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## EMOTIONAL EDUCATION IN TEACHER TRAINING THROUGH MUSIC

### EDUKACJA EMOCJONALNA W SZKOLENIU NAUCZYCIELI POPRZEZ MUZYKĘ

#### Abstract

In the present article, the authors attempt to discuss the importance of working emotional intelligence with students who study the Degree of Teacher Training in Primary Education and Nursery Education. They pictured the benefits that emotional education through music offers. The authors tried to show the importance of developing musical intelligence in future teachers. It is connected with the fact that teachers directly influence their students- the all-round motivation and development. Music facilitates the interrelations between the teacher and learning process and the teacher-student relationship.

**Key words:** emotional education, music, teacher training

#### Streszczenie

W przedstawionym artykule autorzy starali się ukazać istotność rozwijania emocjonalnej inteligencji w pracy ze studentami studiów nauczycielskich edukacji przedszkolnej i wczesnoszkolnej. Podjęli kwestię zalet kształcenia emocjonalnego poprzez muzykę. Autorzy chcieli pokazać jak ważnym jest rozwój muzycznej inteligencji u przyszłych nauczycieli. Wiąże się to z tym, że nauczyciele wpływają bezpośrednio na uczniów – na ich rozwój ogólny i motywację, a muzyka sprzyja korelacji nauczyciela i procesu nauczania oraz relacji nauczyciela z uczniem.

**Słowa kluczowe:** edukacja emocjonalna, muzyka, kształcenie nauczycieli

#### Introduction

Nowadays the importance of educating emotions is unquestionable in all areas. If attempts are made to teach educating emotions at school, special attention needs

to be paid to teacher training. This work, conducted through music, acquires new dimensions.

We resort to the works of Gardner<sup>1</sup>, which stated that if we want our students to learn, master and apply something properly, we will have to make sure we pack this something into a context in which emotions intervene.

We have to bear in mind how emotions work, how we acquire them, how they develop, how they are expressed, how they can help us at school, etc.

Twenty-first-century teachers must develop their emotional intelligence to build interpersonal relations that facilitate their pupils' all-round development.

According to Fernández and Extremera<sup>2</sup>, teaching and learning are inevitably emotional activities by nature, and they confirm that this is an emotional fact by act or omission, by design or default.

Today's society finds that emotional dimensions are teachable. Traditionally speaking, knowledge has been prioritised over emotions without considering that both aspects cannot be separated<sup>3</sup>. Therefore, we believe that schools are an ideal context to provide emotional education in which the leading characters are teachers and students.

### **The importance of emotional education**

In the UNESCO report by the International Commission on Education for the Twenty-First Century, chaired by Jacques Delors<sup>4</sup>, "Learning: the Treasure Within". Chapter 4 presents the four pillars on which lifelong education should be based: 1.- Learning to know; 2.- Learning to be; 3.- Learning to live together, developing an understanding of someone else and perceiving forms of interdependence, –undertaking shared projects and learning to deal with conflicts, respecting values of pluralism, mutual understanding and peace; 4.- Learning to do so that our personality better flourishes and is capable of autonomous judgement and personal responsibility.

Since the end of the past century, affectivity and emotions have drawn considerable interest in the education field. The emotional competence is much

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<sup>1</sup> H. Gardner, *La educación de la mente y el conocimiento de las disciplinas*, Paidós, Barcelona, 2000.

<sup>2</sup> P. Fernández Berrocal, N. Extremera, *Emoción y formación*, cited in E. G. Fernández–Abascal, M.<sup>a</sup> P. Jiménez & M.<sup>a</sup> D. Martín, 2003, vol. I. pp. 477–497.

<sup>3</sup> M.R. Fernández, J.E. Palomero, M.P. Teruel, *El desarrollo socioafectivo en la formación inicial de los maestros*, "Revista electrónica interuniversitaria de formación del profesorado" Recuperado en [http://www.aufop.com/aufop/uploaded\\_files/articulos/1240872524.pdf](http://www.aufop.com/aufop/uploaded_files/articulos/1240872524.pdf), 2009, vol.12, pp.33-50.

<sup>4</sup> J. Delors, y miembros de la Comisión, *Informe a la UNESCO de la Comisión Internacional sobre la educación para el siglo XXI. La educación encierra un tesoro*, Santillana Ediciones UNESCO, 2014, p.34.

more important in the academic learning of teachers so they can work effectively and for their own emotional well-being, and also is students' socio-emotional development<sup>5</sup>.

It also seems an impossible task to teach a competence that has not been previously achieved. Nor is it possible to offer quality teaching when teacher well-being is lacking. So it appears necessary to "explicitly develop social and emotional competences not only at school, but also in teacher training centres"<sup>6</sup>. We are aware that the broadest conception of education strives for all-round, harmonious and balanced human development. This also involves caring for "preventing any factors that can hinder it (violence, stress, anxiety, depression, drug use, risk behaviors, etc.)".

Therefore, we feel it is right to confirm the need for emotional education, conceived as "an educational, and continuous and permanent process that attempts to develop emotional competences as an essential element of people's all-round development in order to qualify them for life"<sup>7</sup>. Emotional education develops throughout one's life cycle and is sequenced by different programmes, like those of Pascual and Cuadrado (2001), López (2003), Renom (2003), Güelly Muñoz (2003), Gallego and Gallego (2004), etc. Among others, they all share common objectives, like acquiring knowledge from our own emotions and knowing how to manage them, recognising other people's emotions, developing the capacity to protect ourselves from negative emotions, generating positive emotions, and enriching interpersonal relations. Basically, they attempt to improve the understanding of our feelings and those of others by encouraging making a reflection on what happens to us.

For Fernández, one of the main objectives of teacher training would have to be the all-round training of their personality by collaborating in their personal growth process. "Help them to understand themselves, know themselves, become aware of their qualities, master their emotions and lives, and simply be themselves". This objective is based on the importance of teachers' maturity as it allows them to face the many educational challenges that emerge during their personal growth.

"Moreover, personal teacher training is fundamental for teachers to develop positive attitudes with children and adolescents, which enables an unconditional climate of acceptance to be created in class, an atmosphere of tranquility and a liking of knowledge that will doubtlessly contribute positively to school learning, and also to students' affective and social maturity"<sup>8</sup>.

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<sup>5</sup> Sutton & Wheatly, 2003 cited in Palomera et al. 2008, p. 440.

<sup>6</sup> Weare & Grey, 2003 cited in Palomera et al. 2008, p. 441.

<sup>7</sup> R. Bisquerra, *La educación emocional en la formación del profesorado*, "Revista interuniversitaria de formación del profesorado", Recuperado en <https://dialnet.unirioja.es/servlet/articulo?codigo=2126758>, 2005, No. 54, pp. 95-114,

<sup>8</sup> M.R. Fernández, J.E. Palomero, M.P. Teruel, , *El desarrollo socioafectivo en la formación inicial de los maestros*, "Revista electrónica interuniversitaria de formación del profesorado" Recuperado en [http://www.aufop.com/aufop/uploaded\\_files/articulos/1240872524.pdf](http://www.aufop.com/aufop/uploaded_files/articulos/1240872524.pdf), 2009, vol.12, pp. 33-50.

In 2005, Bisquerra suggested designing a subject on *Emotional Education* as part of preliminary teacher training in Nursery and Primary Education, and even in Secondary Education. This would allow different competences to be acquired like: understanding the relevance of emotions, being aware of one's own emotions and those of others, exercising emotional self-control, establishing better interpersonal relations, etc. And all this by a methodology based on individual work, group dynamics, etc., which allows acquired knowledge to be used in practice<sup>9</sup>.

Moreover, "it seems that, through their many interactions, teachers influence the motivation and shaping of their students' personal identity [...], which is generated in the communicative teachers-students interaction"<sup>10</sup>. Thus interpersonal emotional intelligence facilitates interrelations between teacher-student and educational action.

According to Neill<sup>11</sup>, schools teach to think, but do not teach to feel. The teaching profession is filled with interpersonal relations, emotions and feelings that also flourish in learning and education. It is essential for teachers to enjoy emotional balance and to develop socio-affective competences that allow them to securely face unforeseeable situations in class.

In order to promote positive experiences in music classes, we have to pay attention to students' emotional development. For this reason, we need to change working habits in class by using operational and participative methods as they are quite suitable for teaching music because they adapt to the working pace and to students' individual characteristics, and also stress an interest and ability to excel oneself<sup>12</sup>.

In Finland, a reference country of Education, one essential aspect of selecting teachers is the ability to pass an interview during which applicants show their communication capacity, social competence and empathy. To be a good teacher it is important to have certain personal traits, like emotional intelligence, social skills, balance, empathy, and the capacity to show one's best side and that of others.

Hence "teachers should receive training in an emotional education setting [...]" so as to be able to positively influence children and adolescents"<sup>13</sup>.

All this leads us to reflect and constructively analyse the school education task and the teacher training model.

<sup>9</sup> R. Bisquerra, *La educación emocional en la formación del profesorado*, Revista interuniversitaria de formación del profesorado. Recuperado en <https://dialnet.unirioja.es/servlet/articulo?codigo=2126758> , 2005, No. 54, pp. 95-114.

<sup>10</sup> A. Bernal, A.J Cárdenas, *Influencia de la competencia emocional docente en la formación de procesos motivacionales e identitarios en estudiantes de educación secundaria. Una aproximación desde la memoria autobiográfica del alumnado* Revista de Investigación Educativa, Recuperado <http://revistas.um.es/rie/article/view/94371/103001> , 2009, vol 27, No.1, pp. 203-222.

<sup>11</sup> Cit. in M.R. Fernández et al., *El desarrollo socioafectivo en la formación inicial de los maestros*, "Revista electrónica interuniversitaria de formación del profesorado" 2009, vol.12, p. 34.

<sup>12</sup> J. Bernardo, J. Basterretche, *Técnicas y recursos para motivar a los alumnos*, Rialp, Madrid 1995.

<sup>13</sup> M.R. Fernández, J.E. Palomero, M.P. Teruel, *El desarrollo socioafectivo en la formación inicial de los maestros*, "Revista electrónica interuniversitaria de formación del profesorado" 2009, vol.12, p. 37.

## Music and emotional education

Music plays a very relevant role in developing emotional competences. Back in Ancient Greece, singing and instrumental music were two basic pillars in liberal education. Important twentieth-century educationalists like Dalcroze, Willems, Kodály, Orff or Suzuki, among others, stressed the need for basic musical education to transmit values and to develop human being's main capacities. Willems thought there was a strong connection between children's development and learning music. In all these methodologies, music is conceived as a language that encourages creativity, improves sense of rhythm and promotes communication<sup>14</sup>.

Following Goleman's terminology, Balsera and Gallego described which emotional aspects are developed by musical practice:

- Trust: believing in oneself and in chances of success in musical learning
- Curiosity: discovering new musical aspects is always a pleasure
- Intentionality: making a quality musical interpretation allows students to feel efficient and competent
- Self-control: learning to manage anxiety in public presentations by avoiding "emotional seizures"
- Capacity to relate: empathise with classmates in music classes or in the corresponding musical group
- Capacity to communicate: verbally and musically exchange ideas, feelings and concepts with other people
- Cooperation: harmonise one's own needs with those of other people during musical activities done as groups

Music students will show strong development in emotional intelligence when they are able to "harmonise what is emotional and cognitive, in such a way that they can pay attention, understand, control, express and analyse emotions in themselves and in others. All this will allow their actions in their environment and their human relations to be efficient and useful, and have positive repercussions for themselves, for others and for the environment that surrounds them"<sup>15</sup>.

## Effects of music on emotions

Our organism reacts to a musical stimulus. When we listen to the rhythm of a song, the motor system is activated. This influences breathing and the heart as they

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<sup>14</sup> F.J. Balsera, D.J. Gallego, *Inteligencia emocional y enseñanza de la música*, Dinsic, Barcelona 2010 pp. 41-44.

<sup>15</sup> D. Gallego, M.J. Gallego, *Educación la inteligencia emocional en el aula*, PPC, Madrid 2004, pp. 85-86.

tend to synchronise with rhythm. Several research<sup>16</sup> works have demonstrated that music influences certain functions and parts of the human body, like breathing, blood pressure, muscle tension, body temperature, endorphins or the immune system.

Gigante<sup>17</sup> analysed the influence of music on six basic emotions. Joy can be experienced with music by using major modes, pleasant sounds and harmonies, melodies that take a question-answer structure, or with cheerful rhythms and airs. Through musical intervention, major progress is being made in the behaviour of autistic children, people who mourn or have serious diseases (heart disease or cancer). Minor modes produce sadness or melancholy, while along with threatening sounds and unexpected noises, dissonant chords can stir up the emotion of fear. Scientific evidence reveals that patients with depression significantly improve thanks to musical intervention. Relaxing music in situations of stress helps minimise the fear that these circumstances can produce. Raucous and aggressive sounds played very loud at a rapid rhythm can bring about annoyance, anger or hostility. After experiencing aversion, listening to pleasant music allows people to recover their emotional stability. Finally, music surprisingly contributes to activate sensorial organs.

### Musical intelligence

In 1983, Howard Gardner put forward his theory of multiple intelligences, according to which intelligence is multidimensional because it is made up of different capacities. All intelligences possess a series of typical characteristics and operate independently. Balsera<sup>18</sup> pointed out that people have musical intelligence when they are sensitive to the different constitutive elements of music; i.e., sound, rhythm, melody, harmony and form. Without ruling out genetic inheritance, Gardner's philosophy explains that everyone has musical intelligence, even though it is the cultural and musical setting in which they live that helps them develop this capacity to a greater or lesser extent. And so it is that children acquire musical skills spontaneously and in the same way as they learn to talk. However, it is the education setting which allows them to share and develop these musical experiences.

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<sup>16</sup> L. López-Bernad, *PIEC: Programa para el desarrollo de la inteligencia emocional en los conservatorios de música*, (Tesis Doctoral), Universidad Nacional de Educación a Distancia (UNED), Madrid 2015, p.150.

<sup>17</sup> C. Gigante, *Análisis de respuestas fisiológicas, emocionales y conductuales, ante el estímulo musical en una muestra de jóvenes universitarios* (Tesis Doctoral), Universidad Complutense, Madrid 2013, pp. 88-107.

<sup>18</sup> Cit. in L.F. Vilchez (DIR.), *La música y su potencial educativo*. Fundación SM, Madrid 2009, pp.76-78.

To the musical intelligence definition, Armstrong added the very functions that are related with music, such as being a fan, a critic, a composer and an interpreter or, in other words, the capacity to perceive, discriminate, transform or express musical forms<sup>19</sup>.

Musical capacities emerge at early ages. Indeed for Gardner, musical intelligence is the first to develop. Shortly after birth, babies already show an interest in the sound fact. At the age of 2, we are capable of mimicking brief fragments of melodies. Gardner<sup>20</sup> believes that music is a knowledge area in which genetic inheritance needs to be taken into account, or that other factors cannot be ignored, such as motivation, personality or character.

Research into the brain has vastly advanced in recent years thanks to diagnostic tests with magnetic resonance imaging. We now know that most musical capacities are located in the right brain hemisphere. Damage to right frontal and temporal lobes prevents us from correctly recognising and reproducing sounds. However, people who have had more musical education also use mechanisms from the left brain hemisphere to perform musical tasks. Despins<sup>21</sup> realised this aspect when working on musical rhythm. He observed that rhythm stimulated both brain hemispheres in such a way that the right brain hemisphere receives the musical stimulus, while the left brain hemisphere interprets its performance. So he concluded with the idea that music is the best ally to develop and stimulate the exchange of information between both brain hemispheres. A research work by Gaser and Schlaug<sup>22</sup> used magnetic resonance imaging to study and compare the brains of professional musicians with those of amateur musicians, and also with the brains of people who were not involved in any musical activity. The results of their study indicated that the grey matter volume, which is activated when listening to music, was greater in professional musicians, average in music lovers and small in “non-musicians”. These authors also saw that the activated brain areas corresponded to areas of mobility, and to visual and hearing development. The studies carried out by Blood and Zatorre<sup>23</sup> demonstrated that different brain parts are activated depending on whether we listen to consonant or dissonant chords. The brains of musicians were scanned who had been seen to be euphoric when listening to music, they observed

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<sup>19</sup> M<sup>a</sup> A. Oriol, *La inteligencia musical: actitudes y estrategias en la educación musical* (Tesis Doctoral), Universidad Complutense, Madrid 2011, p. 127.

<sup>20</sup> H. Gardner, *Frames of mind: The theory of multiple intelligence*, Fontana Press, London, 1993 pp.112-114.

<sup>21</sup> J.P. Despins, *La música y el cerebro*, Gedisa, Barcelona 1994.

<sup>22</sup> C. Gaser, G. Schlaug, “Brain structures differ between musicians and non-musicians”, *The Journal of Neuroscience*, 2003, vol. 23 (27), pp.9240-9245.

<sup>23</sup> A.J. Blood, R.J. Zatorre, *Intensely pleasurable responses to music correlate with activity in brain regions implicated with reward and emotion*, “Proceedings of the National Academy of Sciences” 2001, vol. 98, 11818-11823.

that the same brain parts were activated which were also stimulated by feeling pleasure with food or sex.

Finally, we wish to point out that the same brain areas are activated when we play a musical instrument and when “we think” about what we are playing<sup>24</sup>.

## Conclusions

The analyses done to date reflect that in order to promote positive experiences in class, we have to pay attention to students’ emotional development. Teacher training requires participatory methods adapted to its requirements that examine the motivation of students in-depth, who develop the capacity to excel themselves. Such intervention methods must develop emotional education and also allow competences to improve through music. When we talk about emotional education, we need to link the emotional part and the cognitive part of intelligence. These two aspects interact dynamically, and in such a way that the more emotional intelligence develops, the greater the capacity to harmonise what is emotional and what is cognitive.

It is necessary to implement into classrooms intervention programmes which, with a suitable methodology, allow students to develop their emotional intelligence on the one hand, and to improve their competences on the other hand.

Teachers who leave an impression are those whose teaching activity has a repercussion on their students’ emotional development. Educating implies commitment, possessing a mind that is flexible and open to change, being sensitive to students’ requirements, knowing their strong and weak points (reinforcing the former and improving the latter), and coming into permanent contact with emotions to generate empathy, which is a basic aspect if we wish students to act with creativity and efficacy. In short, a good educator must be a leader and leading is clearly an emotional task.

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<sup>24</sup> J.A., Jauset, *Música y neurociencia: la musicoterapia*, UOC, Barcelona 2008, p.59.

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