



Teacher Research Bulletin

July 2018

Looking back at a year of exceptional research...

Thoughts from Katie Hasler, outgoing Teacher Research Co-ordinator

In the midst of all the end-of-term madness and frantic count-downs to holidays, it's easy to start to forget just how much work the teachers of Woodford have done this year to contribute to our Joint Professional Development, and to making improvements to Teaching and Learning across the school.

The 'Celebrating Teacher Research' conference was a fantastic opportunity to share the many findings and conclusions that we've come to in our various research projects, and the resources from this event make up the bulk of this 'bumper' edition of the Teacher Research Bulletin—alongside thoughts about the evaluation of this year's project and looking forward to next year's Teaching and Learning plans.

Meanwhile, we look forward to the 'official' announcement of our awarding of the NFER (National Foundation for Educational Research) Research Mark, for which, at the time of writing, our final report is in the process of being written up and evaluated—but when we do receive this, it will be a fitting conclusion to a year of fruitful hard work—and a great 'jumping off' point for the next stage of research-based practice at Woodford.

As the outgoing Teacher Research Co-ordinator, I would like to take this opportunity to publicly thank all those who have been involved in the project this year, and particularly the 6 Research Group Leaders and Floating Mentor for all of their work to guide us all through the research process.



CamSTAR Conference 2018

Katie Estruch, Head of Science

On June 21st Tony Le (Physics Teacher) and I attended the 2018 CamSTAR Research Conference in Cambridge at the CATS International School. Not only was this an opportunity for us to share our research for the CamSTAR certificate, but also a chance to share good practice and innovative teaching and learning strategies with teachers from a range of subject areas and schools, which was the element we were most looking forward to.

The research session I opted to attend was 'Success in the linear curriculum age' by Sally-Ann Raymond, Teacher of English & Lead Practitioner: Teaching & Learning and Rose Conner, Teacher of Psychology & Lead Practitioner: Teaching & Learning, The Herts and Essex High School. The Herts and Essex High School have had a similar whole school research focus to ours over the last two years, and Sally-Ann and Rose were presenting their findings from a range of projects that linked to their group focus on making content more memorable.

They trialled a range of different activities across many subjects and year groups and collected data via questionnaires to see which activities the students preferred and which they felt helped them remember content best. The staff also completed questionnaires to give their opinion on which activities they perceived to be most effective. 'Bubble Self-assessment', 'Pit Stops' and 'Pimp my Paragraph' were the most popular as these improved engagement, but it is hard to measure if this improved memory. They linked their research to the Ofsted requirements for linear specifications whereby progress can also be demonstrated by 'knowing more'. Overall, they received very good feedback from their school as they appreciated having a large bank of activities to use to vary the lessons, which we have now added to the Woodford Research Resource Bank for our own use.

Reflections on the past year and looking ahead

Mary Heath, incoming Teacher Research Co-ordinator

The research project 2017-2018 represented a significant initiative for staff at Woodford and as such, the evaluation of the project was a suitable conclusion to the year to reflect on the year and to look forward to the year ahead.

Although it has not yet been finalised and published, the preliminary feedback from the NFER Research Mark assessment was overwhelmingly positive and this is a testament to the projects which were carried out within the school last year.

One of the strengths of the research project was the impact that the individual projects had on student learning and the coming year offers an opportunity to build on the success of this year as well as to learn from the findings from projects this year.

Continued inside...

Reflections on the past year and looking ahead—continued from the front page

As part of the evaluation, staff involved in the project were asked to participate in a group discussion and staff completed a questionnaire. Below are some of the key findings from the comments received and these will be presented in more detail at the start of the academic year.

What staff felt was most helpful from the research project:

- discussion and collaboration with colleagues
- opportunities to develop teaching practice, including evaluation of a particular area and trying new ideas
- hearing from students about different ideas
- having a specific area to work on
- external training including training at UCL
- formalising research
- having time allocated to completing the research

What staff felt was most challenging about the research project:

- having sufficient time to complete the project and to complete background reading
- timing of the end research project (busy time of year)
- difficulty of completing an academic rigorous project
- feeling a sense of compulsion to complete research
- difficulty of involvement for part-time members of staff

How staff felt the project could be developed for next year:

Carrying out research:

- formal research should be optional
- opportunities to complete more informal research
- opportunities to apply and discuss the findings from research
- opportunities to discuss research through Teaching and Learning groups to be led by members of staff which have a clear focus

Sharing of educational research:

- have summaries of recent findings in educational research
- opportunities to discuss action research and existing research in departments

Topics for research:

- range of topics (either department based / or complete choice / or everyone to do the same)

Plans for next year

All staff will join a Teaching and Learning group which will be determined by the interests of individual teachers and departments. Within these groups, members will determine their aims and their focus for the year; each group will have a lead researcher and group members will be able to determine their level of involvement in the research carried out in the groups. More detailed plans will be presented to staff in September.



Can student motivation be improved through semi-formal peer mentoring in the English classroom?

Sally Faid, Teacher of English

Why this research? The context:

- To explore how a differently structured method might add to, or refine, the effectiveness/ range of use of peer mentoring in differentiation by grouping.
- To find other ways of 'filling the gap' left by the reduction in availability of Year 12s as peer mentors to address individual issues, one-to-one.
- To develop the skills relating to literary analysis and interpretation in relation to drama texts that we had begun in our Shakespeare study.

Method:

- Research carried out with a class of 'characters' - a year 8 class whose motivation and focus were inconsistent, which was affecting their progress.
- Over the course of a study unit, 15-minute sections of several lessons were peer mentoring sessions—students worked in groups, with leaders (mentors) selected for their strong or clear demonstration of a skill which was to be the focus of the next lesson. Groups were given copies of an exemplar paragraph from that student's work, and the mentor was tasked with explain how she reached her interpretation and constructed her response, while the group annotated the paragraph and asked questions to clarify their understanding.
- Baseline and final assessment data was compared across the class. One 'target' group monitored through observation and informal questioning. Further data was captured through student questionnaires.

Findings: Most students gained in all areas—confidence, motivation, progress and learning process, although the target group gained less than the class overall (given that these students were selected as having particular difficulty, this is still quite pleasing). This group felt particularly that their understanding of the learning process had greatly increased (although they may have misinterpreted the questionnaire question!) 57% of the whole class made better than expected progress within the time period—a clearly positive result!

Recommendations: This method can work well if there is a variety of motivationally/academically underperforming students in one class. The provision of individual copies for students to annotate is effective by time-consuming; worthwhile for one lesson (two at most). Careful grouping of students is important, but again, time-consuming. Several lesson over the course of a unit are necessary to embed the practice and to allow the peer mentors to gain confidence.

This method would work with regard to skills in most subjects, even practical ones.

To what extent can student leaders in Year 8 Whole Class Ensemble Brass lessons improve student confidence in performing and independent practice?

Katie Hasler and Kate Hannent, Head of Music and Teacher of Music

Focus and context:

- Year 8 ensemble brass lessons—it is difficult to give individual support and feedback to students when working in a whole-class situation. This lack of individual feedback has led to de-motivation in the past (and lack of practice at home)
- **The idea: Could student leaders working with small groups of students in lessons solve these issues?**

Key points from existing research:

- Small group work with student leaders has been found to be beneficial in Music lessons
- The parameters and guidance as to how student leadership could work best include using more experienced/skilled students as leaders, clearly defining the focuses for group work, training leaders in some way, and allowing opportunities to reflect

Method:

- Student leaders selected by teachers according to existing expertise and musical ability; group work (groups of 6 students including one leader) formed 30 minutes of each of 5 lessons. Students were given 'task cards' to direct group work
- Data collected through student questionnaires in first, middle and final lessons, and focus group interviews.

Findings:

Student confidence and enjoyment improved over time, with most students reporting feeling that they had made more progress with a student leader. Group leaders and members reported that small group work improved their progress and confidence, and that students who were experienced musicians made effective leaders.

"In a small group we can hear everybody—it's harder in a whole class to do this."

Improving Essay Writing in Key Stage 5 English

Melody Nairn and Gemma Charlton—Head of English and Teacher of English

Research Questions:

Can more formalised and regular discussion between partnered teachers about the work of their students improve progress?

How might using shared strategies and lesson structures help students to build connections between different parts of the course and the common skills that need to be mastered?

Context: A Level English students at Woodford are very able in terms of their ability to master subject knowledge and their ability to verbalise their ideas. Whilst A Level results in the subject are very good, on reading a range of scripts from last year's examinations there was a clearly a discrepancy between students' excellent subject knowledge and how well they were able to apply this. Teachers in the English department have always set essays and given written feedback. However, communications between teachers is often informal and can be irregular at busy periods. There was also the recognition within the English department that whilst a lot of time was given over to subject content, not enough was being given over to its application

Strategies:

- Lessons dedicated to essay preparation or feedback
- Feedback lessons have to happen.
- Use of exemplars from with the group and other sources.
- Discussion between teachers after each assessment so that target areas could be identified and both teachers could design lessons and activities that focused on these.
- Common teacher points such as 'the golden thread' idea to teach essay structure.
- Talking about students' progress and targets on both sides of the course to them in the lesson.
- Trying to arrange individual tutorials where possible.
- Data collected through student questionnaires as well as teacher reflection on strategies

Findings: The students' response was generally positive: they were all in agreement that the quality of feedback was high and that the feedback lessons were helpful. Some students answered 'neutral' to the question regarding how well their teachers understood their needs which was a surprise to use but may indicate that we aren't communicating to them how much we are talking about them. When asked in an open question about how we could improve our teaching of essay-writing, a lot of students suggested more individual feedback which we have read as 'tutorials'. Whilst this would be ideal, it probably would be difficult to implement in the 'real world'. Students were mixed about how satisfied they were with their progress, although this may have been more down to their modesty or insecurity as all of the students in the class have made progress over the course of the year—and some of this progress has been significant.

Differentiation—Grouping by Efficacy

Mellisa Greenfield—Assistant Head teacher and Teacher of Physics

Context: I have been interested for some time in the achievement of students at A Level in Physics and what the barriers are to meeting expected progress from GCSE grades. Assuming that students are on the right course for them—i.e. that they enjoy and are good at Physics and Mathematics relative to their other GCSEs—a number of students still underperform. In the larger Physics groups, in particular, there seems to be a divide which becomes more apparent as the course progresses. Some students become more and more confident whilst some become less and less confident. I wanted to know more about what causes this to happen and if there are better ways to improve confidence levels and hence progress and achievement for all students.

Focus: Self-efficacy: I looked into the idea of self-efficacy which seemed to be a significant factor for some students working harder than others. There are 5 aspects of self-efficacy as shown by Figure 1. I was particularly interested in the **vicarious experience** aspect of self-efficacy and investigating whether by grouping students so that they work with students with a similar self-efficacy they would be able to see modelled how to figure out how to apply their knowledge, by someone who they think is like themselves. This stems from the idea that some students are 'intimidated' by the more confident in the class.

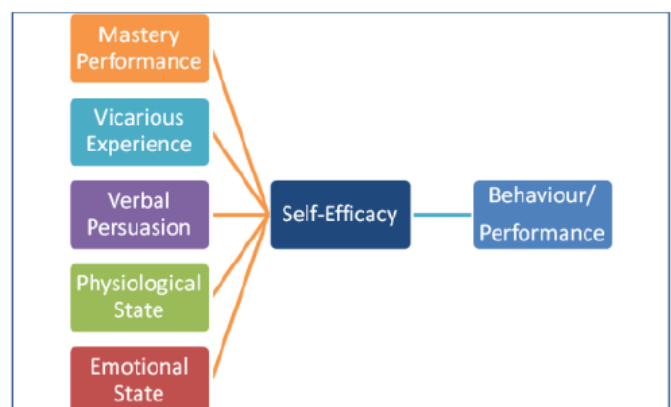


Figure 1: Self-Efficacy Theory (adapted from Bandura, 1997)

Differentiation—Grouping by Efficacy : Continued...

Method: A questionnaire to determine self-efficacy was carried out with students in a Year 12 Physics class. This was used to group students—students were firstly asked to work in pairs or threes with students with a **similar self-efficacy**. In a subsequent lesson, students were asked to work with others who had a **different self-efficacy**. Students were observed and asked to complete a final survey about their confidence and progress in the different types of groupings, and also to make a comparison with the group they usually work in. There was also a discussion with the students once the surveys had been completed.

Findings: Interestingly there is not complete correlation between achievement and self-efficacy. Some students have high achievement but with lower self-efficacy and vice versa. With the groupings by similar self-efficacy there seemed to be good progress made by students, with both in the pair having to agree and therefore explain their thinking and logic. Interestingly the group with the three with the highest self-efficacy took the longest time to agree because they had so many ideas that they wanted to put forward. Another observation was that a few students already work with others with a similar self-efficacy when they are allowed to choose for themselves, but not all. 89% of the students surveyed stated that both their progress and confidence were better (or the same) when in similar self-efficacy groups rather than very different ones.



Conclusions: Although this was a very small-scale study with a class of 16 students over 3 lessons (and the self-efficacy test would be affected by the emotional state of the students on that day), it is probably worth considering students' self-efficacy and surveying this periodically. It is probably worth ensuring that students have ample opportunities to see other students with a similar self-efficacy to themselves working through problems (vicarious experience). Future research could be carried out in terms of how to effectively improve self-efficacy by verbal persuasion, good physiological state and good emotional state or other ways of facilitating vicarious experience effectively.

Are Year 10 Ambassadors an effective way to educate younger students?

Holly Baillie and Gemma Moore—KS3 and KS4 Co-ordinators

Focus of research: We wanted to investigate whether Year 10 Ambassadors are an effective way to educate younger students about LGBT+, celebrate diversity and promote inclusivity.

Context: Championing equality is a whole-school action plan priority, and supporting student wellbeing is a key element of our role within the pastoral team covering Year 8-11. The elimination of discrimination and provision of equality of opportunity between minority groups is a key part of the Public Sector Equality Duty (Equality Act 2010), while OFSTED require secondary schools to both keep students identifying as LGBT+ safe, as well as to educate all students about HBT (Homophobic, Biphobic and Transphobic) bullying (how to identify and stop it), as well as teaching positive attitudes and behaviour with regard to students and staff identifying as LGBT+.

Method: We opted for student ambassadors to plan and delivery information and events based on the success of previous 'peer power'-oriented programmes.

- Year 10 students were offered the opportunity to become Pride Youth Network (PYN) ambassadors—with 10 being selected from those who applied. The organisation 'Educate & Celebrate' came into school to deliver initial training to the ambassadors and set out 10 targets for them to achieve.
- The PYN ambassadors met weekly to meet the E&C targets and to plan how they would educate other students, celebrate diversity and promote inclusivity—they organised various activities including assemblies, an event day, and planned and delivered an LGBT+ 'fundamentals' PSHCE session to years 8, 9 and 10.
- The PSHCE session was informed by the results of an initial pre-engagement survey. Year 8 students were re-surveyed after their PYN engagement to assess the success of the ambassadors in developing their understanding of LGBT+ issues

Findings:

- There was an increase in students' knowledge and understanding of all key LGBT+ terms (except 'gay' which was already understood by 100% of students).
- Data suggests that Woodford is a more LGBT+ inclusive place and students report a decline in hearing LGBT+ words used in a negative way, while students stated that they are now talking more frequently about LGBT+ issues in school and at home.

- ***"I think the Pride Youth Network have successfully made people more aware of LGBT+ history and discrimination."***

The effect of regular exercise on self-confidence and body image perception of young adolescent girls

Carly Harris, Head of PE

Focus: To determine whether self-confidence and body image perception can improve through participation in regular physical activity (outside of existing PE lessons).

Context: I have a personal interest in the effect that exercise can have on our own perception of body image and our self-confidence. I am very much aware that the impact of social media and airbrushed images can have, particularly on young adolescent girls and I believe that they are detrimental in giving unrealistic ideas about what our bodies should look like. I am interested to know whether participating in more exercise and educating students a little more about looking after ourselves can help influence their perception of body image and increase their confidence.

Key points from existing research:

- Positive changes were seen in students' perceived physical ability and physical self-presentation as a result of a 15-week 'Lifetime Wellness Course' for college students—but altering of behaviour patterns is a complex process and may require a longer time period to take place (Lockwood, Park, Wohl and Roy, 2012)
- Aerobic exercise can service to enhance self-perceptions of emotional and behavioural adjustment in pre-adolescent students (Lamb and Gulliford, 2011)
- Adolescents should be given the tools to deconstruct the sociocultural influences they encounter—interventions in school could focus on presenting and reinforcing a critical stance toward female beauty standards in order to prevent (or at least reduce) low levels of self-confidence (Clay et al, 2005)
- Girls who desire thinner figures are likely to have a negative body image perception and low self-esteem (Dohnt and Tiggeman, 2006)

Research Questions:

Can regular exercise have a positive impact on self-confidence and body image perception in young adolescent girls?

What other factors influence the way in which young adolescent girls feel about their body?

Method:

- 'Healthy Habits' morning fitness club run twice per week
- A selection of participating students selected to complete a questionnaire before and after 9 months of the club.

Findings: The findings suggest that there has been some improvement in girls' perception of body image and confidence. There was an increase in the number of girls who agreed that they are satisfied with how their body looks between starting morning fitness sessions in September to June.

Before training 70% of girls said they agreed that they were satisfied with how their body looks and 30% disagreed with this statement. The post training survey shows that 89% of girls either agreed or strongly agreed with this statement, with just 11% strongly disagreeing.

When analysing some of the responses to the question **How do you feel about your body? (Are you confident? Are you unhappy with how you look?)** it is evident that pre training most girls seemed to feel relatively happy in terms of their body, although self-esteem and confidence does seem to be identified as relatively low. Comparatively, post training, there seems to be a slightly more positive attitude towards their own bodies, or at least an understanding as to why we should learn to embrace who they are and celebrate what our bodies can do.

"I am moderately confident with my body. There are times when the confidence I have for my body can drop but now I am able to love how I look instead of pinpoint everything. I feel that there is room for improvement but I feel better about my body."



Self-assessment: Helping students to become more reflective learners

Mary Heath – Acting Head of Modern Foreign Languages

“Cela me fait plus réflexive quand j’écris mes dissertations”

(This [self-assessment] makes me more reflective when I write my essays)

– a year 13 student in a questionnaire on using self-assessment in French.

Development of reflection to enable student to become more self-sufficient whilst writing was a key aim of the promotion of self-assessment with the year 13 French class. As part of the self-assessment approach, students would analyse their own work, write reflections and the teacher would “mark” their comments. No grades were given during this process. The overall findings were overwhelmingly positive in favour of using self-assessment. As students were not given grades, they were able to focus fully on their work and through self-assessing their work, students were encouraged to reflect more deeply on their own work. As their teacher also keeping a note of their marks, it was clear that they were making good progress. Another student in year 13 also articulated the way in which self-assessment helped her to develop her reflection of her work; *“It [self-assessment] gives you a chance to reflect after having complete it, when you have the perspective of the piece as a whole”*

Students were encouraged to evaluate their work as a whole – as much the areas for improvement as the areas of strength. One student in a mid-evaluation of self-assessment noted that; *“I did a final summary and comparison and clearly stated my overall judgement”*, which recognises the student’s confidence in her clarity of work. However, in other instances, students noticed the ways in which they could have improved their work. For example, one student noted that when asked about her reference to wider context, she had made *“a mention, but not in depth discussion...I didn’t think it was relevant in regards to essay, but re-reading, I realised it would have strengthened argument.”* When a similar activity was trialled with year 12 students and in discussion with the students about their use of self-assessment, a student mentioned that although she had not made any changes in light of doing the self-assessment to her essay she *“should have done”*.

Students acknowledged the difficulties of using self-assessment which are acknowledged existing research. One year 13 student wrote; *“you can become overly critical of yourself”* or *“when I don’t know where I’ve made mistakes, self-assessment doesn’t help me to improve”*. However, the objections to self-assessment in terms of being too critical of oneself or not knowing how to evaluate the work have an important message for the teacher leading the students. The teacher leading the students must help students learn how to identify the strengths in their essays and help teach students to have confidence in (identifying) the strengths of their work. The comments also reveal the importance of the teacher as a facilitator in supporting students understand what makes a good piece of work. This stage is as important as the self-assessment itself.

In parallel to the use of self-assessment, students were not given grades, although as their teacher I kept a record of their marks in my mark book. The views from the students on not having grades were also revealing as students recognised that they did not require grades on all pieces of work; this showed a significant change in their thinking from the start of the year. One student compared recognised the greater value of the self-assessment relative to receiving a grade; *“I still the grade is important but self-assessments are more important in terms of improving”*. Another student recognised that in not having a grade, she was able to focus more on the comments; *“It [self-assessment] allows me to pay more attention on the comments rather than just the mark”*. That said, students still found it helpful to receive grades but recognised that this was only necessary at timely intervals. One student wrote she did not want grades *“..every time”* and another student said that she would have wanted it *“sometimes”*.

From the project, there are a number of recommendations:

- Self-assessment is positive for student progress in terms of helping them become more reflective learners based on student experience, student perception and marks
- Students should have opportunities to act on their reflections and self-assessment should be used during a process and not always for “final pieces”
- Grades are not required for every piece of work but rather should be used a timely intervals

Next year I am keen to keep investigating and looking at self-assessment (at times instead of using grades) and I will be focusing on the following particular areas:

- Develop a more concise self-assessment form
- Enable students to make changes to their work before it is submitted
- Use self-assessment with a wider range of year groups
- Be more explicit about not using grades and investigate the effect

A few further key findings from research projects...

Full details of these investigations are available to Woodford staff in the 'Research Resource Bank'

- 'Flipped Learning' techniques in Year 9 Biology allowed teachers and students more time to focus on higher level skills in lesson (Katie Estruch and Preet Sehmi—Biology Department)
- Differentiated vocabulary tests in Latin led to increased confidence in students—with many citing that the experience was productive and gave them more time to complete homework—but also raised concerns about students' lack of awareness of the disadvantages of not knowing key grammar (Jamie McClelland—Head of Classics)
- A case study of four students completing the 'Artefact' option for their Extended Project Qualification determined key conditions of making which are required for a successful project—including the opportunity to work flexibly and independently, having access to art materials and understanding the required outcomes before the project begins—as well as recommending that students have at least the equivalent of a B' grade in Art and Design GCSE in order to complete an Artefact project (Emma Liebeskind—Head of Psychology and EPQ Supervisor)
- A study into students' understandings of 'equality' - and student leadership in the promotion thereof—identified five key areas for further consideration (uniform, diet, mental health and wellbeing, content of assemblies and information on equality issues) while also enabling students to gain a stronger understanding of the various domains of equality (Jo Pomeroy—Head teacher)
- The introduction of extension classes in Year 13 Chemistry enabled more students to achieve or exceed their ALPs targets in mock exams (Saira Khan—Teacher of Chemistry)
- A study of students' engagement with practical science activities discovered that students generally enjoy practical work, but there is scope for improving leadership avenues within it—and meanwhile, practical science skills require training over time to improve students' resilience and problem-solving skills (Tony Le—Teacher of Physics)

National developments in Educational Research

Analysing the 'self-improving school-led system' agenda in England - from the NFER, 3rd July 2018

A new report analysing how schools in England have interpreted and begun to respond to the government's 'self-improving school-led system' policy agenda has been published today. The four-year study, undertaken by the UCL Institute of Education (IOE) and funded by the Nuffield Foundation, evaluated the government's 'self-improving school-led system' (SISS), which has become an overarching narrative for education policy since 2010, making schools more autonomous and accountable for their own improvement.

The reforms have included an expansion in the number of academies and the development of Multi-Academy Trusts (MATs), the roll back of Local Authorities (LAs) from school oversight, and the development of new school-to-school support models, such as Teaching School Alliances (TSAs).

Case study research as well as a survey of almost 700 head teachers and analysis of Ofsted results over a 10 year period found that despite the government's claims to be 'moving control to the frontline' and giving schools more autonomy, the reality is very different. Schools are more tightly regulated than ever, facing pressure to get good exam results and Ofsted grades or face being taken over by a MAT. Many schools have felt the need to narrow their curriculum and focus relentlessly on test outcomes in response.

Chartered College of Teaching supports #LetThemTeach campaign—from the CCT website, 29th June 2018

Today, the Chartered College of Teaching has announced its support for Tes #LetThemTeach campaign which calls for the whole teaching profession to be included on the 'shortage occupation' list for teachers.

Professor Dame Alison Peacock, Chief Executive of the Chartered College of Teaching, comments:

"At the Chartered College of Teaching, we hear every day from our members about the fantastic work they are doing and the challenges they are facing. We know that schools and teachers are under some of the biggest pressures than at any point in the last 30 years. With 1 in 10 teachers leaving the profession last year, those that remain see their working hours climb upwards while their wellbeing drops.

If we are going to change this course we need to see teachers at all stages of their career receiving support so they can do their jobs and provide the best possible education for children and young people. However, that cannot happen if those that have the skills and knowledge to change a young person's life are prevented from doing so because they're blocked from joining or worse yet, being forced to leave the profession here.

That is why the Chartered College of Teaching wholeheartedly supports the Tes #LetThemTeach campaign. We want to see the best professionals given the opportunity to provide the best education. Their skills and knowledge should be the deciding factor, not where they are from. We want to see the whole teaching profession placed on the visa 'shortage occupation list'. At a time when teacher shortages are a real concern, let us show that we are listening to the profession's concerns and working towards easing their pressures and removing these unnecessary barriers."