Teacher Research Bulletin

November 2017

CamStar Conference 2017

The 2017 CamStar Conference took place in Cambridge in October, featuring presentations by Teacher Researchers from across the CamStar (Cambridge, School Teachers and Research) network, including by two delegates from Woodford—Saphina Siddiq and Mary Heath—who share their experiences below.

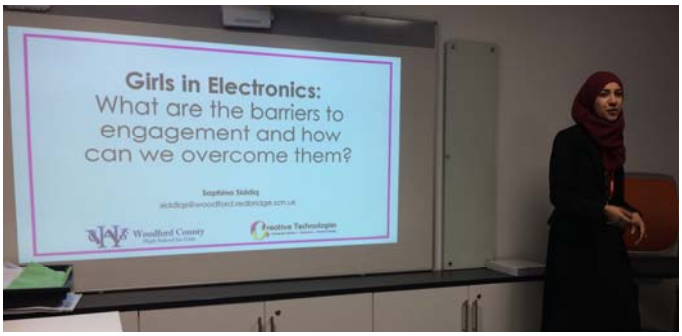
Presenting on Multilingual Reading

—Mary Heath, Teacher of Modern Foreign Languages

The annual teachers' CamStar conference brings together teachers from CamStar schools and serves as an opportunity for teachers to share their research with other teachers. As part of the conference this year, I was presenting some research I carried out at Woodford on a multilingual reading project. As part of my research, I investigated the value of implementing a year 9 multilingual reading project, where pupils were encouraged to read in any language they knew on a regular basis. During the project, pupils kept a record of their reading through a logbook and this enabled me to analyse the languages the pupils read in and the ways in which they responded to the texts. I also used questionnaires before and after the project to evaluate the value of the project. Some of the most interesting findings of the project were based on "cultural learning"; the way in which the project acted as an impetus for students to read in other languages, some reading in their 1st language for the first time. As part of the presentation at the CamStar conference, there was a discussion on multilingualism and ways in which this can be promoted throughout the school.

I attended a session on the role of student voice and was interested to hear research from one school looking at the way in which student voice can support teaching and learning. In particular, the project investigated student opinions on homework and also teacher opinions. It transpired in this particular project that the teacher perceptions of student perceptions did not match, which raises wider implications about having open discussions between teachers and students. It was recognised, however, that this particular exercise cannot be carried out too regularly, but did prove to have a useful place.

The CamStar conference was an enjoyable occasion to showcase research taking place in schools across the country and I would recommend it to anyone who is interested in sharing their research more widely or in hearing of other research taking place.



Girls in Electronics

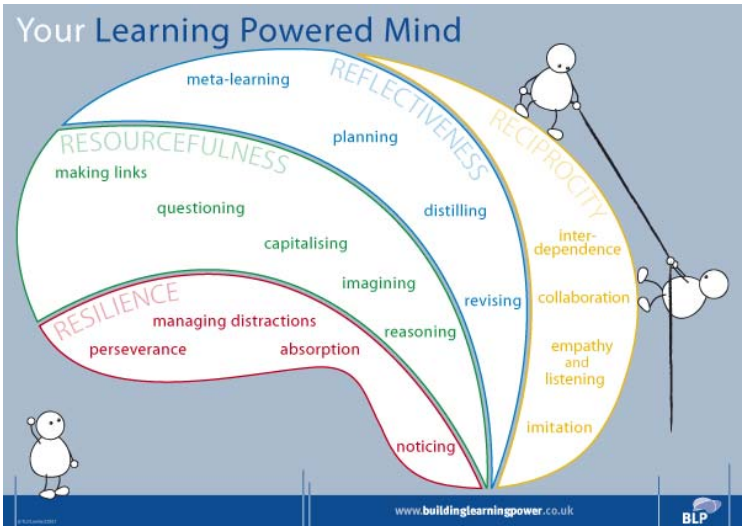
—Saphina Siddiq, Teacher of Computer Science and Electronics

As part of the annual CamStar conference, I was presenting my research project: "Girls in Electronics: What are the barriers to engagement and how can we overcome them?" KS3 Electronics is part of STEM, in which we endeavour to engage and retain interest in Electronics and Programming amongst pupils. Female pupil participation in this subject area in mixed settings is often significantly lower than that of their male counterparts. This project explored the reasons and causes behind the hesitation and reluctance of female pupils in participating in Electronics. At Woodford, students are motivated by different learning styles and are engaged by interactive resources as a way of learning. We are fortunate in that students are more likely to take up a male-dominated subject in a single-sex setting as they don't feel dominated. A better understanding of this has led to the development of effective strategies to enthuse and excite female pupils, in addition to developing and delivering a challenging and fully resourced Electronics curriculum. The CamStar conference was a great opportunity to meet other teachers who were able to share their views on this topic and what they have observed of female pupil participation in male-dominated subjects.

Whilst at the conference, we had the chance to attend other workshops—an excellent opportunity to share and exchange ideas of good practice.

Building Learning Power—where is it now?

Reflections from the CamStar conference—Katie Hasler, Teacher Research Co-ordinator



Those staff members who have been at Woodford for more than a few years will remember that, back in 2013, a task force was started with the aim of improving independent learning at Woodford through the **'Building Learning Power'** model.

While BLP has become less of a focus—at least in name—at Woodford in recent years, it remains a focus at other CamStar schools, including the independent international school, CATS Cambridge, where they aim to embed the tenets of BLP into their curriculum, with a specific focus on sharing the 'language of learning' with students in order to teach students how to be better learners.

In her recent research work, Rebecca Baker-Milne, Sociology teacher at CATS Cambridge, hypothesised that successful learners are characterised by wanting to have ownership of their knowledge—i.e. taking full responsibility for the depth of their understanding, rather than wanting 'immediate' answers. She questioned whether, therefore, the best learning must stem from a student's love for a subject, and to what extent we, as teachers, should also be teaching students to take ownership of the things that they don't enjoy. In order to succeed outside of the school environment, and in the workplace, suggested Baker-Milne, students need to have experienced failure, and to understand the idea of deferred gratification in their learning and understanding.

So, what could we be doing differently as teachers to instill this sense of ownership of their learning into our own students? One possible answer, as suggested by Baker-Milne, could be **Socratic questioning**—using questions such that, rather than giving away too much to students, we create building blocks to learning, leaving the rest up to the students. By carefully scaffolding their learning process in a way that allows them to make mistakes and to have to work hard to find the right answers, we can enable students to engage with topics –whether they love them or not—in a deeper way, and to take ownership of their own learning about them.

What is Building Learning Power?

- A framework developed by Guy Claxton in the 1980s-90s concerned with enabling a person to engage effectively with learning challenges
- Aiming to enable students to 'know what to do when they don't know what to do' (a phrase coined by Jean Piaget)
- Based around four key tenets:
  Resilience - including perseverance, absorption, concentration
  Resourcesfulness - including questioning, connecting, reasoning
  Reciprocity - including collaboration, listening and interdependence
  Reflection—including self-evaluating and meta-learning
- More information at www.buildinglearningpower.com

Socratic Questioning

'Disciplined questioning that can be used to pursue thought at a deep level'

Socratic questioning in the classroom could include…

- Getting students to clarify their thinking
  Why do you say that? Could you explain…?
- Challenging students' assumptions
  Is this always the case?
- Exploring alternative viewpoints
  What is the counter-argument to this?
- Identifying implications and consequences
  But if… happened, what else would result?
- Questioning the question
  Why do you think that I asked that question?
  Why was that question important?

More information available at:

http://www.criticalthinking.org/pages/the-role-of-socratic-questioning-in-thinking-teaching-amp-learning/522

Research groups in focus: Ideas from the Differentiation group

- The impact of group work at A Level in a range of subjects—is it more effective to assign students to groups randomly, by mixed ability or ability-based groups?
- Differentiated practical tasks in Year 9 Food and Nutrition—how could this help to develop students' practical skills so that they are sufficiently competent for the new GCSE specification in year 10?
- Flipped learning in GCSE Sciences and Computing—with the increased level of content in new GCSE specifications, how can flipped learning enable more time to be spent focusing on the skills with a higher level of challenge?
- Differentiation by skillset in English—how could identifying and using student 'mentors' in particular skills enable all students to improve their work in those skill sets?
- Differentiated vocab tests in Latin—what impact would these have on the self-esteem of lower ability students in Key Stage 3?
- Differentiated seating plans—what impact would a range of different types of seating plan have on engagement, focus, enjoyment and attainment?
- *Plus further ideas on the correlation between age and academic progress, a focus on SEN in the classroom and students' use of differentiated support materials in Biology...*

The artist emerges—developing a creative self-concept through reflection, criticism and making (in the EPQ: Artefact topic)

The beginnings of a research diary—Emma Liebeskind, Head of Psychology

Day one: October 2017

I have made a huge decision today to commit to the research project at school—requesting a transfer from the City Lit Print course to the Developing Fine Art Practice course. My foremost purpose here is to be able to work alongside my tutees, whilst facilitating the development of their unique set of artefacts, giving critical appraisal and guidance. Danielle Horn (our librarian) pointed out that this proposed project bears the hallmark of a phenomenological approach to research. I plan to be observing the way individual students approach the task of synthesising theoretical research with aesthetic propositions and practical gestures that fuse to form an artefact, and asking them to reflect on their experience of this process. Not only for the sake of clarification but also to find common ground. I intend to talk with my students about their practice to encourage them to vocalise their reflections as well as my own on the process of their work. Danielle mentions that I will need to adopt an ethical stance to work as a facilitator and a principled helper in this way, as the potential for the boundaries between teacher and tutee – teacher/learner and artist are in danger of becoming blurred. There are obvious parallels with a therapeutic working relationship, and I can draw on my previous training.

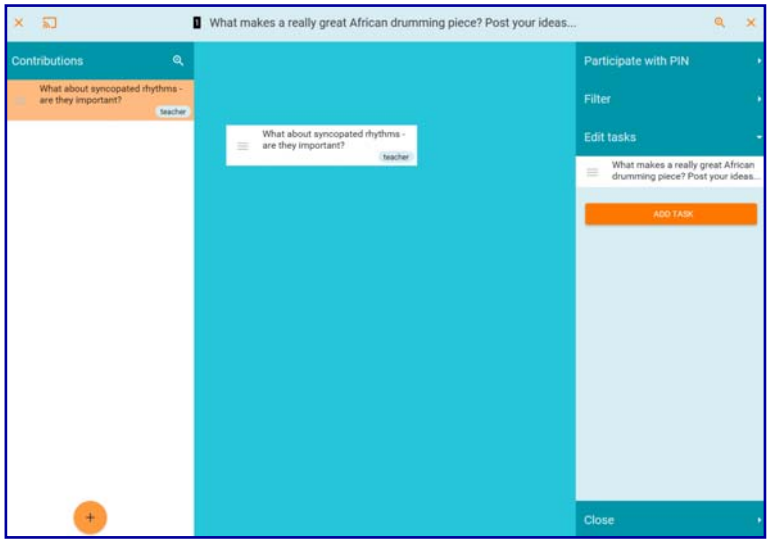
Reading: Boundary and Space – An Introduction to the Work of D.W. Winnicott (Davis & Wallbridge 1987)

The following week

It was a busy weekend, but I was able to take refuge in Winnicott's ideas and practice from time to time. Can one emulate his practice with young adults? I am referring to the 'Squiggle Game'. For Winnicott the Squiggle Game was a way of getting into contact with his young clients – a mutual drawing exchange on the same page, initiated to explore further perceptions, ideas and visual descriptions of the therapeutic process between the child and psychotherapist. Winnicott proposed that "to use the mutual experience one must have in one's bones a theory of the emotional development of the child and of the relationship of the child to the environmental factors". This insight can be applied to the extended project and the artefact students I am supervising. I propose to build a working relationship with them through discourse and writing (and squiggles??); to learn more about their creative development through observation and enquiry, and to discover the necessary environmental factors needed to enable them to make an artefact in school. Over the weekend, I watched some YouTube replications of the Squiggle game – one of Winnicott's pioneering methods which he used with young children in the therapeutic process – and had the immediate sense that this activity is not a spectator sport. The irony being that to film the process breaks the necessary bounded and confidential nature of the working relationship and renders in redundant. Recording the students' process will need to be approached carefully.

Reading: Playing and Reality (D.W. Winnicott, 1971) and Art, Creativity, Living (L. Caldwell, 2000)

National developments in Teacher Research



Talkwall—a tool to support dialogic teaching

Researchers from Cambridge University, Oslo University and Saffron Walden County High School (a CamStar school) have been working together to explore how Talkwall technology can enhance dialogic teaching and learning. Talkwall is a web-based platform that enables students to contribute (through use of PCs, iPads or their own devices) to a collaborative 'wall' of discussion which can be displayed on a large screen. So far, the research has found it to be an effective tool for ensuring all students engage with dialogic discussion in the classroom. Talkwall is free to use and can be found at www.talkwall.net.

From the National Foundation for Educational Research (NFER):

Increasing structured teacher observations makes no difference to GCSE English and Maths results

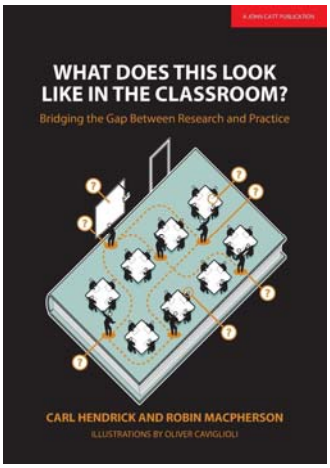
Introducing more frequent and structured lesson observations—where teachers observe their colleagues and give them feedback—made no different to pupils' GCSE Maths and English results, according to a report published by the Education Endowment Foundation (EEF) [on 10th November].

14,100 pupils in 82 English secondary schools took part in the randomised controlled trial of Teacher Observation. Maths and English teachers in the intervention schools were asked to take parti n at least 6 structured 20-minute peer observations over a two-year period (with a suggested number of between 12 and 24). Teachers rated each other on specific elements of a lesson, like how well they managed behaviour, engaged students in learning or used discussion techniques. A US study found that structured lesson observation led to gains in student and teacher performance. The EEF funded this evaluation to explore the impact of structured teacher observation in the English context. The independent evaluation by researchers at the NFER found that GCSE pupils whose teachers were eligible to take part made, on average, no more progress in combined English and Maths scores than a similar group of pupils whose teachers were not eligible to take part.

Sir Kevan Collins, Chief Executive of the EEF, said: "We know that quality of teaching is one of the biggest drivers of pupil attainment… but when it comes to developing teachers, it's the type of feedback and professional development that schools use that really matters."

From the Chartered College of Teaching website:

Book Review: What does this look like in the classroom? Bridging the gap between research and practice
by Carl Hendrick and Robin MacPherson—reviewed by Mark Enser of Heathfield Community College



This is an incredibly timely book. Interest from teachers in educational research has never been greater, but understanding how to apply it in the classroom can be a minefield. Organisations like the Chartered College of Teaching and ResearchEd are already going a long way to help teachers make that leap, but what we have needed for a long time is a book that clearly sets out what educational research suggests and what it means in practice for teachers. This is that book.

The structure of the book is excellent. Each chapter considers one aspect of teaching, such as feedback, misconceptions or motivation. This is introduced by the authors who put the issues in context and explain the debates surrounding it. They then hand over to two experts in the field who answer questions from teachers about applying their ideas in practice. This means you get questions on assessment answered by Dylan Wiliam and Daisy Christodoulou, behaviour by Jill Berry and Tom Bennett, and memory by Paul Kirschner and Yana Weinstein.

This all drawn together at the end to create a no-nonsense, streamlined approach to effective teaching.

This book will be coming to the school library's 'Teacher Research' section soon!