

EMPIRICAL STUDY

Lesson Study and Collaborative Work Supporting Teacher Training during Internship

 Ildikó Szabó¹

¹University of Pécs, Hungary

RESUMEN (Spanish)

El objetivo de este estudio es ofrecer una visión general de cómo estas áreas pueden combinarse en la práctica escolar diaria apoyando la formación del profesorado centrándose en las prácticas de los profesores en prácticas en la escuela primaria, donde se grabaron lecciones DICO+ en Hungría. Los profesores en prácticas en esta escuela de prácticas deben realizar una investigación de estudio de la lección utilizando un cierto corpus durante su observación centrándose en los siguientes temas: cómo se lleva a cabo una lección, qué fases de la lección se pueden identificar, qué formas de trabajo se utilizan, qué métodos, herramientas son utilizadas por el profesor, qué buenos ejemplos se pueden identificar para aplicar la resolución de problemas, la interdisciplinariedad, las prácticas creativas en el aula. Se espera que los profesores en prácticas realicen sesiones de co-enseñanza, así como sesiones de enseñanza individual, ambas analizadas en un debate de grupo. Este estudio pretende presentar cómo siendo una escuela de prácticas y tutelando a los profesores en prácticas, los jóvenes profesores pueden contribuir a cambiar las actitudes y creencias de los profesores en prácticas hacia el trabajo colaborativo y el uso del lesson study como método.

PALABRAS CLAVE

Formación de profesores;
Trabajo colaborativo;
Practicás;
Lesson Study

ABSTRACT (English)

The aim of this study is to give an overview on how these areas can be combined in everyday school practice supporting teacher training focusing on teacher trainees' internship in the primary school, where DICO+ lessons were recorded in Hungary. Teacher trainees in this practice school are to make a lesson study research using a certain corpus during their observation focusing on the following topics: how a lesson is conducted, what lesson phases can be identified, what work forms are used, what methods, tools are used by the teacher, what good examples can be identified for applying problem-solving, interdisciplinary, creative classroom practices. Teacher trainees are expected to do co-teaching as well as individual teaching sessions, both of which are analyzed in a group discussion. This study is to introduce how being a practice school and mentoring trainees, young teachers can contribute to change the attitudes and beliefs of practitioners towards working collaboratively and using lesson study as a method.

KEYWORDS

Teacher training;
Collaborative work;
Internship;
Lesson Study

RÉSUMÉ (Français)

L'objectif de cette étude est de donner un aperçu de la manière dont les champs d'action du projet DICO+ peuvent être combinés dans la pratique scolaire quotidienne pour soutenir la formation des enseignants. L'étude se concentre sur le stage des enseignants stagiaires à l'école primaire où les leçons DICO+ ont été enregistrées en Hongrie. Les enseignants stagiaires de cette école pratique doivent effectuer une recherche sur la méthodologie de la lesson study en utilisant un certain corpus pendant leur observation, et en se concentrant sur les objets suivants : comment se déroule une leçon, quelles phases de la leçon peuvent être identifiées, quelles formes de travail, quelles méthodes, quels outils sont utilisés par l'enseignant, quelles bonnes pratiques peuvent être identifiées dans le champ de la résolution de problèmes, de l'interdisciplinarité ou des pratiques créatives en classe. Les enseignants stagiaires ont été amenés à co-enseigner ainsi qu'à mettre en œuvre des sessions d'enseignement individuelles ; ces séances sont analysées dans le cadre d'une discussion de groupe. Cette étude vise à présenter l'intérêt d'une école pratique et d'encadrer les stagiaires pour aider les jeunes enseignants à changer les attitudes et les croyances des praticiens à l'égard du travail en collaboration et de l'utilisation de la méthode de la lesson study.

MOTS-CLÉS

Formation des enseignants;
Travail collaboratif;
Stage;
Lesson Study

1. Introduction

Lesson study is an ideal way of the continuous professional development in order to improve the future teachers' personality, teaching as such and school enhancement. Its aim is to analyse and make suggestions regarding certain aspects of a particular lesson and improve a learning situation. Being reflective on teaching process is one of the most relevant competences for teachers. Lesson study gives an insight into teachers' way of thinking from the first step of lesson preparation till the final phase of student assessment. This is what future teachers are trained for. However, this is not what most of the times happens in everyday classroom practice in most schools.

Teacher training has undergone fundamental changes in recent years. A shift towards incorporating more practical experiences in education institutions into the curriculum is a key concept in reforms in teacher training. This hands-on experience is offered either in practice schools professionally supervised by higher education institutions, or schools professionally selected and contracted by higher education institutions.

The legal status of practice schools in teacher education is defined by Act CCIV of 2011 on National Higher Education. A practice school can be funded and run by a university that has a teacher training faculty. Teacher trainees observe lessons and do their teaching practice supervised by mentor teachers in these institutions. Teacher trainees do observation and their placement during their BA/MA studies. Mentor teachers have to be qualified to mentor and supervise teacher trainees, and they are expected to have a minimum practice in the field they train future teachers. These institutions are highly committed to transfer the most recent innovations in pedagogy, methodology in practice, strongly collaborate with researchers in these disciplines and have strong professional connection with the teacher training cabinet of the university they belong to.

Due to aforementioned situation, practice schools act both as a place to test and assess theoretical innovations in pedagogy and methodology, and as a catalysator for spreading innovations education practice throughout the whole system. There is an expectation that all the innovations, good practices teacher trainees get familiarised with in practice schools will be multiplied when trainees start their own teaching career throughout the country.

The main focus of the DICO+ project was pupils' outcomes. However, it is the teacher whose attitude towards the process of teaching is the basis of a good practice. Teachers are seen as agents of changes who monitor and intervene into learners' learning processes in case it is needed. To achieve this teaching and learning scenario requires the teachers' working together; therefore collective teacher effectiveness is the key to successful learning (Juhász, 2018, pp. 74–75). Based on the aforementioned aspect on teacher's role, teachers' common beliefs and attitudes are crucial factors in pupils' learning outcomes. This present study is to give an insight into how lesson study (a methodology to develop cooperative learning situations for teachers) as a perfect method supporting both experienced and inexperienced

teachers to learn and reflect on their own teaching practice, pedagogical beliefs and attitudes is put into practice in training teachers in a former practice school in Kecskemét, Hungary¹.

2. Objectives

Lesson study means joint planning, joint observation and joint analysis, during which teachers have collectively to imagine learning. "Lesson study (LS) is a highly specified form of classroom action research focusing on the development of teacher practice knowledge. It has been in use in Japan since 1870s. LS therefore pre-dates action research as we know it in the West, by some 70 years. LS involves groups of teachers collaboratively planning, teaching, observing and analysing learning and teaching in 'research lessons'. They record their findings. Over a cycle of research lessons they may innovate or refine a pedagogical approach that will improve pupils' learning and which will be shared with others both through public research lessons, and through the publication of a paper outlining their work" (Dudley, 2014, p. 2). Lesson study approach is very beneficial as teachers can learn new skills and new curriculum materials to implement. It also provides a forum to exchange learning strategies across disciplines and offers an opportunity for teacher collaboration for instruction. Moreover, teachers can see the aspects of students' learning through the eyes of others, they can reflect on their own practices and become more conscious of teaching and learning processes. That is the reason why it is extensively used during school placement in training teachers for lower primary section (class 1–4 in primary school, children aged 6–10) in Kecskemét, Hungary.

Teacher trainees were to have the opportunity to be involved in school practice throughout their whole four-year training. Teacher trainees' activities during placement at Petőfi Primary School in Kecskemét were organised during training in the following structure (see table 1):

Year One	Year Two	Year Three	Year Four
<p>Introduction into the work of an educational institution (4X2 hours); Observation and reflection (10 hours)</p>	<p>Observation and teaching practice (2 subjects); one week in class 1– 4</p>	<p>Observation and teaching practice (7 subjects); two weeks in class 1– 4 ; subject area observation in class 5– 6</p>	<p>Observation and teaching practice (7 subjects); two weeks at the school in class 14 ; subject area teaching practice in class 5– 6</p>

Table 1. Teacher trainees' activities during placement at the practice school. Source : own elaboration.

¹ Petőfi Sándor Catholic Primary School in Kecskemét worked as a practice school of John von Neumann University (previously Kecskemét College) for 22 years. As the Teacher Training Faculty of John von Neumann University merged into Károli Gáspár University of the Reformed Church in Hungary Faculty of Pedagogy in 2020, teacher training for lower primary section in Kecskemét was terminated. As a consequence, the school does not work as a practice school now.

“Lesson study is an ideal way of the continuous professional development in order to improve the teachers’ personality, teaching as such and school enhancement. Its aim is to analyse and make suggestions regarding certain aspects of a particular lesson and improve a learning situation” (Gordon Győri, 2009, p. 9). Based on this scientific recommendation, teacher trainees worked with the method of lesson study in every phase of their placement. Our belief is that lesson study gives an insight into teachers’ way of thinking from the first step of lesson preparation till the final phase of student assessment. Therefore the objective to apply study throughout school placement is to create a school culture that values knowledge sharing, shared responsibility and collaborative approach. By involving future teachers in such a way of thinking and school culture, the whole school system can be positively affected.

3. Methodology

“However, in order to make the lesson study successful, it is important to have an understanding of the procedures of lesson study for the members to join. From the beginning of lesson study, a trust strategy should be developed between the members of the group. This will improve the motivation of members within the group to adjust their thinking and work method which in turn affects instructional design and development of learner-centered lessons” (Kareemee, Suwannattachote and Faikhamta, 2019, p. 42). Following this success factor, lesson study was used in individual, pair and group work by the trainees in several phases of school placement from the beginning of their school placement (see Figure 1).

Individual lesson study was applied during their Year I observation period, when they got insight into school administration, planning and management, and observed 10 lessons. Mutual trust between school management and trainees, trainees and mentor teachers, trainees and students, and among trainees themselves was founded in this introductory year, when all areas of school life was open to them, all of their questions, remarks, ideas were listened to and reflected in a supportive way.

In Year II trainees started to work in pairs and groups: they prepared for lessons via brainstorming in groups under the mentor teacher’s supervision. While doing so, the whole group of trainees collected ideas, hints, prompts for the very same lesson; during these preparatory discussion phase they experienced what shared responsibility is. Following the collaborative preparation, trainees planned their lessons in pairs. During the preparation phase it was the mentor teacher who trainees could consult. After conducting their lessons, trainees were asked to reflect on their own lessons, which was followed by peer reflection and assessment. The reflection and assessment on a lesson conducted by a trainee was immediately followed by collaborative preparation for the next lesson to be held by another trainee. The trainee partner conducted the same lesson This cyclical approach of using lesson study promoted its integration into trainees’ pedagogical culture and teaching toolkit.

Traditional Lesson Planning suggests that a group of teachers should start up a new approach in a school adding that a group of three could work well. In our case the third partner supporting the pair was the whole group of trainees observing the research lessons. According to lesson study protocol at least one member of the team should be a senior

teacher so that the teachers will have a mix of teaching experience. Following this guideline, the mentor teacher represented the seniority, experience and expertise in the team.

Pupil interviews were not conducted. The final phase of each practice lesson is dedicated to pupils' reflection on the lesson. During this phase trainees take notes. These feedback notes on pupils' reflection are used in the post lesson discussion alongside observations of the whole group.

Year III and Year IV teaching practices followed the same routine. As trainees did their disciplinary teaching practice in class 5–6 in smaller groups based on their chosen subject area, they were motivated to work collaboratively and apply lesson study as a method to analyse and make suggestions on certain aspects of a particular lesson.

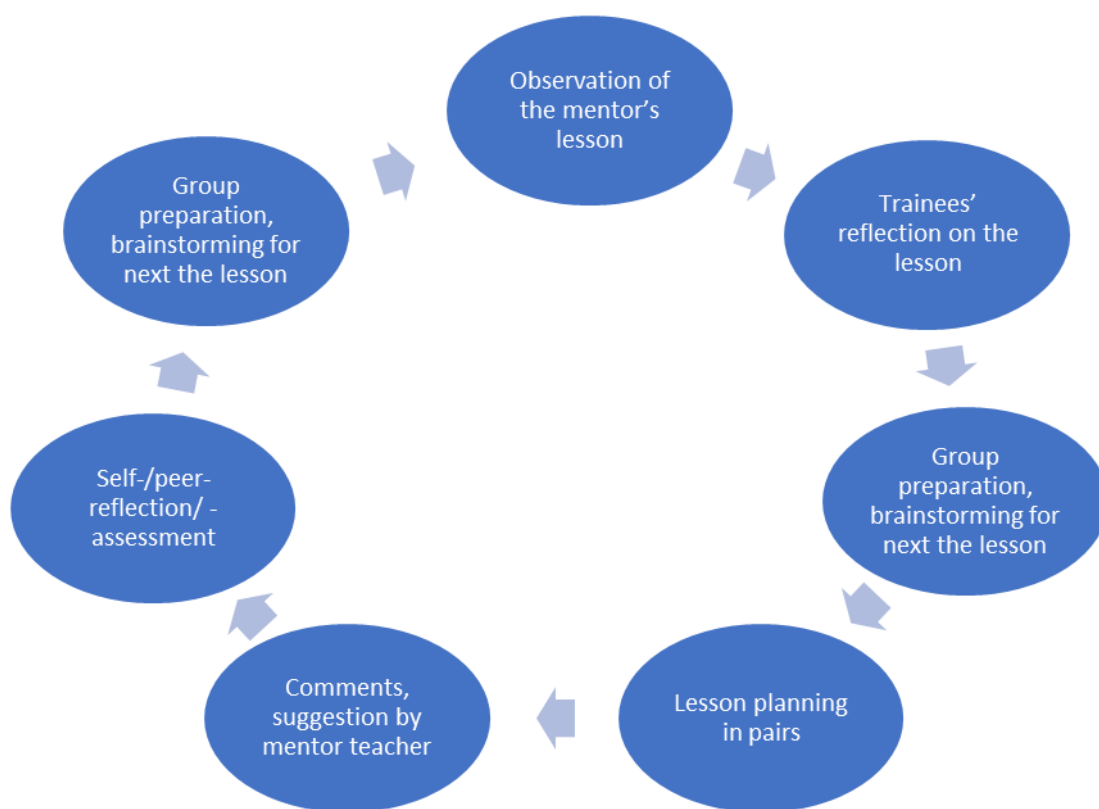


Figure 1. The cyclical approach of applying lesson study during teacher trainees' school placement. Source: own elaboration.

Trainees were asked to use an observation sheet during observing one another's lessons. In feedback session after the conducted lesson the guidelines in the observation sheet were used for reflection and assessment (see table 2).

Observe and take notes about ...	
1. the lesson!	
	What subject area is the lesson (Mother Tongue, Music, Science PE, Art, Design, Foreign Language)?
	What are the lesson phases? (making draft, note taking)
	<p>What resources were used?</p> <p>Do they meet the expected criteria?</p> <p>Do they support the learning processes? If yes, how?</p>
	What type of lesson is it (presenting new information, practice, revision, systematising, repetitive-systematic lesson, skill-building lesson, experiential lesson, end-of-module-summary lesson, summary lesson, debriefing lesson)?
	<p>What about the structure and organisation of the lesson?</p> <p>Is the choice of lesson type correct?</p> <p>Is the content and sequence of the exercises in the lesson appropriate</p> <ul style="list-style-type: none"> • for the requirements of the subject? • for the characteristics of the group/class? • the didactic principles taught? <p>Was the structure and timing of the lesson appropriate?</p>
2. the learning scenario!	
	What learning organisation methods have you seen?
	What work formats did the teacher use (general didactic and subject-specific)?
	What strategies did the teacher use (pedagogical, teaching, educational)?
	What methods did the teacher use?
	What was the ratio between traditional and innovative ways of working?

	Was there any differentiation (when, how, for what purpose)?
	If you have seen a complex lesson, how was it manifested?
3. students' work and behaviour!	
	How would you describe students' abilities? social skills?
	To what extent are the students motivated, interested and attentive in the lesson?
	How active are the students in class?
	How much independence is given to students?
	What is the level of student responsibility; do they follow rules?
4. the teacher's work, personality and attitudes!	
	How effective was the teacher in lesson planning? lesson evaluation and assessment? self-reflection? disciplining and guiding pupils?
	Which characteristics of pedagogical professionalism could you identify in the teacher's personality and activities?
	How purposeful, accurate and comprehensive were the teacher's questions and instructions?

	How was the working relationship between the teacher and the students, was it allowed to ask questions, make mistakes, have doubts?
	To what extent is the teacher able to share his/her attention, does the teacher give feedback or react to students' work, comments and reactions?
	To what extent does the teacher make use of the educational and developmental opportunities provided by spontaneous situations?
	What kind of motivation has the teacher used? How effective was it?
	How did the teacher engage the students in the lesson?
	How was talent care implemented?
	How was redevelopment achieved?
	How did the teacher implement integration and inclusiveness in the lesson?
	What about lesson management? What role did the teacher have in pedagogical situation(s)?

Table 2. Teacher trainees' observation sheet used during placement at the practice school. Source: Kecskeméti Főiskola Gyakorlati Képzési Kabinet 2018, internal document, own translation.

Regarding collaborative work, trainees were put into groups of 7-8. In Year I they were to teach mini-lessons, co-teaching with mentors. In Year II they did preparation for each practice lesson in groups. While observing, they were taking notes during one another's lessons following the set of guidelines or a checklist of their observation sheet (see table 2). As the preparation for lessons was done following lesson study method, in case of need trainees could and were allowed to give support during a lesson to their fellow trainee.

4. Results

"Teacher trainees' expectations towards teaching practice have risen recently: they expect school enhancement to integrate theory and practice, moreover, to gain deeper knowledge on teaching itself" (Hercz, 2015, p. 7). The school enhancement and the first years of actual teaching upon completing initial preparation have crucial importance in teachers' careers. Taking this fact into consideration, in 2015 teacher trainees were asked to assess and give feedback on their school practice and school enhancement (Hercz, 2015). Regarding the usefulness of school practice and school enhancement, teacher trainees had a positive opinion on them (the average was 4,44 and 4,6 on a scale of five). Teacher trainees have improved both in general or subject-specific teacher roles. The most significant success factor was the relationship and cooperation with the mentors at school lots.

Regarding collaborative work, an international survey on teachers (TALIS 2013) pointed out that collaboration among teachers is not a part of school culture. Most of the teachers still work in an isolated way; half of the respondents never or very rarely takes part in collaborative teaching, or so called team teaching, and only a third of them observe their colleagues' lessons. Teachers who are involved in such practices have higher self-efficacy, feel more comfortable in their position, and are more satisfied with their work.

Mentor teachers in practice schools can act as icebreakers in the aforementioned school culture. They are expected to work in teams before, during and after the school practice (they elaborate on unified expectations towards the trainees, prepare all the documents trainees have to use, agree on common assessment and evaluation standards), and to observe one another's lesson in order to set up common standards in practice. Therefore collaborative work and lesson study is a coherent part not only of individual teachers' work, but of school culture as well. As it is they who have a very strong influence on future teachers' career, higher integration of collaborative work using lesson study could be expected in education.

However, there are certain obstacles to hinder the progress collaborative teaching. There is a need for induction programmes or mentoring in teachers' first schools. Such programmes are or would be ideal to introduce or integrate collaborative work, lesson study in novices' school culture. "When teachers reach the stage of actual teaching, upon completing their initial preparation, only 38% of them participate in some kinds of formal or informal induction in their first school, despite the positive impact of induction processes on novice teachers' transition to school and perceived efficacy. At the same time, while school principals also generally consider mentoring to be important for teachers' work and students' performance, only 22% of novice teachers have an assigned mentor, on average across OECD countries and economies in TALIS" (TALIS 2018). In Hungary there are even fewer induction programmes than in OECD countries: 24 % of schools offer formal, 46 % of them offer informal programmes.

According to the international and Hungarian research result, there is a discrepancy between the school culture of practice schools where lesson study and collaborative work are parts of everyday work, and that of non-practice schools, which represent the majority of educational institutions.

5. Discussion and conclusion

When using lesson study, we can focus on the following topics: how a lesson is conducted, what lesson phases can be identified, what work forms are used, what methods, tools are used by the teacher, what good examples can be identified for applying problem-solving, interdisciplinary, creative classroom practices. Lesson study gives an insight into teachers' way of thinking from the first step of lesson preparation till the final phase of student assessment. This is what future teachers are trained for. However, this is not what most of the times happens in everyday classroom practices.

Teacher trainees' feedback on school practices and enhancement could be a starting point in improving school culture. The positive impact of school practice on trainees' career socialisation is clearly indicated in surveys (Hercz, 2015).

In education systems with high achievements teachers take part in long-term school practices or in an induction programme. In Hungary there is no induction or lead-in programme for novices in 43 % of educational institutions (Balázsi, Vadász, 2019, p. 62). In Hungary 15 % of teachers took part in formal, 17 % of them took part in informal induction programmes, and 80 % had no such support at all in their first schools. In the first phase of their teaching career teachers need support in three areas: personal support to develop teacher identity, social support to integrate into a professional community, and professional support to improve professional skills. All these needs can be fulfilled with collaborative work and using lesson study as a method in schools.

Being supported during their initial training with both personal and social support, get familiar with lesson study and use it in collaborative work, teacher trainees would feel comfortable working with these approaches. When asking teachers, they "[...] also report that professional development based on collaboration and collaborative approaches to teaching is among the most impactful for them" (TALIS 2018). As it is the case, integrating collaborative work, of which lesson study can be a part of, is a need of both novices and experienced teachers. Education policy should act to develop and maintain induction programmes for novices and professional development programmes for practitioners to support collaborative work in schools, which would lead to success, higher self-efficacy and fewer career leavers in the long run.

References

- Balázsi, I., Vadász, Cs. (2019). *TALIS 2018. Összefoglaló jelentés*. Budapest, Oktatási Hivatal. https://www.oktatas.hu/pub_bin/dload/kozoktat/meresek/talis/TALIS_jelentes_2018.pdf
- Dudley, P. (2014). *Lesson Study: A Handbook*. Cambridge. <https://lessonstudy.co.uk/wp-content/uploads/2012/03/new-handbook-revisedMay14.pdf>
- Gordon Győri, J. (2009). *Tanórakutatás*. Budapest, Gondolat Kiadó, ELTE PPK Neveléstudományi Intézet.
- Hertz, M. (2015). Pedagógushallgatók pályaszocializációjának alakulása a tanítási gyakorlatokon. In: Major, É. Veszelszki, Á. (Eds.), *A tanárrá válás és a tanárság kutatása: A magyar nyelv és irodalom, az idegen nyelvek és a művészetek műveltségi területen*. (pp. 9–27). Budapest, Eötvös Loránd Tudományegyetem
- Juhász, V. (2018) A szövegértés fejlesztési stratégiák hatékonyságáról. *Új Pedagógiai Szemle* 68(3–4) 73–88. https://epa.oszk.hu/00000/00035/00186/pdf/EPA00035_upsz_2018_03-04_073-088.pdf
- Kareemee, S. Suwannatthachote, P., & Faikhamta, C. (2019). Guidelines for Online PLC with a Lesson Study Approach to Promote STEM Education. *The Journal of Behavioral Science*, 14(3), 32-48.

OECD Multilingual Summaries TALIS 2018 Results (Volume I) Teachers and School Leaders as Lifelong Learners Summary in English. <https://www.oecd-ilibrary.org/docserver/0d310598-en.pdf?expires=1660392918&id=id&accname=guest&checksum=26D75672BEB39CB8221354625FE5FE6C>

OECD TALIS 2013 Results: An International Perspective on Teaching and Learning. Executive Summary of the Full Report. <https://www.oecd.org/education/school/TALIS-2013-Executive-Summary.pdf>