

**Aim:**

The aim of this research was to adopt a model of lesson study (LS) (Elliott, 2012; Lewis *et al.*, 2009), that was owned and managed entirely by pre-service teachers (PSTs) to convey its potential in facilitating mutual spaces of learning between peers (Lamb *et al.*, 2013). Whilst there is steadily growing interest within initial teacher education (ITE) programmes, 'few projects have managed to use full cycles of LS in ITE due to constraints most commonly associated with time and workloads' (Cajkler *et al.*, 2013:540). The incorporation of lesson study into school-based elements of training could offer PST's autonomy in their professional learning, beyond the formal hierarchical relationships between school-based mentors and PSTs (Le Cornu, 2005). Fuller's (1969) 'phases of concern' conceptualisation of teacher development, consisting of self concerns task concerns and impact concerns informed the study.

**Method:**

- ◆ Participants were Secondary Physical Education PSTs (n=17: males = 9, females = 8), enrolled onto a 38 week Master's level University Postgraduate Certificate in Education course (PGCE) in eastern England.
- ◆ An action research methodology was adopted for the study.
- ◆ During two school placements PSTs engaged in two separate lesson study opportunities.
- ◆ PSTs completed a paired first placement of six weeks, conducting a lesson study together with an emphasis on working collaboratively whilst developing observation skills.
- ◆ Each PST selected a lesson to solo teach and their peer acted as a non-participant observer and recorded the lesson on an iPad.
- ◆ Immediately afterwards, the pair watched the recorded lesson together, engaging in a joint evaluative conversation and review of the lesson.
- ◆ A template of questions associated with pedagogical skills was made available to support their discourse on the lesson.
- ◆ PSTs completed an individual second placement of fifteen weeks, conducting a lesson study with another peer based in a different school (see diagram below), paired through convenience sampling.
- ◆ Data was obtained through a multi-method approach including a group discussion board, individual questionnaires at the end of each lesson study cycle and individual interviews at the end of the course.
- ◆ Interviews were transcribed verbatim and subjected to inductive analysis, exploring common categories across the data, with key patterns compared in order to locate emergent themes.



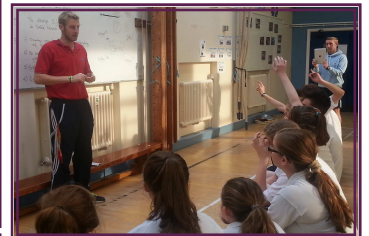
**Step 1:** PST 'A' chose a class to conduct the lesson study in an activity they felt expert in, and shared their draft lesson plan with PST 'B' for feedback and further ideas.



**Step 2:** PST 'A' taught the agreed lesson, with PST 'B' acting as a non-participant observer and recording the lesson on an iPad.



**Step 3:** Immediately after the lesson, the PSTs watched the recorded lesson together, engaging in professional dialogue about the lesson. Together, they reviewed and revised the original plan.



**Step 4:** PST 'B' taught the revised lesson to their own class of pupils, with PST 'A' observing and recording it on an iPad. Together they reviewed the revised lesson, evaluating the impact of the improvements. At a later date, cycles 1-4 were repeated with a reversal of roles for the PSTs and a focus on a different area of activity.

**Findings:**

All data sources endorsed a range of successful outcomes of engaging in lesson study:

*'Seeing someone do it and then having the confidence to go away and take that lesson plan that you had developed together, to then apply, I think was really good, 'cause I would have had a go at teaching soft ball, but I would not have been as confident as I was knowing that this was sort of tried and tested'*

(Interview 3: female PST)

**Findings:**

Data revealed four main emergent themes from the PSTs' personal insights and reflections:

**Acquiring content and pedagogical knowledge**

*'This study task has increased my football subject knowledge and has given me new ideas'* (Q1, 1: female PST)  
*'I also hope that Lisa maybe benefitted from seeing me teach a football lesson as it is my strongest area and she might have gained some ideas how to teach football herself'* (Q2, 10: male PST)

**Developing the planning process**

*'Rewriting the lesson plan on both occasions. Not only did this fill me with confidence that I had a detailed and structured plan it has given me the assurance to deliver this lesson in a different school'* (Q2, 6: male PST)  
*'I feel my partner will have benefitted through learning how to organise lesson plans and times in order to keep up to date with lesson planning'* (Q2, 5: female PST)

**Understanding individual learners' needs**

*'Since completing the lesson study task, I am able to differentiate activities for both high and low achieving pupils, but still allow for full participation which challenges pupils at an appropriate level'* (Q2, 7: male PST)  
*'I feel that this process has improved the learning of the pupils in my class as the standard of my lessons is hopefully higher and the activities in my lessons are now more specific to the learning outcomes'* (Q2, 10: male PST)

**Embedding reflective practice**

*'Being able to reflect on each other's teaching and revisiting the lesson together helped to improve our understanding of the needs of a variety of classes, along with being able to teach similar content, through various activities'* (Q2, 7: male PST)  
*'The task helped me to start understanding how my reflections of someone else's lesson can help the planning and development of my own teaching'* (Q1, 2: female PST)

**Findings:**

⇒ 100% of the PSTs felt the lesson study task had contributed in a positive way to their professional development during their training.

⇒ A common message reinforced the perceived benefits associated with cycles of action: planning and observing an initial lesson, reviewing and adapting the original plan and delivering a revised plan.

⇒ The opportunity to reflect between each of the cycles was acknowledged as an essential element of the process.

⇒ The findings indicated increased levels of confidence, especially in reducing self and task concerns (Fuller, 1969), contributing towards a much stronger transition as newly qualified teachers.

**Conclusion:**

The findings contribute to existing literature exploring the effectiveness and impact of lesson study within initial teacher education. Collaboration with a peer at the same stage of training was viewed as easing the pressure PSTs felt during school placements. The mutually supportive learning environment created pedagogic space beyond the formal mentoring process, allowing for risk-taking with revised lesson approaches and empowering the PSTs to learn through their teaching. They developed confidence in learning from and with peers, especially acquiring subject knowledge, developing planning, understanding learners' needs and embedding reflective practice as they planned, taught, observed, discussed and evaluated lessons.

**References:**

Cajkler, W., Wood, P., Norton, J. & Pedder, D. (2013) Lesson study: towards a collaborative approach to learning in initial teacher education. *Cambridge Journal of Education*, 43(4), 537-554.  
Elliott, J. (2012) Developing a science of teaching through lesson study. *International Journal of Learning and Lesson Study*, 1(2), 108-125.  
Fuller, F. (1969) Concerns of teachers: a developmental conceptualisation. *American Educational Research Journal*, 6(2), 207-226.  
Lamb, P., Lane, K. & Aldous, D. (2013) Enhancing the spaces of reflection: A buddy peer review process within physical education initial teacher education. *European Physical Education Review*, 19(1), 21-38.  
Le Cornu, R. (2005) Peer mentoring: Engaging pre-service teachers in mentoring one another. *Mentoring and Tutoring*, 13(3), 355-366.  
Lewis, C., Perry, R. & Friedkin, S. (2009) 'Lesson study as action research', in Noffke, S. and Somekh, B. (Eds), *The Sage Handbook of Educational Action Research* (Chapter 11), Sage, London, Thousand Oaks, CA, New Delhi, Singapore, p. 142-64.