FORUM
Volume 57, Number 1, 2015
www.wwwords.co.uk/FORUM
http://dx.doi.org/10.15730/forum.2015.57.1.49

Developing Innovative Approaches to Teaching and Learning through Lesson Study

ANDRIA RUNCIEMAN

ABSTRACT The author, who teaches in a Norfolk comprehensive school, presents an account of her involvement with the new research practice of lesson study, and discusses its benefits as part of a continuing professional development programme designed to encourage teachers to become more reflective.

In this article I will explain the process of networked lesson study as a method of supporting professional development and pupil progress within teaching at Framingham Earl High School, Norwich. I am a teacher of religious studies at Framingham Earl and I became part of this process when an opportunity to participate in a funded research project was given as part of my professional development. The project was offered by the University of East Anglia, with Professor John Elliott leading the course and with three other schools participating. Our head teacher had previously discussed the possibility of using lesson study with some colleagues as part of the provision for continuing professional development at school.

Our initial lecture focused on the explanation of the process of lesson study as a Japanese pedagogic structure for the support and development of teaching in Japanese schools. This approach to teacher development was introduced into the United Kingdom through the Primary Strategy. Networked lesson study involves identifying an area of classroom practice that needs development to support progress in learning. This will have been highlighted as an area for development in consultation with students. The identified aspect of classroom practice will be developed by all of the teachers within the lesson study group, trialled with students and the outcomes discussed by the teachers and students in collaboration. In Japan this often results in lessons being re-

taught by the group of teachers to a large body of colleagues in order to model findings and support progress across different curriculum areas.

The concept of a lesson in Japanese education is not time-dependent but is defined by content or aim. As a group, we immediately felt we could develop a part of the research lesson or method of assessment over time. Doing so removed constraints and allowed greater flexibility. The other aspect of lesson study that appealed to us was that lessons are designed by a group, not by an individual. The notion of individual ownership of the lesson is not recognised, which is positive, as then there is no ownership of failure, for ideas are developed and eventually improved upon. Lewis and Hurd (2011) state that:

> In their work together, group members should come to feel that the lessons are 'our' lessons, not 'your' lesson or 'my' lesson. The point of lesson study is not to polish the skills of a few star teachers but to help all teachers grow and to create the interpersonal relationships, school culture, and personal and collective habits of inquiry that support continuing growth every day. (p. 35)

The lesson is taught by one person in the triad of teachers and observed by the other two. This is followed by a post-research lesson conference to analyse the lesson. The lesson's design is developed and further tested.

Initiating the Cycle

This approach felt refreshing in a culture of hyper-accountability that is linked to the often hostile judgement of 'outstanding' or 'good' as previously given through Office for Standards in Education (Ofsted) criteria. It would appear to empower colleagues to progress with the development of their own learning unencumbered by target levels, to make real progress in understanding the process of learning. We are, ironically, aware of the restrictions that working to levels place upon our students and we realise that levels do not allow for learning through incremental cognitive links.

Interestingly, the recent Ofsted report on religious education (2013) highlights a failing of religious education in its inability to enable students 'to adopt an enquiring, critical and reflective approach to the study of religion' (p. 8).

It is difficult to judge the learning progress made by a student if the measure we give the student is bound by a description of skills needed to achieve a particular 'level'. The student will inevitably look to the skills needed to reach the next level. Once it is reached, the student will not incrementally continue to build competence through an organic process of understanding, but will look for a new set of skills needed to secure the new level and in the process often discard skills previously demonstrated. This is the same with the continual drive to achieve an 'outstanding' or 'good' lesson judgement, with teachers often teaching to a formula for an observed lesson. Lesson study

appeared to offer the opportunity to apply this understanding to the development of our classroom practice.

Once the lesson design is improved upon, a revised session is taught by another teacher within the group. Each lesson redesign and analysis constitutes a cycle. It is claimed that differences in the achievement of students can be reduced by lesson study, and progress can be dramatic once the practice of lesson study is embedded. Lesson study was introduced in North America from 1999. A study by Catherine Lewis et al (2006) noted that

> Student achievement data at Highlands suggest that lesson study is paying off for students as well ... additional analysis found that, for the same period, the net increase in mathematics achievement for students who remained at Highlands School was more than triple that for students who remained elsewhere in the district as a whole (an increase of 91 scale score points compared to 26 points), a difference that was statistically significant. (p. 276)

This is measured through pre- and post-testing or systematic interviews with students. In turn, results are compared with the wider cohort to ascertain additional progress that has been made.

The idea is to move teachers beyond the autonomous culture of classroom practice where we operate as individuals. Lesson study could in some way replace the hierarchical structure currently used in assessing the training needs of teachers. Perhaps this could lead to a more collaborative professional culture in schools? Colleagues would feel empowered as they become more generative in their involvement in the development of the curriculum.

Variation Theory and the Object of Learning

Evidence for development of teaching pedagogy does not just come from the observer. There is a process of triangulation to look at learning from three different perspectives: the teacher teaching the lesson, the observer and, crucially, through interview, the students being taught. In this way, issues which emerge from comparing perspectives on the learning that is taking place are identified through cross-referencing three opinions. This can in turn be used as a point of commonality for development. This also addresses the issue of objectivity. It can be difficult for teachers who are being judged and observed as part of the process of appraisal to avoid taking criticism in a personal and negative manner.

Interestingly, we recognise this issue in using peer assessment with students. Students may often only judge their performance against that of their peers, without considering the skills needed for progression in a subject. Appraisal can bring the same experience to teachers, with an Ofsted judgement often affirming or negating the relationship between colleagues, rather than supporting the development of teaching. Within the lesson study we need to adopt the approach of being a 'critical friend'. The difficulty is that due to the

nature of formal education, with its multiple pressures on time, many classroom teachers do not have direct experience of the positive benefits of this relationship. The role of a school improvement partner or member of the governing body or other 'critical friend' is often not directly experienced by a classroom teacher. We feel uncomfortable being given the role of 'critical friend', and perhaps misunderstand it as a form of judgement or appraisal.

As a strategy for our lesson study at Framingham Earl, we decided to use a methodology that we felt best suited our study – variation theory. This was introduced and used extensively in Hong Kong by Lo Mun Ling in earlier successful studies. Variation theory is based upon the understanding that there is often a gap between what the teacher is teaching and what the student is learning. As teachers, we need to set our classrooms up so that students are aware of what is being taught, in order to reduce that variation. Teacher and students may otherwise actually focus on different 'critical features of learning'. This is described by Lo Mun Ling (2009), who states that

> learning must be directed towards an object (i.e., an object of learning), and so even if the learning environment is luxurious and high tech, the teachers are kind and caring and the students highly motivated, if the object of learning is very complex and difficult, learning is still unlikely to take place without the teachers' help to tease out the critical aspects and make them available for students. (p. 7)

The example given by Professor John Elliott to explain this was that an intended 'object of learning' may be teaching students how to discuss an issue; however, the observed or actual 'object of learning' is often only a question and answer session led by the teacher.

To understand the lived 'object of learning' is to determine what learning objective was in the teacher's mind. The critical feature is what students need to do to achieve this, so in Professor Elliott's example it is to discuss, which is to say to listen, and to feel free to express ideas, build on each other's ideas and think ideas through. Discussion is the critical aspect – to learn what good discussion is, you would have to learn what poor discussion is in contrast.

In this approach, teachers gather data about the chosen 'object of learning' from prior interviews with students who are part of the case study and then draw a contrast through final interviewing afterwards. The only issue with this method is that it can only prove that students have progressed. If students do not progress, it is due not to their lack of intelligence or use of skills, but their inability to progress beyond what is common sense learning. In normal classroom conditions, we get variation in learning outcomes, both through engagement with different learning styles and abilities of students, and teaching styles used by a teacher. We therefore need to develop classroom practice, through our developed 'object of learning' that caters for individual difference. We also need eventually to measure the progress of our chosen class against other classes in the same cohort.

Feedback on Feedback

For our aims to be met and our lesson study to be successful we needed to identify a pedagogic problem that was shared across all subject areas. In completing the study at Framingham Earl, we discussed using a whole-school focus. The school focus we chose was a tangible object of learning as it is an element of assessment pedagogy that we have introduced to measure progress and offer feedback to students. We felt that it would be easier to identify an aspect of classroom practice that was of common use and concern to all students and teachers if we focused on the school improvement and development plan. With colleagues working together from different curriculum areas, it may be difficult to identify common issues for development, as skills vary between different areas of the curriculum. This needs to be borne in mind when putting colleagues together in groups during a cycle of lesson study as a whole-school activity. With colleagues from History, English and Philosophy & Ethics working on the lesson study, the linguistic nature of skill development should, we felt, ensure that pedagogy should be fairly similar in nature. There appeared one obvious focus for us in the form of a recent school development: the development of feedback for formative assessment and use of target setting.

The use of 'target setting sheets' and 'green pen feedback' for all students to record and work on targets and subsequently progress had been introduced during the academic year. Our group all spoke of how effective they felt their own use of this new initiative was. However, we were concerned about whether target sheets were aiding progress or were merely a mechanism to make us feel that students had progressed, rather than providing evidence that they had actually done so. We set as our aims the development of a formative assessment strategy that would really work and we wanted to create something that all colleagues could use.

In terms of the method used to achieve these aims, we decided to use a group within a class common to all of us as the focus for our lesson study. Our case study comprised of a group of eight students with a broad spread of academic abilities. As the variables between learning experiences in students of different ages were considerable, we felt that this would not be the best way to measure progress. Permission letters were adapted and sent out to all carers and were returned, allowing us to progress. In addition, students all seem really pleased to have been selected. Permission was given for this study to be shared with other colleagues beyond the school. John Elliott was to conduct the initial interview and explain to students the rationale, and crucially that any comments that they did not wish us to hear could be edited out. Students were all happy for us to listen to an unedited version of the interview, which was excellent as we were aware of all of the issues they had with our object of learning. We were able to choose a group of students whom we all taught: a mixed-ability class in Key Stage 3. Within the class there is a broad range of ability and a variety of students with different attitudes to learning. The students are also excellent at class discussion, which the group felt would be good for evidence-gathering during interviews, if that was to be our chosen method of assessment

in the study. We decided that we would observe rather than use videotape (presented as a possibility by Professor Elliott). We all felt far more confident that students and teachers would react normally in lessons if we adopted the use of interviews to gain the students' perspective of their learning.

Once these aspects of the study were agreed, we began our first cycle of observations to look at how target setting sheets and feedback were used across the three curriculum areas. When observed, students used target setting and feedback in different ways. There were many positive aspects to the newly introduced system. The opportunity for direct feedback to students in relation to each piece of work supported progress and developed a discourse between teacher and student. In addition to this, all students made use of their target sheets at the back of their exercise books. These enable students to work towards targets that in turn matched curriculum-specific skills. However, upon closer scrutiny we realised that this approach was not successful. The process of turning to target sheets had caused students to disengage from their learning to complete the sheets and gain reward for hitting their targets. Completing their sheet had become an additional task rather that the desired integral part of their learning. This focus, rather than the building of skills with incremental understanding, had become the goal. In addition, students were observed failing to apply their newly achieved skills in other curriculum areas once a target had been 'hit' in one subject area. This would suggest that students were localising the progress they had made to the target set and subsequent skill 'achieved' in one subject. This is not an outcome that demonstrates real progress together with a reflective approach to learning. Students need to generalise their application of skills, so that they transfer their skills, enabling their learning to progress across all subjects. From our initial observations, the choice of feedback and progress as our 'object of learning' seemed logical and translates as having real value at Framingham Earl.

This 'critical incident' carried significant meaning for learning and education in the broader sense and gave a focus for developing our teaching tool. One of the critical points realised was that using target sheets was not helping students make progress with their current work or to transfer skills they had learned to other curriculum areas. The difficulty was how we might overcome this.

What Students Said, and What We Did

The interview that John Elliott conducted with students reinforced our own understanding and helped us develop a strategy. It raised a number of issues. It was very useful to hear the students' perspective on an area that is so central to teaching and learning. Among the main points made by students were the following:

- The consensus was that students did not like the target sheet at the back of the book. Firstly, they felt the spaces to write targets were too small. Secondly, as it was at the back of the book it was not a working part of what

they were doing. Thirdly, the target set for one piece of work was not always relevant to subsequent pieces of work and so became difficult to attain or find relevant. Fourthly, the concept of the target led them to feel this was something they could do and then forget about, rather than something that needed ongoing practice.

- They liked the use of green pen for responding to feedback from teachers, and teachers asking questions to extend their understanding and them responding in their books. They felt this was useful and they could see how it was of benefit to their learning.
- However, they felt that during target time it was difficult to get the support needed from teachers. With up to 30 students in a class teachers were only able to support a limited number of learners to achieve their skill.
- Students also recognised there were different kinds of targets. They came up with their own terms: 'hard targets', which were often cross-curricular skills and literacy based; and 'soft targets', which were relevant to one specific piece of work in one subject.

Having listened to the interview with our students we decided to completely change the system of using target-setting sheets. Instead, the class would have bookmarks in the front of their books. It was felt that this would enable students to make a direct link between feedback and progress with learning, with their bookmark highlighting not targets but rather skills to develop adjacent to their written work. Thus, continuity and thought process should be unbroken and it was intended that students would be able to relate feedback to their learning in a continuous dialogue. Bookmarks would have a set of subject-specific skills that the teacher would use to look for evidence of progress when marking and assessing students' work. In addition to this teachers would use the 'two stars and a wish', i.e. two positive comments and a suggestion for improvement, feedback mechanism to support progress. Students would move away from targets as such and would build use of and familiarity with skills incrementally. It was hoped this would avoid the issue of a student believing that they can stop developing a particular skill once they have 'hit' their target. The skills would not be set out as banded steps that mirror National Curriculum levels; they would be shown as all being equally important in making progress within a chosen subject. On the reverse of the bookmark there was to be a set of literacy focus skills to show progress in learning across each key stage and for use across curriculum areas.

We consulted colleagues in the English department who felt that aspects of this system were too restrictive. The idea of 'two stars and a wish', for example, did not allow for additional points to be made. Colleagues also wanted bookmarks to be in a different format and to be stuck inside the front cover of exercise books. Whilst the points made were wholly valid, we decided to trial the new format as originally planned and see whether students found it useful. The idea of 'two stars and a wish' should not be prescriptive, merely an indication of the emphasis upon the positive. We also felt that to put skills in

the front of students' books would echo the current problem of the separation of feedback for progress and learning. We are all agreed on the importance of using the study to determine whether the bookmarks are helpful in supporting progress.

All members of the group thought that moving away from levels seemed rather vague. At this point in the study we felt slightly anxious as to how we were going to measure, record and report progress in learning across the class and against other measures currently in place, so it was useful to meet with colleagues from other schools and hear about their lesson study experiences and 'objects of learning'. We all felt that the constant pressure of time was difficult within school. Having time with colleagues and with Professor Elliott gave us the space and liminal experience that took us away from our everyday constraints and gave us a sense of community that was not as threatening as lesson observation may sometimes feel within our own educational environment. The initial interview with students had given us a real boost. It was an opportunity to focus our efforts on developing our lesson study and to use the interview outcomes as a basis for development. Other colleagues had already carried out the first phase of their study. We were able to discuss our findings from the interview, which was interesting as colleagues were able to offer opinions on how our 'object of learning' was explored in their own schools.

Second Cycle, and the Question of Teacher Autonomy

With the lesson design improved upon, the process of using it during our second cycle began. Due to time restrictions, we didn't feel that we had enough time before the second interview was due to take place, but students felt they had used their bookmarks enough and responded to feedback in relation to this. We therefore felt that we could go ahead and ask John Elliott to hold his second interview. This produced some really interesting comments. Students had, for example, identified themselves as being in a privileged position, aiding the teacher. The main findings from the second round of interviews included the following:

- The students were positive about the bookmarks, especially their aspirational aspect. Students were all keen to progress to the next bookmark with more complex skills. The proviso was that they were still unsure as to their effectiveness, having only used them for one lesson in each subject.
- Students were aware of the language employed for the literacy aspect of their bookmark and were comfortable with using it.
- They were pleased not to be using the target sheets any more; however, they continued to use the language of targets rather than of skills.
- They felt it was more manageable to have fewer targets to focus on.
- The students continued to be positive about the use of green pen and dialogue with the teacher in their book. This maintains the personalised aspect of the assessment and prevents the process from becoming too generic.

- From the students' perspective, issues remained around the teacher's attention in the classroom. Some felt that certain students received favourable treatment in terms of the teacher's attention during 'feedback time'. While we are sure there was no conscious favouritism in our classroom, it is good to think about how we spent our time supporting our students. The matter of where a teacher chooses to distribute his or her attention around the classroom could be the subject of a completely different lesson study.

The practice of lesson study is embedded in China and Japan where it is used to resolve a teaching-knowledge or learning problem. It is believed that this reduces variation in teaching pedagogy and outcomes over time. It is claimed by Ball and Cohen (1999) that over time 'the focus does become student learning, but initially the focus is inevitably upon teacher behaviour and a learning study needs to continue to get beyond this as it can be a barrier to development' (p. 31). The process of observing our own professional vulnerability at the beginning of the lesson study, and the collaboration we realised as this fell away, was a unique learning experience for the group. This was helped, ironically, by our being remote from the school environment when we discussed our progress. Being away from school enabled the process of change to become less personal as it felt less about the appraisal of performance: a barrier that often seems to inhibit honest development of teaching within a school environment. This feeling reduced as we undertook our study, but we were acutely aware of it at the beginning. In time, this allows exploration of the dynamic relationship between what a student thinks their teacher wants them to learn and the teacher's own pedagogic practices. The realisation that students did not fully understand the learning outcomes that we had set them was not a completely new experience. It is a truth encountered through the realisation occasionally, when marking a set of books, that students share a misconception you have unwittingly given them about a key learning point. To be able to explore and reduce that gap through using variation theory in a lesson study is something that will be an increasing part of the development of teaching at Framingham Earl as lesson study is made use of across all curriculum areas.

In answer to the question of whether the process of undertaking networked lesson study had value for the group, I believe it did. Sharing good practice, and developing strategies to support progress, will support the very ethos that drew us to the teaching profession. It inevitably encourages reflective practice and re-engages us with the process of teaching and learning and obvious professional collaboration. Does it reduce teacher autonomy and the dynamic difference that an individual brings to the classroom? In answer to this question, I am unsure. I believe firmly that the character of a student's educational experience is enriched and made real by the different teaching and learning experiences they encounter. Looking back on our own education, we remember the teachers who had the skills and values we aspired to as ambitious young people. These were the teachers that made learning memorable and fun. If networked lesson study is to be of real value to learning, we need to be aware

of the importance of the shared development of learning strategy. But this needs to be undertaken without an erosion of the autonomous nature of classroom pedagogy. After all, it is the fun and memorable learning experiences that we recall most and that form a positive reflection of our educational experience.

References

Ball, D.L. & Cohen, D.K. (1999) Developing Practice, Developing Practitioners: toward a practice-based theory of professional education, in G. Sykes & L. Darling-Hammond (Eds) *Teaching as the Learning Profession: handbook of policy and practice.* San Francisco: Jossey-Bass.

Lewis, C. & Hurd, J. (2011) *Lesson Study Step by Step: how teacher learning communities improve instruction.* London: Heinemann.

Lewis, C., Perry, R., O'Connell, M.P. & Hurd, J. (2006) Lesson Study Comes of Age in North America, *Phi Delta Kappan*, 88(4), 273-281. http://dx.doi.org/10.1177/003172170608800406

Ling Lo, M. (2009) Lesson and Learning Study: a globalizing form of teacher research. Paper presented at the British Educational Research Association Annual Conference, University of Manchester, 2-5 September.

Office for Standards in Education (2013) *Religious Education: realising the potential.* Ofsted. www.ofsted.gov.uk/resources/130068

ANDRIA RUNCIEMAN, an experienced teacher, is Director of Philosophy and Ethics at Framingham Earl High School, Norfolk. *Correspondence*: andria.runcieman@framinghamearl.net