

# THE CONTENT OF TODAY'S MUSIC SUBJECT CURRICULUM FOR GRADES 1–3 IN THE CONTEXT OF MONTESSORI EDUCATION PRINCIPLES

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## ABSTRACT

The use of an improved curriculum and a new approach in the teaching-learning process of the comprehensive schools in Latvia determine the topicality of the study. The aim of the study is to identify the Montessori education principles and the keywords that describe them, as well as to compare them with the content of learning topics in today's music subject curriculum for grades 1–3. The following research questions were raised to achieve this aim. RQ1: What are the Montessori education principles and the keywords that describe them? RQ2: What keywords describe the principles of Montessori education are mentioned in the content of learning topics in the music subject curriculum for grades 1–3? twenty-two academic articles that are published in the EBSCO database between 2010 and 2021 were used to define the principles of Montessori education. As a result of content analysis of the academic publications, the study identified three principles of Montessori education: Student's discoveries and finding creative solutions, collaboration and learning by doing. The study determined the frequency of using the keywords describing the Montessori education principles in number (N) and percentage (f%) by using document analysis, content analysis, and visual representation of the relationships between the identified keywords in the word cloud. The study found that the content of learning topics in the curriculum of music subject dominated by keywords that describe the Montessori education principles, such as creativity and learning by talking. The study results provide an opportunity to understand the features that are in common between Montessori and traditional education in the content of the music subject curriculum.

**Keywords:** *learning music, Montessori education principles, primary education, the content of music subject curriculum, the 1<sup>st</sup> –3<sup>rd</sup>-grade students.*

## Introduction

In the modern world, changes are constantly taking place, driven by globalization, climate change, technological development and other factors. The education system cannot ignore the problems that exist in the

world. That is why there is a growing debate about what education should be in the 21<sup>st</sup> century. The topicality of the study was determined by the fact that this year is the first school year, when the first, fourth and seventh classes of the Latvian primary schools are offered to implement curricula and approaches that meet the new basic education standard. Music is one of the school subjects that belong to the field of cultural awareness and self-expression. The improved curriculum and the new approach adapt music learning to each child and enable the student to acquire what will be practical in life. Alternative education theories, which have already emerged in the 20<sup>th</sup> century, adapt the learning process to each child and promote the acquisition of life-useful knowledge and skills. Therefore, the idea that arose in this study to compare Maria Montessori principles of education with the content of today's music subject curriculum.

Maria Montessori began to implement her cherished ideas about 114 years ago in the Italian education system. Nowadays, Montessori education is one of the alternative education directions, which has many advantages over the traditional education system. For example, the Montessori educator L. Pavlovskā writes in the preface to the Latvian-translated Montessori book *The Absorbent Mind* that alternative education is the most appropriate response to the changing and dynamic realities of the 21<sup>st</sup> century (Montessori, 2019). Montessori school teachers, leaders and Montessori education researchers believe that Montessori education promotes creativity, innovation, teamwork and resilience (Ungerer, 2017; Roemer, 2012) and is a constructivist approach to education (Colgan, 2016). Furthermore, it is a holistic form of education in which children learn as they should learn (Pailoor, 2014). Montessori education is a child-centred educational approach.

There have been several studies conducted to demonstrate the advantages of Montessori education over traditional pedagogy. For example, the Brown & Lewis study compared the learning achievements of 3<sup>rd</sup>-grade students in mathematics and reading. There was no significant difference in mathematics achievement, but Montessori school students showed significantly higher scores in reading (Brown & Lewis, 2017). Peng & Md-Yunus have also compared the learning achievement of the 1<sup>st</sup>-3<sup>rd</sup>-grade students who were learning mathematics, language and social studies according to the Montessori curriculum, with those students who were learning the same subjects but according to traditional education. The researchers concluded that there were significantly higher learning achievements in language for all 1<sup>st</sup>-3<sup>rd</sup>-grade students who have learned in the Montessori curriculum. However, only the 1<sup>st</sup>-grade students showed higher learning achievements in mathematics, but none of the students had higher learning outcomes in social science (Peng & Md-Yunus, 2014). In their turn, Kayili & Ari

conducted a study involving children aged 5–6 in Montessori pre-school and traditional pre-school to find out their readiness to start school. Researchers concluded that the Montessori method has a positive impact on pre-school children's readiness to attend school. Furthermore, it is more effective than the current pre-school education program (Kayili & Ari, 2011).

The aim of the study is to identify the Montessori education principles and the keywords that describe them, as well as to compare them with the content of learning topics in today's music subject curriculum for grades 1–3.

## Methodology

To reach the aim of the study two research questions were set:

RQ1: What are the Montessori education principles and the keywords that describe them?

RQ2: What keywords describe the principles of Montessori education are mentioned in the content of learning topics in the music subject curriculum for grades 1–3?

The study was conducted between November 2020 and May 2021, and based on a qualitative research design, in which the results reliability is described by the depth and breadth of the description. A content analysis of academic articles published between 2010 and 2021 in the EBSCO database was used to determine the principles of Montessori education and their keywords. The full-text publications only were selected according to the keyword. The keyword Montessori principles were initially used to select the articles, according to which ten publications only were sorted out, but none of them was relevant to the study objectives. Therefore, it was decided to use the keywords, Montessori approach and Montessori method to select the appropriate publications. The keyword Montessori approach finds 50 full-text articles in the EBSCO database, of which five publications involved in the study, and the keyword Montessori method selected 403 publications, of which 17 publications were used in the study (see Table 1).

**Table 1.** Number of publications used in the study (N)

Database	Keywords	Number of full-text publications (N)	Number of publications used in the study (N)
EBSCO	Montessori principle	10	0
EBSCO	Montessori approach	50	5
EBSCO	Montessori method	403	17

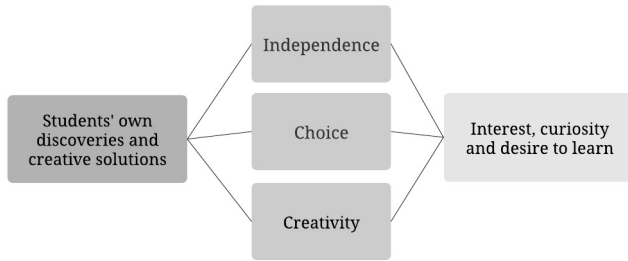
The academic publications that reflected Montessori principles in special education (11) and theology (7), as well as the articles that were not written in English (19) and did not analyse the principles of Montessori education (404), were not included in the study base. The analysis of twenty-two academic articles identified the principles of Montessori education and the keywords describing them. The publications were analysed by using content analysis. In addition, the obtained results were illustrated in figures.

To determine what principles of Montessori education and the keywords describing them are mentioned in the content of learning topics of the music subject curriculum for grades 1–3 (Fenhane, Fyodorova, Godiņa, Nelsone & Vilde, 2020), two research methods were used: document analysis and content analysis. The word cloud was created to illustrate the document content and describe the different relationships between keywords that make up the text. The keywords that describe the principles of Montessori education were compiled and quantified by determining their numerical (N) and percentage (f%) frequency. A table was structured to illustrate the obtained results.

## Results and Discussion

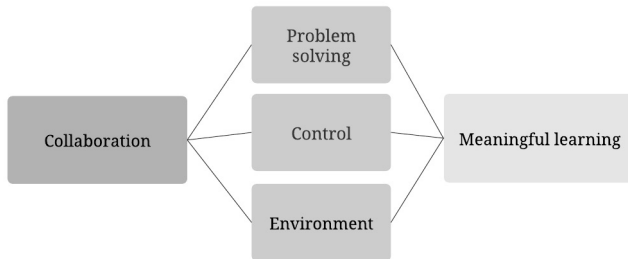
The principles of Montessori education are implemented at different stages of education and in several subject areas. However, it must be acknowledged that the Montessori approach is studied mainly in the pre-school education system and less at the early stages of primary education. As a result of the content analysis of academic articles, the study identified three principles of Montessori education. The first principle of Montessori education is expressed in the following keywords: discovery, investigation and experimentation, learning by experiencing, learning from experience, meaningful experience, independence, self-selected activities, choice in work activities, freedom of choice, encourage creativity, development creativity, which characterize the student's discoveries and finding creative solutions based on the student's independent learning, the opportunity to choose and the creative activity. This learning approach creates interest, curiosity and a desire to learn (see Figure 1).

The second principle of Montessori education is expressed in the following keywords (working in a team and collaboration, collaborative knowledge creation, communication, cooperation, school environment, self-control, attention control, meaningful learning), which characterize the collaboration among students on the one hand and the collaboration between students and their teacher on the other hand. Collaboration can be used in group work to deal with real-life problems together.



**Figure 1.** Keywords describing the student's discovery and creative solution in the context of Montessori education (author's construct)

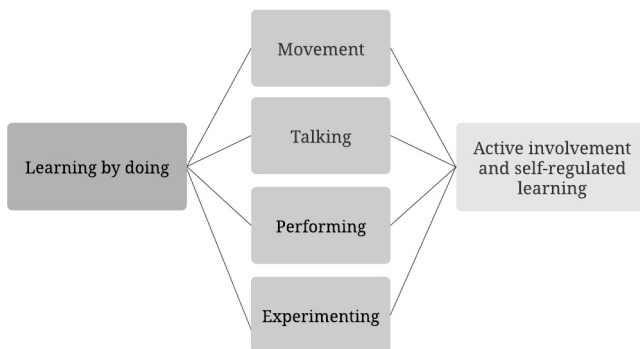
The environment in which collaboration takes place is not insignificant. It must be created to encourage students to concentrate and enable them to control their learning. Focusing on action promotes student's development, while control helps manage one's behaviour and emotions. Collaborative learning is one of the ways that allows a student to learn meaningfully (see Figure 2).



**Figure 2.** Collaboration and the keywords that describe it in the context of Montessori education (author's construct)

The third principle of Montessori education is expressed in the following keywords (practical life exercises, freedom of movement, learn by talking, deep listening, learning through performing, learning by experiencing), which describe the student's learning by doing, mind development by moving, talking, performing and experimenting. Learning by doing can be promoted by active involvement in several activities and self-regulated learning (see Figure 3).

Several studies have also examined the implementation of the keywords describing the principles of Montessori education in the pedagogical process. For example, researchers (Livstrom, Szostkowski & Roehrig, 2018; Rinke, Gimbel & Haskell, 2013; Negru, 2012) have found in their study that students between the ages of six and twelve enjoy group learning, and this is one of the best ages to foster collaboration.



**Figure 3.** Learning by doing and the keywords that describe it in the context of Montessori education (author's construct)

On the other hand, Dorer has studied the independent learning of primary school students and concluded that it can be promoted in three ways. Firstly, the learning process should be implemented to provide a student with the opportunity to make teacher-guided discoveries. Secondly, the students should be encouraged to talk more in the classroom: inventing definitions, rephrasing ideas, explaining their thought processes. Thirdly, the students should be able to choose between two tasks, which must be of the same degree of difficulty but different (Dorer, 2018). Çakır and Yalçın highlighted that the child's ability to choose creates their curiosity (Çakır & Yalçın, 2020). The choice allows students to perform the tasks they can complete and provides them with an opportunity to learn according to their inner potential and expectations. Montessori education is also focused on encouraging students to find creative solutions. Roemer believes that creativity in the Montessori approach is provided by: the opportunity to seek innovative solutions both in groups and individually; a balance between skills development and challenges; educators' belief that all children can succeed; supporting and encouraging students (Roemer, 2012).

To answer the second research question, the existence of the keywords such as independence, choice, creativity, problem-solving, control, environment, movement, talking, performing, and experimenting were identified in the music subject curriculum in context with the three principles of Montessori education (student's discoveries and creative solutions, collaboration, and learning by doing) (see Table 2).

As a result of content analysis, it was determined that creativity is the most common keyword in the music subject curriculum. The 1<sup>st</sup>-3<sup>rd</sup>-grade students create sound paintings and improvise simple melodies in free form. The expressions of creativity are simple for the first graders, as they compose rhythm lines or produce an accompaniment with sounding gestures.

**Table 2.** Principles of Montessori Education

Principles of Montessori education	Key words	Grade 1		Grade 2		Grade 3	
		N	f (%)	N	f (%)	N	f (%)
Students' discoveries and creative solutions	Independence	2	4.9	2	5.3	1	2.1
	Choice	4	9.8	1	2.3	2	4.2
	Creativity	11	26.8	10	26.3	15	31.2
Collaboration	Problem solving	3	7.3	4	10.6	3	6.2
	Control	3	7.3	2	5.3	1	2.1
	Environment	2	4.9	3	7.9	2	4.2
Learning by doing	Movement	3	7.3	2	5.3	2	4.2
	Talking	8	19.5	8	21.1	15	31.2
	Performing	2	4.9	2	5.3	3	6.2
	Experimenting	3	7.3	4	10.6	4	8.4

In the second and third-grade classroom, the expressions of creativity become more and more impressive. The second graders create accompaniments to songs using the acquired rhythms, sound levels and improvising of winter moods. The third-grade students compose an accompaniment for compositions and songs in period and rondo form with rhythm instruments and create rhythm ostinato. Visual arts are also used for creative expressions to illustrate the rondo form.

As a result of content analysis, it was determined that students learn music subject not only by making music but also by talking. The 1<sup>st</sup>-3<sup>rd</sup>-grade students tell about their music experience. In the first grade, the students explain how a solo song differs from a choir song and discuss the most appropriate means of musical expression for the performance of the song. In the second grade classroom, the students talk about how the image and mood of music change, what character can be created using voice, music instruments and musical-rhythmic movements. In the third grade, learning through conversation almost doubles compared to the first and second grades (see Table 2). The 3<sup>rd</sup>-grade students not only discuss the choice and use of the means of musical expression in the process of staging the songs but also discuss the ideas of creative work and the implementation steps of the final production, and the progress of demonstrating the performance, the findings obtained and the contribution of each student to the joint work. In the 3<sup>rd</sup> grade, students begin to learn to evaluate the values expressed in the compositions, express their views and listen to different opinions.

The keyword choice is mentioned in the first-grade music subject curriculum more than in the second and third grade. In the 1<sup>st</sup> grade, students

are allowed to choose the most suitable songs for celebrating the Latvian holidays and a song, a poem and a fragment of prose corresponding to Mother's Day. In the 2<sup>nd</sup> grade, as in the first grade, students choose the musical instruments needed for accompaniment. In the 3<sup>rd</sup> grade, students are allowed to select text or images to create sound paintings. The study revealed that there is not a significant difference in the frequency of use of other keywords that describe the principles of Montessori education for the first and third grades. In the music subject curriculum, independence is manifested in evaluating one's performance, musical experiences and achievements in music culture. Problem-solving is characterized by finding new solutions in making music, but with movements, students can imitate the music tempo, reproduce the melodic line of a composition, perceive a motive and a phrase and sing songs with rhythmical movements. The students are allowed in music lessons to experiment with different sound instruments, elementary music instruments and voice, to understand the sounds formation and the major and minor system. In addition, learning by doing enables students not only to play music actively but also to know the traditions of celebrating Christmas in practice and create rhythm instruments from natural objects and reusable materials.

The music subject curriculum provides the students with an opportunity to learn through performing. For example, in a music lesson, the students demonstrate a performance depicting Christmas scenes, and they are going on mask marches with role-playing, singing songs and playing an accompaniment. Collaboration is one of the main principles of Montessori education that can be demonstrated by playing musical instruments together, staging performances in groups and observing the conditions of collective music-making. The students should be encouraged to arrange the learning environment by picking up and putting musical instruments in the provided place and controlling their behaviour and emotions to collaborate in music lessons successfully.

Music is as important as other school subjects in Montessori education. Rajan believes that, according to Montessori education, the students learn music through listening to, recognizing and imitating the sounds of bells, experimenting with piano, marimba and xylophones, as well as collaborating and communicating (Rajan, 2016; Rajan, 2010). Learning music helps to know different cultures, which develops empathy and creates a greater understanding of the world around (Duckworth, 2006). The principles of Montessori education are still present and relevant in the context of today's music subject curriculum.



## Conclusion

Three principles of Montessori education have been identified in academic articles published over the past decade: the student's discoveries and creative solutions, collaboration and learning by doing. The first principle of Montessori education is characterized by keywords such as independence, choice and creativity. The second one is determined by the keywords problem solving, control and environment. In turn, learning by doing is described by the keywords movement, talking, performing and experimenting.

All keywords that describe Montessori principles were identified in the content of learning topics of the music subject curriculum for grades 1–3. However, the dominant keywords were creativity and learning by talking. The creativity is realized in music lessons by improvising with voice and sound tools and creating performances. In addition, to promote students learning by talking in the classroom, the students should have the opportunity to speak about their music experiences, discuss with each other the idea of creative work, the steps taken to implement the final product, the demonstration of the performance, the findings obtained, and the value expressed in the composition. The study results provide an opportunity to understand the features that are in common between Montessori and traditional education in the content of the music subject curriculum.

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