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## **SYMPOSIUM V**

### **Flipped Classroom: implementation, teaching approaches, and challenges in music education**

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#### **Abstract**

*The Flipped Classroom has been widely used to enrich teaching practices with digital tools at all levels of education, underlining the enhancement of students' learning implications and experiences. According to this blended learning teaching approach, a video or any other digital material is posted on a platform (Learning Management System) before the lesson. Students study the material in their time (pre-class phase), and in the class (in-class phase), queries are answered, and clarifications are given. Consequently, the majority of teaching time connects theory and practice and contains more creative and collaborative activities. Thus, students achieve learning outcomes that belong to lower Bloom taxonomy levels in pre-class, and during the in-class phase, they achieve learning outcomes such as applying, analysing, evaluating, and creating (higher levels). This symposium proposes implementations of the inverted classroom in Primary and Secondary Education in Greece and answers the following questions: a) Is the music lessons' content suitable for the flipped classroom application? b) What are the obstacles and limitations of this approach? c) To what extent does music instruction in class focus on the higher levels of Bloom's Taxonomy? d) How do pupils/students respond? Music teachers filled out an observation form based on the four pillars of the flipped classroom and reflective diaries and participated in semi-structured interviews before and after the implementation. As a result, the flipped classroom can be applied in Music lessons, demonstrating pupils/students' active participation; however, watching the educational material during the pre-class phase is very beneficial. In addition, it offers efficient time for music educators to deepen on various issues and include more creative activities in their lessons, which are based on analysis, creation, and evaluation. At the same time, it enhances students' interests and preferences and promotes participation and involvement in their learning process.*

**Keywords:** music education, blended learning, flipped classroom, Bloom's taxonomy, self-learning, creativity

Nowadays, technical and theoretical innovations in educational science have unlocked new paths (Goksu & Duran, 2020), using technological means to transmit knowledge. Most students worldwide usually have 24/7 Internet access via PC, tablet, and smartphone; at the same time, technology is getting easier accessible. A decade ago, Roehl, Reddy, and Shannon (2013) underlined the urgency of adapting teaching tools to capture and maintain students' attention. Santos and Serpa (2020) describe shortly the most common teaching-learning process in the school culture, which is based on the “presentation of the contents by the teacher, and implementation of these contents in a very theoretical way” (p. 167). We can assume that this urgency was the main reason for the popularity of the ideology of flipped learning at all levels of education over the past few years. Some of the studies are in Medicine, Physics, Chemistry, Mathematics, and English. At the same time, there are few studies on flipped learning in Music (Akbel, 2018), especially in primary and secondary education. The symposium aims to put flipped learning in Greek Primary and Secondary Education into practice, set the benefits and difficulties of its implementation after quarantine due to the Covid-19 pandemic, and arouse questions and reflections for further applications.

### **The roots of the flipped classroom**

Students' motivation and active participation during a lesson is a topic of interest for many teachers. As the primary tool for knowledge transmission, the lecture does not gain students' attention for a long time and does not maintain their attentiveness. Alison King, associate professor of education in the College of Education at California State University in San Marcos, underlined the importance of active learning in tertiary education and the extension of the educator's role from lecturer to facilitator and guide, in her research “From Sage on the Stage to Guide on the Side” in 1993. She realises that:

In most college classrooms, the professor lectures, and the students listen and take notes... In this view of teaching and learning, students are passive learners rather than active ones. Such a view is outdated and will not be effective for the twenty-first century when individuals will be expected to think for themselves, pose and solve complex problems, and generally produce knowledge rather than reproduce it (King, 1993, p. 30).

She promoted active learning activities and techniques such as think-pair-share, generating examples, concept mapping, problem posing, developing critiques and pair summarising/checking to involve students in their learning, think for themselves, cultivate their critical thinking, and produce the knowledge -rather than reproduce it. According to Goksu and Duran (2020), this article set the foundation of the flipped classroom. We find the term “flip” in Baker's research “The “Classroom Flip”: using web course management tools to become the guide by the side” (2000) for the first time in the literature review. Teaching “Graphic design for interactive multimedia and communication in the Information Age”, Prof. J. Wesley Baker at Cedarville University (Ohio) realised that his students were unprepared for the class, and he felt unable to get them to read the text and apply the content using active learning strategies. Under these assumptions, he tried to use technology to present the lecture's content and involve undergraduate students in active learning activities working in cooperation. Posting the PowerPoint slides before the lesson, students had time to study at their own pace. The changes in the classroom were based on the four concepts: “clarify, expand, apply, practice” (Baker, 2000, pp. 13-14). In the classroom, he clarified and explained the topic, and then the students were divided into small groups to implement and work on the new knowledge. The research's results stressed, among others, “the benefits of increased interactivity and collaboration without sacrificing any content” (Baker, 2000, p. 16).

Jonathan Bergmann and Aaron Sams were the two chemistry teachers at Colorado who implemented the flipped classroom in secondary education. In the book “*Flip your classroom: reach every student in every class every day*”, released in 2012, they described the reason for recording their lectures and how this idea transformed into a learning model. Trying to find a solution for absent students to catch up on the lessons, Sams

...was thumbing through a technology magazine and showed Jonathan an article about some software that would record a PowerPoint slide show, including voice and any annotations, and then convert the recording into a video file that could be easily distributed online. YouTube was just getting started, and the world of online video was in its infancy. But as we discussed the potential of such software, we realised that this might be a way to keep our students who missed class from missing out on learning (Bergmann & Sams, 2012, p. 3).

They started pre-recording all their lectures in the Spring of 2007, but Aaron Sams observed that students needed the teacher’s presence when they had difficulties during their practice. He then wondered: “What if we pre recorded all of our lectures, students viewed the video as ‘homework,’ and then we used the entire class period to help students with the concepts they do not understand?” (Bergmann & Sams, 2012, p. 5).

Since then, the number of research papers, which focus on flipped learning, the importance of collaboration, students’ views, and the advantages and limitations of the method has increased. This approach has been implemented in various cognitive subjects in schools, such as Physics (Finkenberg, 2018), History (Makrodimos, Papadakis & Koutsouba, 2017), Mathematics (Johnson, 2013; Makrodimos, Papadakis & Koutsouba, 2017), English Language (Schaffer, 2016), Geography (Makrodimos, Papadakis & Koutsouba, 2017) English as a foreign language (Rigoutsou, 2018) and Music (Duker et al., 2015; Gilbert, 2016; Nagy, 2017; Bernhofer & Wieland, 2018; Jia, 2019).

### **Defining the flipped classroom**

In the literature review, the terms *flipped classroom*, *inverted classroom*, and *flipped learning* refer to the same way of teaching. However, much research uses the term *flipped classroom* to define it either as a methodology (Doi, 2016; Makrodimos, Papadakis, Koutsoumpa, 2017), a teaching method (Bergmann & Sams, 2012; Jia, 2019), a pedagogical approach (Abeysekera & Dawson, 2014; Doi, 2016; Goksu & Duran, 2020) or instructional strategy (Johnson, 2013). The worldwide coalition “Flipped Learning Global Initiative Network” with co-founder J. Bergmann, consisting of educators, researchers, technologists, professional development providers and education leaders in 49 countries, takes into consideration the development and growth of flipped learning and gives an international definition as follows:

Flipped learning is a framework that enables educators to reach every student. The Flipped approach inverts the traditional classroom model by introducing course concepts before class, allowing educators to use class time to guide each student through active, practical, innovative application of the course principles ([https://www.flglobal.org/international\\_definition](https://www.flglobal.org/international_definition)).

The flipped classroom is a blended learning type, combining face-to-face teaching with asynchronous one. Based on constructivist theory, flipped teaching is a student-centred instruction, putting the teacher as the facilitator of the experiential learning process, allowing class time for active learning (Doi, 2016).

In this framework, in pre-class activities, students put most of their effort into

the lower levels of revised Bloom's taxonomy (levels: remembering and understanding). They can watch the educational digital material, which the teacher uploads to the Learning Management System. They can re-watch, pause, rewind, and review it as many times as needed, following their own learning pace and without the pressure of the classroom atmosphere. Consequently, active and creative activities in groups, which are held in class, focus on the upper level of taxonomy (levels: applying, analysing, evaluating, and creating). As a result, a lesson is extended, as it begins out of the class, and the time is sufficient for all levels of Bloom's taxonomy objectives to be achieved (Anderson et al., 2001).

Setting all the above elements from theory into practice, several factors are fundamental for its success, which are presented in the acronym F.L.I.P. (Goksu & Duran, 2020):

- F for a flexible environment, in which flexible environments have small individual and group work areas so that most of their class time is dedicated to cultivating skills through more problem-based learning exercises.
- L for a learning culture where students actively engage with knowledge application and reconstruction.
- I for intentional content of pre-class educational material and in-class activities. The content is intentionally tailored to pursue the lesson's aims and is suitable for every student's learning style.
- P for Professional Educator who implements the approach and can organise the lesson following its main principles. They can also be open to new ideas and innovations to enrich everyday teaching practices.

Doi (2016) states that many teachers apply the flipped classroom due to "its flexibility, responsiveness, and effectiveness for information literacy instruction" (p.114). In more detail, Bergmann and Sam's assumptions about the advantages of its implementation (2012, pp. 19-33) are still up to date:

- 1- Flipping speaks the language of today's students: Today's students grew up with Internet access, YouTube, Facebook, Myspace, and a host of other digital resources. Therefore, teachers should infiltrate the video/digital culture instead of fighting it. They should embrace digital learning and use it to help the students instead of telling them they cannot learn with today's tools.
- 2- Flipping helps busy students: Students today are busy. Many are over-programmed, going from one event to the next, so they need the flexibility of the flipped classroom.
- 3- Flipping helps struggling students: Teachers can spend most of their classroom time assisting those students who struggle most.
- 4- Flipping helps students of all abilities to excel: All direct instruction is recorded, and students with special needs can watch the videos as often as they need to learn the material.
- 5- Flipping allows students to pause and rewind their teacher: Flipping the classroom gives the students control of courses so that students appreciate the pause function for different reasons, such as slow or fast learning.
- 6- Flipping increases student-teacher interaction: Flipping allows teachers to leverage technology to increase student interaction.
- 7- Flipping allows teachers to know their students better: Flipping allows teachers to build better relationships with our students due to increased teacher-student interaction.
- 8- Flipping increases student-student interaction: Teachers can purposely try to make

their classes places where students carry out meaningful activities instead of completing busy work so that they can create a culture of learning.

- 9- Flipping allows for real differentiation: Flipping the class can show how needy many students are since teachers can personalise all learning.
- 10- Flipping changes classroom management: Since teachers do not just stand up and speak to students, all school administration issues disappear.
- 11- Flipping changes how teachers talk to parents: Flipped classrooms are shifting the emphasis to a place where parents can consider how their children can enhance learning.
- 12- Flipping educates parents: Many parents watch alongside their children and learn.
- 13- Flipping makes the class transparent: Flipping opens the doors to our classrooms and allows the public to come in.

### **Flipped classroom and music education**

Although many teachers worldwide integrate the flipped classroom approach in various cognitive domains, the research in music education is limited. However, its benefits and limitations are presented in the following selected research.

Four music educators, P. Duker, A. Gawboy, B. Hughes, and K. Shaffer, implemented three teaching tools -the standard-based grading (SBG), just-in-time teaching (JiTT) and inverted classroom- in Music Theory at Ohio State University, Charleston Southern University, the University of Miami, and the University of Delaware in 2012. They aimed to “strengthen curricula, increase the impact that an instructor can have on undergraduate theory students, and in some cases reduce the amount of time an instructor must devote to achieving that impact” (Duker et al., 2015, p. 1). Short videos (5-10 min.) replaced the lecture about Music Theory, and in-class collaborative learning activities, such as composition, aural analysis, and performances, took place on multiple levels so that all students could participate according to their pace. By extending the activities following their needs, they had control of their learning and procedure, cultivating metacognitive skills. For example, slower students continued their work taking the teacher’s support, and the more fluent ones could transition to higher-level tasks. All the above activities reinforced the development of students’ musicianship.

As a supplement teaching tool in student-centred learning for music ensembles, the flipped classroom enriched the CCC concept (Curious, Collaborative, Creativity) at the State University of New York-Potsdam. The aims focused on students’ more profound and meaningful musical experiences, independent learning, and maintenance of long musicianship, encouraging curiosity via repertoire selection, promoting collaboration, and sharing their music creations (Gilbert, 2016). The flipped classroom implementation emerged with the following issues (Gilbert, 2016, pp. 32,33):

- Much time is needed for behind-the-scenes work to mentor student conductors, coach student composers, and ensure students have access to the materials they need to bring their ideas to life.
- Allocating time in rehearsals for student contributions can benefit the ensemble and promote more advanced music-making.
- It may help directors reach goals more quickly than instruction solely delivered in traditional formats.
- Students demonstrate more substantial musical knowledge, increased participation, and a deeper level of enjoyment.

Teaching the history of Western art music is a subject in which lecture is essential during instruction. Art Brownlow, a music teacher at The University of Texas Rio Grande Valley, focused on objectives such as learning the historical, aesthetic,

cultural and philosophical framework of music history, understanding how that information relates to musical compositions and using the appropriate methodological tools of scholarly inquiry through some research project. The time for applying all the above was limited, as the lecture was in the middle of the lesson. He decided to implement flipped classroom to bring more creative activities into the class and allow students to apply their knowledge. He prepared online lectures and offered extra material to his students according to the topic (e.g., guides, translations of vocal texts, book chapters, journal articles, opera librettos and synopses, films of operas, ballets or orchestral concerts, or interviews with composers and performers). The lesson in the class started with pre-prepared questions, which stimulated the discussion or material clarification. Then, students collaborated in groups of four or five and analysed specific musical pieces. The use of the iPads was critical as they annotated all parts of the score. Then, every group presented its efforts and listened to the musical piece at the end of the lesson. Brownlow (2017) realised he was more engaged throughout the course as he circulated from group to group, answering questions and guiding the process. He noticed, "I am not just learning the information to pass the class. I feel like I will carry this information with me in the real world" (Brownlow, 2017, p. 6).

The flipped classroom was selected as an appropriate approach for teaching cello to keep practising on students' instruments during the mid-term break, spending the holiday performing effectively according to the video instructions and information for a new music piece (Akbel, 2018). The qualitative research, designed by the Turkish Music Conservatory of Yildirim Beyazit University, was held in 2017-2018 and aimed to receive three students' and three instructors' opinions from different conservatories and universities on the feasibility of flipped learning model for cello education in Turkish music. The effects of flipped learning on students' success in right-hand-left-hand techniques on the cello, rhythms, maqam transitions, nuance signs, musical interpretation, fluency, and performance of Turkish Music pitches on the cello were examined. The semi-structured interview analysis showed, among others, that:

- Students used the tutorial video effectively, identifying their flaws and correcting mistakes during the practice class. The most considerable progress was reported in fluency and musical interpretation, but no significant progress in producing clean Turkish music pitches.
- Students agreed that the tutorial video organised their study better, watching and re-watching specific details of the music piece.
- All instructors highlighted that students performed much better after implementing the flipped classroom.

### **Implementing the flipped classroom in Primary and Secondary Education in Greece**

The school year 2021-2022, a year at the end of the Covid-19 pandemic, but still, with some restrictions, found music teachers and students tired of long-distance learning but eager to participate in and organise creative musical activities. Most students had access to the Internet and the appropriate technological supplies and were familiar with a Learning Management System. These conditions were considered sufficient for the flipped classroom implementation in Greek schools.

The following applications occurred in face-to-face instruction and with the Covid-19 pandemic restrictions. The aims were to explore the following questions:

1. Is the music lessons content suitable for the flipped classroom application?
2. What are the obstacles and limitations of its approach?

3. To what extent does music instruction in class focus on the higher levels of Bloom's Taxonomy?
4. How do pupils/students respond?

Music teachers implemented flipped classroom, selecting the topic appropriate to their pupils/students in any period of the year. They taught Music once a week, according to the official primary and secondary education programme. They filled out an observation form based on the four pillars of the flipped classroom and reflective diaries and participated in semi-structured interviews before and after the implementation. They are all experienced music teachers interested in enriching their teaching with innovative approaches. Singing, music appreciation, performance and music theory in a creative and collaborative context are the main parts of their music lesson plans.

In the pre-class phase, they used E-Class and Teams Microsoft platforms with which both teachers and pupils/students were already familiar since distance learning and teaching. The lessons' structure and framework in primary [6th Grade and during a project at the International Baccalaureate Primary Years Programme (PYP) framework] and in secondary education (2nd Grade of Junior high school) are presented in the following section.

### **Teaching songs in the 6th Grade (primary education): one step ahead**

Two significant events influenced the topic selection of the flipped classroom implementation: a) the death of the eminent Greek composer Mikis Theodorakis (1925-2021), whose life and works inspired the whole world, and b) the coming of Christmas.

Mikis Theodorakis's lesson occurred at the beginning of the school year, after the summer break. The song “*Βάρκα στο γιαλό*” (*Varka sto yalo / Boat by the shore*, lyrics by M. Theodorakis) was selected as its content is associated with summer, and we can recognise basic musical characteristics, such as solo, chorus and a melody motif.

In the lesson, pupils would:

- develop listening, performing, and creating skills,
- collaborate and interact with each other musically,
- feel capable of playing a musical instrument,
- feel capable of composing on a musical instrument,
- analyse the parts of a musical piece,
- discriminate the antecedent and consequent phrases aurally.

During the pre-class phase, pupils had to watch a video of the song “*Βάρκα στο γιαλό*” (*Varka sto yalo / Boat by the shore*, <https://www.youtube.com/watch?v=RW2-KyMHocE>). Listening to the song introduced pupils to its melody and strengthened their auditory memory (first level of revised Bloom's taxonomy). This knowledge encouraged them to actively participate in music performances and creative activities during the in-class phase, which contained three types of musical activity:

#### **a) Listening and performing music in groups:**

Pupils listened to the chorus of the song “*Βάρκα στο γιαλό*” played by a glockenspiel, sang the corresponding lyrics, and then sang and said the note names of its musical phrases reading the following non-conventional score, apart from the underlined **bold** notes that represent half notes and the underlined notes that represent quarter notes, the others are sung as eighth notes:

1. Do      Do

		Si		
			La	
				<u>Sol</u>
2.Fa	Fa			
		Mi		
			Re	
				<u>Do</u>
3.Do	Do			
		Si		
			La	
				<u>Sol</u> <u>Sol</u>
4.Fa	Fa			
		Mi		
			Re	
				<u>Do</u>

The music teacher indicated the repeated melodic and rhythmic pattern, introducing the definition of the term *music pattern*. Then, the teacher played and repeated the sequence of the two phrases on the glockenspiel and asked pupils to discriminate which sequence gives the impression of an end (perfect cadence) or of continuity (half cadence) (Bloom's taxonomy levels: remember and understand):

1st phrase: do do si la sol – fa fa mi re do

2nd phrase: do do si la sol sol – fa fa mi re do

**b) Performance activity (glockenspiel):**

Pupils in pairs - each one had its own glockenspiel - played the chorus melody, consisting of two phrases, the first being a call and the second as a response:

do do si la sol (call) – fa fa mi re do (response)

do do si la sol sol (call) – fa fa mi re do (response).

During this activity, pupils taught, learned, and evaluated one another with limited teacher intervention (Bloom's taxonomy levels: apply, analyse, evaluate and



create).

**c) Music making in collaboration:**

Pupils worked in pairs. Every member improvised a short melody on its glockenspiel as a call (notes: do si la and sol) and the other as a response (notes: fa mi re do). One by one, they played in sequence, interacting and communicating with each other.

Due to the flipped classroom implementation, pupils were involved in more creative musical activities during lesson time. In conventional teaching, two lessons would be necessary for these activities, and as a result, some pupils would lose their interest and enthusiasm, seeking something new and different. Simultaneously, the music lesson in the flipped classroom starts from pre-class. In other words, pupils are one step ahead when they enter the classroom. The music teacher has the time and opportunity to reach every level of Bloom's taxonomy and to structure a completed music lesson.

The pupils' favourite Christmas song, "Jingle Bells", was taught before the school break. The music teacher selected a body percussion challenge so that pupils would:

- develop listening, performing, and creating music skills,
- collaborate and interact with one another,
- revise complex rhythmic patterns emphasising on rhythmic patterns (downbeat and upbeat discrimination) and
- improvise their rhythmic patterns using both singing and body percussion.

During phase 1 (pre-class), pupils watched at home the YouTube video "Lesson 21 -Body Percussion/ Jingle bells challenge" (<https://youtu.be/n4L93OydVVM>). By drilling and practising with body percussion, the rhythmic accompaniment shown in the video, they followed their own pace according to their psychomotor skills. This activity is significant for strengthening the self-confidence of pupils who have difficulties in coordination and need more practice time to follow their classmates. Then, during phase 2 (in class), a group performance of body percussion took place alongside the video. Pupils who had not watched the video needed more time to learn and practice, so they found difficulties in following their classmates. Afterwards, pupils improvised their rhythmic patterns in groups of five, hitting their desks or chairs with pencils as mallets (chair/desk drumming). All pupils performed the video's rhythmic patterns, according to their capabilities, when they felt confident and "safe" to do it.

The flipped classroom proved to be a teaching approach which provides multiple learning and teaching benefits, encouraging the further engagement of the pupils with music videos and tutorials. Even with digital music applications on the internet, pupils seemed to achieve a lifelong involvement and relation in music. In the months after the implementation, they looked for videos and material on the internet according to their musical preferences, keeping the touch with the lesson outside of school time.

**The IB - PYP project "My Theodorakis" in the 5th Grade (primary education)**

The flipped classroom teaching approach was implemented in the International Baccalaureate (IB) Primary Years Program (PYP) framework. Pupils of the 5th Grade (primary education) participated in a 3-month interdisciplinary project on the life and works of the eminent Greek composer Mikis Theodorakis (1925-2021). Pupils worked in groups on sub-topics and activities which aimed to cultivate all types of intelligence (Gardner's theory). Because of the project duration, there was enough time for all suggested topics to be covered.

Teams Microsoft was the platform where the teacher and pupils found the educational material, an e-book about the composer and uploaded a part of their homework

([https://read.bookcreator.com/QdUw3e8AJ3TzWL8npVJTidnHBiJ3/CQ7om\\_PYQvC KLRO09kV3IA](https://read.bookcreator.com/QdUw3e8AJ3TzWL8npVJTidnHBiJ3/CQ7om_PYQvC KLRO09kV3IA)).

The project related to the music curriculum and pupils aimed to:

- discriminate Greek song genres,
- understand the relationship between music and poetry,
- perform and sing these songs,
- connect the role of music with the most important historical events in modern Greek history,
- realise the connection between the musical genres and their social functions and
- develop an attitude about the variety and historical continuity of Greek singing.

Pupils' previous knowledge concerned the connection between poetry and music, singing Theodorakis's songs, such as "*Ένα το χελιδόνι*" (*Ena to chelidoni / A single swallow*: O. Elytis), "*Ο Λεβέντης*" (*O Leventis / The gallant*, poem by N. Pergialis), "*Άιγο ακόμα*" (*Ligo akoma / Just a little more*, poem by G. Seferis), "*Το Γράμμα*" (*To gramma / The letter*, poem by M. Eleftheriou), and "*Κουβέντα με ένα λουλούδι*" (*Kouventa me ena louloudi / Talk with a flower*, poem by Y. Ritsos).

Beginning from the school educational material about Music and Poetry, pupils studied the educational material and chose one of the suggested sub-topics following their preferences. During the pre-class phase, they also had to write a short report about the selected topic (e.g., his childhood and youth, his first compositions, his first symphonic works, his studies in Paris, music composition for movies, his exile and anti-dictatorship music, etc.). Collaborative activities took place by pupils with the same sub-topics, and they dealt with given questions. They had to work all together to organise their presentation. The music teacher encouraged pupils' work, answered questions, and intervened when needed. There was enough time for participating in activities which belong to the upper levels of Bloom's taxonomy, such as problem-solving, making decisions, discussion, and reflection. They could also read again, analyse and evaluate the educational material and their assignments with the other group members. Even if the lessons were once a week, they confidently and safely organised their presentation enthusiastically. Although this possibility to select the topics according to their preference left some sub-topics unnegotiated, the music teacher found that an exciting topic motivated pupils to deal with material that was attractive to them. The results and their hard work confirmed the importance of this decision.

Implementing the flipped classroom proved an effective teaching approach for projects. Pupils self-regulated their learning during the pre-class time and worked under the teacher's supervision, supporting and motivating them (in-class phase). At the same time, absent pupils were smoothly incorporated into the activities due to their possibility to catch up from the Learning Management System. The flipped classroom was beneficial for pupils, especially after the Covid-19 pandemic and its restrictions, as it offered more time for cooperation and communication, which pupils needed more than ever. At the same time, teachers and pupils can collaborate equally, pursuing the same aims.

### **Flipped classroom or “flipped teacher”: implementation in a Junior High School**

The music and culture of Japan was the topic on which flipped classroom was implemented. The topic refers to the title of the student's music textbook, "The land of the Rising Sun". The aims of the lesson were for students to:

- recognise the basic music features of Japanese music,
- discriminate the differences between the pentatonic and major scales aurally,
- sing a short composition in a pentatonic scale accurately,
- write down their musical ideas using an unconventional score,

- learn about Haiku, a typical style of Japanese poetry,
- create their own Haiku and compose a pentatonic melody for it,
- cooperate in small groups and
- share their creations with the other classmates.

The pre-class educational material was based on the student's textbook. The video (<https://drive.google.com/file/d/1jcTPzOLyyp65jfh3hFYWwivJyk7ALeIf/view>) contained some information and audio-visual musical examples of the Japanese tradition, similarities with other musical cultures, interconnection of arts, the most representative musical instruments (such as shakuhachi, koto, samisen, taiko), the Kabuki and No Theatre and Haiku (theoretical approach). Students were involved in a series of creative activities during the in-class time. They sang a Haiku composed in pentatonic reading the music notation, and they invented their own Haiku in groups based on its main features. Then, they composed a pentatonic musical phrase and wrote it down on a colour graphic score, and they sang and performed it, playing recorders' accompaniment. In the end, they reflected on their musical creations.

Students participated in all activities, which motivated them and kept their interest. The higher levels of Bloom's Taxonomy were covered in all the above tasks, and students could ask for the teacher's support at all stages. The class atmosphere was warm, and the relations among students were excellent, even if there were 26 students, 4 of them with learning difficulties.

One of the disadvantages of implementing the flipped classroom is the restricted access of some students to technology (internet access, non-affordable for P/C or tablets, etc.). However, this implementation found difficulties when students had to watch and study the educational material as they were tired of distance learning during the pandemic. Any association with any form of distance learning made them hostile. In addition, students needed some lessons to understand the advantages of the flipped classroom, especially the pre-class phase, when students had "homework" in music lessons that surprised them as they never had.

Compared to the traditional teaching method, the flipped classroom offered the possibility to include more musical activities in class. More than lesson time is needed to cover various issues and creative activities simultaneously. Nevertheless, the flipped classroom extends lesson time from home (pre-class), and students who have already watched the educational digital material are prepared to participate in creative activities.

## **Conclusions**

The implementation referred to above and the observation keys according to the pillars of the flipped classroom state that this teaching approach is feasible to be applied in primary and secondary education in Music lessons and demonstrates its advantages for pupils/students and music teachers. The transmission from a specific and safe teaching approach to another breaks previous teaching habits and gradually adopts new ones, changing the role of the teacher. This change does not refer only to the lesson and digital educational material preparation but to the active role in the class. A role that brings the teacher closer to students, recognises their needs, hears their inner voice, and deploys them in the lesson. Jia (2019) states:

Flipped classroom also redefines the roles of teachers and students. Teachers completely dominate the classroom's main position, change it to students in the main position, and transfer the initiative of learning from teachers to students. In this role change, teachers should first lower their attitude, take the initiative to understand the real ideas of students and get close to their daily life (p. 564).

Pupils' and students' involvement in more creative activities was beneficial, especially after the Covid-19 pandemic and its restrictions. As Karakaya et al. (2021) research showed that “the COVID-19 pandemic process has social and psychological effects on students... [such as] boredom, decreased sense of belonging to the school, lack of interaction, loss of motivation and digital dependency” (p. 25). The flipped classroom offered more time for cooperation and communication, which pupils/students needed more than ever.

Although distance learning due to the pandemic changed the time we spend in front of the screens, the flipped classroom is not a way of incorporating technology into education. The “Flipped Learning Network” board members Aaron Sams, Jon Bergmann, Kristin Daniels, Brian Bennett, Helaine W. Marshall, and Kari M. Arfstrom (2014) mention that many teachers may flip their classes, but having students read text outside of class, watch a supplemental video, or solve an additional problem is not enough (Flipped Learning Network, 2014). During the above music lessons, students cultivate their skills in good digital learning behaviours (Fisher et al., 2017). Furthermore, the technology “encourages constructive learning by providing active learning through interaction between students and teachers” (Goksu & Duran, 2020, p. 119). Creative and collaborative activities took the central part of the lessons. The teachers allowed time to help and motivate students (Abeysekera & Dawson, 2014), deepening the lesson's content and building their confidence (Duker et al., 2015). In this framework, the lesson had started since pre-class and activities based on upper Bloom's taxonomy levels took place. Although not all students were one step ahead, as they had not watched the digital educational material in the pre-class phase, they tried to catch up in the class.

In the literature review, we can find many implementations of the flipped classroom in various cognitive subjects. Especially in Music, the flipped classroom puts theory into practice and extends the lesson's duration, starting with pre-class activities; it allows students to collaborate, express themselves, and create and offers possibilities for a deeper lifelong relationship with music (Duker et al., 2015; Doi, 2016; Gilbert, 2016; Akbel, 2018; Jia, 2019). Even during a single lesson or a more extended project, it can widen students' horizons and give them the tools to follow their interests and preferences. Although it takes time for teachers to prepare the digital educational material initially, Brownlow (2017) admits that the results are worth the effort.

Fisher et al. (2017) claim that the flipped classroom, like any model of teaching and learning, is better suited for some teachers and students than others. Nevertheless, students' way of learning is changing generation by generation, and “deeper habits and beliefs must be overcome” (Goksu & Duran, 2020, p. 113). Teachers and pupils/ students must perceive that this transition is valuable for both sides and that they can enjoy the new instructional journey.

## References

- Abeysekera, L., & Dawson, P. (2014). Motivation and cognitive load in the flipped classroom: definition, rationale and a call for research. *Higher Education Research and Development*, 34(1), 1-14.  
<https://doi.org/10.1080/07294360.2014.934336>
- Akbel, B. A. (2018). Students and instructors' opinions on the implementation of flipped learning model for cello education in Turkish music. *Journal of Education and Training Studies* 6(8).  
<https://doi.org/10.11114/jets.v6i8.3256>
- Anderson, L. W. & Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Rintrich, P.R., Raths, J., & Wittrock, M. C. (eds) (2001). *A Taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. Longman.
- Baker, J.W. (2000). *The classroom flip: Using web course management tools to become the guide by the side*. 11th international Conference on College Teaching and Learning, Jacksonville, Florida

- Community College.
- Bernhofer, A., & Wieland, E. (2018). Unterrichtsmodelle des Flipped Classroom fuer die Sing-und Musizierpraxis im Musikunterricht. <https://www.researchgate.net/publication/323358224>.
- Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*. International Society for Technology in Education.
- Brownlow, A. (2017). A new approach to music history pedagogy using iPad technology and flipped learning. *College Music Symposium*, 57, <https://www.jstor.org/stable/10.2307/26574460>
- Doi, C. (2016). Applying the flipped classroom methodology in a first-year undergraduate music research methods course. *Music Reference Services Quarterly*, 19(2), 114-135. <https://doi.org/10.1080/10588167.2016.1167427>
- Duker, P., Gawboy, A., Hughes, B., Shaffer, K. P. (2015). Hacking the music theory classroom: Standards-based grading, just-in-time teaching and the inverted class. *Society for Music Theory*, 21(1) [http://www.mtosmt.org/issues/mto.15.21.1/mto.15.21.1.duker\\_gawboy\\_hughes\\_shaffer.php](http://www.mtosmt.org/issues/mto.15.21.1/mto.15.21.1.duker_gawboy_hughes_shaffer.php)
- Finkenberg, F. (2018). *Flipped classroom im Physikunterricht*. Dissertation zur Erlangung des naturwissenschaftlichen Doktorgrades der Julius-Maximilians-Universitaet Wuerzburg.
- Fisher, R., Ross, B., LaFerriere, R., & Maritz, A. (2017). Flipped learning, flipped satisfaction, getting the balance right. *Teaching & Learning Inquiry*, 5(2). <http://dx.doi.org/10.20343/teachlearninqu.5.2.9>
- Flipped Learning Network (FLN) (2014, March 12). The four pillars of F-L-I-P. [www.flippedlearning.org/definition](http://www.flippedlearning.org/definition)
- Gilbert, D. (2016). Curious, collaborative, creativity: Applying student-centered principles to performing ensembles. *Music Educators Journal*, 103(2), 27-34.
- Goksu D.Y., Duran V. (2020). Flipped classroom model in the context of distant training. *Research Highlights in Education and Science*, 104–127, [isres.org/books/chapters/Rhes2020-104-127\\_29-12-2020.pdf](http://isres.org/books/chapters/Rhes2020-104-127_29-12-2020.pdf)
- Jia, R. (2019). *Research on the flipped classroom mode in the teaching of public art music course*. 3rd International Conference on Advancement of the Theory and Practices in Education. 562-566. <http://dx.doi.org/10.25236/icatpe.2019.107>
- Johnson, G. B. (2013). *Student perceptions of the flipped classroom*. Thesis. The University of British Columbia.
- Karakaya, F., Adigüzel, M., Üçüncü, G., Çimen, O., & Yılmaz, M. (2021). Teachers' views towards the effects of COVID-19 pandemic in the education process in Turkey. *Participatory Educational Research*, 8(2), 17-30.
- King, A. (1993). From sage on the stage to guide on the side. *College Teaching*, 41(1), 30-35.
- Makrodimos, N., Papadakis, S., & Koutsouba, M. (2017). *Flipped classroom in primary schools: A Greek case*. 9th International Conference in Open & Distance Learning - November 2017, Athens, Greece - PROCEEDINGS, 179-187.
- Nagy, M.J. (2017). *Music theory for student composers: a course designed for engagement using a flipped classroom and practical philosophy*. Master's thesis. Liberty University.
- Rigoutsou, A. C. (2018). Flipped classroom integration in Greek state primary schools: An action research project. *Research papers in Language Teaching and Learning*, 9(1), 166-180.
- Roehl, A., Reddy, S. L., & Shannon, G. J. (2013). The flipped classroom: An opportunity to engage millennial students through active learning strategies. *Journal of Family & Consumer Sciences*, 105(2), 44-50.
- Santos, A. I., & Serpa, S. (2020). Flipped classroom for an active learning. *Journal of Education and e-Learning Research*, 7(2), 167-173.