged with academic communities

somehow. I don't think you can understand what those standards are or what the methodological standards that hold up to scrutiny are unless you're a part of that community. You can do this through membership of organizations that bring together researchers and teachers/ school leaders together. Places like ***CARN or BELMAS***[3], both of those organizations are located within the universities, as that's where the space is often available for that kind of administration, but they have members which are teachers, school leaders, consultants, researchers, writers, retired people who want to stay in touch. What it almost always entails is that you are able to demonstrate a rationalized systematic approach to your inquiry which allows you to collect data. To have a 'disinterested interest' is a nice way of thinking about it, although it's not my quote sadly! It's a study or a topic that you are interested in, but that you are distancing yourself from to avoid conflicts of interest or bias. It's also in-depth and rich and informative – and this something that people in school have that researchers have to fight tooth and nail for and that is that you are *in the setting*. So you are creating is an in-depth story that are informed by a systematic approach can really capture people's attention. There is an issue there with trying to be something that aren't. These sorts of studies are not a kind of data generations that will cover entire countries or thousands of schools in the way that researchers would. There is no reason why schools couldn't do that, but it's not what is at your fingertips. Demonstrate that you have looked at your situation systematically and you are explaining the richness and the context of what you're looking at, it can help to hold it up to scrutiny. What that leads to is a greater understanding of your work as a teacher, what it means for the children and other people within the school, then it can benefit them. And I would like to make one more point, which is to ***give children the chance to be researchers as well. That is very motivating for them, it changes the way they can relate to school, the way in which they feel about their school.*** This can have an impact on them; including their voices in research and involving them in the change process as well and that can be very beneficial to them.

Further Reading

- TOWNSEND, A., 2014. Collaborative Action Research. In: COGHLAN, D. and BRYDON-MILLER, M., eds., The Sage Encyclopaedia of Action Research 1. Sage. 116-119
- TOWNSEND, A, 2013. Action research: the challenges of understanding and changing practice Maidenhead : Open University Press.
- TOWNSEND, A., 2013. Rethinking Networks in Education: Case Studies of Organisational Development Networks in Neoliberal Contexts Interchange. 43(4), 343-362
- TOWNSEND, A, 2013. Action research: the challenges of understanding and changing practice Maidenhead: Open University Press.
- HOBSON, A. and TOWNSEND, A., 2010. Interviews as Research Method(s).. In: HARTAS, D, ed., Educational Research and Inquiry: Qualitative and Quantitative Approaches. Continuum.. 223-238
- DAY, C. and TOWNSEND, A., 2009. Practitioner action research: building and sustaining success through networked learning communities. In: NOFFKE, S. and SOMEKH, B., eds., The Sage handbook of educational action research Sage. 178-189

[3] If you would like to talk more about BELMAS and CARN, please email bishopc@hattonacademy.org.uk – I am a member of both and can show you the range of resources/events they have on offer

Book Review: Vicki Cook reviews *Enhancing Learning with Effective Practical Science 11-16* Edited by Ian Abrahams and Michael J. Reiss

What is the book about?
This book acts as a guide through biology, chemistry and physics practicals. It discusses the long-running debate over the effectiveness of science practicals in helping students to progress. It enforces that practicals can be valuable to learning, as long as the approach is "minds on" as well as "hands on". The book goes on to share over 70 practicals that can be used in the classroom. Each practical includes learning objectives, a procedure, health and safety and equipment needed. In addition to this, an effectiveness matrix provides teachers with information on what students will be able to do and what they will learn as well. The book also includes ideas for discussion and things to keep in mind when carrying out the practicals. This is particularly useful in encouraging students to develop their understanding of concepts further.

Who is the book aimed or and who might find it useful?
This book is aimed at secondary school science teachers and I believe many science departments would benefit from having access to it. As well as this, science technicians and teaching assistants may find it beneficial to read about the reasons behind some practical work.

How did the book inform your practice?
When planning practical-based lessons I will take a different approach in the future. This book has highlighted to me that it is important to think about the reasons for practical work, and share these with my pupils, so that it is beneficial to their learning. Practicals can be extremely useful as long as there is thinking behind the doing!

Is there anything the book is missing?
Outside of the 3 conventional sciences, this book includes limited information on other branches of science, such as psychology and earth science. Whilst the majority of the national curriculum focuses on biology, chemistry and physics, ideas about other branches of science are introduced. Ideas for practicals within these areas may be beneficial in order to widen student's perceptions of science.

In addition to this, the book focuses on experiments that students can undertake. It may be useful to have similar information for teacher-led demonstrations, as often the meaning behind these can be lost when carrying them out.

Would you recommend this book to your department or colleagues in the teaching school?
I would highly recommend this book as not only is it a valuable source of practicals, it also provides detailed information on how best to carry out these practicals and discussions around them, in order to make them as effective as possible.

Should we go and buy this book?
Yes!

Current Research Projects Update

Gender Bias in Education with the Institute of Physics

SCHA is one of the first wave of eight Institute of Physics (IOP) lead schools. Our role is to support physics teaching in the area and also to increase the uptake of students (with a particular focus on girls) that go on to study physics post-16. We are therefore taking part in the IOP's Whole School Equality Project where we will work to use more inclusive teaching techniques and improve the experiences of both girls and boys in the physics classroom. This project works across the whole school to address gender inequities as well as with groups of girls to help develop their science identity and confidence. The project is based on research performed by the IOP over a number of years, starting with the 2012 report "It's different for girls" which revealed that the type of school that a girl goes to has a vast impact on her chances of studying physics post 16[4] . The 2013 report "Closing doors" showed that schools that have a gender imbalance in one subject, tend to have imbalances cross the board[5]. The 2015 "Opening doors" report offered guidance to schools on breaking down the barriers to gender equality in schools[6]. We will be using the findings of these reports to address gender imbalances across the school.

RPS Sessions

Reflective Practice CPD Programme-

At Sir Christopher Hatton we value all staff and acknowledge the important role they play in raising standards across the academy. It is important that all staff experienced and those that are new to the profession have the opportunity to develop and embed outstanding practice both within their teams and across the academy. The Reflective Practice CPD programme has been developed to allow staff to research, experiment and observe best practice, which will inform pedagogy and improve the outcomes of students at Sir Christopher Hatton. The programme is designed to engage staff in the most recent educational research. Staff experiment with teaching and learning ideas during 'open door weeks' where they observe colleagues across the academy and reflect in teams on what has been seen to inform their own pedagogy.

The first session of the academic year focused on **'The High Expectations Classroom.'**

Key Learning Points

- 88% of children placed in sets or streams at age 4 remain in the same groupings until they leave school
- Very early on students have already worked out their place in the ranking
- Students can often see mistakes as a sign of failure

Achievement is more likely to be increased when students:

- invoke learning rather than performance strategies
- accept rather than discount feedback
- benchmark to difficult rather than easy goals
- compare themselves to subject criteria rather than to other students
- possess high rather than low efficacy to learning

Exciting changes to RPS going forward

Going forward the academy plans to further develop the RPS sessions as to allow staff to undertake their own small scale research projects to further improve the quality of teaching and learning at the academy and improve the outcomes of learners.

[4] http://www.iop.org/education/teacher/support/girls_physics/file_58196.pdf

[5] http://www.iop.org/publications/iop/2013/file_62083.pdf

[6] http://www.iop.org/publications/iop/2015/file_66429.pdf

Teaching School Update

It has been a busy term for the Teaching School as we have been delivering a range of CPD in partnership with other Teaching Schools in the county, as well as our own network and CPD. We are also hosting the launch of the Teach Northamptonshire website. This website is funded by the County Council and hopes to address some of the issues surrounding teacher recruitment. Initial Teacher Training recruitment is a central aspect of the work of Teaching Schools and we are working hard to recruit the best trainees to the county, not only for their training year but beyond. We have also designated a further three Specialist Leaders of Education this year to add to our current team.

We are delighted to welcome Claire Bishop to the Teaching School team. Claire will be leading on Research and Development both within the Academy and across the Alliance. With established academic experience in the area of Educational Research, Claire brings a wealth of skills and we are looking forward to developing this aspect of the Teaching School's work. In some cases, the most forgotten aspect of the Teaching School "Big Six", we regard Research and Development as a crucial area that underpins and supports other elements of the work that Teaching Schools undertake. Without quality, evidenced-based research - how can schools really be expected to improve and sustain improvement in outcomes for their students? How can CPD be truly meaningful unless it is underpinned by effective research into what really works? How can School to School Support and Leadership development have the impact we desire? How can Initial Teacher Training create the self-sustaining Leaders of tomorrow?

Research and development is having a resurgence - but in the days of social media we are often bombarded with the "latest thing". We want to make sure that all staff across the Alliance have the opportunity to engage with effective and accurate evidence-based education research - in order to make sure that we are all providing the best opportunities not only for the staff but also for the young people of Northamptonshire.

Kyra Research School Launch – Summary by Wendy Ingram

We recently attended the launch of the Kyra Research School. They have been funded to provide support, guidance and advice to encourage research to take place in all settings, leading to a measurable impact for children and young people's learning.

In addition to improving outcomes, evidence shows that teacher wellbeing improves when they feel that they have a sense of control, and one way of doing this is by taking part in research. Research starts with an inquiry question that is based on a genuine demand. The question is made up of three distinct elements – intervention – impact – cohort based on the following template "How does ***intervention x*** impact the ***learning need*** of ***specific pupils*** ."

Schools who have used research to influence their practice were also keen to point out that not all of the inquiries will work, but that's OK, school staff can learn as much from the inquiries that fail as much as the ones which work. It is good to foster a 'fail and learn' culture.

The conference gave us the opportunity to listen to real teachers, in a variety of schools who have used research to influence their practice. They were keen to point out that research doesn't mean having to read endless amounts of literature. By using the inquiry question teachers can translate their gut feeling about what could work in a classroom into research-based evidence. The quality of what teachers do in the classroom is what makes the difference to outcomes and research gives teachers the necessary tools to make a difference.