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Contribution of Cognitive-Emotional Approach to Music Listening on Students' Cognitive and Emotional Experience

Prispevek kognitivno-emocionalnega pristopa poslušanja glasbe h kognitivnim in emocionalnim izkušnjam študentov

IZVLEČEK

Pričujoča raziskava je preučevala, ali kognitivno--emocionalni in standardni pristopi k poslušanju glasbe pri poučevanju glasbe vplivajo na različne kognitivne in emocionalne izkušnje v zvezi s skladbami *Maškarada*, *La battaglia di Wellington*,

ABSTRACT

It was explored whether cognitive-emotional and standard approach to music listening in music teaching contribute to different students' cognitive and emotional experiences regarding the artworks *Masquerade*, *Wellington's Victory*, *Scheherazade*,

Šeherezada in *Pavana*. Rezultati so pokazali, da ima kognitivno-emocionalni pristop prednosti, prav tako so se štiri dotične skladbe izkazale v več pogledih kot ustrezne za učenje poslušanja glasbe.

and *Pavane*. Results reveal advantages of the cognitive-emotional approach, as well different contribution of the four music pieces in fostering music listening.

Introduction

Musical art is an integral part of the general culture which contributes to artistic education and the development of children and young people's cultural identity. Deriving from the senses, feelings and intuitions, as well as rational-logical relationships, art is a special form of human knowledge and communication. Artworks link past and present, different musical tradition and cultures, and are the sources of knowledge and experience. This is one of the reasons why arts play an important role in the Nacionalni okvirni kurikulum [Croatian National Curriculum Framework] from 2011,[1] in which it is highlighted that the purpose of arts is to enable students to understand arts, but also to actively participate and express their feelings, experiences, ideas and attitudes about it. Since musical art is a constituent of the artistic field, listening, judging and evaluating musical works become one of the music teaching tasks.

Rojko[2] points out that learning about music is an activity that leads to a multifaceted educated person and that learning about music is one of the circumstances which affect the personal culture. To achieve the criterion of culture, greater attention should be given to the process of choosing musical work, to the performance quality as well as to the didactical strategy of music transfer, in order to encourage students to actively listen to music, compare, evaluate and critically think about music.

The challenge in achieving cultural attitudes represents a cognitive-emotional student's point of view, his/her knowledge, experience and preferences. Vidulin and Radica[3] point out that "perception and reception of music is conditioned by the emotional, cognitive and psychophysical features of a child, his/her age, development, musical experience and preferences." Therefore, it is important to determine to whom the music work is addressed, what the characteristics of the children's psychophysical development are, and which elements determine their personality. In addition to this, the experience and understanding of music differs in relation to whether the musical work is known to children and if they accept it. Children accept music if it is in accordance with their affinities and preferences. There are visible differences in the acceptance of musical works depending on genres, whereby art music becomes closer to students only after its repeated listening and better understanding.[4]

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1   "Nacionalni okvirni kurikulum za predškolski odgoj i obrazovanje te opće obvezno i srednjoškolsko obrazovanje," Ministarstvo znanosti i obrazovanja, accessed October 20, 2018, http://mzos.hr/datoteke/Nacionalni_okvirni_kurikulum.pdf.

2   Pavel Rojko, *Metodika nastave glazbe: Teorijsko-tematski aspekti* (Osijek: Sveučilište Josipa Jurja Strossmayera, Pedagoški fakultet, 1996).

3   Sabina Vidulin and Davorka Radica, "Spoznajno-emocionalni pristup slušanju glazbe u školi: teorijsko polazište," in *Glazbena pedagogija u svjetlu sadašnjih i budućih promjena* 5, ed. Sabina Vidulin (Pula: Sveučilište Jurja Dobrile u Puli, 2017), 56.

4   Antoine Hennion, "Listen!" *MAiA – Music and Arts in Action* 1, no. 1 (2008): 36–45; Rojko, *Metodika nastave glazbe*.

Forward-facing, the contemporary music teaching has a difficult task: to bring art music closer to students in only 35 hours per year, per classes, along with other areas, mostly singing and playing which are realised during the lessons. It is necessary to corroborate that art music is an opportunity to form the identity of children and young people,[5] and it is a significant area of their affirmation.[6] Apart from encouraging the development of artistic expression and understanding of art music, it is important to contribute to the creation of the students' identity and cultural awareness and to influence the formation of their cultural-value system, social worldview, and emotional well-being.

Is this feasible in compulsory education without changing the existing pedagogical and didactical paradigms?

An Analytical Approach to Listening to Music in Croatian Schools

According to the *Nastavni plan i program* [*Teaching Curriculum*],[7] the aim of music teaching in compulsory school[8] is to educate students as knowledgeable and competent music listeners. It implies that students will be qualified and able to critically reflect on music they are surrounded with daily.

With active listening students learn and analyse music. It means that they observe and distinguish music-expressive constituents, musical forms, types, performers, etc. The emphasis is on the fact that music is analysed, and in that way students acquire basic music knowledge and skills, which leads, in most cases, to the cognitive perception of artwork, but the experience and deeper emotional involvement are not taken into great consideration.

In the fifth grade of compulsory school (students are on average 10–11 years old), according to the *Teaching Curriculum*,[9] the following areas are intended: singing, playing, musical notation, dance and listening to music. In addition to the list of artworks, the educational achievements are mentioned: "recognition of the pieces (according to the students' abilities); acquaintance of the composers and works' names; recognition of the musical instruments, performers' ensembles, musical forms, signs for tempo and dynamics – at the level of recognition on concrete music works." There are two topic areas that have been dealt with, the first one being the structure of the musical work (two-part song, sentence, period, three-part song, phrase, motif), while the other one is string instruments.

At the end of the fifth grade of compulsory school, according to the *Kurikulum za nastavni predmet Glazbene kulture za osnovne škole i Glazbene umjetnosti za gimnazije u Republici Hrvatskoj [Curriculum for the Subject Music Culture for Compulsory*

5   Raymond A. R. MacDonald, David J. Hargreaves, and Dorothy Miell, eds., *Musical Identities* (Oxford: Oxford University Press, 2002).

6   Monica Prendergast, Peter Gouzouasis, Carl Leggo, and Rita L. Irwin, "A Haiku Suite: The Importance of Music Making in the Lives of Secondary School Students," *Music Education Research* 11, no. 3 (2009): 303–317, doi:10.1080/14613800903144262.

7   Ministarstvo znanosti, obrazovanja i športa, *Nastavni plan i program* (Zagreb: Ministarstvo znanosti, obrazovanja i športa, 2006).

8   Compulsory school in this paper refers to school in Croatia that starts at the age of seven and lasts for eight years.

9   Ministarstvo znanosti, obrazovanja i športa, *Nastavni plan i program*, 73.

Schools and Music Art for Gymnasium in the Republic of Croatia] from 2019,[10] a student is expected to know a certain number of songs of different genres, to distinguish singing voices and observe their performance, and to distinguish the types of choirs. Furthermore, it is expected that they differentiate the types of singing voices (female, male, children) and contrasting voices (e.g. high and deep female voice). In addition, it is expected to differentiate the sound and appearance of the instrument, to associate the instruments with the respective groups and observe their performing role (solo, chamber, orchestra). Based on listening to music, students should distinguish between basic musical forms: the two-part and the three-part form, and the music period.

Although the proposal is not the final solution, it is a reflection of the practitioners and scientists involved in the creation of the new curriculum. They also point out that the activity of listening and understanding music is still extremely important and have the idea to deal with different kinds of genres to support it.

At this stage, the introduction of a more contemporary didactical approaches and the shifting of the focus from the music work to the student have not been taken into consideration yet.

Cognitive-emotional Approach to Music Listening and Music Understanding

With the change of the pedagogical and didactical paradigms of listening and learning music at school, it is obvious that, in this case, the purpose and tasks of listening need to be revised and updated. Vidulin and Radica point out that the aim of listening to music at school is:

> to shape the students' cultural and artistic worldview and contribute to their aesthetic education. This can be achieved by listening to quality and aesthetic valuable art music. On the other hand, the task of listening in compulsory school is to develop and enhance the students' musical competences. With a carefully chosen music repertoire, it is expected that students develop their knowledge and skills, encouraging their independence, responsibility and desire to participate in artistic events of the society. The purpose of music listening can be observed through the final result: students' perception, understanding and acceptance of (artistic) music.[11]

Although the contents of music teaching in compulsory school include: familiarising with instruments, voices, solo, chamber and group modes of performing music, musical forms, instrumental, vocal and vocal-instrumental types as well as musical-stylistic periods, the content itself is, above all, a unique artwork that helps students in generating their general and musical culture. The examples of music listening should be carefully chosen, which means that a teacher ought to have a high level of theoretical and musicological knowledge and distinctive listening competences which would

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10 "Kurikulum za nastavni predmet Glazbene kulture za osnovne škole i Glazbene umjetnosti za gimnazije u Republici Hrvatskoj," Ministarstvo znanosti i obrazovanja, accessed May 14, 2020, https://narodne-novine.nn.hr/clanci/sluzbeni/2019_01_7_151.html.
11 Vidulin and Radica, "Spoznajno-emocionalni pristup slušanju glazbe," 62.

support him/her in recognising the particularity of each work. It is essential to create a didactically creative context with multi-modal patterns that will enable the students' cognitive-emotional development. Jewitt and Kress[12] under multi-modal expression or multi-modal communication mean different forms of expression, such as images, motion, music, speech, etc. It is achieved by a combination of expressions that affect the individual's most successful and creative expression. The use of different multi-modal patterns enables students to perceive music in musical and non-musical context with the intention for artwork to enter into the child's deeper level as a listener, and finds a place in his/her life. The rationale builds upon the dual coding theoretical approach that describes human experience and behaviour resulting from processes based on abundant network of modality specific verbal and nonverbal representations.[13]

In the literature different classifications of music listening can be found: sensory, sensory-motor, emotional, aesthetic, imaginative;[14] or: sensory, perceptive, imaginative,[15] as a part of different theoretical points of view and through fields as musicology, psychology, sociology, aesthetics, etc. The common things regarding listening to music are that it should be perceived from its sociocultural context[16] and that joining of affective and analytical parts leads to the music understanding and appreciation. In the cognitive-emotional approach, besides the recognition and analyses of structural musical constituents, music experience is very important because it leads to the emotional reception of music.

The work on listening to music, according to Cvetković and Đurđanović,[17] implies the cognitive and emotional parts which are distinguished as analytical and aesthetics ones. Radoš[18] points out, that only through cognitive and emotional issues the educational goals may be achieved and make the difference regarding music understanding, experiencing music and reacting to it. Požgaj emphasises the following: "Active listening and emotional reaction are primary functions of experiencing a music piece. Understanding an art product means, above all, experiencing it emotionally through lifetime. Emotional and cognitive activities cannot be time-separated in the process of music listening. They take place parallel, and the stronger of the two could be emphasised; it depends on the tendency and focus of the listeners."[19]

Before listening to music it is necessary to set up simple tasks: from defining the composer and title of the selected work, tempo, dynamics, character, performers, musical forms and types to finding melodic and rhythmic specifics of each piece. It is

12 Carey Jewitt and Gunther Kress, *Multimodal Literacy* (New York: Peter Lang, 2003).

13 James M. Clark and Allan Paivio, "Dual Coding Theory and Education," *Educational Psychology Review* 3, no. 3 (1991): 149–210, doi:10.1007/BF01320076; Allan Paivio, *Mind and Its Evolution: A Dual Coding Theoretical Approach* (New York: Psychology Press, 2014), doi:10.4324/9781315785233.

14 Alt. in: Rojko, *Metodika nastave glazbe*.

15 Otto Ortmann, "Types of Listeners: Genetic Consideration," in *The Effects of Music: A Series of Essays*, ed. Max Schoen (London: Kegan Paul, Trench, Trubner & Co. Ltd.), 38–77, quoted in Rojko, *Metodika nastave glazbe*, 143–144.

16 Hauke Egermann et al., "Does music listening in a social context alter experience? A physiological and psychological perspective on emotion," *Musicae Scientiae* 15, no. 3 (2011): 307–323, doi:10.1177/1029864911399497; Sabina Vidulin, "Propitivanje ostvarenja cilja nastave glazbe u kontekstu vremena glazbene hiperprodukcije," *Arti Musices* 44, no. 2 (2013): 201–226.

17 Jelena D. Cvetković and Miomira M. Đurđanović, "Slušanje savremene muzike kao izazov muzičkog obrazovanja danas," *Teme* 38, no. 1 (2014): 317–329.

18 Ksenija Radoš, *Psihologija muzike* (Beograd: Zavod za udžbenike, 2010).

19 Joža Požgaj, *Metodika nastave glazbene kulture u osnovnoj školi* (Zagreb: Školska knjiga, 1988), 138.

appropriate to listen to it several times, with different tasks, because listening to the work several times and considering it from various aspects will result in better music understanding.[20]

> *Tasks do not only need to be analytical, the ones that lead completely to cognizance. As an introduction to listening, it is desirable to sing/play the theme, to reproduce a characteristic rhythm on rhythmic instruments, to follow the structure of artwork by playing or dancing. In this way students will be actively involved in the music flow and experience music as well. Additional activity before or during listening is important because it creates a relationship with the piece: it affects the students' concentration, increases the attention to music parts, stimulates interest in music, points to the specifics patterns that are expressed in the work, enables active participation and students' musicianship.[21]*

With multi-modal ways of creative expression the authors[22] propose the accomplishment of cognitive and emotional tasks that lead to one goal – the overall students' development. For this reason, listening to art music needs to be enriched with other activities such as singing, playing, dancing, drama games, multimedia supplements to get to know the musical components, understand and accept the music better.

The results from the research conducted by Martinović and Vidulin[23] show that the most noticeable composer in the *Teaching Curriculum*[24] is W. A. Mozart. It is obvious that his works describe the musical phenomena presented to students in an appropriate way, and it is close to the contents of music teaching in compulsory school such as: learning about various instruments, voices, musical forms, genres, musical and stylistic periods of Classicism. However, considering these and other artworks, it can be seen that some of them are not representative examples a young person must know, that some of them are not the most suitable for demonstration and emotional reception, and that the play list is limited. That is why one of the authors of this paper proposed to add-on the proposals for listening and understanding music in compulsory school through the cognitive-emotional approach, as a possibility of the complete students' development, fostering their cultural-artistic experience.

This idea led to the research with the objective to explore whether cognitive-emotional and standard (conventional) approach in music teaching contribute to different students' cognitive and emotional experiences of art music, depending on different music pieces.

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20 Vera Martinović and Sabina Vidulin, "Umjetnička glazba i oblikovanje kulturnoga identiteta učenika," *Školski vjesnik: Časopis za pedagogijsku teoriju i praksu* 64, no. 4 (2015): 573–588.
21 Vidulin and Radica, "Spoznajno-emocionalni pristup slušanju glazbe," 66.
22 Ibid.
23 Martinović and Vidulin, "Umjetnička glazba i oblikovanje kulturnoga identiteta učenika."
24 Ministarstvo znanosti, obrazovanja i športa, *Nastavni plan i program.*

Method

Participants

The research took place in 16 compulsory schools in 12 Croatian towns. Thirty classes were included, comprising 557 students from the 5th grade. Their average age was 10.6 years (SD = 0.54). Half of them were boys (48%), half were girls (52%).

Variables

Basic demographic variables (age, gender, class, school) were asked with open type questions. In order to address the research objective, students' experience of art music was tackled with:

- four music artworks (four teaching units): *Masquerade*, *Wellington's Victory*, *Scheherazade* and *Pavane*;
- two approaches to music teaching: standard and cognitive-emotional; and
- three open questions: What did teacher's instruction and guidance encourage you to? What were you thinking about while you were listening to music? And: What will you remember this music piece by?

Procedure

This study was a part of a larger survey related to cognitive-emotional approach to music listening.[25] Fifteen classes had lectures (45 minutes) on four themes/teaching units delivered in the cognitive-emotional approach (experimental groups), while other fifteen classes had the same themes elaborated in the standard approach (control groups).

The standard (conventional) lectures mostly emphasised cognitive elements connected to music.[26] The most common tasks were regarding: performers, tempo, dynamics, measure, character, type of work, melody, and rhythm. The cognitive-emotional approach, designed by the first author of this research, provided more musicological elaboration, use of multimedia as well as non-musical elements (historical, social and geographical background, values, personality traits etc.).[27] All students filled in questionnaire about music listening three times: after the first listening, second and third in the same lecture. The lectures were delivered once or twice a month, from September through December 2018. In the meantime, all students had their standard weekly music lectures. When the first theme was on schedule 557 students were present, 435 students attended the second, 498 joined the third and 409 students took part when the fourth theme was elaborated.

According to the cognitive-emotional approach to listening to music and music understanding in the fifth grade of compulsory school, four instrumental artworks were planned: Aram Khachaturian: *Masquerade*; Ludwig van Beethoven: *Wellington's*

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25 Sabina Vidulin, Marlena Plavšić, and Valnea Žauhar, "Usporedba spoznajnog i emocionalnog aspekta slušanja glazbe u glazbeno-pedagoškom kontekstu osnovne škole," *Metodički ogledi* 26, no. 2 (2019): 9–32, doi:10.21464/mo.26.2.4.

26 The author collected and analysed lesson plans of the control group. The lesson plans for the control group were sent to the researcher a week prior to the research in class, and before the researcher sent a lesson plan for the experimental group.

27 This is explained in details further below in the text.

Victory (*Battle in Vittoria*); Nikolai Rimsky-Korsakov: *Scheherazade: The Sea and Sindbad's Ship*; and Gabriel Fauré: *Pavane*. The teachers who participated in the research received detailed lesson plans and teaching aids prepared by the first author for the realisation of each unit (artwork). The whole lesson was programmed.

In experimental groups (cognitive-emotional approach) each artwork was listened to three times during the same lesson. For the first time, listening was not related to any assignments. After the listening, the teacher started a dialogue to find out whether students had heard music piece earlier, what they first noticed and liked in the work. From the second listening with proper tasks, students recognised the tempo, dynamics, character, instruments, repetitions, and other theoretical and musicological issues which lead to the emotional experience. The third listening went parallel with drawing and with the questions about being fond of the work after analysing it. All the artworks have been set into the musicological and musical-theoretical context with the intent to learn about the composer and the work, about the musical components and to expand everything outlined through social context, respecting the humanistic paradigm and affecting their emotional and aesthetic upbringing.

The musicological context was accompanied by specific issues that the teachers placed during the conversation with students, appealing to their emotional engagement, encouraging positive and human values, feelings for their social well-being, etc.

Thus, in the *Masquerade*, composed by Aram Khachaturian (1903–1978), the composer's data were not only historically mentioned, but useful part of argumentation. Given the fact that the composer is from Georgia, that he attended the music school, the questions were focused on the parts of the biography and its connection to the real life. After that, students were introduced to the music piece, the name of the masquerade was explained (a set of masks that form part of Carnival customs), and their experiences were discussed. The Khachaturian's *Masquerade*, set up on a drama in lyrics and written by Mikhail Yuryevich Lermontov (1814–1841), exposed the tragedy of a woman poisoned by her husband and it is based on a misunderstanding of that situation. It was an additional motive for discussion using the following questions: Have you ever misunderstood something? What happened then? When someone puts the blame on you without reason, what should you do? After very intense motivation, the teachers retold the whole story.

Elaborating Beethoven, the teachers referred to his life with a rough father who forced him to practice, a mild and sick mother, then about the fact that he was a contemporary of Mozart and Haydn, that he lost his hearing, but also, taken from his life, the recommendation that the results should be achieved with patience, courage, perseverance, and faith in own strengths and capabilities. Motivating students continued through questions regarding *Wellington's Victory*: Do you know who Wellington was? According to his surname, which country does he originate from? What do you think they were fighting against? The historical aspect on which the artwork is based was a great motive for building a successful lesson. The conversation continued with anticipating the atmosphere and character of the artwork, and a particular attention was paid to the war. The teachers emphasised the need to strengthen the ideal of peace among all nations and people.

In the lesson unit regarding *Scheherazade: The Sea and Sindbad's Ship*, the emphasis was on reading the prepared text about *Scheherazade* which was supported by music and questions to involve students more. The lesson did not start with an insight into the composer's life, but with the narrative part. During the narrative, students were asked to describe the character of Scheherazade and Sultan on the basis of their two themes. Students got acquainted with Scheherazade, with her beauty, boasting courage, wisdom and sympathy, the Sultan as steep and rigorous man, and the story *Sea and Sindbad's Ship* which is about a very wise and wealthy trader who succeeded in life after great misery and much effort. On that basis the students expressed their views and the moral.

In the unit *Pavane*, the emphasis was on the multimedia approach. The same artwork was viewed in various forms, with various performing ensembles and even different genres. Regarding the composer's biography, students discussed what inspired them and whether they had a place where they felt well. It was interesting that Fauré dedicated *Pavane* to his patron, Countesse Elisabeth Greffulhe. Students were asked the following questions: What area would you support? Which person do you consider a role model and what are your reasons for that? Do you think you should have the money to help someone or could you do it without it? After different performances being presented to students, the teachers pointed out the relationship between Fauré, *Pavane* and the Countess. Namely, she invited Fauré into her palace and entrusted him with the organisation of music evenings, after which Fauré dedicated to her the work *Pavane*. The patron liked the work, but suggested adding a choral part. The French text was written by Robert de Montesquiou (1855–1921). Students were also referred to the television show *Prodiges*, a contest of talented children aged 7 to 16 in classical music, and teachers also stated that *Pavane* was used in films and series, and accompanied BBC's broadcast during the 1998 World Cup. The question that followed was: Which event would you choose *Pavane* for?

In addition to musicological point of view, musical works were also placed in the musical-theoretical context, which was in direct connection with the emotional experience.

The musical-theoretical context of the *Masquerade* tangled on analysing and understanding the theoretical elements by which the artwork was built. Special attention was given to the musical form that was realised by listening to music all together with singing and playing of the introductory part and the masked choreography along with the drama play. The consideration of certain parts was fixed by choreography as: duration, length of phrase and expressiveness of the interpretation (accents). Likewise, in the introduction, a phrase was sung and another played with the rhythmical instruments. In a non-choreographed part, the waltz was danced, after which the attention was given to the parts that were repeated. Students learnt about tempo, dynamics, character and musical forms. Singing, playing and dancing intended to affect the emotional reception of the presented artwork.

Although in the presentation of the *Wellington's Victory* a rhythmic component had the main role, in the lecture the attention was paid to the songs *For He's a Jolly Good Fellow* and *God Save the Queen*, which Beethoven used for composing the artwork.

With listening to and playing the rhythmic phrase from the beginning of the work, students distinguished rhythm from melody, crescendo and decrescendo parts, recognised the instruments, whether the instruments played solo or in the group, whether the trumpet player played the similar or different tones, and discussed how the composer increased the impression of a battle. Through this artwork, students repeated and defined the terms: rhythm, melody, dynamics, crescendo, decrescendo, solo trumpet, tutti, pitch of tones. They also learned to listen and perform the song *For He's a Jolly Good Fellow*. Singing, playing and the specific character of the work were used to contribute to the students' emotional involvement.

At the beginning of the part *Sea and Sindbad's Ship* by Rimsky-Korsakov the music described the characters of Sultan and Scheherazade, so the questions for students were focused to the first appearance of the characters' themes. Furthermore, the questions were pointed on details: melodies on higher initial notes, melodies going up and down at the same time, various characters of artwork, etc. Throughout this teaching unit students noticed different theme characters, distinguished upper and lower notes, longer and shorter notes, ascending and descending melodies and simultaneous moving of melodies; they compared graphic images and music they listened to, determining the instruments. The story of Scheherazade realised by the teachers in a specially prepared environment, with musical background, was implemented to influence the emotional students' experience.

While listening to *Pavane*, tasks were related to the recognition of instruments, ensembles, voices, way of singing, dancing, genres and character. Particular questions expanded from the cognitive component to the emotional one: Why did the composer choose these instruments? Fauré described his *Pavane* as elegant. How would you describe it? Does *Pavane* have a dance character? Where (in which space) can *Pavane* be danced? What has been achieved by adding the singing excerpts to the instrumental *Pavane*? Which version do you prefer: instrumental or vocal-instrumental? What do you notice when *Pavane* is performed in other genres?

Through listening to *Pavane* played on different instruments, by different ensembles (piano, guitar, accordion quintet, flute and guitar, cello quartet) and in other genres (by performers such as Jethro Tull, Regina Carter, Joolz Gianni, Caecilie Norby and Barbra Streisand), students repeated and identified the instruments, character, singing, playing and dancing parts as well as the characteristics of the genres.

Results

In order to explore whether cognitive-emotional and standard approach in music teaching, as well as different music pieces contribute to different students' cognitive and emotional experience of art music, firstly quantity of answers to the three questions was analysed. Number of answers were compared between the two groups with different didactical approaches for each of the four music pieces. Results of chi-square test presented in Table 1 show some differences.

Table 1: Number of students' answers in the four music themes

Frequences	Masquerade		Wellington's Victory		Scheberazade		Pavane	
	Standard approach	Cognitive-emotional approach	Standard approach	Cognitive-emotional approach	Standard approach	Cognitive-emotional approach	Standard approach	Cognitive-emotional approach
What did teacher's instruction and guidance encourage you to?								
Observed	124	222	89	151	82	169	85	131
Expected	155	191	132	108	117	134	101	115
	$\chi^2 = 11.23$ *df* = 1 $p < 0.001$		$\chi^2 = 31.13$ *df* = 1 $p < 0.001$		$\chi^2 = 19.61$ *df* = 1 $p < 0.001$		$\chi^2 = 4.76$ *df* = 1 $p < 0.05$	
What were you thinking about while you were listening to music?								
Observed	154	180	147	165	102	251	141	150
Expected	150	184	171	141	164	189	136	155
	$\chi^2 = 0.19$ *df* = 1 $p > 0.05$		$\chi^2 = 7.45$ *df* = 1 $p < 0.01$		$\chi^2 = 43.78$ *df* = 1 $p < 0.001$		$\chi^2 = 0.35$ *df* = 1 $p > 0.05$	
What will you remember this music piece by?								
Observed	297	460	197	231	172	194	172	194
Expected	340	417	235	193	171	195	172	194
	$\chi^2 = 9.82$ *df* = 1 $p < 0.01$		$\chi^2 = 13.63$ *df* = 1 $p < 0.001$		$\chi^2 = 0.01$ *df* = 1 $p > 0.05$		$\chi^2 = 0$ *df* = 1 $p > 0.05$	

Results (Table 1) show that groups that were exposed to cognitive-emotional teaching approach, compared with their peers exposed to the standard teaching approach, often provided more answers to the questions related to their cognitive and emotional experience of art music. Students' answers also discover that *Wellington's Victory* yielded more answers between the two groups, while for *Pavane* the groups provided about the same amount of answers.

In the next step answers to all three questions were distributed into five categories and then compared between the two groups. Categories are: 1) answers related to the music elements of the music piece (e.g. tempo, rhythm, dynamics, etc.) or the composer; 2) answers related to emotions and thoughts and (dis)liking of the music piece; 3) answers related to the content of the music piece; 4) answers related to the articulation of the lecture; and 5) answers that were out of music or lecture context. Results are presented in Table 2.

When it comes to the qualitative aspect of cognitive and emotional experience of music listening, again differences appeared between the groups exposed to different didactical approaches (Table 2). Students in classes with the cognitive-emotional approach gave more answers related to thoughts and emotions as well as answers related to the didactical articulation of the lecture than students with the standard approach. When compositions are compared, students' answers between the two groups mostly differed in the *Masquerade* and *Scheherazade* and less so in *Wellington's Victory* and *Pavane*.

Table 2: Five categories of students' answers in the four music themes

Category	Masquerade		Wellington's Victory		Scheherazade		Pavane	
	Standard approach	Cognitive-emotional approach	Standard approach	Cognitive-emotional approach	Standard approach	Cognitive-emotional approach	Standard approach	Cognitive-emotional approach
What did teacher's instruction and guidance encourage you to?								
Music	9	22	3	17	63	91	73	89
Cog.-emot.	17	73	13	37	7	57	11	25
Content	26	23	9	5	8	15	0	2
Articulation	68	77	63	23	3	1	1	9
Out of context	4	5	2	1	1	4	1	7
	$\chi^2 = 22.41\ df = 4$ $p < 0.001$		$\chi^2 = 37.22\ df = 4$ $p < 0.001$		$\chi^2 = 18.76\ df = 4$ $p < 0.001$		$\chi^2 = 6.87\ df = 4$ $p > 0.05$	
What were you thinking about while you were listening to music?								
Music	99	52	43	54	31	134	60	53
Cog.-emot.	6	14	2	0	3	9	9	12
Content	22	70	87	89	36	76	18	32
Articulation	1	22	2	2	1	22	2	12
Out of context	29	21	14	20	26	10	56	41
	$\chi^2 = 57.78\ df = 4$ $p < 0.001$		$\chi^2 = 1.54\ df = 4$ $p > 0.05$		$\chi^2 = 45.42\ df = 4$ $p < 0.001$		$\chi^2 = 11.65\ df = 4$ $p < 0.05$	
What will you remember this music piece by?								
Music	255	216	135	169	112	95	124	131
Cog.-emot.	11	121	7	12	14	19	16	3
Content	9	32	48	36	30	24	5	9
Articulation	21	75	5	11	1	50	18	46
Out of context	8	2	2	1	3	6	8	3
	$\chi^2 = 119.16\ df = 4$ $p < 0.001$		$\chi^2 = 5.20\ df = 4$ $p > 0.05$		$\chi^2 = 48.08\ df = 4$ $p < 0.001$		$\chi^2 = 20.05\ df = 4$ $p < 0.001$	

Discussion

Although music with its diverse and numerous features and elements by itself influences a person's experiences on cognitive, emotional as well as behavioural levels, adding context to it can have amplifying or changing effects. The combination of both, the music itself and didactical approach in listening to music was the theme of this research.

Quantitative as well as qualitative analysis show some advantages of the cognitive-emotional approach in music listening compared to the standard music lecture approach. Quantitative data (Table 1) reveal that cognitive-emotional approach encouraged students to generate more answers to the questions regarding teacher's instruction and guidance, about their thoughts while listening to music and about what they will remember related to the music piece. Such findings likely resulted from

multi-modal stimulation pursued in the cognitive-emotional approach. Namely, being exposed to various activities (e.g. singing, dancing, playing) as well as presentations (verbal and non-verbal), students were inspired with a broader range of stimuli that provoked a multitude of associations and responses. Somewhat similar experiment done by Yu, Lai, Tsai and Chang[28] explored multi-modal presentation in music teaching with students of comparable age. They provided twelve 40-minute music lectures over eight weeks. Their findings confirmed advantages of multi-modal approach compared to the conventional in learning achievement and motivation. Using of more sources allows more information to be presented (quantitative rationale) and they can be complementary (qualitative rationale) which helped students construct more responses and create more referential connections of their experiences.[29]

When music pieces are compared (Table 1), students' answers point to *Wellington's Victory* as the piece that yielded more answers in the groups with the cognitive-emotional approach. *Masquerade* and *Scheherazade* follow, and *Pavane* inspired both experimental and control groups to deliver about the same number of answers. The inspiration for so many answers in the *Wellington's Victory* probably results from students' very active involvement, especially in the playing of rhythmical instruments and dynamical interpretation and by singing *For He's a Jolly Good Fellow*. *Pavane* was articulated in the least dynamic manner: students were neither moving, dancing nor singing.

The question related to teacher's instruction and guidance yielded the largest differences between the standard and the cognitive-emotional group, in favour of the latter. This is in line with previous findings. Namely, there is evidence that live voice narration in a less formal style and in the form of dialogue contributes to more efficient learning atmosphere.[30] The emphasise in teacher's guidance for the *Wellington's Victory* was related to the dynamical story of the war, while *Pavane* had a more relaxing than exciting story. For students of that age, the action-related stories may be more stimulating for providing answers than emotion-related ones. So teacher's introduction plays a significant role in preparing and motivating students to create more associations related to music listening.

When students' answers were analysed in the qualitative manner, regarding their content, again differences were noticeable (Table 2). Students exposed to the cognitive-emotional approach provided more answers related to thoughts (e.g. "it encouraged me to believe in myself," "about importance of peace," "about history," "about not giving up," etc.) and emotions (e.g. "it was sad," "it was joyful," "it was beautiful," "it was boring," etc.), as well as answers related to the didactical articulation of the lecture (e.g. "the lecture was entertaining," "the lecture was interesting," "I was expecting to hear if what teacher said was going to happen," etc.) than students with the standard approach. The cognitive-emotional approach tackles the artwork from different angles

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28 Pao-Ta Yu et al., "Using a Multimodal Learning System to Support Music Instruction," *Journal of Educational Technology & Society* 13, no. 3 (2010): 151–162.

29 Richard E. Mayer, *Multimedia Learning* (New York: Cambridge University Press, 2001).

30 Ibid.; Roxana Moreno and Richard Mayer, "Interactive Multimodal Learning Environments," *Educational Psychology Review* 19, no. 3 (2007): 309–326, doi:10.1007/s10648-007-9047-2.

and in various ways. Having such a multi-modal articulation of the lecture, it reaches to diverse students' needs and preferences for information acquisition and processing, giving them the opportunity to try and learn in other ways as well.[31] Previous research proved that students recognised the variety of learning resources with additional representations of content as helpful to their comprehension and retaining, and to be more exciting and amusing to use.[32]

Cognitive-emotional approach includes a higher level of interactivity – among students as well as between teacher and students. Teacher guides the process, provides the introduction, tells stories, asks questions, asks for students' experiences and opinions. Such approach sensitises students more regarding the music piece they are listening to and involves them in a more active approach to music listening. Such didactical articulation of the lecture encourages students to construct knowledge or meaningful learning.[33] They make sense of the content, combine information, impressions and experience, mixing thoughts and emotions, which is visible in their responses to the three open questions. Associations in their answers reach beyond music-related theme and content; they spread to a larger field of (self-)reflections.

When artworks are compared, students' answers between the two groups mostly differed in the *Masquerade* and *Scheherazade* and less so in *Wellington's Victory* and *Pavane*. These differences could be ascribed to different teacher's guidance. In the cases of *Masquerade* and *Scheherazade* teachers guided students in a more intriguing manner, encouraging them to reflect upon human characteristics, values, ways of creating and solving problems. *Masquerade* is about a tragedy of a woman who was poisoned by her husband due to a misinterpretation: he thought that she was unfaithful to him. This was an additional motive for discussion with students based on questions: Have you ever misunderstood something and what happened then? What should be done when the true facts are known? The teacher paraphrased the whole story in which he/she mentioned the characters and the course of the event. *Scheherazade* tells the story about a woman that was wise enough to save her life when the Sultan, convinced of the duplicity and infidelity of all women, decided to execute them after the first night. Scheherazade counted on Sultan's curiosity and successfully kept telling him tales over a period of one thousand and one nights. During the narrative, students were asked to describe the characters of Scheherazade and Sultan. In the cases of the *Wellington's Victory* and *Pavane*, the story content was more explicit and less transferrable to everyday life situations.

Guided activities stimulate students to more actively engage in the acquisition of new information, though processes of selection, organisation and integration. These processes lead to deeper understanding than just pure exposure to instructional

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31 Ibid.; Anthony G. Picciano, "Blending with Purpose: The Multimodal Model," *Journal of Asynchronous Learning Networks* 13, no. 1 (2009): 7–18, doi:10.24059/olj.v13i1.1673.

32 Michael Sankey, Dawn Birch, and Michael Gardiner, "Engaging Students through Multimodal Learning Environments: The Journey Continues," in *Proceedings ASCILITE 2010: 27th Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education; Curriculum, Technology and Transformation for an Unknown Future* (University of Queensland, 2010), 852–863.

33 Moreno and Mayer, "Interactive Multimodal Learning Environments," 309–326.

materials[34] or leaving it on students to discover everything by themselves.[35] Asking students to reflect which was exactly the purpose of the three open questions proved to be an efficient practice.[36]

Conclusion

When compared with the standard (conventional) music lecture related to music listening, a more interactive and multi-modal cognitive-emotional approach showed some advantages. Students that were exposed to the cognitive-emotional approach provided more answers to questions related to their experience of art music. Looking at the contents of their answers, their responses were more related to the cognitive and emotional experience and to the didactical articulation of the lecture that left a good impression on them. Four music pieces that were chosen for this research differed in many elements and aspects, so that contributed as well to diverse answers. Teachers' guidance as well as the level of students' (inter)activity during the lecture seemed to be crucial for their experience of music listening.

However, the methodological constraint of the research is different didactical approach for a different music piece, so it is impossible to separate their influences on students' experience. Recommendation for further investigation would be to explore various didactical articulations on the same music piece. Suggestion for further research would also be to explore which students benefit more from the cognitive-emotional approach in the music context, because there is some evidence that lower achievers benefit more from multi-media usage.[37]

Cognitive-emotional approach shows advantages in the classroom, and the quantitative and qualitative analyses reveal that lesson units should be carefully planned and implemented. Lectures that include multi-media can improve the learning environment, but the articulation of the lecture should take into consideration not to overload students, as cognitive capacities are not unlimited. It is important to design the lecture to maximise students' motivation to engage in generative cognitive and emotional processing.[38]

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35 Richard E. Mayer, "Should There be a Three-Strikes Rule against Pure Discovery Learning?" *American Psychologist* 59, no. 1 (2004): 14–19, doi:10.1037/0003-066X.59.1.14.
36 Moreno and Mayer, "Interactive Multimodal Learning Environments," 309–326.
37 Ibid.
38 Mayer and Moreno, "Nine Ways to Reduce Cognitive Load in Multimedia Learning," 43–52; Moreno and Mayer, "Interactive Multimodal Learning Environments," 309–326.

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POVZETEK

Spremembe pedagoških in didaktičnih paradigem pri poslušanju in učenju glasbe v šoli so bile povod za ponovno presojo in prilagoditev potreb. Od učiteljev se ob visoki stopnji teoretskega in muzikološkega znanja pričakuje, da znajo na kreativen način gojiti didaktično bolj raznolik in navdahnjen učni kontekst, ki bo učencem omogočil kognitivno-emocionalni razvoj. Ena od predlaganih metod za doseganje tega cilja je kognitivno-emocionalni pristop, ki vključuje večmodalno in interaktivno učno okolje. Namen študije je bil ugotoviti, ali kognitivno-emocionalni in standardni pristop v poučevanju prispevata k različnim kognitivnim in emocionalnim izkušnjam učencev pri poslušanju klasične zahodne glasbe. Raziskava je potekala v 30 razredih na 16 osnovnih šolah. V prvi polovici razredov je bil pouk standarden (konvencionalen), v drugi je bilo poučevanje usmerjeno kognitivno-emocionalno. Skupno je 557 učencev 5. razreda odgovarjalo na vprašanja odprtega tipa in poslušalo iste štiri skladbe: Hačaturjanovo *Maškarado*, Beethovnovo *La battaglia di Wellington*, *Šeherezado* Rimskega-Korsakova in Fauréjevo *Pavano*. Rezultati so pokazali, da je kognitivno-emocionalni pristop učence spodbudil k več odgovorom na vprašanja o učiteljskih navodilih in spodbudah, lastnih mislih med poslušanjem glasbe in o tem, kar si bodo zapomnili v povezavi z določeno skladbo. Njihovi odgovori so bili prav tako bolj povezani z mislimi, čustvi in didaktičnimi artikulacijami učne ure. Tudi izbrane štiri skladbe so prispevale k raznolikosti odgovorov. Tako vodenje pouka učiteljic in učiteljev kot tudi stopnja (inter)aktivnosti učenk in učencev med poukom sta bila ključna za prednosti kognitivno-emocionalnega pristopa pri spodbujanju poslušanja glasbe.