

THE THEORY OF MULTIPLE INTELLIGENCE: APPLICATION POSSIBILITIES IN TEACHING MUSIC

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Respecting diversity is one of the most important requirement of modern life and condition for effective functioning of the community. However, the truth is that we are not always willing to show respect to people whose preferences and behavior or levels of skill to perform some work differ from ours. Introducing and encouraging manifestation of diversity is inconsistently carried out in the educational process as well. Organization and realization of the educational process and learning conditions in general are the same for all students. The use of same one approach to teaching all students makes teaching less efficient and the quality of the acquired knowledge worse. Respecting for diversity in teaching and adapting of teaching process to individual abilities of students finds support in Howard Gardner's theory of multiple intelligences. Application of this theory concept in teaching represents a possible solution for avoiding the disadvantages of traditional teaching concept. Although the educational perspectives of musical content and musical activities are often neglected in the classroom, with teaching music to students can be achieved a simultaneous and balanced development of all types of intelligence (according to first Gardner's classification). Therefore by encouraging all students to participate in music activities together we can ensure that same teaching content can be adapted and be "understandable" to students of different individual abilities and different preferences and motivation level. In this paper we will present some examples to how music, as universal tool, can engage all students so they develop not only their music abilities and skills, but also all types of intelligences.

Keywords: individual abilities of students; Music teaching; musical activities; theory of multiple intelligences

Respecting diversity is one of the most important requirements of modern life and a condition for efficient functioning of the community. However, the truth is that we are not always willing to show proper respect to people whose preferences and behavior or levels of skill to perform some work differ from ours.

Introducing and encouraging manifestation of diversity is inconsistently carried out in educational process as well. Organization and realization of educational processes, and learning conditions in general are the same for all students. The use of same one approach to teaching of all students, while neglecting their individual skills, different abilities and pace of progression, makes the teaching process less efficient and delivers less knowledge.

Orientation of the teaching procedure towards one individual student with average abilities, pre-knowledge and average development possibilities it is known as one out of many missing parts in traditional organization of teaching process. In teaching practice, overcoming of this problem is most often with combining, modifying and adjusting different methods and forms of teaching according to the individual abilities of a student. Individualization of teaching process is often used as efficient mean for eliminating deficiency in traditional teaching. This particular teaching organization adjustment to the individual abilities of the student finds a necessary support in the theory of multiple intelligence by American psychologist *Howard Gardner*.

Bearing in mind actuality of this concept, in psychological and pedagogical literature and practice, in this paper we will point out the possibilities and examples of the Musical teaching realization, and now the music, as universal teaching means, can engage all students to develop not only their own musical abilities and skills, but all the other types of intelligences that exists in the concept of multiple intelligence theory.

Principle of Multiple Intelligence Theory

Multiple Intelligence theory by Howard Gardner is represented in public in the 80's of the last century. Itemizing various evidences, in his study "*Frames of Mind*" (1983) he provides whole new perspective in comprehension and defining the term of intelligence. The traditional understanding of intelligence, on the one hand, and the essence of Gardner's theory of multiple intelligences, on the other, points out to the unadjusted approach to interpretation of cognitive functioning. Gardner's assumptions and evidences presented in the theory of multiple intelligence finds a great deal of attention and acceptance not only in America but around the world as well.

Starting point in Multiple intelligence theory constitution was an intention to determine how the brain and mind operate and to show to the world that all people are intelligent, although, each one of them in his own individual and specific way. With intention to provide a wider significance to the term of intelligence, Gardner with this definition includes a wider range of "*skills and competences which are not entirely in intellectual order*" (Žiropadja, 2007:14). According to his understanding, it is possible to indentify at least seven different relatively autonomic types of intelligence which, interconnected between them, we can call human intelligence. Gardner has described in details: verbal-linguistic, logical-mathematical, spatial/visual, musical-rhythmic, bodily-kinesthetic, interpersonal and intrapersonal intelligence. Beside this, it is important the understanding Gardners stand that the intelligence is a variable ability (or a group of

abilities) that can be improved through teaching process and appropriate school classes. Gardner emphasizes that this abilities do not function in isolation (except in pathological cases) and yet their specific combination gives a complete range of intellectual abilities of an individual.

Verbal-linguistic intelligence is the most studied and with a lot of empiric indicators about the autonomy of it (although mostly out of neuropsychological research). Dominant expression of this intelligence in all together profile implies semantic, phonological, syntactic and pragmatic competence. According to Gardner, all the children develop this intelligence and in short period of time acquires mentioned competences. Differences, of course exist in the levels of this competences, respectively in the degrees of competence development.

Logical-mathematical intelligence implies ability of successful and simple usage of calculating operations and numerical content. Also, persons with increased logical-mathematical intelligence notice with ease structure and cause-consequences connections in presented content. In recognition of items or life situations they are using different mind operation that characterizes logical judgment and conclusion.

Abilities of exact observation and creation of shapes or items and recognition of their mutual relationships determine individuals in whose profile of intelligence dominates developed *spatial/visual intelligence*. Beside this, sense for colors and lines and ability for graphical idea representation, is also specificity of this kind of intelligence.

Ability of using the body to express thoughts and feelings determines the persons with expressed *bodily-kinesthetic intelligence*. The key operation of this ability is body control; maintain balance and good motion coordination. Expressing abilities that dominate over a person with developed bodily-kinesthetic intelligence, besides that, includes precision and dexterity in production and shaping different material products.

Interpersonal intelligence allows to an individual to understand his own feelings, desires, goals, his own weak and strong sides. Persons who know their own profile of intelligences are using this knowledge to build a self-control, self-discipline and self-respect.

On the other hand, *interpersonal intelligence* characterizes ability of recognition and understanding of emotions, mood and motive of other people, ability of solving problems in cooperation with others (in a group). Although each one of the *personal intelligence* posses his own feature and developing paths, they are connected and represented in each profile, so their mutuality is more or less expressed.

Independence of *musical intelligence* is confirmed by the number of theories and their empiric evidences. Specificity of these kind of intelligence implies such a combination of cognitive operation that allows to an individual to design organization of musical data, to add a distinctive meaning thanks to ability of pitch discrimination (melody), his duration (rhythm) and timbre. Developed musical intelligence involves the students' ability of different forms of musical expression and developed an ability of apperception music.

In order that application of this theory became a successful one it is very important to consider Gardner's point of view that each student poses relatively developed all kinds of intelligences, therewith combination of different abilities is specific to each one of the student. Development of certain intelligences is with different intensity which is, also a reason of the uniqueness of the intelligence profile for each of the individual student. Existence of the different types of intelligence allows "compensation of inferior domains with the most developed abilities that students have"

(Miletic & Vukicevic, 2013:1967). Therefore, when some of the mentioned intelligences is recognized with students on a significantly high level, it is recognized as his/hers dominant and distinct ability for successful studying in a certain teaching area or activity in particular area of creativity.

From the very beginning, Gardner's theory is conceptualized as psychological theory but Gardner himself points out that he was not expecting that the teachers will evince more interest than psychologists.

Implication of Gardner's theory in teaching practice

Conceiving teaching practice on Gardner's concept of multiple intelligences follows a need for removal, or at least reduces traditional teaching organization defects. Primarily, related to a need of appreciation of specificity and diversity of each student studying approach. However, some individual examples of application of this concept in teaching points to a superficial interpretation of the theory, but in the majority of cases theory application shows that stimulation of intellectual development and teaching adjustment to abilities and preferences of the students can be successfully implemented in practice with all student categories, in entire levels and age.

Gardner considers that indications of development of certain intelligences can be noticed in a very early stage. According to this, teacher's task is very delicate because he has to engage additionally in a procedure of recognition of different intelligences combinations that make a profile of student abilities. Gardner himself denied application of standard psychometric tests in procedures of recognition of student's abilities with explanation that these tests do not allow sufficiently wide span of intellectual expression. Opposite to this, as a procedure of identification, he suggested observation of student's behavior in a real environment (during class and out-of-class activities while staying in school). Beside application of observation technique (can be organized as monitoring of team of teachers) in a procedure of identification of student's abilities, engagement of the teachers in keeping evidence of students achievement it is very important.

Development possibilities for each one of the mentioned intelligences should not be related only to increasing level of one particular intelligence, achieving quality connections between all forms of intelligences is more important, based on this students will use, intuitively at first, and afterwards consciously various abilities for solving a specific problem (Miletic & Vukicevic, 2013:1969). Profound understanding and various approaches to studying teachers content from a certain area can be achieved with interdisciplinary, thematic approach to a teaching planning and implementation. Because of this, goal of teachers is to provide conditions that teacher's contents can be studied in various manors appropriate to a student's ability profile.

Besides the mention one, important advantage of Gardner's concept application in teaching is stimulation for a student's confidence and equalization of possibilities of their improvement, but not only in an area of source intelligence.

Specificity of adopting knowledge in Music Classes

Goal of musical teaching is encouraging of aesthetic development and intensification of student's musical experience, but knowledge as well. Cognition achieved by musical contents is different from all the other forms of cognition (scientific in the first place) by the mode of approaching to the world, his representation and expression. Most precious characteristic of studying with musical art is precisely a master piece, authentic medium of transferring knowledge and experience. Coming into contact with a art master piece, students are motivated and provoked to a creative expression in various areas of human experience (Ivanovic, 2007:5). Such an approach to an education of generations encourage stimulated studying, studying with pleasure and with challenge, developing analytical, critical and creative opinion. Besides the art-character specific of musical culture teaching is reflected in their inter-disciplinary content. Because of the mentioned, musical culture teaching is especially suitable for simultaneous development of all intelligences and stimulation of student's motivation.

Due to the heterogeneous structure of the profile of student's intelligences in one class, it is important to emphasize that for the successful realization of teaching music it is very important that each student needs to have, regardless of the dominant intelligence, developed elementary musical abilities of perception, as well as the ability for interpretation of the most important components of the musical flow (melody and rhythm).

Musical Intelligence and music teaching

In pedagogical and psychological literature the meaning of the phrase which has musical intelligence, also have terms musicality, musical talent, musical abilities, musical predisposition, sense of music etc¹. In Gardner's description musical intelligence is recognized as listening sensitivity expressed in ability of observation and discrimination of pitch (melody), duration (rhythm) and timbre (tone color) and developed musical memory. It is clear that during the primary school education students all the mentioned components of musical intelligence are developing most consistently in music classes. Contents of the musical teaching program are separated in specific program areas that includes basic requirements for introduction of musical art to students such as: interpretation of music, listening and music creating.

"Music interpretation" considers of several fields of work: singing and playing, musical dance performance and musical literacy basics.

Singing have very important place in educational process of the youths. In lower grades of elementary school, singing of properly chosen songs activates the musical predispositions of students and thus gradually developing the basic aspects of musical abilities, such as a sense of rhythm, a sense of melody and musical memory. Considering the fact that students has various musical abilities and uniformity in singing are expected, it is necessary to develop adjustment ability with children with weaker musical potential.

¹ Gardner's description and sintagma *musical intelligence* were known before, from a line of works of British physiologists Henry Wing, who was the first, after Seashore, who introduced revolutionary innovation in musical testing. Wing described in details behaviors which considers as indicators of musical intelligence achieved by standardized tests (Mirkovic-Rados, 1996:73).

Playing of musical instruments implies enabling students for active playing of music and utilization of children instruments. This field of work is introduced in teaching practice as a singing upgrade. It is well known that not all the children are equally capable for vocal song interpretation, and because of that it is required to make possible for them to affirm in other musical areas such as playing instruments. In such a manner they will not feel less worthy and they will not avoid musical activities and participation in musical classes. In the younger school age, playing implies rhythm supporting of the played song, counting-rhymes or musical games on one or more musical instruments. By playing on rhythmic instruments sense for counting emphasized and non-emphasized tact parts is developing, sense for noticing longer and shorter note values as well. Implementation of melodic instruments is connected with beginning of musical literacy of students and their training for interpretation of music sheet text.

Conscious *musical literacy* of students, as integrated field of musical culture teaching begins in third grade of elementary school. Base for implementation of this field of work and a starting point in adopting theoretical musical knowledge is previous musical experience and musical plays. Work on melodic literacy is conducting, in a first place, through the field of singing and playing songs (tone models) and sang counting-rhymes. Beginnings of rhythmic literacy are based on performance of spoken counting-rhymes and short rhythmic motives.

During singing of songs can be noticed that children react spontaneously on the rhythm of the song with hand, head or whole body movement. Besides singing and playing, listening of the music and creative activities in music teaching, children personality and interest for musical activities are best developed through *musical games*. Value and importance of musical games is reflecting in a fact that through engagement of students in this field of work, besides primary musical abilities, posses an influence on ability for space orientation, through body movement they are expressing music, that is to say a character of music, and the music itself influence that children movement becomes more harmonized and rhythmic.

Listening of music is, besides of singing, most represented activity in teaching music. With active music listening focus and attention are developing and musical taste of students is improving, complete musical experience is inspired, acquainting with esthetic values of a piece, musical literature, creators and musical instruments. In initial work on music listening, students need to be introduced with vocally-instrumental music because literature content is supported with music close to children. With developing ability of apperception of musical piece, it is required to introduce music with program content progressively, and as final level acquainting students with effects of absolute music, entirely free of out-of-music significance. Richer experience gained in field of music listening in musical culture teaching implies student's competence to express their own feelings and observations, to give critical answers on placed requests related to a listened musical piece and to give esthetic evaluation.

Along with song singing, counting rhymes, musical games, and playing on children instruments teacher should also involve work on children *music creativity expression*. This field of work is very important because encourages students on creative invention. Advantage of this field is liberating students of pressure that musical task needed to be done in certain manner. Therefore, children works in a field of musical creativity incurred as a result of musical experience or sang song are reflection of genuine and unique student expression, theirs new and creative ideas. Work on children creativity should not be only with musically capable students, because all the

forms of children creativity have a task to capacitate and progressively activate musical potentials of all students in a class.

Verbal-linguistic intelligence

In Gardner's theory of multiple intelligences, also in wider psychological literature, verbal-linguistic intelligence defines as ability of fluid usage of words and expressions in verbal and non-verbal communication.

Work in children musical creativity field represents one of the modes of encouraging development of verbal-linguistic intelligence of students. This aspect of including students in a creative process is particularly suitable for engagement of students with less developed abilities of using and shaping elements of musical expression. To such a student is easier to express himself with words (or color and forms in a case of space intelligence) than with tone combination. Therefore, it is most important to allow to a child to express spontaneously and primarily with means that he thinks it is most suitable.

Composing of children song represents very delicate task for majority of students. A program request of this field of work in area of children creativity implies higher degree of activation of musical ability of students and ability of poetic expression (synthesis of text and melody). Because of that a "composer's role" most often, divides so that melody is written by more gifted students, and text by the students who has more developed sense for semantic and pragmatic of words. The result of integration of this two forms of student's expression is children song. Thereby, melodies composed by students are smaller musical range (suitable to achieved voice span), rhythmically relatively simple with lot of motive repetition (sequentially or modified), mainly with brighter character and faster tempo. Textual component is often inspired by contents that surrounds and interests students.

Among the remaining specificity and features of verbal-linguistic intelligence which are manifested to students who thinks "verbally" is a great interests for reading and listening of short stories and fairytales. Even that those are, in first place a educational tasks implemented in teaching of literature they can be achieved in music teaching as well. Listening of musical story (symphonic fairytale) is actually most favorite form of music listening among lower age students. In general, this is the literature-musical form which is based on *leitmotif*² principle of building a musical flow. Leitmotifs are using then as didactic means for experience and introduction of musical instruments, memorizing and recognizing motive and thematic plan of musical flow. These two art mediums are, therefore, connected regarding to a presented theme, characters, place and time of action, order of events and idea and in such manner engagement of students is achieved in both of fields of teaching work, listening and analysis of musical flow and analysis of story (fairytale) content. Students of younger age are finding these classes of simultaneous release of musical and literature content very interesting and gladly takes part in performing of its dramatization.

² Leitmotifes are musical themes (ger Leitmotiv – leading motive) that have associative, symbolic meaning. Their utilization is characteristic in program music when represents characterizing of musical figures, events, objects or emotions. Each one of the new occurrence or a memory for certain object, figure or event is followed by analog musical, light motive presentation.

Logical- mathematical intelligence

Besides successful manipulation with calculating operations and effective number usage, logical-mathematical intelligence implies ability of good logical conclusion. Developing of logical thinking and conclusion as one of the most important goal of mathematic teaching is implemented in teaching process by application of various mathematical contents. However, achieving of the same goal it's possible also in teaching of other classes, artistic as well.

Even that a goal of musical culture is that through musical contents encourages interest for musical art and to influence on aesthetic development and musical taste forming, these contents also encourages and intensify their mental activity. Logical thinking, in musical teaching and mathematical as well, can be developed by encouraging students to use various thinking operation but with specific musical content.

Application of *analysis* and *synthesis* in music teaching encourages thinking activities of students. Even that these two operations are present in almost all fields of work in music teaching, as most characteristic we will indicate examples from field of music listening.

One of the specificity of the musical piece is that, besides the talking about the piece, indirect introduction through retelling of matter, music should be experienced directly during teaching process (Ivanovic, 2007:5). Therefore, as pre-condition of successful implementation of music listening it is necessary to work on developing of active hearing attention of students. Careful and focused listening of music allows to students that besides temporality of musical piece they notice and memorize details and phases of musical event. Procedure of listening composition processing implies three stages of work: globally (synthesis), selective (analysis) and global listening of higher level (synthesis). Global listening is a listening of a musical piece in entirety as a source of emotional and esthetic experience of musical content. During a first encounter with a musical piece student's attention is directed to a experience of musical content, without analysis and criticism. Selective music listening implies observation and understanding of musical details which through mutual activity make a feature of a particular musical content. Student directs their attention while listening a musical piece towards performers (voice, instrument), observe individual elements of musical expression (rhythm, melody, tempo, dynamic) and their organization (structure and form). Opposite of global (musical experience), selective listening encourages student's thinking activity. Conscious experience of a musical piece and taking critical stand towards a piece requires higher level global listening which comes after selective listening and implies synthesis, gathering of various musical elements in a unique audio entirety.

Using of method of *comparison* have extreme importance in process of adopting new contents in music teaching. Because a musical content is a temporary character, musical event which is percept step by step implies accumulating, thinking connection and memorizing sound impression or entirety, which will be a subject of comparison in process of analysis. Requirements for students are higher as long as comparison of sound impression is conducting in a frame of one composition (theme plan, performers, form, harmonic base, performance tempo, dynamic tinting). On the other hand, in younger classes, application of comparison is using more often during comparison of various composition in a procedure of music listening. While so, composition contrasts have to be clearly exposed and present in almost all elements of musical expression. Students compare

performer ensemble, performing tempo, piece character, dynamic tint, and eventually structure if simple composition was chosen.

Identification and *differentiation* in musical teaching can be used in a field of music listening. Comparing two compositions with contrast character students establish their similarity and differences. For example to a composition with cheerful character students will notice faster tempo, higher dynamic degree, cheerful melodic and richer rhythmic line, compositions with sadly character will be represented with lighter tempo, calmer dynamic and monotonous rhythm.

Abstraction and *generalization* are specific thinking operation very important for adopting and forming of mathematical terms, however, they can be implemented in adopting terms in music teaching process as well. In processing of musical scale terms (a-minor), comparison of sound impression is a starting point for both tone gender. After observing differences of the tone quality in observation and performance of tonic trisound, teacher will present theoretical explanation of audio experience differences. Besides all of that, he will highlight a meaning of a scale, as well as initial and final tone on the scale, mark the degrees and tetrahords, point on a half-degrees (in a minor scale between II and III; V and VI degree), determine main degrees of the scale (minor chords on tonic, subdominant and major chords on dominant) and a tone of a VII degree. Using *generalization* in adopting form of minor scale students will understand that each one of the scales (minor and major) represents row of eight consecutive lined tones, that initial and final tone determine her name, that is composed out of two tetrahords (line of four tones), that it has two half degrees, that the main poles of scale is tonica, subdominant and dominant and that the guide is VII degree of the scale. On the other hand, using of the *abstraction* in adopting term of minor scale (a-minor) students will ignore all of the known elements which refer to building of the major scale (audio experience of major third of tonic triton, half degrees between III and IV and VII and VIII degree).

Spatial Intelligence

Spatial intelligence is recognized as an ability of noticing entirety and details in space, and in teaching as a tendency of students towards certain shapes and areas of artistic expression. These students have developed sense for color, lines, volume and space, expressing developed imagination, independence and individuality in expressing of artistic experience.

Analogously to the examples with which is pointed to the possibility of connecting and developing verbal-linguistic intelligence, it is also very efficiently possible to develop spatial intelligence in music teaching by stimulating students to work in a field of children (musical) creativity. Within this field of work it implies representation of musical experience by means of art of painting, during which elements of master piece of both fields connecting spontaneously and unconsciously. Thematic frame of these activities are, mostly closer to the children field of interest, from description of nature and kingdom of children imagination to musical pictures of various animals. Demands for translating language of one art to a language to of another are slightly higher. To a skilled teacher is very easy to fulfill these demands in teaching because of layers of meaning and manner of experiencing expressed means of art.

Complex demands for students with developed spatial intelligence are also the ones which encourage recognition of the theory form principle in a

musical piece. This demand in a music teaching is implemented most consistently through field of music listening.

Occurrence of *repetition* is connected with symmetry in a master piece. Regarding on that, in its simplest form implies repetition of thematic material, one or more sections in their successive rotation, repetition is manifested, in a musical flow, in various forms of motive work (literally, imitational, repetition, melodically or rhythmic altered and sequent repetition), or as repetition on distance (mostly on larger structural entirety – reruns). In musical flow, students easily recognize repetition on thematic and tonal plan, therewith recognition of repetition on thematic plan explains simple and with ease, while the terminology for existence of tonal plan of the musical flow for their age is not adopted (students recognize only same-different).

Symmetry in musical piece is a very common occurrence and refer to achieving of balance or equal distribution of a content within borders of musical entirety. Existence of symmetry in a musical piece provides connectivity and firmness of musical form. While working with students of younger age, noticing of this formative principle retains on a level of observation of symmetry on thematic and simpler structure plan. Audio observation of symmetry is most easier to achieve with listening of a composition written in form of a tripart or complex tripart song. Most common chart of a tripart song is *a b a* (or A B A with complex tripart song), where first and third are part of the same content (thematic and harmonic uniqueness provided), and a middle part is in contrast. Regarding on that this form do not characterize larger sections, it is easy for students to recognize contrast, middle, part (b) and beginning of replay (a). Most common procedure, during a treatment of musical forms, is that at the end of the analysis and during synthesis of higher level write out a structure or visual view of the structure of the musical piece to be offered to students. Architectonic solutions are mostly used for comparison of various structures in music.

Diversity in a master piece provokes and develops interest, revives values and enriches with meaning (Miletic, 2008:71). In painted piece students observes *contrasts* in color, shape, size and texture, they will observe at first, contrasts on thematic plan level (rhythm and melody), and after on a tonal plan. While listening of more complex musical piece students observes contrasts on the level of tempo, dynamic, performing ensemble, articulation, tonal coloring. In work on musical literacy of students, teachers uses effects of contrasts in order that some of the components of musical expression will be showed intensively. Adopting of musical terms must be always based on experience, and in regard to that in example of processing term tempo, teacher will play a same song at first, in various speed of performing (in an initial work he will use absolute opposites), and after he will demand observation and highlighting of similarity and differences of interpretations.

Gradation of expressive elements in a visual art³ indentifies with meaning of a term of dynamization of a musical flow in music. While listening of musical piece students observes dynamization of a musical flow as tension growing, therefore they will recognize contrasts of beginning and of an end of a section (piece or movement), cause they are based on increased or reduced activities of musical components. The most characteristic procedures of dynamization of a musical flow are increasing of a dynamical level, ascending melody movement, transition from gradually

³ Implies gradation in form, color, size, Valera, direction or texture.

on stepwise melodic movement, frequent changes of tonality and smaller harmonic rhythm and complexity of performing ensemble.

Since that musical piece is of time character, question of spotting *proportion* in musical flow is viewed from an aspect of relationship of duration of certain sections or parts within a section, in order that students can notice proportional relationship of musical flow parts, it is necessary to work on developing of sense of experiencing borders, or noticing roundness of certain structural parts.

Bodily-kinesthetic intelligence

Ability of expressing ideas and personal feelings, and ability of rapid reaction with body movements caused by various stimulants from surroundings in general represents basic specificity of bodily –kinesthetic intelligence. Besides above mentioned, important feature of these kind of intelligent students is developed tactile sensitivity which is reflected in skill of model-making and usage of various objects.

Teaching demands in regard of developing of these abilities are defined and contained in educational tasks of physical education. However, improvement and perfecting of motion coordination, forming and aesthetic framing of motion habits of students, as well as their work on developing their motoric memory is not only in physical education activities. Mentioned tasks can be implemented in correlation with other educational fields, and especially with contents and tasks from music teaching. In fact, teaching practice of physical education had shown that inclusion of music as means of stimulation impact on proper body posture, hand and legs motion coordination, quality of walk and running.

In music teaching most intensive work on student's motoric skills development is achieved by performance of music games, while studying of playing on children instruments students develop ability of separated, independent functioning of right and left hand.

While dancing with music children develop voice and musical abilities, sense for rhythm, musical and motoric memory, encourages expression of musical experience, and fostering sense of harmony, grace and beauty is achieved by harmonization and connection of music with movement actions. Creating optimistic, cheerful and joyful atmosphere with joint participation in dance encourages a sense of equality and cooperation in a group.

While working with student of lower grades, movements that they make with music are unconscious and represent spontaneous reaction on musical experience. These can be very simple as, feet tapping, body swaying, walking or spontaneous movement shaped in dance followed by mimic (dancing while instruments playing). Music teaching task is that, with larger experience, replace these spontaneous steps with designed, complex form of musical experience expression. In regard that music determines character of movement, their precision and speed, basic demand for proper implementation of this form of musical activity is that students adjust their movements with rhythm of music. Therefore is very important to properly choose instrumental compositions (pieces with dancing or program character). Therefore, musical miniature and short instrumental pieces are very suitable genres for processing this form of dancing.

Studying dancing with singing implies adopting song with method of processing by sense for rhythm or from note text, and of course performance with movements with song reproduction. It is required out of students for participation in this form of dancing, to study more complex conditioned

reactions, for example students have to react faster on music and on movements of their friends, so that they can move in specific way in space (Manasteriotti, V. 1980). Besides that, singing of songs with moving emphasizes coordination of verbal and bodily expression.

In regards that performing this kind of musical games, is specific for younger age students, respecting of criteria of their choice, musical and dance criteria as well, is one of the most important condition for their implementation. Therefore, melody and rhythm of a dance have to be simple enough so that they are suitable for interpretation according to the age of students, their pre-knowledge and interests. Also, text of a song, playing while dancing, should not be too long, so that attention of the students will be directed to movements, steps and other dancing motions. Basic dancing demands are that speed and complexity of movement performing should respond to children abilities, and rules of dancing cannot be complicated and hard.

Playing on children instruments is one of the important tasks which is necessary to fulfill in music teaching. Besides that joint playing of music influence on developing primary musical abilities, sense for rhythm, melodic movements and musical memories of students, this activity provides a great deal of pleasure and influence on developing interests for group musical activity by instrumental playing of music. In such a way it is possible to achieve equal participation of students with expressed musical abilities and students with less expressed. Developing of bodily- kinesthetic intelligence in this field of work is stimulated by consistent work and performing exercises of alternate and simultaneous hand motions. Final phase of song playing, which implies expressed trimming of processed song; skillful and coordinated motions are demanded from students and controlled intensity of impact. Otherwise, manual errors will be sounded.

One more model of bodily-kinesthetic intelligence is an ability of precise manufacture of object out of different material. In fact, familiarizing with certain instruments of the *Orf instrumentarium*⁴ begins with improvised modeling of simpler instruments out of available materials. Due to a complexity of manufacturing, implies that students will not make instruments with certain tone level but only simpler instruments as sticks, drums, triangles and rattles. With engagement in these activities students are additionally motivated and stimulated to a joint work.

Intrapersonal intelligence

Recognition of our own emotions, motives and desires, and understanding how personal emotions impact on work and results is an ability known as emotional competence of an individual (Suzic, 2005:77). Besides developed emotional conscience, efficient individual functioning of an individual implies expressed ability of self-control (control of expression and a control of experience emotions) and self-confidence (clear sense of our own ability and limits). In context of review of multiple intelligence theory, mentioned competences are recognized and linked with specific abilities of intrapersonal intelligence. When it comes to identification and further work on developing of these abilities in teaching, it should consider that this type of intelligence is more or less developed with all students in one particular

⁴ Orf's children instrumentarium makes percussion with certain and non-certain tone height. This performing structure is adjusted to children's performing ability, and got his name by German composer Carl Orf who chose the instruments and compose and arrange short musical pieces.

class. Due to this, for benefit of a higher efficiency of teaching and achieving better results of studying, in particular for students with dominantly expressed intrapersonal intelligence, teaching process needs to be organized with applying various procedures of individualization of a teaching work.

Artistic contents, musical especially, are unique medium of emotion initiation and stimulating of emotional experience (Vukicevic, 2009:135). Bearing this in mind, intrapersonal intelligence, with students in music teaching is recognized as ability of aesthetic and emotional experience triggered by listening or performing musical piece. In regard that musical experience is an individual aesthetic and emotional act of students, encouraging and intensifying of a musical experience is a task of music teaching which needs to be implemented in various fields of work.

Listening of music is a significant field of work with which encourages musical experience very efficiently, however, it is required that it needs to pay attention that this experience expression should be free and spontaneous thoughts and emotions expression of each student. In order that this demand will be fulfill it is of great importance to make right choice of compositions (compositions of absolute and program character are required) and consistently equip students for independent expression of musical experience, unconstrained with non-musical contents.

Besides listening of music, children musical creation is the most appropriate filed for encouraging musical experience. Through various forms of creation we encourage musical imagination and expression of musical inventiveness, developing of musical thinking and student's creativity. Work on melodic supplements, musical questions and answers, composing a melody for a song text, determining escort for instrumental sections of processed song represents forms of children musical creation which rely on pre-experience and acquired theoretical knowledge. Therefore, regardless on the level of success all pieces created is process of creative engagement of students have great pedagogical values.

Interpersonal intelligence

Large number of explorations based on examination of distribution of seven abilities which were recognized and defined by Gardner, points to that with musical and bodily-kinesthetic intelligence domination of interpersonal intelligence recognizes with most of respondents. According to that, in conclusions is often state that interpersonal intelligence, analog to intrapersonal, is always present more or less id profiles of intelligences of each student. Recognition of this intelligence in a class implies increasing sensibility on behavior, emotions, mood and other student's intentions or developed ability for understanding needs of others. Student that this intelligence is recognizes with, generate communications with ease, and most efficiently study and fulfill task by participating in group activities.

Even in a everyday's life, and especially in educational process, music is recognized as important medium for achieving and improving social interaction among peers. Musical activities in teaching affects on empathy development, encourages friendliness, allows making of spontaneous communications among students. Bearing in mind possibilities that music as mechanism of social interaction has, it can be ascertain that work on developing interpersonal intelligence in musical culture teaching is natural and spontaneous act.

Due to a specificity of their demands, a musical activity in music teaching very often includes high level of engagement of students as a group.

Opposite of other fields of work performing of music is partially implemented as joint student activities in field of singing, playing and performing of musical dances. Besides better mood and joy due to a mutual achievement of success, advantages of joint music playing refers to a formation of positive character features, above all stimulation of focus, solidarity and tolerance. Mutual musical activities encourages desire for anew musical experience and knowledge gain, and that are best indicators for interest and motivation of students in music classes.

Instead of conclusion

From the publishing of initial study that determine basic assumptions and starting points of Gardner's theory about existence of multiple intelligences full 30 years had passed. During that period this concept gains more popularity, and especially in a field of its practical implementation in teaching. Pedagogical value and significance of this concept in teaching practice refers primarily on fulfillment of student's demands about appreciation and adjustment teaching conditions to differences and individual abilities of all students.

Spatial, logical-mathematical, musical, verbal-linguistic, bodily-kinesthetic, intrapersonal and interpersonal intelligences have almost direct equivalence in teaching subjects of younger classes in elementary school (Miletic & Vukicevic, 2013:1967). With a fact that in this age it's about classroom teaching, unification of all, or most of the fields of education through implementation of teaching of only one topic allows more complex, more comprehensive and problem study, optimal development of whole personality at the end.

Educational perspectives of musical contents and activities are often neglected. Encouraging all students to participate together in musical activities we can provide that learning of same contents be adjusted and understandable to students of various individual abilities, various interests and level of motivation. Therefore, we should more think about using music as a mean of education.

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