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The lead author of this article is a young teacher, new to the profession, who has been enabled to exercise leadership with the support he derived from his participation in the HertsCam Teacher Led Development Work programme facilitated at his school by the co-author. The article is an interesting exploration of a particular aspect of pedagogy – flipped learning – but more than that it exemplifies ways in which teachers who might otherwise be on the margins of decision making can be empowered as leaders of change.

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Jack Woosey has just completed his first year as a Science teacher at Samuel Ryder Academy, an ‘all through’ school teaching children and young people from nursery age through to 18 years old in the UK. Lucy Miles is Deputy Headteacher at the school and has for several years facilitated a Teacher led Development Work (TLDW) group there. Jack joined this group in his first year of teaching. Lucy supported him and his fellow participants, enabling them to design and lead development projects in the school. These projects use the TLDW model developed by HertsCam, an educational charity promoting non-positional teacher leadership across many schools with its programmes: TLDW is a year-long, school-based course open to all educators who have a role in the classroom and the MEd in Leading Teaching and Learning is a two-year course accredited by the University of Hertfordshire.

Jack and Lucy describe here how they used the TLDW model to develop Jack’s ideas for using flipped learning as an effective learning tool, how he was encouraged to collaborate with colleagues to widen and embed the technique, how he learned to deal with the challenges this presented and reflections on what he learned about teacher leadership and his own leadership capacity.

Lucy’s long connection with HertsCam has enabled her use the network to help unlock teacher leadership potential and drive improvement at all levels. She was herself a participant in a TLDW group at her previous school but as a member of the senior leadership team at her current school, she now provides the structures to enable colleagues to exercise their leadership.

HertsCam fosters an approach which seeks to develop individual agency and moral purpose and thus awaken the giant of teacher leadership (Katzenmeyer & Moller, 1996). The TLDW programme leads classroom practitioners through a seven-stage process which reconnects them with their values, supports collaboration, encourages ‘tinkering’ with practice (Hargreaves, 1999) to improve outcomes for students and enables them to adopt the mantle of leadership unselfconsciously (Frost, 2007).
The seven steps are:

- **Step 1**: the teacher clarifies their professional values
- **Step 2**: they identify a concern
- **Step 3**: they negotiate with colleagues to explore that concern
- **Step 4**: they design and produce action plan
- **Step 5**: they negotiate with colleagues to refine the practicality of the project
- **Step 6**: teachers lead projects that draw colleagues, students and their families into collaborative processes. Each project enhances professional knowledge within the individual’s school
- **Step 7**: teachers contribute to knowledge building in their networks and educational systems (Hill, 2014)

Through this step-by-step process, participants are enabled to design and plan a development project according to their own professional concerns. They are guided by tools that enable collaboration. Action plans are modeled and examples provided. Importantly, facilitators who are senior leaders of their school, such as Lucy, ensure that projects lead to collaboration and innovation and this critical friendship continues throughout the process. The growth of Jack’s development project here is one such example of the process in action.

In Jack and Lucy’s school, years of undertaking individual projects have led to a considerable shift in the professional culture where teachers have grown in their sense of agency and ability to lead change. These small-scale developments have cultivated an organisational culture in which everyone feels empowered to make a difference. An example of this was a TLDW project by a teacher on developing strategies to cultivate a growth mindset culture – a project which was published (Hayes & Thompson, 2017) and which became the foundation of the school’s policy on this issue. This example illustrates how professional knowledge is grown and accumulated through projects, each building on previous work by colleagues, and contributing to the dialogue within schools and in the wider HertsCam network, thus reinvigorating practice (Frost & Roberts, 2006).

As an inexperienced teacher, Jack began his development work in a somewhat trepidatious fashion, believing that his lack of experience might hinder his ability to lead change. He felt that without a formal leadership role his ideas would be seen as presumptuous or invalid. This chimes with a prevalent view within institutions that leadership is linked to formal position within an organisation (Spillane, Halverson & Diamond, 2004), a view which limits the capacity for decision making and the creation of change. Additionally, it erodes teachers’ sense of empowerment: a vital defence against the perils of intense workload and constant flux.

In contrast, as one of the facilitators of the TLDW programme, and a member of the senior leadership team, Lucy was keen to promote the values and norms of a professional culture that will create the best environment for developing practice. She did this through TLDW where the key message given is that all members of the school community can contribute by exercising leadership and managing collaborative processes (Frost, 2012). This way of working resonated with the approach already established within the cluster of schools to which the Samuel Ryder Academy belonged (Mylles, 2017).
This consistent emphasis on leadership as an aspect of teachers’ professionalism in the culture of the school quickly instilled the confidence in Jack that he needed to share his ideas and collaborate with others. Rapidly, the ripples of impact Jack discerned in his own classroom began to make waves beyond. Jack himself commented that he was ‘proud’ that he could initiate development that had such a wide-ranging impact.

**Jack’s Development Project**

Jack welcomed the opportunity to join the school’s Teacher Led Development Work (TLDW) group in which he would participate along with colleagues with a range of experience. He recognised that sometimes his students were not as engaged in the learning as he had hoped; that they appeared uninterested in topics and unwilling to put effort into the challenge of learning. They did not ask questions but accepted information passively and were easily distracted by social interactions. He was especially searching for a way to stretch and challenge students within science and wanted to try something new to motivate them. During his reading he came across the idea of ‘flipping’ learning in the classroom, a teaching technique that is used in American schools already and at the top levels of higher education in the UK. It did not, however, appear to be prevalent in UK secondary schools (Ash, 2012).

The flipped learning approach (Flipped Learning Network, 2014) is where the teacher provides on-line activities for students to complete before they come to lessons, sometimes referred to as pre-learning. According to the Flipped Learning Network it can be defined as:

> A pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter (FLN, 2014, p. 1)

Flipped learning provides a different approach to many aspects of classroom learning such as preparing for practical experiments in science, prior learning about topics, the forming of questions and the way homework is set, making it more relevant to what students are about to learn and engaging them more in forthcoming lessons. Jack had found himself setting spurious homework tasks simply because he was expected to do so, or following the ones suggested in existing programmes of work rather than really considering what was going to engage his students. He felt there must be a way to make homework tasks more exciting and relevant whilst promoting better outcomes, rather than simply ticking the box of having set and completed it. Preparatory learning tasks undertaken through flipped learning allow for the foundation of knowledge to be gained before the students walk into the classroom. Once this has been accomplished, students can embed and extend their learning and knowledge within the classroom with the help of the teacher rather than spend a lesson taking notes or researching when much of this can be done at home. It is clearly necessary to have a foundation of knowledge before students can apply the skills they are learning in the classroom, but spending too much time on the building blocks of knowledge meant less time developing the application of those important skills. Jack saw this as a way of transforming the purpose of homework from consolidation to building foundations of learning and, as such, improving its sense of relevance to both teachers and students.
Furthermore, it was evident to Jack that students who would soon to undertaking their national examinations lacked the ability to be independent learners. This independence can be defined as showing engagement through the ability to persist when facing challenges in learning and the ability to organise and plan time well to meet the demands of schoolwork (Martin, 2010). Literature suggests that this independence deficit is most likely cultivated by a system that often means that teachers and schools are pushed into shallow learning (Hargreaves, 2008) as a result of a culture of ‘performativity’ which impacts negatively on teachers, their teaching and children’s learning (Ball, 2003). The fear of adverse results and constant measurement stifles creativity in the curriculum, leading to narrow and unengaging lessons. This was something Jack could see himself and colleagues battling with in his own school and beyond in the national debates emphasising accountability. What Jack was seeking was what Papert described as those who ‘know how to act when they are faced with situations for which they were not specifically prepared’ (Papert, 1998:1). To that end, Jack’s project was designed to guide students across the school to become more independent in their learning and therefore more prepared for higher education and lifelong learning (Claxton and Lucas, 2015) whilst promoting progress, attainment and engagement.

Jack recognised the need for a small-scale development project to start with in order to establish his confidence. He began to use the technique with his Year 13 class, hoping they would pick it up quickly due to their maturity and experience with learning but was surprised to find that they struggled greatly. He reflected that this was because the responsibility to gain knowledge prior to working on topics had never really been put on them before: students who had been provided with pre-packaged knowledge for five years do not suddenly know how to be independent learners overnight. Here was more evidence of the impact of a performativity culture in the education system. His Year 13 students lacked confidence in learning anything beyond what their teacher provided. It seemed logical that if the older students were already in more passive learning modes and lacking a positive mindset (Dweck, 2007), he would have more success with students at a younger age.

The Process of Developing the Technique of Flipped Learning

This first stage of Jack’s project was a process of developing his own confidence and familiarity with the mechanics of flipped learning practice in the classroom. He knew that once he had established the method he would then be in a position to work collaboratively with others to develop it further. Initially he was unsure of the pedagogical approach to take with flipped learning but was in the fortunate position of teaching in a school where students had access to iPads provided by the school. He decided to capitalise on the students’ obvious engagement with these devices and looked for suitable applications, finally deciding to use a free app called SeeSaw to set tasks and receive homework assignments. To begin with he set very simple questions on the application and, although these were usually answered well, he was aware that his questions were far too open and not sufficiently directed on the desired learning outcomes. The questions invited some divergent thinking, which was to be welcomed, but often took students too far from what they needed to know; he needed to develop more precision and a wider range of strategies.
Jack began using more closed questions, for example: *what are some of the differences between osmosis and diffusion?* This allowed students to identify key facts and construct arguments about topics before entering the classroom. Now instead of spending the lesson drawing diagrams about how osmosis and diffusion work, students were able to discuss and complete tasks on it, spending more time correcting misunderstandings rather than copying information. More importantly students were able to engage in deeper learning (Hargreaves, 2008) by questioning, discussing and making links, facilitated by the confidence fostered by their prior learning. This was helping to avoid a problem with conventional style homework: Jack found that all too often students got stuck on things that they had practised briefly in class and forgotten, then in following lessons it was necessary to cover the point again, wasting valuable time that could be used to deepen learning. With flipped learning this staccato process of needing to re-teach information occurred less and less as students got used to the new flipped system. Jack felt he was more proactive too as he was alerted to students’ misunderstandings before the lesson even began, having seen them on the SeeSaw application.

Following this initial work, he began experimenting with the frequency and length of homework tasks. With one mixed ability Year 7 class he set a small task every lesson to prepare for the following lesson. With another in the same year group, he set one larger set of tasks to prepare for the following week. There seemed to be little difference in learning outcomes but what became apparent was that lower ability students were better at dealing with small tasks than a longer set of tasks for the following week: he concluded that the method of flipping the learning was able to support students of all abilities if structured and differentiated carefully.

As well as having improved their enjoyment of the lessons, when an end of topic test came up it appeared that the change to flipped learning had also brought improved test results, which encouraged both Jack and his students to continue. Jack decided to try and increase the complexity of the flipped learning tasks as it was clearly effective and the students were becoming more enthusiastic and were achieving a more reliable grasp of the knowledge that would be deepened in lessons.

Jack set further flipped learning tasks from the school’s pre-existing programme of work on a new topic. This worked very effectively. For Jack, this did not seem to be a radical change but simply a matter of approaching learning more effectively. It ensured that students were set an independent task closely linked to the main activity in the lesson, freeing time for deepening learning, engaging the learners in their own interests and pushing students to achieve their best. Jack created starter activities that created a bridge between the pre-lesson tasks and the main activities of the lesson. This seemed to have the impact he was looking for, with many students displaying engaged learning behaviours and exceeding their previous achievements.

Performativity does not only affect adults: Jack wondered whether perhaps the students had felt hampered by their lack of knowledge previously but now this technique was diminishing their fear of failure in the classroom (Fisher, 2005) so they were displaying more independent learning behaviour, confidently asking questions and making links. It took Jack approximately ten weeks to create and refine the technique the first time around, after which it became easy to try it with other classes and to begin to look for colleagues with whom to collaborate.
The main goal Jack had in flipping his classroom was to improve student engagement with science; to get them to love a subject that has often been seen to be quite dry when not doing a practical lesson. He firmly believed this would lead to better academic results too. Year 7 students, without a preconception of how learning should be in their new environment, were quick to accept flipped learning, adopt enthusiastic attitudes and ask challenging independent scientific questions. Jack was very open and honest with students about the fact he was testing flipped learning to see if it worked and asked them for feedback on lessons and homework anonymously. He asked them how they found science before and after the flipped learning approach was introduced and in particular how they felt about their homework in science. He was very pleased to see comments such as:

*I feel my homework is more relevant to my learning and helps me progress.*

Not only was engagement in lessons improved but the completion of homework increased to the point that the need for detentions and punishments dramatically reduced. Jack’s development work was having impact on student progress, behaviours and attitudes to learning.

Through feedback from students, elicited through discussion and by using simple tools in the classroom, Jack began to understand that engagement with lesson content had improved as a direct result of students understanding much more of what was being presented to them, having already read and made notes on it. This allowed them to access content more quickly and made them feel better about themselves: over time many grew in confidence greatly, moving on from just answering questions to asking why things happen rather than just accepting them, suggesting an improved level of self-efficacy and willingness to grapple with challenges (Bandura, 1997). This creation of critical thinking and enjoyment of lessons is key to any student in any subject and must be initiated and fostered by the teacher (Holt, 1995).

With the clear success of the flipped learning content-based tasks, Jack then began to develop other activities. One issue in particular was around practical lessons, which students find the most engaging in science, where the demonstration took up much time. Jack flipped it, setting videos of himself doing practical demonstrations and asking students to write their own method to work on. This worked much more efficiently than the long demonstration in front of the class. Students were also able to rewind the video in class if they were stuck rather than just asking for help. Again, by saving the time in lessons, not just that year but in years to come, he found he was able to focus on deepening students’ learning and increase their independence.

**Collaboration: Teachers’ Testimonies**

Jack had now established his confidence with the concept and practicalities of flipped learning and he could see it was having an impact in his lessons so he began to collaborate with colleagues to develop the practice further across the school. The TLDW programme actively encourages participants to use institutional opportunities and structures to engage others, so Jack used the forum of an existing school meeting as the opportunity to ask several colleagues to choose a topic within their subject that students had historically found hard. In this Jack was fortunate; he worked in a school where the culture was open to requests being made from all colleagues, not necessitating a leadership title or positional authority. This isn’t to say Jack wasn’t somewhat daunted as a newly qualified teacher proffering ideas to established colleagues. As Little (1988) pointed out, the challenge of teachers being able to influence their colleagues’ practice is considerable with the assumption of teacher autonomy being a strong feature of
professional identity globally. Jack leaned on his TLDW guidance to counteract this feeling and build his sense of agency and developing leadership skills.

Three of Jack’s colleagues agreed to try flipped learning out: a maths teacher, a languages teacher and a science teacher, each choosing a topic they wanted to teach more effectively. After trialling the method, the maths teacher sent Jack this feedback:

*I have just had the best ever first lesson on Circle Theorems with my top set Year 10 thanks to their flipped learning homework. They had all done the homework and came to the lesson with at least some understanding of the theorems and were able to get straight on with applying them to exam style questions with only a small amount of support. They had differentiated sheets so they could choose their level of confidence with where to begin working, which left me free to ‘roam’ giving support to small issues rather than ‘trudging’ through long explanations of each theorem and why it works and when you can apply it. It was a complete revelation and has transformed my teaching of this topic.*

This and further positive feedback from his other colleagues gave Jack great encouragement that the approach was equally effective in different subjects.

**Difficulties Faced**

Although the project had been largely successful, Jack knew that in his, as in all schools, there are students who simply don’t do homework. Using the lure of what students enjoy most, he set a flipped learning task for a practical lesson to learn about the method before class, and if students did not complete it they were unable to take part in the practical activity. The impact of this was instant: no student failed to complete this homework more than once. Whilst acknowledging this may be harder to implement with older students, Jack found that it established positive routines with younger ones which he hoped would create clear expectations for future years (Claxton, 2008).

As the TLDW facilitator, Lucy invited other members of the senior leadership team to participate in one of the group sessions so that they could listen to participants talking about their projects and offer them some ‘critical friendship’ (MacBeath & Jardine, 1998). Jack talked about his struggles with older disaffected students and was advised to teach with high expectations for all. Jack found this advice helpful. The approach had a clear impact especially when the flipped learning tasks were also differentiated, giving students more confidence and engaging them more effectively in the subject. This incident reinforces the efficacy of the TLDW programme in providing collective support for teachers undertaking change; the weight of the organisation is brought to bear by creating connections, sharing and creating professional knowledge (Frost, 2017). Individual teachers are empowered by being given practical help that secures sustainable change in their organisation.

Jack found that when suggesting flipped learning to colleagues an issue arose about extra workload in an unquestionably busy professional life. However, Jack argued that, from his experience, the opposite is true in the long term. Not only was setting activities on the SeeSaw app less time-consuming compared with more traditional ways of setting and collecting in homework, but monitoring is also easier and more secure since the evidence of learning is online. Students too benefited by having access to prior resources, their own notes, questions, hypotheses, revisions and experiments.
Jack’s experience and that of his colleagues also suggested that, as with other pedagogical strategies, once it is part of a teacher’s normal planning for lessons it is no more demanding than more traditional approaches. Existing resources are easy to adapt to a flipped learning style. Similarly, Jack and his colleagues found that students can be stretched by app-based extension tasks which they previously did not reach or complete. The experience of Jack’s colleagues is that workload has decreased and they have a store of accessible resources building steadily. While teacher workload is not a priority in itself, it is important to respect colleagues’ wellbeing and be mindful of the enormous pressure they are under so as not to add to their burden. In a professional environment of stress and burn-out (Huberman & Vandenberghe, 1999) these gains are vital in creating a vibrant and resilient learning community ready to inspire children. This approach resonates with the work on professional learning communities, of which the defining characteristics include ‘reflective professional enquiry’ (Bolam et al., 2005).

Developing as a Leader

At the beginning, the focus of Jack’s project was his students and his own practice, but he was surprised to discover that he experienced a profound growth in his confidence as someone who is able to lead change. At the start of the TLDW process participants are asked about their perceptions of leadership. In Jack’s group the facilitator asked participants to rank themselves on a qualitative scale to indicate how empowered they felt as leaders within the school. Jack saw himself as a very minor cog in the grand machine of his school and so gave himself a score well below everyone else. However, over the course of the programme, Jack started to feel more empowered about his role as a leader beyond his own classroom and as a more valued part of the school. He gained confidence after being able to engage colleagues from different departments to collaborate with him. This does not happen by chance: the school had structures in place to facilitate collaboration and encourage this burgeoning dialogue. Lucy in her role as a senior leader was instrumental in creating those structural opportunities for Jack to collaborate and network. Jack’s confidence as a leader produced benefits for himself, his colleagues, students and the culture of the school. His sense of professionality now included change agentry (Fullan, 1993).

The ways in which the school encouraged the development of this sense of agency included strategically spaced continuing professional development (CPD) events for the whole teaching staff. TLDW participants, including Jack, were asked to lead group sessions and were given support to help them prepare for this through the TLDW programme. These school CPD sessions provided each participant with critical friendship from a group of volunteers, colleagues who had chosen to attend their workshop. The dialogue engendered helped to shape and develop TLDW participants’ projects, adding both depth and breadth to the understanding and application of the work. Additionally, members of the senior leadership team were invited to TLDW sessions and became a mentor for one participant, the pairing being based on affinity and perceived usefulness of a particular project rather than being linked to the usual formal line management system. This relationship gave each TLDW participant an important sounding board and advocate; someone who can see the links across the whole school and beyond to help the project grow. TLDW members were also asked to present their work at staff briefing meetings on a regular basis to keep the project live in people’s minds during a busy term.
Jack’s sense of leadership was developed further by being asked to lead workshops on his project at HertsCam events attended by teachers from all the schools in the network. The impact of such experiences for a newly qualified teacher is immense, providing a sense of possibility and engagement in the profession that does much to provide the resilience required to thrive (Bangs and Frost, 2016).

At the final TLDW programme meeting Jack completed the same exercise about his perception of leadership and this time he placed himself right at the top. He was full of confidence in his ability to make a difference, to lead meaningful change in his school that would bring improvements for students and be valued by his colleagues. As the TLDW facilitator and a member of the senior leadership team Lucy too could see the benefits of this for the wider professional learning community, acknowledging the personal impact and empowerment engendered by such leadership work at all levels. Through these planned structures a collaborative culture is fostered and the intellectual capital held by the staff is mobilised, arguably a necessary condition for school effectiveness (Hargreaves, 2001).

Jack had further opportunities to share his work more widely and hone his growing sense of leadership because of the school’s status as the Regional Training Centre for Apple, where he presented to teachers from across the region. The focus of his project on developing student-led learning has continued to grow with seven school departments now routinely using the technique, and with one department having gone entirely paperless as a result of the project’s influence. In the Primary phase of the school, in particular, a profound impact on student engagement and independent learning has been observed due to the adoption of flipped learning. As an all-through school teaching children from age 4-18, this will have significant impact on practice and student outcomes in the longer term.

This narrative illustrates the benefits of the HertsCam TLDW programme where teachers can pursue their own professional concerns and where they have the support of facilitators and structures in their organisation that enable them to translate their visions into practical development work which improve outcomes for students and the working lives of colleagues. Research indicates that teachers put a high value on the kind of collaborative, enquiry-based processes that can flow from such project work (Pedder, Storey and Opfer, 2008). The HertsCam model chimes with practitioners’ moral purpose and their search for increased agency and it is for these reasons that it thrives in so many schools enabling teachers like Jack to become effective leaders.
References


