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## PTAS Project Report (for REGULAR PROJECT GRANTS)

**Project Title:** Empowering student teachers to improve classroom practice using the Lesson Study model: teacher research for the next generation?

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**Project type** (delete as appropriate):

**B Innovation Project** (introduction and evaluation of an educational innovation, usually taking a practical approach)

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**Principal Investigator :** Paul McMillan

**Schools/department :** Moray House School of Education and Sport

**Team members (including Schools and Departments) :**

Co-applicant: Dr Mike Jess

School: Moray House School of Education and Sport

Co-applicant: Dr Mary Bovill

School: Moray House School of Education and Sport

Co-applicant: Dr Murray Craig

School: Moray House School of Education and Sport

Co-applicant: Wilma Irvine

School: Moray House School of Education and Sport

Co-applicant: Dr Andrew Horrell

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**For further details, please contact:**

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Project teams must submit a report within 4 months of the conclusion of their project.

Copies of dissemination material (eg journals/newsletter articles, conference papers, posters should be listed and attached (separate to the word count). The brief report will be published on the IAD web pages.

**Report (maximum 1500 words)**

**What did you do?**

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This project employed 'Lesson Study' with student teachers. Lesson Study is one contemporary framework that can provide 'hands-on' guidance for teacher inquiry and is founded upon *collaboration* with others, usually working in groups of three or four, during the following stages of



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a cyclic process: collective planning; students observing their own planned lesson to gather data while it is taught by one team member; follow-up interviews with case learners that were the focus during the observed lesson; post-lesson group reflection on data gathered; re-planning further lessons collectively using the data.

To further support students to engage more deeply with Lesson Study, this project gathered information – by observing and interviewing staff and student teachers – to better understand the process in higher education. We now have the basis to create a resource package to support the students' collective efforts to research and improve their teaching practices using the Lesson Study model.

### **What did you find out?**

At the heart of Lesson Study is a 5-phase cyclic process focussed on collaborative planning, teaching, observation, analysis and discussion, and a final recording and reporting phase.

Our initial findings – from observing and interviewing staff and student teachers – were that for student teachers to better appreciate the expectations and roles of Lesson Study, the different phases of the cycle needed critical examination. We developed a series of critical questions for four of the main phases (planning, observation, analysis and discussion, recording and reporting), which included:

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1. Critical questions needed in the planning phase to tease out personal visions of the student teachers and their understanding of the learners.
  2. Critical questions needed in the observation phase to identify how the teaching approaches being deployed are experienced by learners.
  3. Critical questions in the analysis and discussion phase are required to frame the nature of collaborative reflective.
  4. Critical questions to play a role in the recording and reporting phase to offer caution (and confidence) in interpreting data about teaching and learning.

We conducted more refined and specific observations and interviews with staff and student teachers. The initial focus of the resource package was on student teacher engagement with Lesson Study. To enable deeper professional learning, we discovered that teacher educator staff needed further support on how the best facilitate the Lesson Study cyclic process. Subsequently, the closing stages of the project focused attention on how teacher educator staff facilitate the collaborative process between students in general and in the recording/reporting stage in particular.



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### **How did you disseminate your findings?**

Presentation at the University of Edinburgh's Learning and Teaching Conference (abstract attached):

McMillan, P., Jess, M. and Mulholland, R. (2022) Lesson Study: Shaping Our Professional Learning Futures? Learning & Teaching Conference, University of Edinburgh, 16 June 2022.

Article Published in a Professional Journal (copy attached):

McMillan, P., Jess, M. and Irvine, W. (2021) Lesson study: Professional learning for the next generation, *Physical Education Matters*, Vol. 16, no. 2.

Abstract accepted to present a roundtable discussion at the Scottish Educational Research Association (abstract attached):

McMillan, P., Mulholland, R. Jess, M. Carse, N., Lunniss, J., Smeadley, B., Stepney, K., Docherty, J., Mackay, J., Paris, G., Kubo, K. (forthcoming) Lesson Study as professional learning: supporting practitioners to embrace collaboration, Scottish Educational Research Association (SERA) Annual Conference, Ayr, Scotland, November 2022.

### **What have been the benefits to student learning?**

A prototype will be complete by September 2022, but we will need to source additional funding to mass produce it; we intend to apply for learning and teaching funding for the Moray House School of Education and Sport. It will become a critical resource to support staff and students within MHSES to engage with Lesson Study in different ways: between ITE staff-students *and within* the ITE staff community.

### **How could these benefits be extended to other parts of the university?**

Studies on the quality of university teaching suggests a need for further improvement: more interactive teaching methods are required and adaptations to better include broad ranging student populations (e.g. Hardman, 2015). Peer observation often proposed as productive professional development for university staff (e.g. Hitch et al., 2017) and could be used to address the existing limitations in the quality of university teaching. While there are valuable theoretical accounts advocating for the use of peer observation, specific frameworks to guide the inquiry process at an applied level are scant. Our PTAS funded project has generated data to develop a resource package to support university tutors and student teachers to better engage with peer observation. Therefore, there is potential for the resource to be adapted for university staff across the wider University community to provide more substance to the peer observation process.

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### **Financial statement (please delete as appropriate):**

This project has utilised the funding awarded to it by the PTAS adjudication committee and the Principal Investigator or School Administrator appropriate can provide financial statements showing the funding usage as and when required by the UoE Development Trusts who may require it for auditing purposes.



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