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LESSON STUDY MODEL APPLICATION IN THE FIELD OF TEACHING MUSIC AND STUDENT COMPETENCIES

Abstract: This paper considers the possibilities of applying the Japanese Lesson Study Model in the process of teaching music to future kindergarten teachers. Given the artistic character of the subject and diverse music abilities of students, the aim of this paper is to explore the possibility of applying the Lesson Study with regard to students' personal feelings toward competencies to prepare and perform activities during the music lesson. Research results show that student competencies acquired during formal education are sufficient for preparation and performance of activities, but that differences in experiencing competencies can be spotted within individual parameters. According to the attitudes of future teachers, the application of the Lesson Study in teaching music would yield positive results in the context of improving their social competences, self-assurance and confidence when performing music, their ability for collaborative work and some aspects of the teaching method.

Keywords: music education, Lesson Study, student competencies, collaboration, interaction.

INTRODUCTION

Students at universities of education acquire mandatory theoretical knowledge and didactic-methodological competencies to perform classes and other forms of education work. Since teaching is a complex process, future teachers, educators or tutors sometimes find it difficult to apply theory in practice (Kennedy, 1999).

Student's education should be focused on practical programs (training) development enabling future teachers not only to acquire the means for performing lessons but also to learn and permanently develop through performing teaching (Sims and Walsh, 2009).

One of the authentic ways to prepare students to deliver lessons practically is the Japanese Lesson Study genuine model, the application of which has contributed to high achievements in students' learning and the improvement of teaching practice in Japan.

Although Lesson Study was initially conceived as an improvement process for teachers working in schools, research shows that the adapted version of the Lesson Study can also be implemented in the initial education of teachers, in work with students attending universities of education, future elementary school teachers or kindergarten teachers (Cajkler, Wood, 2015, Chassels & Melville, 2009; Fernandez, 2005; Sims & Walsh, 2009). The results of the above research work, being the empirical confirmation of the basic ideas and aims of the study, showed that Lesson Study application in teaching methods has the following positive effects on performing lessons in schools:

- It develops and improves the teaching skills of students, improves the quality of their lessons (Chassels & Melville, 2009; Ganesh & Matteson, 2010);
- After obtaining feedback, revised lessons have become more pupil-centered (Fernandez, 2005);
- It enables better understanding by pupils and greater openness to different styles of teaching and learning (Chassels and Melville, 2009; Ganesh and Matteson, 2010);
- It develops a deeper understanding of the subject contents by pupils (Chassels and Melville, 2009; Fernandez, 2005; Ganesh and Matteson, 2010).

Observing classes by colleagues has improved the insight into the pupil's needs, increased awareness of the importance of collaboration and improved teaching abilities in the critical analysis of classes and in the exploration of effective and non-effective teaching strategies (Chassels and Melville, 2009).

Secondary importance of the process of teaching and learning within the Lesson Study lies in the fact that it represents a form of training students to develop skills crucial for collaborative work.

Having in mind the specific nature of teaching music – the artistic character of the subject and the complex nature of musical abilities of students, the aim of this paper is defined from the aspect of possibilities to apply the Lesson Study model in music education in relation to the students' personal feelings toward competencies to prepare and carry out targeted activities within music education.

DESCRIPTION OF JAPANESE LESSON STUDY MODEL

The essence of the Lesson Study lies in lesson observation, ongoing discussion among teachers and their collaborative work aimed at re-working and improving these lessons (Lewis, 2011).

Lesson Study is a Japanese teaching improvement approach, i.e. the model of a teacher-led research in which participants work together to research, plan, teach and observe series of lessons using ongoing discussions, reflection, and

expert input to track and refine their pedagogical interventions within teaching process (Dudley, 2012). This is a comprehensive and well-articulated process of reviewing practice (Lenski, Caskey, 2009) focused on the successful teaching and learning through implementing a systematic method of modifying lessons through collaborative planning, carrying out the plan, testing the work plan with pupils (through so-called field testing), and the feedback-based revision of the plan (Mostofo, 2014).

The model has been used in teaching practice in Japan since the 1880s as a teaching activity based on observing the way of teaching with the aim of advancing the process of preparing a class, series of classes or a selected teaching unit. It represents the process of collaborative activities focused on content and pupils; it enables teachers to develop their teaching practice – to foresee pupil reactions, to evaluate and improve the class studied within that cycle of improvement, and train pupils to think independently (Pjanić, 2014). In Japan, where it emerged, the Lesson Study model is deemed a powerful means for increasing the capacity and sensitivity of teachers for the very process of learning and the way the pupils learn.

The concept is simple. Teachers work in teams, to target an area (teaching unit) together and plan articulation and flow of activities. Then they together observe a lesson simulation and contemplate on how to improve the lesson preparation. They create a professional knowledge base for learning that can be applied in practice – not remaining documentation only; by carefully observing examples made as a product of interaction during mutual meetings, they attempt to apply them in their classroom now becoming the center of learning (Lewis, 2011).

The focus in all these processes is on *how* pupils learn, on active and careful observation of pupils' learning process, on contemplation about whether this model of learning is useful and productive for pupils, as well as on shedding light on the question: *If this is not functioning, what should we as teachers change and how should we change it?* Due to its clear and simple structure, Lesson Study is a highly practical approach to designing better lessons.

In order to secure and keep the focus on pupils' learning and not on the evaluation of teachers, the practice of the Lesson Study is guided by careful protocols. Two key protocols are: the observing protocol and the discussion protocol.

The purpose of the observing protocol is to carefully observe what pupils do and say and to notice their learning since the role of the teacher is not only to help pupils and to teach them but to learn together with them through direct experiences (Lewis, 2011).

In the discussion protocol or so-called post-research discussions, the presentation is in most of the cases initiated by the teacher who lectured and the discussion is focused on pupils rather than on the teacher. Comments of other team members are also focused on the pupils' activities and answers. A careful and

consistent description of the class does not imply conclusions or evaluation but represents an analysis of the methods used by the student or obstacles the student faced during the class. When we gather them, these descriptions help us to get a picture of what the class looked like from different points of view – the teacher, the students, observers, and the student demonstrator/performer. Only then can the implications for further work be made.

The segments of the Lesson Study cycle are differentiated in the following way:

1. Study of curriculum, standards, and formulation of goals – general, long-term goals relating to pupils' learning and development are taken into account;
2. Planning – a new lesson to be field tested is selected (or the existing one is revised);
3. Performing the field test of the lesson – one team member conducts a lesson and others observe and collect data;
4. Reflection – through formal class analysis data are exchanged in order to identify wider problems in teaching/learning (Lewis, 2011).

Author Lewis discovered that the Lesson Study could be a powerful platform for the professional development of teachers since, as a form of testing and evaluating teachers' work, it allows teachers to explore their own practice, especially the subject matters problematic for teaching.

A team of teachers in Singapore added an innovation to the Lesson Study practice: teachers who observe the lesson are given a few minutes to interview pupils immediately after a field test/simulation. The goal of this interview as an additional segment of the Lesson Study is to motivate the observer to talk to children, to ask the children questions about the assignment they did, all with the aim of obtaining a full insight in their way of thinking.

Having in mind the described characteristics and positive effects on teaching methods, the Lesson Study can also be applied in the field of music education. Certain limitations and deviations from the usual concept are conditioned by the specific nature of this subject that we explained below.

SPECIFIC NATURE OF MUSIC EDUCATION

Innovative forms of teaching music education at universities should correspond to the real needs of students that are, due to heterogeneous music abilities, very diverse in relation to separate segments of music education (theory of music, vocal and instrumental reproduction of music contents – singing and playing, aspects of teaching methods).

The aim of the research was to determine the spheres in which the cooperation and interaction would help students, and whether the Lesson Study could be applied to these spheres. Theoretical starting points that directed the researchers in defining the subject and objective of the research are the existing definitions of peer interaction and group learning extended by dimensions such as the social context in which interaction happens, the type of assignment solved within interaction, the participants' activity in communication, the observation of own competencies, and their evaluation in relation to the competencies of other participants (Petrović, 2015: 79).

The only possible way to see collaborative relation positively reflected in the development of skills and competencies of students is to combine the Lesson Study model with other approaches in a complementary manner. In new research fields, one of them certainly being the field of music education in the context of conceptual development and psychology of music skills, combining two approaches to studying peer interaction as a specific form of learning is almost inevitable (Stepanović, 2010). This is supported by similar terms accepted by different authors, including field test discussion (Mercer, 2003), field testing lessons (Mostofo, 2014), or field test class assignments (Lewis, 2011). Within different contexts or conditions of studies, researchers have come to similar characteristics of the group learning process, including shared responsibility among participants during the common work on the assignment and negotiation or agreement with regard to the meaning of a situation in the direction of common meaning structuring (Mercer and Howe, 2012 in Petrović, 2015).

Building competencies and skills is the result of the tripartite interaction of teachers, students, and assignment (Per-Clermont, 2004). Studying social interactions among students has two main dimensions; 1) peer interaction, and 2) specific nature of the contents that are the subject of interaction between teachers and students. In music activities, interaction is directly conditioned by program requirements of certain fields of work, the implementation of which activates different abilities of students – the ability of active listening to music and music memory in the field of listening to music, vocal skills and performance skills of playing a harmonic instrument when singing children's songs, a sense of rhythm when performing music games, counting rhymes, and playing children's musical instruments, creative ability and ability to observe music elements in children's music creative work.

The efficiency of educational practice in the field of music education largely depends on practical music skills of lower elementary school and kindergarten teachers, i.e. it is conditioned by the level of development of music skills of the student, the knowledge of music theory – music literacy of the student, student's motivation for continual work and improvement, abilities to apply different teaching

methods and forms of work including ability for collaborative work (Nikolić, Ercegovac-Jagljčić, 2010).

Modern approaches to teaching mostly underline active learning as opposed to traditional concept teaching, but the attitudes of authors are somewhat different. According to Kyriacou (1997), “we achieve active learning by involving pupils in activities giving them a marked degree of autonomy and control over the organisation, conduct and direction of the learning activity”, and it is in field test teaching, collaborative learning and teamwork that it is achieved (Svalina, 2015: 71).

In music education, and from the aspect of the methodology, it can be applied to planning and acquiring music-theoretical knowledge, while in the field of performing activity it must be combined with other teaching method approaches. A more significant approach to teaching from the aspect of applying in music education belongs to German didactics advocate Paul Heimann who spoke about models of teaching methods – analytical approach and individual subject methods that “enable considering all specifics of individual educational fields and creativity of practitioners when shaping the educational process” (Bognar, Matijević, 2007: 268).

Authors Bognar and Matijević emphasize that systematization of educational strategies is done in accordance with basic postulates of humanistic psychology and educational strategies according to the areas and interests. In the area of music education, the most important edification task is to make pupils love music and to become familiar with it on the basis of emotional experience in order to freely express their music experience. Cognitive interests of students/pupils can be satisfied by learning about music, by explanations, by analyzing pieces of music; satisfaction of experiential interests is achieved by experience (the most intensive in the area of listening music) and creative expression, while psychomotor interests are met by singing, playing instruments, and performing music games (Bognar, Matijević, 2007).

The interrelatedness between cognitive and experiential aspects points to the inevitability of adjusting methods to music contents and applying educational processes particularly created for music education (Bognar, Matijević, 2007). The application of corresponding methods depends exclusively on the subject area and wrong attempts of some teaching method practitioners to implement certain methods to unsuitable areas can often be encountered in artistic subjects (Bognar, Matijević, 2007:269).

METHODOLOGY FRAMEWORK

Segments and key determinants of the Lesson Study - observation, simulation, feedback, and collaborative work – are not novel to teaching practice¹, but the significance of the Lesson Study is reflected in the sequence and articulation of these activities. The focus is on collaboration and mutual activities of students as well as feedback that students obtain directly after the class/activity through mutual analysis and suggestions, while conceptualization of new ideas is the product of described interaction and collaboration.

The aim of the paper is to establish possible application of the Lesson Study in relation to students' personal experience regarding competencies for preparation and implementation of targeted activities in the field of music education. According to the defined aim, the research tasks are to:

1. Examine student's attitudes about personal experience toward competencies for preparation and implementation of music activities;
2. Examine student's attitudes about the significance of collaboration and interaction for preparation and implementation of targeted activities within music education.

The descriptive method and surveying technique are applied. The sample of this research consisted of fourth-year students of the study program Pre-school Teacher, a total of 74 respondents, and surveying was done at the end of 2017/2018 school year, after the implementation of two different music activities in a preschool institution. Students' attitudes were interpreted in accordance with defined tasks and in relation to evaluations of the first and second lecturing. The evaluation of teachers was formed after a mutual analysis of the performed class with the group of students who observed the class.

RESEARCH RESULTS AND DISCUSSION

When it comes to students' competencies for performing music activities,² students evaluated that their competencies acquired during the formal education were sufficient for the preparation and implementation of activities. Insignificant differences in own experience toward competencies can be spotted within individual parameters: professional knowledge in the field of music theory, vocal and

1 According to American authors Walter and Marx (1981) simulation, group interaction, role playing and practical exercises belong to central methods group, one of "three groups of methods crucial for achieving experiential learning or teaching" (Svalina, 2015: 71).

2 Students' competencies for performing music activities include their knowledge and experience in domain of pedagogical sciences and program contents of music education.

instrumental reproduction of music contents, didactic-methodological competencies and pedagogical-psychological knowledge (Table 1).

Table 1. Students' attitudes toward competencies for the implementation of music activities

Level of competencies	Possessed to a great extent f (%)	Sufficient for activity implementation f (%)	Sufficient only for preparation f (%)	Additional improvement needed f (%)	Total f (%)
Subject areas					
Theory of music	22 (29.73)	42 (56.76)	8 (10.81)	2 (2.70)	
Vocal and instrumental reproduction	12 (16.22)	38 (51.35)	12 (16.22)	12 (16.22)	74
Didactic and methodological knowledge	24 (32.43)	42 (56.76)	8 (10.81)	0	(100)
Pedagogical and psychological knowledge	28 (37.84)	30 (40.54)	10 (13.51)	6 (8.11)	

When we compare their answers relating to the preparation of activities and answers regarding the implementation of activities (including the design of preparation), it can be observed that a certain number of students believe they have sufficient knowledge and skills to prepare an activity but that the implementation of the activity is marked by a certain extent of insecurity regarding their own competencies. This phenomenon stems from the specifics of music education and music activities and a chain of factors influencing their implementation that we have explained it in the previous chapter.

Students obtain basic theoretical knowledge they apply to performing music – playing and singing, but an important factor of successful implementation is music and performing skills that are uneven and vary among students. Work on the development of music skills is a long-term process starting in the preschool period and happening in parallel with other forms of education in lower elementary school grades, while at other levels of education, music knowledge is adopted through the area of listening to music and themes from the history of music, knowledge of musical instruments, musical forms. Continual development of music skills and abilities is a privilege of individuals attending a music school, singing in the choir or playing in an orchestra. Their music education at teacher

education faculties is focused on the possibility of performing a music lesson in a school or music activities in a preschool institution, and insecurity, stage fright, and insufficient self-confidence are significantly in correlation with the level of their skills development.

Similar research in the field of music education of students, the sample of which were future elementary school teachers, showed that “more than one-half of students think that problem in achieving competences (...) is their underdeveloped music skills” (Suzdilovski, 2012:632).

In the same research a large number of students believe that in addition to innovations and intensification of certain teaching contents within music courses (vocal-instrumental teaching and music culture teaching method), an important step in acquiring professional competencies would be continual work on developing self-confidence necessary for singing and playing in front of a larger number of people (Suzdilovski, 2012). The identical attitudes are expressed by future teachers being the sample of this research.

Some psychological studies by the authors dealing with nature of music skills (Sloboda, 2000) attempted to demystify the process of music performance and describe different music parameters that (in addition to inborn talent) influence individual differences when performing the same musical composition. Playing is not only a technical motor skill; it also demands the ability to create distinctly different performances of the same piece of music in relation to the nature of structural elements and the emotional experience of the composition. One of the conditions for mastering a certain instrument is understanding music vs. the mechanical repeating of music materials without thoughtful engagement. Understanding music depends on the existence and deployment of processes for discovering, storing and organizing music materials according to basic structural characteristics. Common cultural experiences that students possess develop these processes to a certain extent but in order to achieve a level of expertise needed for performing music and implementing educational work it is necessary to have a specially designed learning environment and activities implying the inclusion of certain motivating and social factors (Sloboda, 2000).

Other form of music performance, singing, also can be advanced by applying corresponding techniques (Welch and McPherson, 2012). The analysis of data about class observations in the research conducted with elementary school pupils showed characteristics of high-quality teaching of singing that can also be applied in music education of future teachers:

- Learning is the most efficient when pupils are actively engaged during the most part of the class;
- Pupils' activities are dominant during singing and answering the questions;
- Success criteria are explicit, students' performing/singing is promptly

evaluated and feedback is offered with clear indications on how to improve singing;

- Achievement is evaluated and related to success criteria (Welch and McPherson, 2012).

With other research task relating to students' need to cooperate and interact in music education, students' experience in preparation and implementation of music activities during the school year showed that majority of students, 58 or 78.38% of respondents, prepared activities most easily and efficiently when acting partially independently in consultations with the subject professor. Only 16 of them (21.62%) confirmed that collaborative work in groups helped in designing the preparation. In both categories of the answers, the majority of the students better evaluated the second targeted activity (Table 2).

Table 2. Manner of preparation and implementation of music activities and evaluation of activities

First and second activity evaluation	Better evaluation of second activity f (%)	Same evaluations f (%)	Poorer evaluation of the second activity f (%)	Total f (%)
Manner of preparation of activities				
Independently in consultation with professor	30 (51.72)	20 (34.48)	8 (13.79)	58 (100)
Collaboratively in pair or group	10 (62.5)	4 (25)	2 (12.5)	16 (100)
Total f (%)	40 (54.05)	24 (32.43)	10 (13.51)	74 (100)

Based on the evaluation of practical lectures, the implementation of the second class was more successful and better evaluated with 54.05% students, while other student showed the same (32.43%) or weaker evaluation (13.51%). These data confirm that students are not trained for collaborative work and that the given abilities are not developed spontaneously, but with systematic support within a specially designed program for acquiring these skills.

Providing aspects where collaborative work can contribute to competences improvement, a total of 20 (27.03%) participants responded they needed support in the form of cooperation with other students when it comes to their

self-assurance, self-confidence, and inner motivation, while 46 students (62.16%) said they needed help with singing and playing instruments. In our research and educational system in general, it can be noticed that students are not taught to be partners in the collaborative process of learning and researching. The focus of contemporary higher school learning should be shifted from knowing concepts and contents to acquiring competencies and developing students' skills (Gojkov, Stojanović, 2015). The Lesson Study in such context would be a convenient procedure to encourage and develop student competencies.

Experience in planning and implementing the first activity, learning from mistakes and feedback have helped students to implement the second practical lecture although it included a different unit and theme of activity (56 or 75.67%). With smaller number of students (18 or 24.32%), due to the given specifics of music skills and circumstances that the performance of different music field is conditioned by a certain component of skills, the implementation of activities depended only on program requirements by the fields of work, regardless of the former experience (Table 3).

Table 3. Students' attitudes about factors influencing the activity implementation

Activity evaluation→ Factors	Better evaluation of the second activity f (%)	Same evaluations f (%)	Poorer evaluation of the second activity f (%)	Total f(%)
Positive influence of former experience in planning the second class	30 (53.57)	16 (28.57)	10 (17.86)	56 (100)
Planning depends on teaching unit	10 (55.56)	8 (44.44)	0	18 (100)
Total f (%)	40 (54.05)	24 (32.43)	10 (13.51)	74 (100)

Students' attitudes on the way of preparing and implementing the class – independently or in collaboration with the group, and on factors influencing the implementation, are not in correlation with the evaluation of their targeted activities.

This points to the assumption that during the implementation of activities, a Lesson Study simulation would help students only in teaching method aspects,

such as planning, content articulation and predicted and expected answers of children, while in the area of music competencies it has no sufficient effect on their development and improvement. In order to make interaction advantageous to the outcomes of the class/practical lecture, student's dialogue or exchange of thoughts and ideas with other students as a form of social interaction would not suffice – the interactive process must include the contents of different areas. A higher level of correlation and linking music with other non-musical contents and areas gives a feeling of confidence to all surveyed students (100%), while the correlating area depends on the topic and student's affinity.

CONCLUSION

Research results show that the Lesson Study can be applied to music education with respect of specific nature of the subject area – experiential-educational aspects of teaching that need to be harmonized with the selection and application of certain methods and strategies, and that musical abilities of students are the crucial pre-condition for the efficient application of the Japanese model. The education of future teachers is a dynamic and open process that involves theoretical knowledge, competency, collaboration, development of skills relevant for the performance of different segments of educational work, and, therefore, demands the integration of knowledge, abilities, and action (Tatković, Mocinić 2012).

On the basis of students' attitudes, it is possible to conclude that the Lesson Study application in music education would yield good results in the context of improving students' competencies only in the aspects of teaching method, while it shows no sufficient effect on the development of performing competencies.

In order to train future teachers to apply modern scientific insights in the educational process, in addition to knowledge of different psychological and pedagogical theories, mastering teaching methods in educational work, it is necessary to train them to apply modern interactive, cooperative and other methods and ways of work (Gojkov, 2015).

Research results confirmed the assumption that the collaborative work skill does not develop spontaneously; it is necessary to learn according to the special program. In this regard, the Lesson Study could have a significant role in training the students to apply interactive forms of learning. Its advantages are not limited to knowledge participants obtain in the framework of reflexive discussion after the lesson (Pjanić, 2014). The interactive approach in the Lesson Study has a double function: in professor–student (teacher–child) relation and in the form of collaboration between students who learn, resolve different practical problems, reflect on their own work through discussion (Gojkov, 2015: 141).

Music education of future teachers could be improved using the application of the Lesson Study method toward obtaining social competences, self-confidence, and self-assurance in performing music, which are, according to the respondents, the key factors limiting their progression and development.

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