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THE EDUCATIONAL POTENTIAL OF THE IMPACT OF MUSIC ON INTEGRATED TEACHING

INTRODUCTION

According to the main idea of integrated education, which is expressed both in theoretical considerations and practical solutions implemented by teachers, the essence of early childhood education resolves itself to the following:

- perceiving a child as a unique whole;
- respecting individual differences in children's capabilities;
- respecting individuality, i.e. developmental needs, abilities, interests;
- respecting the individual pace of development, the "dissimilarity" of a child's developmental path;
- referring to the basic way (path) of a child's acquiring competence, their thinking patterns and the style of action, also to their nature expressed, for example, through the characteristics of temperament determining the speed and rhythm of their actions, and such capabilities as concentration, perseverance and accuracy;

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- taking into account the “place” in a child’s development, i.e. how much has the child mastered in terms of teachers’ requirements or developmental tasks set for them;
- acquiring competences through action, learning with all senses, or experiencing “here and now”;
- creating the most favorable conditions for a child to reveal his or her developmental potential in different areas of activity. This means starting the entire educational process from the child – from his or her needs, from the way they perceive the world, from their coping strategies in new and difficult situations, from the environmental conditions of their development and activity (Misiorna, 1993).

Both in the historical and contemporary approaches to education, regardless of the adopted concept of integration, indicating various approaches, in which the axis of integration is made of such elements of the education system as: content, methods, forms of activity, organizational schemes, objectives, situations or tasks, etc., education in grades I-III elementary school should be geared towards the holistic development of a child. It takes place through a learner’s undertaking multidirectional activities within individual areas of early childhood education. Thus understood, the task of integration, often mistakenly identified with correlation, is exploring the content of Polish language education, Mathematics, Art, etc. as a part of children’s exploration of a particular issue (Klus-Stańska, Nowicka, 2005). In this case, none of the areas of early childhood education must be ignored or treated as less important. However, research on the practice of early childhood education reveals that music education is often merely complementary to the process of integrated education, although it should be treated as a regular didactic procedure, integrating school and out-of-school musical experiences of a child. According to Szafrąńska-Gajdzica (2016, p. 96): “in the didactic dimension, what we deal with, first and foremost, is the marginalization of some areas of education, e.g. artistic education. As a result, a child in grade I-III, instead of being presented with an integrated picture of the world, is offered a «deprived» one, with its parts selected subjectively.”

The aim of the paper is to justify the thesis that it should be considered one of the directions adopted in working with children to use the enormous possibilities that music brings for the implementation of various didactic and educational tasks set by the early childhood education core curriculum. On the basis of the research, the ways of integrating music with other areas by early childhood education teachers were shown. Based on the obtained results, an attempt was made to indicate other possibilities of using the potential of music in the integrated education in the area of primary school practice.

MUSIC AS A KEY FACTOR FOR INTEGRATION IN THE CONTEXT OF THE CORE CURRICULUM

The main objective of the early childhood education is supporting the full development of a child. Therefore, education in grades I-III primary school should be focused on the holistic development of a child. In the light of the obligatory core curriculum, through the implementation of such functions as: educational, cognitive, teaching, compensation and therapeutic, aesthetic, integrating, ludic and creative, music contributes to shaping a child's personality. What constitutes its main task is to develop pupils' sensitivity, imagination and creativity (Journal of Laws 2017, item 356). The analysis of the objectives-general requirements of early childhood education, as described in relation to the four developmental areas of a child: physical, emotional, social and cognitive, allows to conclude that the potential of musical interactions is not sufficiently included in the aforementioned fields. The issue of musical interactions is reduced in the case of physical development of a child to the ability to use his or her own physical activity in the sphere of their artistic activities. Within the emotional sphere, the means of artistic expression should constitute a tool for presenting their emotions and feelings, as well as those of other people. The pupil is supposed to master the ability to participate in culture and to express their observations and experiences through the musical means of expression. What is worth noticing is that the possibilities for the use of music in cognitive development has been completely marginalized. Modern-day educators and propagators of musical education emphasize the importance of music in the development of a child's general mental dispositions, including perception, attention, imagination, memory, will, emotional sensitivity and intelligence (Przychodzińska, 1989). Numerous studies show that children's participating in music classes, along with learning to play instruments improve their verbal and operational memory, affect the ability to read, as well as the mathematical and time-space skills (Wilsz, 2012). The research conducted by Zofia Burowska and Ewa Głowacka (2006, p. 68) shows that contact with music affects the pace of learning, i.e. "using music while learning allows for the acquisition of sixty percent of the content within five percent of the time used during the learning process when employing traditional methods." Practicing music is exceedingly complex, as it is simultaneously related to performing precise motor activity, developing listening skills, using symbols. Music activates many brain centers, which, in a natural way, may contribute to higher attainments in many areas, and hence – in numerous tests of cognitive skills (Wilsz, 2012). According to Wolińska (2017, p. 264): "musical activities play an important role in a child's mental development, since music teaches simple thought operations, such as: comparing, analyzing, synthesizing, abstracting. They develop sensory sensitivity, stimulate the process of perception and concentration, influence speech development and enrich vocabulary, develop creativity and discharge emotions." The author emphasizes the

influence music has on shaping a child's emotional sphere and his or her willingness to learn about the world around them. Musical classes conducted in groups do socialize, prevent the sense of loneliness and promote cooperation. Children learn how to move in a harmonious and rhythmical way as the basis for acquiring the sense of rhythm. Music goes hand in hand with smooth movement, calm breathing and harmony with the surroundings. Through movement, the right sense of flow, weight, space and pace is shaped in the order appropriate for a child, not for an adult.

Helena Danel-Bohrzyk (2000) indicates numerous qualities of particular forms of musical activity that stem from children's various musical activities and prove to be useful for their full harmonious development (Table 1).

Table 1. The importance of particular forms of musical activity for a child's comprehensive development

Singing	Listening	Music and movement classes with singing and accompaniment	Playing musical instruments
<ul style="list-style-type: none"> • shapes the habit of proper breathing • strengthens the voice apparatus • oxygenates the body • contributes to the development of speech • improves memory • stimulates imagination • enriches a child's language • lyrics broaden our knowledge of the world and our experience, develop vocabulary, influence emotions and shape feelings • collective singing socializes pupils • it teaches cooperation in a group, improves integration, activates shy and reserved children 	<ul style="list-style-type: none"> • supports a child's cultural development and leads to harmonious enrichment of their spiritual sphere • leads to acquiring knowledge on cultural and historical diversities in particular regions and countries • leads to getting acquainted with different music genres • learning how to recognize melody and rhythm contributes to a child's mental development • helps to discharge the child's energy overcapacity, lets them know their body and the skills related to balancing and physical expression • sensitizes the child • prepares to perceive different types of music 	<ul style="list-style-type: none"> • meet the natural need for movement • promote establishing and maintaining relationships with peers • eliminate emotional tensions, encourage the reserved pupils to participate • teach cooperation while performing tasks and independence in problem solving • improve children's physical fitness in terms of agility, speed, strength, balance, eye-hand coordination • boost imagination 	<ul style="list-style-type: none"> • a child moves different parts of his or her body, controls breath and hand movements, tries to produce sound best • shape concentration and attention, its divisibility, endurance and readiness • group musicmaking teaches cooperation in a team • shapes the pupils' personality • teaches how to deal with difficulties, brings satisfaction and joy from undertaking musical actions • teaches to work systematically

Source: author's study based on: Danel-Bohrzyk (2000, p. 215-224).

Thus, each of the above-mentioned forms of musical activity boosts numerous skills and contributes to an overall, harmonious development of a child. Maciej Kołodziejcki (2012, p. 26) emphasizes the significance of musical interactions in shaping creativity and expression, developing multiple intelligences, increasing involvement in problem solving and developing abstract thinking. The author says: “The interdisciplinary nature of art provides a number of opportunities for exposition, is multi-level and open to the search for various models of teaching and learning.”

Undoubtedly, the integration of music with other fields of early childhood education fosters the fusion of emotional, cognitive and motor processes, and thus contributes to the comprehensive development of a child. Musical education in the first grades of primary school consists in organizing a child’s musical activity in a multilateral way, and thus on supporting all the spheres of emotional, psychological, physical, moral and mental development, taking into account the individual pace of developing musical interests and motivations (Ławrowska et al., 2010). Therefore, there occurs a question of whether and how much the integration values of musical education are used in practice in relation to other areas of early childhood education.

MUSIC AND OTHER AREAS OF EARLY SCHOOL EDUCATION IN SCHOOL PRACTICE

The aim of the initial quantitative-qualitative research was to establish how music is integrated with other areas of early childhood education. The research was carried out in grades I-III of five primary schools in the Bielsko-Biała district. The answers to the following questions were sought in the course of the research:

1. What areas of early childhood education are the musical activities undertaken by early childhood education teachers integrated with?
2. What forms of musical activity are integrated with other areas of education within blocks of integrated classes?
3. What are the functions of musical activities of integrated education teachers?

The research method used was the observation of several-hour-long blocks of classes and the registration of educational situations related to the teachers’ and pupils’ musical activities. The cases were faithfully recorded in the observation diary and subsequently subjected to quantitative and qualitative analysis in terms of:

- the relations of music with teaching Polish, Mathematics, Natural Sciences etc.;
- the forms of musical activity to integrate musical content with the non-musical one;
- the ways to integrate musical content with the extra-musical one.

As a result of the analysis of the collected research material, categories illustrating the ways music is integrated with other areas of education were identified. The con-

ducted research is of a pilot nature and there will be an in-depth examination of the aforementioned issue.

In the course of the research, it can be concluded that music was correlated with nearly all areas of early childhood education except for ICT education (Table 2). However, what should be emphasized is the fact that the integration qualities of music are made use of to a small extent. Most often it appeared in connection with a child's social and physical activity.

Table 2. The areas of early childhood education integrated with music

Areas of education integrated with music	Number of classes	% N = 28
Polish Language	4	14.3
Mathematics	8	28.6
Natural Sciences	5	17.8
Social Education	26	92.8
Art	9	32.1
Technology	1	3.6
Physics	15	53.6
ICT	0	0
English Language	6	21.4

Source: author's study.

Musical education most often constitutes an isolated area of early childhood education. Teachers fail to see music as a means to stimulate a child to think, analyze and experience, to search for logical relationships with non-musical content, and therefore they do not make enough use of music during classes.

The research material was analyzed in terms of forms of musical activity integrated with other areas of education (Table 3).

Table 3. The forms of musical activity implemented within the non-musical areas of education

Forms of musical activity implemented within the non-musical areas of education	Number of classes	% N = 28
Listening to music	18	64.3
Musical improvisation	14	50
Singing	28	100
Playing musical instruments	7	25
Physical activity with music	16	57.1
Making music	5	17.8

Source: author's study.

The form of musical activity used in connection with other areas of education during all the classes was singing (28 classes, i.e. 100%). Most often the content of the song was correlated with the content discussed within the framework of Polish, Natural Sciences and Social Education. Singing plays a vital role in the overall development of a child, because, as Bożena Nowak says (2014, p. 51): “A child, singing a simple song, is able to observe the rhythm, the melodic line, the dynamics, the character of the song, as well as its mood, which, altogether, forms the basis for conscious perception of a musical piece. The lyrics of songs, on the other hand, broaden children’s knowledge of the world and the surroundings, enrich their experience, develop children’s vocabulary, shape their feelings.”

The second most frequently occurring form of musical activity in classes was listening to music (18 classes, i.e. 64.3%). It should be noted, however, that music was used mainly as a background for the pupils’ extra-musical activities. Therefore, it cannot be stated that in this case the integration of early childhood education areas occurred, as it was only correlation that could be observed. The analysis of the educational situations described above provokes reflection that music was supposed to “diversify the classes” or serve as a tool for relaxing the pupils and calming their emotions. It was relatively frequent that music was integrated with the physical activity of the children (16 classes, i.e., 57.1%), whereas the least frequent use of music was made in terms of associating it with a specific area of education as a tool for the pupils’ undertaking creative activities (5 classes, i.e. 17.8%).

A detailed analysis of educational situations within which music activity appeared has led to the identification of specific categories of activities that integrate areas of education (Table 4).

Table 4. Types of educational situations related to the integration of music with other areas of education

Area of education	The way of integrating music	Number of classes	% N = 28
Art	listening to music as a source of a child’s creative artistic activity	8	28.6
	the perception of a work of art. And its musical interpretation, expressing their significant and emotional content	1	3.6
PE	listening to music as a source of a child’s physical activity	11	39.3
	illustrating agogic and dynamic changes with movement	4	14.3
Polish	a musical interpretation of a literary work, e.g. a poem, a rhyme	4	14.3

Mathematics	the use of elements of music e.g. the rhythm, the rhythmic values in the process of comprehending mathematical concepts and operations	8	28.6
Natural Sciences	musical improvisation of natural phenomena	5	17.8
Technology	creating musical instruments of one's own making	1	3.6
Social Education	integration games with music	26	92.8
Foreign Language	the use of musical rhymes in the acquisition of phonemes and words in a foreign language	6	21.4

Source: author's study.

What is made use of the most frequently (26 classes, i.e. 92.8%) within the integrated education is the values of music in children's social integration. Singing along with music and movement games aim to integrate pupils as a team and shape the skills of establishing relationships with peers, especially by children who are shy and emotionally inhibited.

Listening to music constitutes the form of musical activity that is often (11 classes, i.e. 39.3%) used as a source of children's creative physical activity in terms of Physical Education. The children's task is to illustrate with movement the content and the mood evoked by listening to music. Combining music with Physical Education allows children to develop interest in the rhythmic movement performed to the accompaniment of music, which boosts the progression of musical and movement memory, as well as the ability to learn and memorize the melody and rhythm. Thanks to the integrated physical and musical activity children have the opportunity to learn and perpetuate the color and scale of sounds, as well as recognize dynamic changes in music. The research results show that the use of movement improvisation by Rudolf Laban, the Batti Strauss method and the Carl Orff Approach of rhythm and music in child's education contribute to improving their contact with other participants of the game. While taking part in the music and movement games, a child learns to cooperate within the group, share responsibility and comply with the rules and principles (Borucka, 2011).

As far as the artistic education is concerned, during the observed classes (8 classes, i.e. 28.6%), it was classical instrumental music that was used as inspiration for children to take up creative artistic activities. Most frequently, the children's task consisted in performing artistic work while listening to music. Unfortunately, only one class was devoted to children taking up creative musical activities based on a work of art (a painting presented by the teacher). The children's task was to use musical instruments to present the emotions and mood evoked by the artwork. Such activities have extraordinary educational values as they are conducive not only to integrating the content of artistic education, but also triggering a child's creative potential.

Only one Technology class was devoted to children making percussive musical instruments of indefinite pitch of sound, which was followed by them performing musical improvisation and repeating rhythmic patterns presented by the teacher. During the other classes, the children played on the ready-made Orff's instruments, even though playing self-constructed instruments can affect a wider range of knowledge (on the construction of instruments) and a child's motivation to undertake reproductive and creative activities.

During the classes observed (5 classes, ie 17.8%), the pupils used their voices and musical instruments and free movement interpretation to illustrate such natural phenomena as wind, storm, rainfall etc. Such activities should be taken much more frequently.

As far as early childhood education is concerned, it is very rare to integrate music with Polish and Mathematics. It was only during four classes that the pupils' task was to interpret the content of a short poem, a proverb or a nursery rhyme by means of music. When it comes to mathematical education, in turn, the children's musical actions served to deepen the understanding of mathematical concepts and activities, such as adding, subtracting or shaping spatial relations. Such elements of music as rhythm and meter division of rhythmic values can be used in order to help understand particular content in the field of mathematical education.

It is also possible to make use of music while teaching foreign languages. During only six English classes in grades I-III primary school, singing songs and rhymes or the alphabet was introduced in order to present new or revise the already known vocabulary and sentence structures.

CONCLUSIONS

The analysis of data collected as a result of observation shows that the integration values of music with other areas of education are highly underestimated. Music classes usually constitute a separate part of the integrated classes. Such forms of musical activity as singing or listening to music are mainly a kind of "musical setting" for other extra-musical activities that pupils realize within the framework of Polish, mathematical or artistic education, etc. The language of music is rarely integrated with the language of other areas of education and it does not constitute a tool used to comprehend concepts and phenomena in the integrated education.

Although teachers use music in classes willingly, the essence of integration seems not to be understood in a proper way, as it is frequently carried out in a casual or random way. Such situations are often related to teachers' lacking sufficient methodological preparation, as well as their lack of confidence in terms of competences related to introducing musical elements in the classroom. As far as the conclusions are concerned, it should be also emphasized that the extra-musical educational content is correlated with music in a similar way in different institutions, which might

suggests that teachers make use of either archaic teaching materials or ready-made scenarios posted on the Internet, whereas there is an abundance of innovative ways to integrate early childhood education contents, such as the following:

1. Natural Sciences:

- imitating the sounds and movements of animals, and using the voice and movements to reproduce such sounds as those of the sea, the forest, etc.;
- spontaneous movement, vocal and instrumental expression showing changes in nature or natural phenomena.

2. Polish:

- using vowels, consonant and vowel clusters or words (e.g. those difficult to spell) for children's voice emission exercises, spontaneous voice depiction of natural conditions, agogic and dynamic changes through singing exercises.

3. Mathematics:

- using the note values and pauses, as well as the musical meter to present and consolidate the concept of a tree and to present the quantitative characteristics in spatial and temporal dimension;
- using the features of repeatability in music to present the phenomenon of multiplication, etc.

4. Art:

- making use of music in creative artistic expression (not only painting pictures), e.g. working from modeling clay, plasticine, sculpturing, etc.
- using artworks for creative musical expression, for instance vocal, movement or instrumental expression.

Properly performed correlation of content in early childhood education will result in a better consolidation of knowledge and comprehensive intellectual, aesthetic and physical development. In the course of integrated classes, a pupil will have the opportunity to comprehend the reality meaningfully and thoroughly.

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THE EDUCATIONAL POTENTIAL OF THE IMPACT OF MUSIC IN INTEGRATED EDUCATION

Keywords: child, music, integrated education

Abstract: The aim of the following article is to justify the thesis that one of the directions adopted in working with children should be to take advantage of the enormous opportunities

that music brings for the implementation of various didactic and educational tasks set by the early school education curriculum. Basing on the conducted research, there have been presented ways of integrating music with other areas of early childhood education undertaken by teachers. Moreover, on the basis of the obtained research results, an attempt has been made to indicate other possibilities of using the potential of music in integrated education in the studied area of the school practice.

POTENCJAŁ EDUKACYJNY ODDZIAŁYWAŃ MUZYCZNYCH W KSZTAŁCENIU ZINTEGROWANYM

Słowa kluczowe: dziecko, muzyka, kształcenie zintegrowane

Streszczenie: Celem artykułu jest uzasadnienie tezy głoszącej, że jednym z kierunków przyjętych w pracy z dziećmi powinno być wykorzystanie ogromnych możliwości, jakie niesie ze sobą muzyka, dla realizacji różnorodnych zadań dydaktyczno-wychowawczych stawianych przez podstawę edukacji wczesnoszkolnej. Na podstawie przeprowadzonych badań ukazano sposoby integrowania muzyki z innymi obszarami podejmowane przez nauczycieli edukacji wczesnoszkolnej. Na podstawie uzyskanych wyników podjęto próbę wskazania innych możliwości wykorzystania potencjału muzyki w kształceniu zintegrowanym w badanym obszarze praktyki szkolnej.