

Effects of Collaborative Musical Theater on the Development of Social Competence

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Abstract

Introduction. This study analyzes the social competence of university students of the Music Education Teaching Degree through variables group climate, team cohesion and social skills. The need to develop good social competence was the basis to implement a project based on the musical theater applied according to the collaborative learning methodology.

Method. A group of 58 university students enrolled in year 2 of Music Education started the musical expression practices as part of the research. A longitudinal quasi-experimental design with pretest-posttest phases was used. The musical theater education project with implementation based on collaborative work was selected as an independent variable. To assess social competence, the CCSES (Questionnaire Social Competence in Higher Education) questionnaire was adapted from the Group Climate Questionnaire – Short Form (GCQ-S), the Group Cohesion Evaluation Questionnaire (GCEQ), and the Social Skills Scale.

Results. The results show statistically significant differences ($p < 0.05$) in the three social competence variables after participating in the collaborative Musical Theater Project-based educational methodology. While climate variables and social skills group differences in the posttest were favorable, group cohesion differences were not. The average in social competence did not differ significantly between the pretest and posttest phases.

Discussion and conclusions. The results of this study confirm that the collaborative Musical Theater Project work led to changes in students' social competences. The different proposals to explain the changes noted in all three variables are group climate, team cohesion and social skills.

Keywords: high education, musical theatre, collaborative learning.

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Efectos del Teatro Musical Colaborativo sobre el Desarrollo de la Competencia Social

Resumen

Introducción. En este estudio se evalúa la competencia social del alumnado universitario de la Diplomatura de Magisterio Musical, a través de las variables: clima grupal, cohesión de equipo y habilidades sociales. La necesidad de adquirir una buena competencia social sirvió de base para la implementación de un proyecto basado en el teatro musical, aplicado bajo la metodología del aprendizaje colaborativo.

Método. Un total de 58 estudiantes universitarios de las prácticas del segundo semestre de la asignatura didáctica de la expresión musical de 2º magisterio musical participaron en la investigación. Se empleó un diseño cuasi-experimental longitudinal con fases pretest-postest, y como variable independiente se tomó el proyecto educativo del teatro musical con una implementación basada en el trabajo colaborativo. Para evaluar la competencia social se empleó el cuestionario CCSES (Cuestionario de Competencia Social en Educación Superior), adaptación de los cuestionarios Group Climate Questionnaire – Short Form (GCQ-S), Group Cohesion Evaluation Questionnaire (GCEQ) y Escala de Habilidades Sociales.

Resultados. Los resultados mostraron diferencias estadísticamente significativas ($p < .05$) en las tres variables de la Competencia Social tras la participación en el proyecto de teatro musical educativo basado en la metodología colaborativa. Mientras que en las variables clima grupal y habilidades sociales las diferencias en el postest fueron favorables, en la cohesión grupal se obtuvieron diferencias desfavorables. La media en la Competencia Social no sufrió cambios significativos entre las fases pretest-postest.

Discusión y conclusiones. A la luz de los resultados de este estudio, se confirma que el trabajo colaborativo con el proyecto de teatro musical produjo modificaciones en la competencia social del alumnado. Se examinan diferentes propuestas para explicar los cambios producidos en cada una de las tres variables: clima grupal, cohesión de equipo y habilidades sociales.

Palabras clave: educación superior, teatro musical, aprendizaje colaborativo.

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Introduction

Music is a primarily social phenomenon (Hatem, Lira & Mattos, 2006). Elliott (1995) emphasizes that the musical phenomenon consists in two interlocking forms of intentional human activity: to make music and to listen to music. Moreover, making music is applied to activities such as playing, improvising, composing, arranging and conducting. However, music is understood as an active job of building intramusical and intermusical information, relationships and their meanings. The above author states that the musicalization concept involves different ways of knowing and participating with music, achieving self-growth, self-knowledge, and flow experiences that develop self-esteem for both those making music and those listening to it. Therefore, experience and musical knowledge are acquired in formal and informal contexts, as well as in particular social, cultural and ideological realities. He also emphasizes music as being central to the constitution of individual and cultural identities, and to develop cohesion and creativity.

Musical theater as an educational innovation Project

The present paper was inspired by an innovative educational project to be developed in the elementary classroom, entitled: LOVA (opera, a vehicle for learning). "LOVA uses metaphorical and evocative power of the performing arts, teamwork and overcoming challenges as a platform for the development of identity [...]" (Sarmiento, 2012a, p.40). The LOVA project began in Madrid (Spain) through American professor Mary Ruth McGinn who, in 2006, adapted the project *Creating Original Opera* from the USA. Basically, the project aims to transform the primary class into an opera company for the purpose of creating an opera for an entire school year, and lastly to represent it. The project "Integrates learning from different areas (language, physical education, maths, arts, music, etc.) and its main objective is personal development through empowerment [...]" (Sarmiento, 2012a, p.41). A innovative aspect of the project is that it is not contained in similar projects (for example, see Llopis, 2011; Llopis, & Villarroya Rosello, 2009), but that "everything is decided, created and managed by children: script, lighting, set design, company name and logo, acting, advertising, purchase of materials, execution and instrumental music, costumes, make-up, props, stage management, budget management, coordinating work, etc." (Sarmiento, 2012a, p.41). Thus, one of the most characteristic features of this way of working is expressed in the words of Sarmiento (2012b, p.33), in that "[...] It allows something much more important than a mere

combination of subjects: the autonomy of students." For these reasons, the LOVA project was adapted to a musical theater format to Music Education Teaching studies.

Regarding the definition of a musical theater, there are many other somewhat ambiguous definitions. For example, Walsh and Platt (2003) define it as a genre that integrates songs, spoken dialog, acting and dance. Since the 20th century, it has been simply called a musical. The story and the emotional content of the humor, pathos, love, anger, etc., pieces communicate through words, music, movement and technical aspects of the show as an integrated whole. Furthermore and Bawtree (1991) recognizes the confusion that currently exists as to the definition of musical theater, which amazing does not possess a satisfactory generic term to cover this concept.

Research on musical theater in the educational field is very limited, mainly because musicals were not created for schools, but were created by professional artists (Howard, 1990). Yet what comes over clearly is that musical theater is one of the most coveted activities in education (Llopis, 2011; Sjoerdsma, 2004), proved by the fact that when other artistic genres, such as opera, were suggest to the students of this project, the majority chose musical theater.

First according to Hower (1999), one of the reasons why it may be interesting to work the musical theater in education is because very little attention has been paid to students' experiences in musicals. Williams (2003) reports the shortage of articles on the musical genre in the academic field. In fact, the literature on musical education lacks examples which identify students' perspectives of experience in musical theater, except for rare exceptions like that of Llopis (2011). Second, existing research works are limited to performing musicals in extra-curricular fashion rather than in formal education. For example, the work carried out by Llopis, Rosello and Villarroya (2009, p.1) who, during extra-curricular school hours, mounted a musical entitled " Els Fills de Kasim", practically developed the principles of the Secondary School coexistence plan where experience was developed.

Cooperative Learning vs. Collaborative Learning

Collaborative learning refers to the commitment that a large group of participants makes in coordinated efforts to solve a problem. The groups assume almost total responsibility for achieving the goal (Dillenbourg, Baker, Blaye & O'Malley, 1996). In

cooperative learning however, work is done in small groups where students get together to enhance their own learning and that of others (Johnson & Johnson, 2001). In collaborative learning, everyone is responsible for his or her actions, while there is an interaction structure in cooperative learning where the teacher fully controls the situation (Panitz, 1996).

Other authors, like Dillenbourg, Baker, Blaye and O'Malley (1996), distinguish the two concepts as follows: collaboration involving the engagement of participants in a coordinated effort to solve a problem; cooperative learning is achieved by distributing tasks between participants, where each student is responsible for one part of the information needed to solve the problem. Therefore in the collaborative model, groups assume almost total responsibility for achieving the objective, and they determine if they have enough information to answer the question. Otherwise they resort to other sources, such as magazines, books, videos, the Internet, etc. The work to obtain additional information is distributed among the same group members themselves, who assume the roles they want to play. The teacher assesses each group's progress and makes suggestions about the obtained results. The final product is determined by all the groups after consulting the teacher (Dillenbourg, Baker, Blaye & O'Malley, 1996).

Music, creativity, social skills, team cohesion and group climate

Psychology of music has been partly dedicated to address issues related to identity, music as well as its potential to create a positive group atmosphere. Sloboda and O'Neill (2001) highlight the fact that listening to music every day is a resource for self-understanding, self-presentation, and is an expression of emotional states associated with self. Similarly, MacDonald, Hargreaves and Miell (2002) emphasize the many ways that music can be used as a means for formation and expression of individuals and collective identities, and how a person can use music to indicate his/her belonging to a certain subculture. After all, it is about an individual and his/her relation to any type of musical material, whether produced by self or by others. It is an approach from the music education sociology which links people's ability to use music in general (Batt-Rawden and DeNora, 2005; Small, 1998), or even to use music as a structuring dynamic material (DeNora, 2000); that is, to regulate and modify behaviors and actions so that people can negotiate their position in the world.

Thus, creative abilities in music are one of the most important points in training prospective music education teachers. This may be partly due to the difficulty of teachers to

define something as difficult as the word creativity (Byrne, 1996). Musical creativity is a very important factor in musical theater creation, not only in the composer and arranger's roles, but for the entire company who, at the end of the day, agree arrangements and new compositions together.

There are considerable research works on the process and results of children's creative efforts in different classroom situations (Barrett, 1998; Folkestad, 1998). However, there are very few research work which have been conducted with university students, and virtually none with prospective musical education teachers who, through the creation of a collaborative project, build a musical theater for the purpose, among others, to improve social competence. Social competence is divided, in this case, into three variables: (1) climate group, (2) team cohesion and (3) social skills.

Much musical creative work has been done in a social context, thus more attention should be paid to investigate the nature and the effect that this context has on the creative process and its results (MacDonald & Miell, 2000). As mentioned at the beginning of the Introduction, recent advances in the field of psychology of music have begun to emphasize that music is a primarily social activity (Hargreaves & North, 1997).

There is a numerous works in the literature that highlight the impact that peer groups, the family, the relationship between teacher and student, and between students themselves, have on the knowledge of music, and also on the development of both personal and musical identity (O'Neill, 1997; Taebel, 1994). This would be directly relevant to conduct research on music education as it is important to consider the social context in which students listen, play and learn and, therefore, how learners respond to different types of music and different musical tasks (Folkestad, 1998).

Therefore it seems that in this paper, a socio-cultural approach is needed to discuss collaboration. However, it must go beyond the recognition and exploration of the social context in creating music, and it has to examine the impact of social factors to a lesser extent. This means having to examine the ways in which social variables not only provide an important backdrop to what is happening when an individual creates music, but to also observe the way it directly affects the nature of the interaction, and music itself. That is, rather than considering the effect of the presence of other individual performances or a person, a

socio-cultural approach must be adopted to study their collaboration in the work. This approach, based on Vygotsky's work, emphasizes the construction of knowledge through joint action (Vygotsky, 1978).

Method

Participants

The sample consisted in 58 students of grade 2 Music Education of academic year 2010/2011, where N = 58 participated in the pretest and N = 56 in the post-test. Of the 58 participants, the percentage of females (63.8%) was higher than males (36.2%). The mean age was 23 years old. Table 1 shows the distribution of participants according to gender and age.

Table 1. Descriptive gender and age data

Groups	Gender		Age		
	Male	Female	19-25	26-32	33+
G1. 2010/2011	21 (36.2%)	37 (63.8%)	42 (72.4%)	9 (15.5%)	7 (12.1%)

Instruments

Group Climate Questionnaire (GCQ-S). To examine the Group Climate variable, an adaptation of the Group Climate Questionnaire - Short Form (GCQ-S) of MacKenzie (1983) was used. The original questionnaire consists in 12 response items on a 7-point Likert scale. In turn, the 12 items are included in three subscales: active collaboration (5 items measuring the degree of self-disclosure, cognitive understanding and confrontation); confrontational atmosphere (4 items that describe the amount of interpersonal conflict and distrust); avoidance of responsibility (3 items indicating the degree to which group members avoid responsibility). The GCQ-S is one of the most widely used to assess the group atmosphere because it is a short questionnaire that is simple to manage (Johnson, Burlingame, Olsen, Davies & Gleave, 2005). The GCQ-S has been used to evaluate differences in group climate in many studies (Kanas and Barr, 1986; MacKenzie, Dies, Coche, Rutan & Stone, 1987), and it demonstrates the validity and reliability of the questionnaire (Kivlighan & Angelone, 1992). Cronbach's alpha was 0.89 after adjustment and validation into Spanish.

Group Cohesion Evaluation Questionnaire (GCEQ). The Team Cohesion variable was measured using a Spanish adaptation of the Group Cohesion Evaluation Questionnaire (GCEQ) of Glass and Benshoff (2002). The GCEQ was designed to measure how far a group of young people are able to work together on a challenge, and whether or not the activities help foster a sense of group cohesion. The GCEQ originally consists in 9 items on a 4-point Likert scale which show the degree of agreement or disagreement: 4, strongly agree, 3, agree, 2, disagree, 1, strongly disagree. The reliability of the instrument according to Cronbach's alpha was 0.88 after adaptation and validation into Spanish.

Social Skills Scale (SSS). To determine the variable Social Skills, we used an adaptation of the Social Skills Scale (SSS) of Goldstein et al. (1989). The list was constructed with items deriving from different studies related to psychological behaviors that allow people to interact successfully in different contexts. This test helps obtain accurate information about the level of the participants' social skills through 50 items divided into 6 categories: early social skills, advanced social skills, skills associated with feelings, alternative skills to aggression, skills for dealing with stress and planning skills. The reliability of the instrument according to Cronbach's alpha was 0.95 when adapted into Spanish.

Based on all the above considerations, a unique 40-item questionnaire "Questionnaire of Social Competence in Higher Education" (CCSES) was developed, which was judged by a panel of experts (N = 8) formed by education professionals (university teachers of education and psychology fields). Then a pilot study was conducted with a group of 51 university students in which the suitability of the used instruments obtained a Cronbach alpha of 0.96.

Procedure

The study was implemented from a collaborative project methodology after collecting quantitative data. Thus on the first day of the second semester of academic year 2010/2011, the project was presented to students, who showed enthusiasm and willingness to participate. In the same class, the CCSES questionnaire was administered to determine students' level of social competence before they participated in the project (the pretest phase). The twelve 2-hour practicals of the musical expression subject didactics involved becoming a musical theater company with departments and areas, and tasks were divided into individual roles (on and off stage) which were chosen by the students. Each student had a choice of three roles

(e.g., writer, singer, composer, etc.) in order of preference. Then the teacher distributed such roles as equitably as possible.

Having completed the 12 practical sessions, in the last week of May 2011 and for a period of approximately 2 hours, three representations were held as a final exam. The first was performed by PR1, and the second by PR2 - two in full: scripts, musical arrangements, lighting, etc. The last one was composed of various class activities, which were improved by students. The third part was joined by participants in the course entitled *Creating a musical show* (open to people inside and outside the University), which intended to strengthen and improve the class contents being studied, thanks to the help of a dancer of the National Dance Company.

The teacher-led classes were conducted in parallel with students' independent work. The responsibility fell mainly on them as they had to be responsible for organizing and coordinating the project. The teacher's role involved being an observer and guide, which required the teacher's complete availability and involvement given the number of problems encountered and the requirements expressed by students, which is in accordance with the collaborative work concept described by Dillenbourg, Baker, Blaye and O'Malley (1996).

Weekly classroom sessions were divided into two parts. Initially, they began by the teacher presenting the educational activities and then the person of each project role showed his or her classmates the work done. Therefore, all the students worked collaboratively. In the last week of the course, and before the final performance, the CCSES questionnaire was administered to determine the Music Education students' level of social competence after their participation in the collaborative project (the post-test phase).

Design and data analysis

The dependent variable of this research was students' Social Competence, which was operationally studied through three of its components: Group Climate, Team Cohesion and Social Skills.

Group Climate. It refers to "the perception that a participant has on the atmosphere of a group" (Kivlighan & Angelone, 1992, p.469). Group climate is further classified by group participation, avoidance and conflict. Participation indicates if members wish to form part of the group, contribute to the group's goals and share personal details about their lives.

Avoidance occurs when members refuse to discuss important issues and depend on the teacher's direction. Conflict occurs when members begin to recognize their differences, and when they feel anxious, distrustful, distant and withdrawn (MacKenzie, 1983).

Team Cohesion. It refers to the degree to which group members wish to stay in the group (Shivers, 1980). Group cohesion is defined as the strength of ties between group members, unity and feelings of attraction for its members and the group itself, as well as the degree to which members collaborate to achieve common goals (Forsyth, 1999, p.9).

Social Skills. It refers to the "positive social behaviors that contribute to the onset and maintenance of positive social interactions" (La Greca, 1993, p.288).

Furthermore, the independent variable was the project itself based on the musical theater using two methodologies which applied to the collaborative project. To select an analysis, normal distribution statistical tests were conducted. The values of asymmetry (-1.420), kurtosis (1.616), Kolmogorov-Smirnov (.00) and the KMO test of Bartlett sphericity (.22) led us to reject the null hypothesis. Thus, it was decided to employ a non parametric analysis using the Wilcoxon test for related samples.

Results

Differences in Group Climate

A level of significance ($p < .05$) was obtained with which it was concluded that there were significant differences before and after the collaborative creative musical theater project. Next, each item was analyzed to check for statistically significant differences in all the items. Table 2 shows the descriptive statistics and the level of significance (LS) of each questionnaire item in the pretest-post-test phases, which belonged to the Group Climate variable. It is observed that there was a statistically significant difference in all the items, except for item 8 (.251, $p > .05$) *We strive to solve the arising problems.*

Table 2. Differences in Group Climate

Ítems (L.S.)	M (SD)	
	Pretest	Post-test
1 (.000)	2.76 (.78)	2.32 (.79)
2(.000)	2.97 (.72)	2.62 (.77)
3 (.001)	2.43 (.90)	2.77 (.66)
4 (.000)	3.05 (.80)	2.45 (.66)
5 (.000)	1.90 (.72)	2.50 (.81)
6 (.000)	2.07 (.83)	3.34 (.55)
7 (.000)	1.86 (.83)	2.86 (.70)
8 (.251)	3.10 (.76)	3.21 (.80)
9 (.000)	3.00 (.88)	2.57 (.99)
10(.000)	1.93 (.70)	2.38 (.88)
11(.000)	1.93 (.88)	2.45 (.91)
12(.000)	2.26 (.64)	2.87 (.76)
Total subscale	2.44 (.23)	2.69 (.25)

Differences in Group Cohesion

A level of significance .00 (<.05) was obtained in the Team Cohesion variable, and it was concluded that there were significant differences before and after the collaborative project. Each item was analyzed to check whether there were statistically significant differences in all the items. Table 3 shows the descriptive statistics and level of significance of every questionnaire item in the pretest-post-test phases, which belonged to the Team Cohesion variable. It is observed that there was a statistically significant difference in all the items.

Table 3. Differences in Team Cohesion

Ítems (L.S.)	M (SD)	
	Pretest	Post-test
13 (.000)	2.88 (.65)	2.25 (.79)
14 (.000)	3.09 (.63)	2.23 (.81)
15 (.000)	3.03 (.72)	2.43 (.68)
16 (.000)	2.95 (.66)	2.34 (.69)
17 (.000)	2.95 (.78)	2.29 (.78)
18 (.000)	2.93 (.77)	2.50 (.83)
19 (.000)	2.91 (.88)	2.50 (.83)
20 (.000)	2.47 (.88)	2.00 (.81)
21 (.000)	2.97 (.82)	2.52 (.79)
Total subscale	2.90 (.41)	2.33 (.34)

Differences in social skills

A significance level of $p < .01$ was obtained and it was concluded that there were significant differences before and after the collaborative project. Each item was analyzed to check whether there were statistically significant differences in all the items. Table 4 shows the descriptive statistics and the L.S. of every questionnaire item in the pretest-post-test phases, which corresponded to the Social Skills variable. Significant differences were found only in items: 23: *When I do not understand something, I ask to the right person.* 32 *If I disagree with someone, I try to reach an agreement.* 35 *I understand what and why accuse me and then I think the best way to relate to the person who accused me.* 38 *I set a goal before starting a task.*

Table 4. Differences in Social Skills

Ítems (L.S.)	M (SD)	
	Pretest	Posttest
22 (.285)	2.83 (.57)	2.91 (.58)
23 (.025)	2.83 (.62)	2.93 (.53)
24 (.102)	2.97 (.79)	3.07 (.66)
25 (.102)	2.76 (.66)	2.86 (.52)
26 (.063)	2.84 (.67)	2.96 (.54)
27 (.063)	2.81 (.66)	2.95 (.52)
28 (.180)	2.84 (.56)	2.93 (.42)
29 (.102)	2.93 (.70)	3.04 (.60)
30 (.317)	2.98 (.58)	3.02 (.56)
31 (.083)	2.90 (.74)	3.04 (.57)
32 (.046)	2.86 (.76)	3.02 (.56)
33 (.157)	3.00 (.50)	3.04 (.47)
34 (.180)	2.95 (.63)	3.00 (.57)
35 (.020)	2.91 (.78)	3.13 (.47)
36 (.102)	2.98 (.58)	3.05 (.48)
37 (.102)	3.14 (.69)	3.21 (.59)
38 (.023)	2.86 (.60)	3.00 (.42)
39 (.317)	2.97 (.65)	3.00 (.63)
40 (.180)	3.03 (.56)	3.09 (.48)
Total subscale	2.91 (.48)	3.01 (.32)

Global Differences: Social Competence

The overall Social competence data are presented and were analyzed in this study by the Group Climate, Team Cohesion and Social Skills variables. The data obtained are presented below.

Table 5. Differences in Social Competence

	Pretest	Post-test
Group Climate	2.44 (.23)	2.69 (.25)
Team Cohesion	2.90 (.41)	2.33 (.34)
Social Skills	2.91 (.48)	3.01 (.32)
Overall Social Competence	2.77 (.28)	2.76 (.19)

Discussion and conclusions

Firstly, the results obtained in the Group Atmosphere variable before and after participating in the collaborative project (pretest-post-test) are examined. It is noted that the mean of the pretest ($M = 2.44$) and the post-test ($M = 2.69$) shows a statistically significant positive difference, which was obtained in the non parametric Wilcoxon test for related samples ($p < .05$). That means that Group Climate improved after participation in the musical theater project using a collaborative methodology, and the results obtained are in line with the studies of Liebermann et al. (1973) and of MacKenzie and Livesley (1983). The latter focuses on early group development to be, thus, more committed to it. This change occurred, in part, because the teacher attempted to get involved in any tension occurring in the group as little as possible.

In order to examine the variable in depth, each item was analyzed. It was found that there was a statistically significant difference in all the items, except item 8 ($0.251 > 0.05$) *We strive to solve the arising problems*. However, this difference was not favorable in all cases. Items 1 ($2.76 > 2.32$) *There are good relationships between members of the group*, 2 ($2.97 > 2.62$) *We try to reason and to understand what we do together*. 4 ($3.05 > 2.45$) and 9 ($3.00 > 2.57$) *We act as we think it is good for the group*, show unfavorable differences since the mean value decreased following project implementation. This may occur, in part, because working collaboratively, as MacKenzie and Livesley (1983) state, produces conflicts between

participants, as well as stressful situations. Panitz (1996) shows that in the model of collaborative work. All the students are responsible for their actions, including respect for peers and their own learning. The fact that the teacher does not mediate directly in students' problems may have conditioned response items like 9 *We act as we think it is good for the group* were affected.

Secondly, the results obtained in the Team Cohesion variable before and after participating in the collaborative project (pretest-post-test) are presented. It is observed that the mean of the pretest ($M = 2.90$) and of the posttest ($M = 2.33$) shows an unfavorable statistically significant difference according to the non parametric Wilcoxon test for related samples $.00 (<.05)$. This indicates that Team Cohesion diminished after participating in the musical theater project. It should be noted that the conflicts generated by a collaborative learning style, where responsibility lies almost entirely on the students (Dillenbourg, Baker, Blaye & O'Malley, 1996), generates the idea that members do not wish to remain in the group (Shivers, 1980).

In order to examine this variable in depth, all the items were analyzed, to show significant differences in them all. This may be because, in part, there were several conflicts among students throughout the project for various reasons: lack of organization; lack of teacher mediation in certain conflicts. This result coincides with the work of Rose (1998) and Yalom (1995) in that group processes may have altered group cohesion.

Thirdly, the results obtained in the Social Skills variable before and after participating in the collaborative project (pretest-post-test) are presented. It is observed that the mean of the pretest ($M = 2.91$) and of the post-test ($M = 3.01$) shows a favourable statistically significant difference according to the non parametric Wilcoxon test for related samples ($.01 <.05$). These data reveal that the participants' social skills improved considerably after they participated in the musical theater project; designing and evaluating a program was not the aim of this study, but to assess social competence by a collaborative learning methodology with an educational and creative musical built entirely by the class group. These results show that the musical theater can, in part, develop social skills. This fact insinuates the need for creative strategies to develop social skills in the Higher Education field (González Fernández & Lobato, 2008; Pérez-Escoda, Filella, & Soldevila, 2010; Pérez-Aldeguer. 2012). The results of the musical theater project based on a collaborative learning model fully coincide with

Garcia-Rojas (2010), when he says that a collaborative working model develops skills or social skills which foster the development of interpersonal tasks.

It is interesting to examine the variable in depth by analyzing each item in turn. Statistically significant differences were found only in items 23 (.025 <.05) *When I do not understand something I ask to the right person*, 32 (.046 <.05) *If I disagree with someone, I try to reach an agreement*, 35 (.020 <.05) *I understand what and why accuse me and then I think the best way to relate to the person who accused me*, and 38 (.023 <.05) *I set a goal before starting a task*. This may partly occur thanks to the urgent need to undertake the project, and by putting overall project goals above individual goals. At the end of the day, students obtained the ability to make favorable adjustments (Coble, Gantt & Mallinckrodt, 1996; Kliewer, 1991).

The score that can be obtained in this questionnaire lies between 40 and 160 points. The lowest and the highest score respect a lower Social Competence and a higher Social Competence, respectively. After examining the overall data, it appears that the variance between the pretest and the post-test is minimal, and is somewhat lower in the post-test (110.82 <110.62).

The organization that must be before starting an activity like an educational musical theater, which is a challenge for students and teachers alike, must be adequately planned and agreed. This entails having to take into account certain aspects like student post-project claims; for example, tasks not being sufficiently compensated in terms of workload. This could be partly one of the crucial reasons why Social Competence as a whole was not seen to be favored, but slightly diminished. The studies of Latane, Williams and Harkins (1979) are fully consistent with this idea. Therefore, this led us to consider that a significant difference before and after a project of such characteristics can only be achieved if every project member equitably participates. This difference may have favorably increased because a cooperative learning model was used, which coincides with the studies by Slavin (1995) and with the reciprocal teaching studies of Palincsar and Brown (1984). By using this cooperative learning model, roles were clearly defined from the beginning, and mixed roles (on and off stage) were also played, thus avoiding in part the workload of some roles over others. Finally, the idea is to use a cooperative learning model where the teacher supervises, forms heterogeneous groups and creates positive interdependence between members (Johnson, Johnson, & Smith,

1991). Obviously, time was also a main problem. Therefore with a cooperative learning model and working with smaller groups, time is managed differently (Johnson, Johnson, & Holubec. 1999). Furthermore, a full academic year could also be used.

On the one hand, one study limitation was to not include a control group to examine whether changes took place due to the collaborative project to a greater or lesser extent. On the other hand, the time that participants worked together in other subject matters where they had to do tasks together somehow also influenced the development of social competence.

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