



## MUSIC THERAPY A SPECIAL MEDIATOR FOR THE SCHOOL INTEGRATION

FELICE CORONA<sup>1\*</sup>, FRANCESCO PERROTTA<sup>2</sup>, AURORA FLAMMIA<sup>3</sup> AND CARLA COZZARELLI<sup>1</sup>

<sup>1</sup>Department of Education and Training, of Naples, Faculty of Humanities, University Telematica Pegaso, Italy

<sup>2</sup>Department of Medicine, Faculty of Science Motor, University of Perugia, Italy

<sup>3</sup>Isfom - Institute Music Therapy Training

\*Corresponding Author: Email- felcoron@libero.it

Received: November 28, 2011; Accepted: February 21, 2012

**Abstract-** The student with disabilities should get a full education and the right to education and also develop good potential in learning, communication, relationships and socialization in order to achieve a complete school integration and real. Music literacy, now promoted in all schools from primary school, meets the need to ensure a growth of child cognitive and affective brought about through the consolidation of their skills and creative expression, not just through the simple learning musical grammar. Therefore, the music itself as an ideal medium for cultural enrichment individually and collectively, also becomes the engine for promoting a sense of self-efficacy and self-esteem, personal and group social skills necessary to interact with others.

**Approach:** Our work aims to validate the need for inclusion of music that enhances and enables the integration done at every stage of growth and school staff. We believe, from this premise, which is not sufficient for the inclusion or the simple acceptance within the school to say that the students are integrated, but "integrated" means foster interpersonal relationships in compliance with the personality of each. The method introduced leads the individuals involved in research and discovery of new sources of enrichment due to 'musical approach through the activities proposed in the form of play, and group work, using various types of language tasks and calibrated according to the difficulties arising from persons with disabilities.

**Results:** It 'been proven that music can help the disabled to reflect reality by stimulating emotional intelligence, as important as the rational one, in order to structure a creative dialogue, dialogue which is primarily oriented to the perfect connection between the two hemispheres of the brain.

**Conclusion:** Music therapy is the planned use of musical sound and also education to the sounds that come from so-called noise of the surrounding world, and has as its primary objective the improvement of the quality of life for those living with a sense of estrangement. In fact, the use of sound planning means placed with a view to the point where interactive dialectic founding of the report is not sound in its artistic significance, but the patient in his expressive .

**Keywords-** learning disabilities, integration, music therapy, audio-psycho-phonological approach, cerebral hemispheres, dichotic listening.

**Citation:** Felice Corona, et al. (2012) Music therapy a special mediator for the school integration. Journal of Education, ISSN: 2249-5517 & E-ISSN: 2249-5525, Volume 2, Issue 1, pp.-36-40.

**Copyright:** Copyright©2012 Felice Corona., et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

### Introduction

The music in all its musical elements should not be considered just an art but a science as the man you always used for therapeutic purposes. Music therapy is precisely the use of music and/or musical elements (sound, melody, harmony and rhythm) as a way to approach the person who can facilitate and encourage verbal and nonverbal communication, the report, learning, the 'expression, motor skills problems in order to improve the emotional, physical, mental, cognitive and social. It aims at achieving integrated intra and interpersonal, to stimulate and enhance any form of expressive communication and consequently to improve

the quality of life through a process of prevention, education, treatment or rehabilitation, speaking on a wide range of pathological conditions and paraphysiological. According Benenzon (1983) music therapy, from a scientific point of view, is a branch of science that focuses on the study and research of the complex sound-man, meaning the sound a natural product or an artifact of music, in order to discover the diagnostic elements and therapeutic methods related to it. From a therapeutic point of view, music therapy is a paramedical discipline that uses sound, music and movement to produce regressive effects and open up channels of communication can begin the transformative process of recovery.

Music therapy is in effect considered a discipline of communication, expression and self-knowledge, because the person, child, adult or senior who is, has the ability to communicate using body language, rhythm, and the emotions and to express their creativity, not only through the use of musical experiences and relationships that develop through them as dynamic forces of change (Brusca, 1992) but also involving movement, singing, manipulation, rhythm, color, graphic, emotion, voice and gesture, depending on your personal and unique way of being and communicating. Already in the womb, the first container emotional-affective, which carries all the sounds, emotions, and actions, the child, wrapped in the warmth of the amniotic fluid, experiencing feelings of pleasure and well-being, through dialogue emotional tone-noise (emotional, muscle toning, voice) with his mother (Manarola, 2006): in this place, if he lives and grows, but also learns to listen to your breathing, heart rate, and those stamps visceral voice, muscle tension due to the joy and sadness, which are stored on the skin and psyche. The pace, along with motion and sound, is already an experience before coming into the world. This is sufficient to include music and movement among the first mediators of reality: they become messengers of dreams, open the visible reality and redesign sculpting with force by the synaptic connections, mark the important moments in life and take on different meanings to make sense again expression to the feelings, body language, gestures clarity, therefore, occur between the forms of expression and communication, not as "technical" but how to use language independent, comprehensive, ever-evolving (Favorino, 2004). How communicatively separated by the word, music and movement take on a special syntax, rich, much richer than the verbal-linguistic: simulate, or mimic, remember, reappear in a new language and subjective that the language can not express. If the representation of reality becomes an example in word and closes rational intelligence, the representation of the same reality in movement and music opens with a cognition and emotional empathy, which forgets nothing of reality, by broadening and re-creating it in a dimension that transcends space and time.

In parallel, music therapy, intervenes by providing a valuable support in cases of: disturbances of language and communication; specific learning disorders, hyperactivity, disturbance in attention and concentration, and in all cases of deficiency, various diseases and syndromes the child, Adult and Elder.

There are four areas of intervention a habilitation-rehabilitation: where music therapy is applied in the treatment of sensory deficits, developmental disorders, disorders of the age senility, mental deficiency, psychomotor and multi-disabilities, neurological disorders, a second therapeutic area: reserved to qualified physicians or psychologists who specialize in music therapy, psychiatric patients are generally treated. In these cases the use of music therapy allows a substantial reduction in drug use or even a suspension of the same, a third aspect is the integrative and budget: where the music therapist can work with adolescents at risk of social groups, with elderly people, pregnant and pregnant women, terminally ill, and in this connection about the young group of users, spoke in support of the other area that sees the introduction of music therapy in schools touching in this case the educational sphere.

Today, right from primary school, the POF Institute attaches importance to music as a factor in the highly formative process of personal growth. Music literacy, now promoted in all schools from

primary school, meets the need to ensure a growth of child cognitive and affective brought about through the consolidation of their skills and creative expression, not just through the simple learning musical grammar. Just have the beneficial effects of music therapy as a starting point the distinction between education and training: for learning, in fact, it discusses two different approaches, the symbolic one which proceeds by abstraction, for example by reading a book, and the immersive, represented by those receiving the audio-visual products. Immersive learning information shall be treated in a more emotional than rational, shall be forfeited without the ability to think analytically and to stop and at the same time implemented quickly and instinctively. The experimental results clearly demonstrate that the use of text messages at once, visual and sound allows you to store more information than that of a message "monomediale" making use of only one type of media (Corona 2011).

Therefore, the music itself as an ideal medium for cultural enrichment individually and collectively, also becomes the engine for promoting a sense of self-efficacy and self-esteem, personal and group social skills necessary to interact with others.

### Objectives and Functions

Our study aims to develop methodologies and alternative educational experiences, to promote inclusion of disabled students. The integration, the right to education, the role of the specialist teaching are supported by legislation which reaffirms that the student with disabilities must reach the full right to education and education and also develop good potential in learning, communication, relationships and socialization in order to achieve a complete and real school integration.

Our work aims to validate the need for inclusion of music that enhances and enables the integration done at every stage of growth and school staff. We believe, from this premise, which is not sufficient for the inclusion or the simple acceptance within the school to say that the students are integrated, but "integrated" means foster interpersonal relationships in compliance with the personality of each. The variety and severity of these types of cases in the school, along with socio-cultural disadvantage, require a search and comparison with more innovative methods.

The musical experience is carried out with a methodology that has two dimensions, one active and the receptive (Ezzu, Messaglia, 2006). Experience is considered active when the subject-user attempts to perform, improvise, or create with the music either alone or in groups. In this case the experience helps, by running, the impetus for change, or a response process causes and supports an educational-therapeutic.

But with a 'type receptive experience, the therapy is due to listening, taking or receiving of music by the user and group. Here is the sound stimulus is perceived as an "event" that causes responses, and as a solicitation for the activation of a therapeutic process of change. This can occur during or after the listening experience and may include music, not answers.

Music therapy is a discipline that utilizes all the musical experiences in order to open new channels of communication, to pursue a general improvement of the quality of life.

You can not express, and communicate messages without producing the movement. That is the sign most basic, but also the most qualified of life and relationship. Life without death, and movement becomes the relationship without communication is

silence, solitude, anguish. The mastery of movement not only has a positive effect on cognitive abilities, for more opportunities to incorporate information from the environment through 'experience, but also on a deeper psychological level, starting with the construction of body image and then move on to 'increased self-confidence and greater security of the person (Corona, 2011).

Education, understood as the progressive realization of the potential and social life, can not therefore leave the motor and the sound component. This is not the mechanical movement, but an intentional movement and expressive, that is psychological. Music and movement thus became the crux of the realization of the person in his dual relationship with the stimuli of reality expression, from the inside out, and assimilation, from the outside. All this promotes a continuity of relationships in the classroom, encouraged the use of the different languages used in their abundance, to bring each student up to the expansion of its "self" and a balance with reality as much as possible based on creativity and dynamism of the interventions.

Numerous studies and research carried out during recent years have in fact highlighted that over 20% of the school population has slowdowns in learning processes that require individualized interventions (Cornoldi, 1999). For some time it became clear that diversity is not deficient, that not all fall into a defined standard and that this should not be considered grounds for exclusion, subjects with specific characteristics that are struggling to learn certain conditions, but if you learn well improves the school setting compared to their needs. The causes may relate to difficulties in perceptual-motor and metafonologiche, that could result, specific learning disorders (dyslexia, dysgraphia, dysorthography, dyscalculia), difficulty in attention, concentration, memory, causing breaks in the performance, poor maintenance of acquisitions, incomplete execution of the task, cognitive delay, which causes slow processes, unsatisfactory performance of products, difficulties in transferring knowledge and re-learned, capacity levels significantly below the class attended, language difficulties, which interfere in the aspects of comprehension-production both oral and written, and finally issues related to the sphere of emotional and communicative, which may result from low levels of self-esteem, attitudes and inappropriate behavior, feelings of inadequacy to the demands at school, feeling unmotivated to 'learning. Learning disabilities are diagnosed when the results obtained from the subject in standardized tests, individually administered, on the reading, calculation, or written expression are significantly below what is expected based on age, education, and level of intelligence. The learning problems significantly interfere with academic achievement or with activities of daily living that require reading skills, arithmetic, or writing.

The acronym refers to the DSA Specific Learning Disorders, also known by the abbreviation F81 in ICD-10 International Classification of the World Health Organization and included in Chapter 315 of the DSM-IV American. The World Health Organization classifies dyslexia and other specific disorders such as learning disabilities, so you can not learn the reading, writing or arithmetic in normal times and normal teaching methods, however, are distinct from academic difficulties due to lack of opportunity, poor teaching, or cultural factors.

The generic learning difficulties are usually due to a lack of experience and a delay of maturation of the subjects, as well as a lack of motivation and investment, not infrequently, to a series of errors

that teachers make pedagogical and early proposals on the approach to teaching written language, then, in the routes of recovery once ascertained the presence of the same problems. Often such interventions have in fact poor specificity, limited to an increase in exercise and rely almost exclusively on a request for storage of rules, but, in most cases, an initial moment of greater efficiency, gives way to subsequent regressions and relapse.

The specific learning disorders are closely related to perceptual-motor deficits or linguistic nature, which were not detected early, and only a specific recovery to be carried out in close collaboration with the school and family (lanes, 2007), can provide satisfactory results, and these disorders are dysgraphia, the dysorthography, dyslexia and dyscalculia.

What characterizes children with specific learning disorder are the presence of a substantial obstacle in the conduct of all those activities that require an integration of the most basic skills, it is the intertwining of different capabilities that puts a strain on the subject in his learning process at school. The real difficulty with the child's disorder is not so much learning, for example, in failing to discriminate visual forms (data of perception - visual) or not to discriminate sounds and noises (auditory perceptual data), but mainly in the process of integration between themselves, to associate, for example, a sound (phoneme) to a shape (grapheme). Both observation early in the kindergarten the next diagnostic observation, will have to tend to the identification of these basic gaps. A child who has difficulty learning to read and write, you realize that this leaves him at a lower level than other students. It does not take long for him will establish itself in a feeling of confidence that can be fixed at the origin of an individual and as allowable delay is not encouraged or not it is explained that each child has his times and ways of learning; or worse, could start taking behaviors such as aggression, withdrawal or discontinuance commitment, discouragement, until you come short in attention to a chronic disorder of learning, which can tap the pathological. The epistemological basis on which it is founded the music therapy open an infinite world of experiences within which you can find what are the strengths, inner difficulties that inhibit learning and help achieve self-awareness and skills necessary to acquire a or decrease the amount of behavior that interferes with daily life and to develop the ability to use, so conscious and purposeful, the first energy untapped, misdirected or wasted. The relationship between the expressive gestures, sounds, voice, articulation, the deep meaning of the words and signs written becomes a wonderful world to discover that opens the horizon to know: when the senses are awakened and stimulated, the doors are open to learning (Boxill, 1991).

### Materials and methods

This work promotes and welcomes, therefore, actions taken at the base of cooperation: the students involved in various activities will be stimulated by the appropriate use of some alternative channels of communication and exchange of experiences will take place in order to facilitate as much as possible, exchanges between children, where each with their own potential and skills, will serve as a vehicle to bridge and to consolidate the experiences of others. The method introduced leads the individuals involved in research and discovery of new sources of enrichment due to 'musical approach through the activities proposed in the form of play, and group work, using various types of language tasks and calibrated

according to the difficulties arising from persons with disabilities.

An experimental study of the neurophysiology of hearing music was represented by the dichotic listening technique, which assumes that the neurophysiological temporal cortex of one hemisphere is preferentially associated with the ear on the opposite side. Dichotic listening test involves the simultaneous presentation of messages to two different musical ear by frequency, timbre and intensity.

Based on neurophysiological knowledge, the best and quickest perception with the right ear mean a predominant involvement of the left hemisphere and on the contrary.

From studies showed that the right hemisphere is dominant, but not for all the musical tasks, for it is the dominant non-musicians in the audience, who perceive the music in a more global, but the left hemisphere is dominant for both tasks that require analytical and sequential processing, and both the perception and musical performance in the context of a more sophisticated audience, differentiated and analytical. We have therefore a broadcast of a right to the left hemisphere which becomes "the hemisphere of the musicians".

As for the song, from the neurophysiological point of view, the words are the responsibility of the left hemisphere, the melody of the right hemisphere. Still, the language has a specific musical characteristics of which may go beyond the intrinsic meaning, conveying feelings very archaic and primitive mode of communication capable of evoking deep emotions (Mancia, 1981).

The method of laterality precursor of musical tasks is introduced in the 50s by the French physician Dr. Alfred Tomatis otolaryngologist (2000), a hypothesis is based on psychological-emotional, the objective of re-education of the ear in order to improve the skills listening and learning, communication, social behavior and creativity: Listening is a process that involves the body as a whole psycho-physical, is a voluntary action aimed at finding what we want to hear. The method is aimed at children with learning disabilities, attention deficit, autism, and motor and sensory integration problems, thanks to it, would regain the ability to listen not only to talk to themselves and others in a different way, but also psychologically able to perceive in new ways.

The method focuses on the different functions of the ear and on the links between the hearing and voice. The duties also involve the ear conscious field and are given by a functional unit 'union and the interaction of functions which, besides that of hearing, related to the possibility of picking up signals, the vestibular and cochlear function. The vestibular function is responsible for postural balance, coordination, verticality, muscle tone and eye muscles. The vestibule has an important role in transmitting sensory information and coordinate our body sends to the brain, in fact, this function cause severe problems of sensory integration problems. The cochlear function, or energy, linked to the "dynamism" of the sound stimuli towards the cerebral cortex is responsible for the analysis of sounds, and is thus closely linked to language comprehension. The cochlear and the vestibular system and then filter and process sensory information, both auditory and tactile than visual.

Another important function of the ear, is that of hearing (no hearing). This feature allows us to filter what we hear, excluding that which we do not need to hear, and organize auditory information

into hierarchies with meaning, rather than being overwhelmed by the sounds. The development of this feature depends on several factors, including pregnancy, childbirth, illness, or trauma and events that may affect your hearing and the ability to communicate. When this function is disturbed, you see a negative impact on academic skills, social and communication skills, particularly those related to voice, such as intensity, timbre, rhythm, fluency in expression, which also depend on the dominance of the ear. If it is to be the dominant right ear than the left, the processing is more efficient and faster, and the individual can better control the components of verbal communication. In addition, individuals with the right auditory dominance, would have a greater ability to manage their emotional experiences. The training aims at recovering the ability to listen in a balanced way and improve the efficiency of the right ear. When the listening function is recovered and balanced, there are also positive effects on the voice, which is closely connected with the auditory system, and with it self-expression and behavior.

In analyzing the development of the ear and hearing functions, special importance is given to all stages of child development, the development of the fetus during uterine life. Since it has been proven that hearing is the first sense to be developed, it is already fully effective when the fetus has 4 and a half months, it is important to retrace the entire development through a symbolic experience.

The program proposes, in a first stage, sound, or the mother's voice, appropriately filtered, as would be perceived by the fetus. The fact that we go through these early stages, and "therapeutic use" of the mother's voice, it was erroneously considered to be a mother guilty of making the child's problems, in the case of autism. What we do with this type of intervention is achieved is to create or restore a healthy attachment bond between mother and son bond that for various reasons could not develop normally. At this stage, they use high frequencies, which energize the brain and load. In the second phase are re-created the sounds that we perceive as after birth, these songs include sounds, repetition of words, stories, and the frequency of sound is high, as in the first phase. During the third phase, to supplement the written language, the patient reads aloud.

In this way it addresses the problem of auditory processing is the functional point of view (auditory stimulation and balance) and psychologically.

In the particular case of children with autism, with particular problems of integration and auditory sensitivity, as evidenced by the tendency, on the occasion of certain noises, to cover their ears, or having temper tantrums, or to intensify activities autostimolatorie, the approach "audio -psycho-phonological" aims to reduce the deficit and the unusual integration, going to desensitize the child's hearing. These behaviors are in fact interpreted as a natural defense hearing to listen to certain stimuli that are perceived as painful, not only in terms of hearing, but also through the skin and skeleton, or are mistakenly associated with other types of sensations, creating confusion in the mind of the child and excessive overhead.

The training is done with the use of stimulation sounds made with a special device, called the electronic ear, which in addition to the headset also has a piece resting on the skull that transmits sound vibrations directly to the bone.

Our contribution also aims to integrate the audio-psycho-phonological approach made by the experts: Moving to the class, it is to reproduce the work took place individually with a refund verbal and/or sound group. Everyone, without distinction, will be featured and will stage their own experiences, memories or feelings as you listen, producing sounds, or using any language deemed more appropriate, supporting their character, choosing their own way, without neglecting originality, fun and pleasure of being with their classmates. The accommodation in a circle, with low lighting and soft, will contribute to better accommodate all participants, and to allow a relaxation that dissolves the tensions and anxieties. The music then, can play a decisive role in helping the disabled, especially those who have multiple deficiencies, to establish physical and emotional contact with other people. It is considered essential that the school helps the child in her active involvement in the world of interpersonal relationships, acceptance and respect for others, dialogue, participation in the common good and promotes the formation of an appropriate balance the student affective and social and a positive self-image.

### Results

It has been proven that music can help the disabled to reflect reality by stimulating emotional intelligence, as important as the rational one, in order to structure a creative dialogue, dialogue which is primarily oriented to the perfect connection between the two hemispheres of the brain. Listening to music, making music, individually or in "ensemble" is an experience that would engage our entire mind and our emotions. In this global listening, lost in the emotional and aesthetic, which blurs the boundary between dream and reality, we must also recognize a biological basis represented by hemispheric dominance, genetically determined, but the "plasticity", which operates the nervous system allows changes and adaptations.

Making music therapy means to grasp and be able to adequately respond to the rhythmic-temporal aspects, and those energy aspects in any logical individual cognitive-communicative behavior: through the mediation of music therapy is so possible a reflection of the physiology and cognitive-emotional map of the world 'other' (Scardovelli, 1999).

The elements involved are represented by the operator, by the patient, sound and musical element that mediates the relationship because it takes upon himself "as if" they were their own rhythms (the heart, respiratory), timing, changes in energy, to ideas, values, beliefs of the other, its language (verbal and otherwise), his silences, his "Physiology", then his whole being in its singularity. It is wonderful to play the symphony audio-visual-kinetic binds two human beings, the mother with her child, that overrides the random fluctuations, the turbulence on the disorder. This creates the symphony of emotions that the child is not able to understand and therefore "rejects", which are taken from the mother's emotions empathically, rationally developed, and that rationally and empathically to the child is returned, thus creating his own inner world and a mind able to grow and to be able to choose from.

In our opinion the role of music therapy plays the role of mediation between us and the world, between our individuality and the individuality out of us, helping to calibrate the other, to accept, to trust in a less structured than what reassuring and consolidating of the word.

### Conclusions

The term education considers both the process of adaptation to an individual's existing social and cultural reality, as the process of liberation which leads the individual to an understanding and discovery of reality in a critical and active.

Each student is entitled to his preferred language, so the bearer of a deficit, it is not considered to be the bearer of a "deficiency" but a subject with other modes of communication, from which you have to start to start the maximum potential of his skills. Music therapy is the planned use of musical sound and also education to the sounds that come from so-called noise of the surrounding world, and has as its primary objective the improvement of the quality of life for those living with a sense of estrangement. In fact, planning the use of sound means of a dialectic interactive view placed the point where the fundamental relationship is not sound in its artistic significance, but the patient in his expressive dimension.

The man-child is the focus of the intervention of music therapy, his speech is aimed at promoting the harmonious development of children with disabilities, paying particular attention to the potential value of each; diversity is an asset to be tapped to help each to find their own motivation and knowledge is a starting point to stimulate thought and then a reflective learning, critical and creative which is also integrated in a climate of collaboration and mutual respect.

If we evaluate many of the exercises you do in school in Italian or in arithmetic, we find that the proposed exercise carries the proceedings and the arrival point. This procedure is the negation of experience. The experiment, however, stimulates the search for different solutions and that is when the child has the opportunity to experience through himself, learns finding congruence between himself (the human body, the feelings, experiences) and signs written comes to learning effortlessly.

### References

- [1] Benenzon R.O. (1983) *Manuale di Musicoterapia*. Edizioni Borla.
- [2] Boxill E.H. (1991) *Musicoterapia per bambini disabili*.
- [3] Bruscia K. (1992) *Definire la musicoterapia*, Ismez.
- [4] Cornoldi C. (1999) *Le difficoltà di apprendimento a scuola*, 2.
- [5] Corona F., Perrotta F., Polcini T.E. and Cozzarelli C. (2011) *J. Soc. Sci*, 7, 408-411.
- [6] Corona F., Perrotta F. and Cozzarelli C. (2011) *Sport Science* 4(1), 34-39
- [7] Ezzu A., Messaglia R., *Introduzione alla Musicoterapia*, Musica Pratica, Torino, 2006
- [8] Favorini A.M. (2004) *Musicoterapia e danzaterapia. Disabilità ed esperienze d'integrazione scolastica*.
- [9] Ianes D., Cramerotti S.E., Monja Tait (2007) *La dislessia - Il ruolo della scuola e della famiglia*.
- [10] Manarolo G (2006) *Manuale di musicoterapia*, Edizioni Cosmopolis.
- [11] Manarolo G. (2009) *Psicologia della musica e musicoterapia - Edizioni Cosmopolis*.
- [12] Mancina M. (1981) *Int.J. Psychoanal*, 62.
- [13] Scardovelli M. (1999) *Musica e trasformazione*.
- [14] Tomatis A. (2000) *L'orecchio e la voce*, 139.