

Using Lesson Study as a form of classroom based research

Professor David Burghes

Jodie Hunter

Background of the study

Lesson study has been identified as a classroom based form of professional development (PD) which enables teachers to take control of their own PD and develop reflective research skills. This form of research originates from Japan and involves the collaborative examination of practice resulting in teachers building a shared body of professional knowledge. The focus of lesson study is the professional sharing of good teaching practice, learning both from other teachers and as a group.

The aims of our project were to:

- To investigate how lesson study could be used with teachers enrolled in the International Masters Programme modules as a form of research based professional develop
- To investigate and evaluate how teachers enrolled in the International Masters Programme modules could use lesson study as a form of classroom based research.

Context of the study and data collection

During the 2009/2010 school year, lesson study cycles were undertaken with groups of teachers from five different schools. These included both primary schools and secondary schools across the United Kingdom and involved a range of socio-economic contexts. Overall 25 teachers were involved in the project.

At each school, there was an initial meeting at which the over-arching aim for the lesson study cycle was discussed and decided upon by the teachers within that school. Following that meeting, a lesson was jointly planned by the group of teachers and then taught by one of the teachers while the other teachers observed. A reflective discussion meeting was held after the lesson observation and then the lesson was improved and modified during another joint planning session. The lesson was then re-taught by a different teacher in a different class and again a reflective discussion meeting was held to critically analyse the lesson. During all of these meetings and observations, University of Plymouth staff acted as both facilitators and as observers collecting data. All the meetings were video-recorded and the teachers were all interviewed after each lesson study cycle to investigate how their reflective research based practice developed through the use of lesson study.

Outcomes

Improving teacher practice and developing skills to research classroom practice

Findings from the data collected indicate that lesson study was a useful tool for the teachers to develop the skills to research their own classroom practice and focus on improving pupil learning outcomes. A snapshot of comments from the teachers involved in the project includes:

Monica (Year 3 teacher after cycle one) - I think it gave me an insight as well (...), you know when you are planning a lesson on your own and it is all in your head, it is one thing but actually when you are verbalising it in a group and discussing it, there is so much. It gives you a depth that I don't feel I achieve when I am planning a lesson on my own necessarily.

Ellen (Year 5 teacher after cycle two) - You know when other people are watching you then you have to reflect on what you are doing regardless of what anybody else says I know that I will look back and say I should have done this and I should have done this and I will then take that thought before I do something else at another time and then taking on board the views of other people as well.

Melissa (Year 3 teacher after cycle two) - I think most importantly though, the whole point is that we worked together and that actually it has given an opportunity for us to come and see you, for you to come and see Monica (...) and that that, I think, is the richness and to share that. You know if this was something that we could do regularly and across phases and everything then it would have an even deeper impact and that's the whole point, isn't it? That it shouldn't be one off.

Rebecca (Year 3 teacher after cycle three) - What it has made me think is actually before a lesson when I have ascertained what my objective is going to be to actually think carefully, to think carefully, to think through all the misconceptions and all the other possible routes they might take so I am a bit more prepared and know what to do when that comes up, to draw it back.

Conferences and seminars

April 2010 – Joint presentation between two teachers and a UoP staff member at the British Congress for Mathematics Education held at Manchester University entitled: Lesson study as research and professional development

June 2010 – Presentation by at British Society for Research into Learning Mathematics held at University of Nottingham entitled: Lesson study as a form of professional development and action research.

June 2010 – Joint presentation by two teachers and a UoP staff member for the University of Plymouth Faculty of Education STEM Research Network at University of Plymouth entitled: Lesson study as research and professional development

July 2010 – Presentation at Mathematics Education Research Group of Australasia conference held at Fremantle, Australia entitled: Lesson study as research and professional development for practitioners.

August 2010 – Workshop at Children’s Mathematical Education Conference, Rzeszow, Poland
entitled: Tasks and big ideas in supporting teachers to develop professionally.

Outputs

July 2010 – Open House held at Bishop Luffa Secondary School.

September 2010 – DVD produced entitled ‘Lesson Study’. This is freely available upon request from Jodie Hunter (Jodie.hunter@plymouth.ac.uk)

October 2010 – Paper under review for the Congress of the European Society for Research into Mathematics Education by Jenni Back

November 2010 – Expression of interest accepted for *Mathematics Teacher Education and Development* for a paper entitled ‘Facilitating sustainable professional learning through lesson study’ by Jodie Hunter and Jenni Back

December 2010 – CfBT Monograph entitled ‘Enhancing Primary Mathematics’ edited by David Burghes and Jodie Hunter with chapters included from teachers involved in this project.