

Institution: University of Exeter		
Unit of Assessment: UoA 23 Education		
Title of case study: Adapting and developing Lesson Study to improve the teaching of pupils with learning difficulties and disabilities.		
Period when the underpinning research was undertaken: 2010-2018		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s): Professor Brahm Norwich	Role(s) (e.g. job title): Professor Educational Psychology and Special Educational Needs	Period(s) employed by submitting HEI: 2000-ongoing
Period when the claimed impact occurred: from August 2013 – December 2020		
Is this case study continued from a case study submitted in 2014? N		
<p>1. Summary of the impact</p> <p>In England, around 15% of pupils are identified as having special educational needs (SEN) with most attending mainstream primary and secondary schools. Accommodating these diverse needs in the classroom can prove challenging for class teachers. Between 2018 and 2019, the UK Government spent £9.4 billion on SEN support which highlights a need for new approaches to better resource professionals and support SEN pupils. The Lesson Study (LS) approach for SEN, developed by Professor Brahm Norwich, offers a collaborative and reflective problem-solving teaching approach which is now widely understood and utilised by SEN training providers coordinators and teachers throughout the UK. Professor Norwich's research has therefore directly influenced the delivery of curriculum in schools and has had an impact on 1. Improving the professional development of SENCOs and class teachers with European recognition as an inclusive teacher education model, 2. Enhanced inter-professional collaboration and 3. Improved teaching and assessment of pupils with SEN.</p>		
<p>2. Underpinning research</p> <p>Lesson Study (LS) is an approach originally developed in Japan to examine teaching practice to improve teaching and learning. Despite the long history of the use of LS in Japan and China for over 100 years, there had been no research or development work on LS for pupils with SEN. This has been the case even with the more recent adoption of LS in the USA and Europe. Norwich's LS research has developed LS practices as a form of professional development about teaching and assessing pupils with SEN by varying the LS team membership to include allied professionals, by varying the focus of LS and varying the purposes of collaborative pedagogic inquiry.</p> <p>Norwich's initial qualitative research with 34 teachers in 18 secondary schools highlighted the need for LS adaptation and development. It demonstrated that although there was widespread agreement that children with SEN should be educated in mainstream classes whenever possible, teachers did not feel they had sufficient training to deal with a wide range of learning problems (3.1). Norwich's programme of research has subsequently demonstrated how LS can enhance the teaching of pupils with learning difficulties mostly in mainstream primary and secondary schools, but also in some special schools (funded by Esmee Fairbairn Foundation, 2010-13). Design-based research methods were used to revise and develop LS methods with teams of class teachers and SENCOs across different curriculum subjects. The research programme involving overall 34 schools and over 100 teachers showed how teachers came to adopt and use LS to focus on pupils (with Moderate Learning Difficulties) whose learning has presented teachers with teaching challenges (3.2, 3.3). This work was completed in collaboration with Pete Dudley whose UK version of LS was adapted to this area of SEN / inclusive practice. At the time (2010-2013) this was the largest funded UK LS research programme. Using a mixed-methods approach, Norwich demonstrated the positive effects that LS can have on teachers' interest in professional learning, their knowledge about teaching pupils with SEN, teaching confidence and pedagogic knowledge. Teachers also reported student learning gains. The research also indicated the</p>		

conditions required to facilitate quality LS work, namely a context where senior teachers support the LS work and LS teachers are given sufficient time to complete the LS work (3.3).

Two further projects demonstrated the efficacy of an adaptation of LS to include professional advisors in the LS teams, such as educational and clinical psychologists and university-based educationalists (3.4 [funded by ESRC, 2015-16], 3.6 [funded internally], 2017). Norwich's work showed how knowledge is exchanged within an inter-professional LS team using distance technology to enable professionals outside school to join team meetings and see what was going on in a research lesson. These projects also showed how research-based knowledge was used in the LS process and how teachers perceived the positive contributions of the outside professionals in the LS teams. This research was funded by the ESRC and an internal grant.

A further adaptation of LS for teaching pupils with SEN pioneered by Norwich has switched the aim of LS from developing teacher knowledge and strategies to using it as a dynamic approach to assessing learning needs. In this version the LS team aims to refine their understanding of specific pupils' learning needs through trying different teaching approaches and observing pupil responses - Lesson Study for Assessment (LSfA). In other words, variations in teaching are used to derive ideas about the pupil's learning characteristics and needs. A design-based trial of LSfA (3.5; funded by Esmee Fairbairn Foundation, 2013-14) has demonstrated its efficacy, and also showed how teachers' assessment of pupils' learning needs changed from focussing only on pupils' difficulties to appreciating the role of classroom environment factors in pupil learning that were open to change. This research also showed the importance of collaboration with colleagues, professional dialogue that was non-judgemental, and learning conversations with pupils.

3. References to the research

3.1 Ylonen, A. and Norwich, B. (2012) Using Lesson Study to develop teaching approaches for secondary school pupils with moderate learning difficulties: Teachers' concepts, attitudes and pedagogic strategies. *European Journal of Special Needs Education* 27(3):301-317 01. ([10.1080/08856257.2012.678664](https://doi.org/10.1080/08856257.2012.678664))

3.2 Norwich, B. and Ylonen, A. (2013) Design based research to develop the teaching of pupils with moderate learning difficulties (MLD): Evaluating lesson study in terms of pupil, teacher and school outcomes. *Teaching and Teacher Education*, 34, 162-173. ([10.1016/j.tate.2013.04.012](https://doi.org/10.1016/j.tate.2013.04.012))

3.3 Norwich, B. and Ylonen, A. (2015) Lesson study practices in the development of secondary teaching of students with moderate learning difficulties: A systematic qualitative analysis in relation to context and outcomes. *British Educational Research Journal* 41(4):629-649 ([10.1002/berj.3167](https://doi.org/10.1002/berj.3167))

3.4 Norwich, B., Koutsouris, G., Fujita, T., Ralph, T. Adlam, A. and Milton, F. (2016) Exploring knowledge bridging and translation in lesson study using an inter-professional team. *International Journal for Lesson and Learning Studies* 5(3):180-195. ([10.1108/IJLLS-02-2016-0006](https://doi.org/10.1108/IJLLS-02-2016-0006))

3.5 Norwich, B. and Ylonen, A. (2015) A design-based trial of Lesson Study for assessment purposes: evaluating a new classroom based dynamic assessment approach. *European Journal of Special Needs Education* 30(2):253-273. ([10.1080/08856257.2015.1009702](https://doi.org/10.1080/08856257.2015.1009702))

3.6 Norwich, B., Fujita, T., Adlam, A., Milton, F. and Edwards-Jones, A. (2018) Lesson study: an inter-professional collaboration approach for Educational Psychologists to improve teaching and learning. *Educational Psychology in Practice* 34(4):370-385 ([10.1080/02667363.2018.1468733](https://doi.org/10.1080/02667363.2018.1468733))

4. Details of the impact

The overall impact of Norwich's research on Lesson Study has been to improve the teaching and assessment of pupils with SEN through the appropriate use of LS and LSfA in mainstream schools. This impact has been in several inter-related areas:

1. Improving the professional development of SENCOs and class teachers with European recognition as an inclusive teacher education model:

All state-funded mainstream schools in England are required to employ a teacher with Qualified Teacher Status in a Special Educational Co-ordinator (SENCO) role. Legislation in 2009 and the subsequent Children & Families Act (2014), went on to stipulate that every new SENCO in these settings would need to gain the NASENCo qualification within 3 years of taking up the post. Norwich's research has not only enabled SENCOs to understand and use LS in their roles but to

also embed LS in the training and assessment of SENCOs. In August 2018, the Department for Education funded the development of a nasen-hosted website which includes the LS website [5.1] information and materials to support teacher and SENCOs' use of LS, based on Norwich's research. Since its launch, the website has seen 1281 users, with 4702 pages viewed and over 780 LS guidelines and other materials downloaded by November 2020 [5.1].

There are currently 35 NASENCo providers in the UK who train around 1000 SENCOs each year. In November 2018, Norwich was invited to present to these providers at their annual meeting to introduce LS as relevant to the SENCO role. Feedback from this event showed that as a result of Norwich's presentation, 60% of attendees intended to introduce LS into their SENCO course [5.2]. As a result of this event, and other specific presentations given by Norwich, LS principles and practices and/or a LS assignment for trainee SENCOs are now integrated into courses at 9 universities and other SENCO training providers. A survey with 35 NASENCo providers identified that over 350 trainees per year were being introduced to the concepts, principles and practice of Lesson Study as an approach on their course and around 400 trainees have undertaken Lesson Study as a school-based assignment [5.3].

In addition, The Eastern Partnership SENCO award, one of the largest SENCO training providers, which covers 12 local authority areas in south-east England, has used LS principles in its SENCO course since 2015. This has drawn on LS materials developed by Norwich in teachers who use LS to examine in depth and develop their teaching and learning of a specific child with SEN [5.4]. UCL's Centre for Inclusive Education also provide a SENCO award course PG Cert with around 80 teachers each year. The Deputy Director at UCL's Centre for Inclusive Education, explains that since learning about the use of LS in a SEN context through a presentation by Norwich in 2015 it has been included within a core module of the course. In addition, she states that Norwich's work is directly cited in their SENCO module training handbook (2017/18) [5.5].

The SENCO course tutor from The University of Derby also explains that they include Norwich's approach to LS for SEN within their SENCO course. The principles and practice of LS are introduced in taught sessions on how SENCOs can lead continuing professional development, which students can choose to embed as part of their own research assignment. She testifies that *"LS is a great way to support a form of CPD that inclusively engages those involved with practitioner research, their own personal craft knowledge and theory in the field. It supports the idea that SEND is every teachers' business and also support the resilience of teachers as they start to generate a team approach to removing barriers and promoting inclusion"* [5.6].

The research has also led to increased practitioner knowledge and use of LS in SEN through direct professional development talks and workshops, alongside the work with SENCOs and SENCO training providers. The impact here is on the subsequent learning experiences of pupils and on the professional development of the teachers themselves as LS encourages a culture of teacher enquiry, growth and wellbeing. Head teacher at Three Bridges Primary School, who has been mentored by Norwich, has used LS extensively in his own London school and in other London schools since 2015. He explained that *"Over the past five years the impact of using Lesson Study within Three Bridges School has been incredible. Lesson Study has allowed and enabled teachers to engage in their own professional development by providing them with a model for active professional learning and by encouraging them to ask questions of their own professional practice. This in turn leads to a culture change among pupils who are also encouraged to be more actively responsible for their own learning...this has enabled us to provide a model for other schools to improve the teaching of pupils with SEN, locally, nationally and internationally"* [5.7].

However, Norwich's approach to LS for SEN has not been limited to the UK. In September 2016, Norwich and a local committee organised the World Association of Lesson Study (WALS) Conference at the University of Exeter, which was attended by 550+ participants from 40 countries. This international conference enabled links to be made with a Netherlands team also involved in LS to communicate with the EASNIE about LS.

Norwich's research has contributed to the recognition of LS as a teacher education for inclusion model by the EASNIE (a 31 country Europe-wide development agency) which they call 'a promising model of continuing professional development' for inclusive teacher education for pupils with SEN and disabilities [5.8 p.23]. Norwich and Netherlands colleague, Prof Sui Lin Goei, presented the Agency with a briefing paper that showed the relevance of LS to the Agency's project on 'Teacher Education for Inclusion'. Following this, they agreed with the Agency to complete a review of international research about LS for teaching pupils with SEN to support and inform the Agency's Teacher Education for Inclusion Project. The Agency's reference to LS in its Project's international literature review now is designed to inform the Agency's practice and policy self-review tool. This tool is for the 31 member countries to use when mapping national practices to construct a comprehensive national policy for preparing teachers to include all learners [5.8].

2. Enhanced inter-professional collaboration between class teachers, SENCOs and Educational Psychologists

Norwich's research has facilitated increased collaboration between practitioner educational psychologists, SENCOs and teachers through joint LS. Using the insights from Norwich's research (3.4, 3.5 and 3.6), Lesson Study for Assessment (LSfA) has been used since 2017 in the training of practitioner educational psychologists in the Exeter DEdPsych, initial BPS recognized training course. This involves trainee psychologists using an inter-professional form of LSfA to respond to a school referral. The trainees set up a LS team with a SENCO and class teacher/s in liaison with the trainee's placement supervising psychologist [5.9].

Norwich's programme of talks and seminars about LS mean that there are also practitioner educational psychologists using versions of LS in their practice. An example of the impact of Norwich's work can be seen in the case of an Educational Psychologist who first came across the adapted use of LS when he was working as a tutor at University College London on the national SENCO training award and attended a presentation by Norwich. Subsequently, he also read Norwich's practical guidance booklet on the use of LS. He now works independently as an educational psychologist, providing short courses and professional development. He uses and advocates the use of LS in schools because: *"It creates a space for innovation in teaching supported by peers and can highlight the discrepancy between what teachers might predict from a student and what they end up observing when teaching"* [5.10].

3. Improved teaching and assessment of pupils with SEN and quality of learning for SEN pupils.

Norwich's research has enabled the enhanced quality of teaching and assessing pupils as illustrated in teacher conclusions of a set of LS case reports [5.9]. For example: **about teaching effects:** having completed a LS a SENCO reflected that: 'Working together was very positive; (the pupil) can be supported long term' (Case 1, p.5). Another teacher concluded that LS *"helped really think about first teaching steps"* and how she *"better understands his (the pupil's) need to be nurtured"* (case 3, p.11). **About learning effects:** the *"improvement in attitude to writing and attainment"* (Case 2, p.9) in one LS and in another LS that the pupil *"continued to use the subtraction grid (or similar resources) in other lessons... was consistently getting more than 60% correct in lessons where she had previously needed one-to-one support and would get only 10-20% of the answers correct"* (Case 1 p.4).

Further evidence is shown in the testimonial of the Head Teacher of Three Bridges School, which describes the impact of Norwich's research as leading to the improved quality of teaching pupils with SEN as well as pupils' learning and wellbeing [5.7].

5. Sources to corroborate the impact

5.1 Lesson Study for Special Needs and Inclusive Education website: a resource of materials, videos, LS case reports etc.

<https://web.archive.org/web/20201110133509/https://www.lessonstudysend.co.uk/>

5.2 SENCO training provider national conference presentation about Lesson Study

5.3 Evidence of use of LS in 9 HEI's (Christ Church, Derby, Chichester, Sheffield, Plymouth, Exeter, UCL, Worcester) and 1 SENCO training provider (The Eastern Partnership) - Summary report of survey responses from SENCO providers and correspondence from other HEI contacts confirming use of LS.

5.4 Testimonial evidence from the Regional Lead Tutor of The Eastern Partnership SENCO award about the use of LS use in SENCO programme.

5.5 Testimonial interview with the Deputy Director at UCL's Centre for Inclusive Education about the use of LS in SENCO programme.

5.6 Testimonial feedback from the SENCO course tutor at The University of Derby about LS in their SENCO programme.

5.7 Letter of Testimony from the Head Teacher of Three Bridges school, London about the whole school use of LS in their school improvement.

5.8 EASNIE Teacher Education for Inclusion (TPL4I). European Agency for Special Needs and Inclusive Education, 2019. *Teacher Professional Learning for Inclusion TPL4I: Literature Review*. (A. De Vroey, S. Symeonidou and A. Watkins, eds.). Odense, Denmark. The European Agency recognition of the promise of LS for teacher professional learning for inclusion.

https://web.archive.org/web/20210115133053/https://www.european-agency.org/sites/default/files/tpl4i_policy_self-review_tool.pdf

5.9 Examples of LS use by SENCOs and Educational Psychologists, improved professional collaboration and improved learning of pupils with SEN: These illustrate the positive impact of this research programme for teachers, their teaching, inter-professional collaboration and the learning pupils with SEN:

<https://web.archive.org/web/20201110133908/https://www.lessonstudysend.co.uk/resources/publications/>

5.10 Testimonial Interview with an Educational Psychologist who uses LS in his practice.