# Creative dance as a tool for developing preschoolers' communicative skills and movement expression

Pavlidou,  $E^1$ ., Sofianidou,  $A^1$ ., Lokosi,  $A^1$ ., & Kosmidou,  $E^2$ .

- <sup>1</sup> Aristotle University of Thessaloniki, School of Early Childhood Education
- <sup>2</sup> Aristotle University of Thessaloniki, Faculty of Physical Education & Sport Science

eva@nured.auth.gr

#### Introduction

oung children, even in infancy, are attracted to music and they respond spontaneously to its emotional content with natural body movements (Trehub, 2003). Creative dance is an art form that is based on natural movement rather than movement of a particular dance style and that is why it is proposed as most

#### **Abstract**

Communication among children as a social skill is a basic goal in preschool education and creative dance, as an expressive, aesthetic, non-verbal language, can be one of the tools to achieve that. The aim of this study was to investigate the suitability of a creative dance program, focusing on the development of communicative relations among children and their movement expressivity. An interventional program of creative dance was designed implemented in an average kindergarten for eight weeks, aiming a) at the development of communicative relations, represented as cooperation, responsibility, initiative and activity for common entertainment and b) at movement expressivity, represented as body expression, expressive use of materials and expressing a concept. An observation protocol and a rubric were designed to evaluate children's performance at the beginning and at the end of the intervention. Forty-nine preschoolers participated, divided into two groups: experimental (n=25) and control (n=24). One-way repeated measures ANOVAs were conducted to compare separately communication relations and expressivity before and after the intervention (Time1, Time 2) and between groups. Concerning both communication relations and expressivity, there was a significant interaction effect between time and group (p<.001), which is evidence for the effectiveness of the program. Nevertheless, further research on a larger sample is needed.

*Keywords:* creative dance, preschool education, communicative relations, expressivity.

appropriate for preschool age. Stinson (1988) claims that a natural movement can become dance by making itself significant and by being paid attention to. A simple movement could become dance when the child is fully aware of it and realizes that the movement can bring out thoughts, ideas and feelings (Galani, 2010). In creative dance the children get stimulated and respond in their own manner, avoiding mimicking and projecting their movement creativity (Eisenberger & Shanock, 2003; Mumford, 2003; Amabile, 1996).

During pre-school age, children learn to express and communicate through movement (Cleland, 1994; Gruber, 1986), while, in a supportive environment, they also develop their movement creativity (Torrance, 1981). Rudolf Laban contributed decisively to the development of creative dance and he was the one who established the basic elements of the structural analysis of motion in relation to the strength, space, time, weight and relations to others (Davies, 2006). To create a dance, an idea serves as a starting point so the children have the opportunity to experiment to discover the movement theme, given maybe as a visual stimulus, to invent motifs and develop rhythmic and spatial possibilities (Russell, 1992).

Dance, according to the Cross-Thematic Curriculum Framework for Nursery School (CTCFNS) of the Greek pre-school education, is detected directly or indirectly in Physical Education (PE) activities, but it sometimes occurs as a result of music and dramatic art activities, in the field of "Creativity and Expression" (FEK 304B/13-03-2003). Unfortunately, the handbook "Pre-school educator's guide" of Pedagogical Institute in Greece (Dafermou, Koulouri & Basayanni, 2003) dedicates only a subsection, of very small extent, to expressive movement and dance, which is most certainly not enough to cover the pre-school educators' need for information.

In the new Curriculum Framework of pre-school education (New School- school of the 21<sup>st</sup> Century, 2011), which is being implemented in certain kindergartens as a trial, PE recovers its importance as a field, while a separate field of Arts is also being created, part of which is dance. The information provided by this program, and its management through the corresponding "Pre-school educator's guide", seem to have the potential to fill the gaps of the current program regarding dance in pre-school education (Pavlidou, 2012).

Children become familiar with following instructions and respecting others as they move and dance together in the shared space, so creative movement can be a guidance tool that teachers can use in many ways during the day (Gilbert, 2002). Co-operation, responsibility, accepting others, acting in pairs or small groups, sharing in decision making and taking on different roles are all necessary life skills that children should develop through creative movement (Bergstein-Dow, 2010; Pickup, 2007).

The importance of social and emotional competence in early childhood is absolutely recognized and it has led to numerous applied intervention efforts towards increasing the social and emotional skills of preschoolers in classroom settings (Hyson, 2004; Denham &

Weissberg, 2004; Joseph & Strain, 2003). Such programs typically offer structured activities and curricula that focus on verbal and cognitive reflection, but one area that is surprisingly almost missing from such efforts is the role of the arts in general, and the role of dance and movement activities in particular, in fostering young children's social competence (Lobo & Winsler, 2006).

Dance as a component of developmental PE seems to be able to contribute to the improvement of children's social and emotional skills (Gallahue, 1996). We can point out that group thinking is important to achieve maximum cognitive activity from dance making (Giguere, 2011). Von Rosseberg - Gempton, Dickinson and Poole (1998) found that creative dance enhanced children's co-operation, communication, the ability to be part of a group, leading and following skills, and they suggest that, through sharing ideas, physical space and accepting individual differences, dance promotes a bond between children and communication skills.

Nonverbal communication games through body movements are important for the development of movement creativity and the improvement of communicative relations among children (Pavlidou, 2001). PE is also considered to be expedient in co-working learning, which, as research has shown, significantly boosts the students' social and emotional skills through playtime, if applied appropriately (Magotsiou & Goudas, 2007; Dyson & Strachan 2000; Hellison, 1996). It has become obvious that during movement playtime, important psycho-social processes, that include strong social interaction and emotional maturation, take place (Staiano & Calvert, 2011).

In researches, among other variables, development of social relations and children's cooperation were examined, either through appropriately formed activities of General Gymnastics (Pollatou, 2003) or through activities of rhythmic movement education and dance (Pavlidou, 2001). The interventional programs had an obvious positive effect on the cooperation among the children and between the children and the educator. A common component of these two interventions was the prevalence of the co-operative teaching method, in the form of co-operative movement explorations and improvisations in pairs and in small or bigger groups of children.

The results of an eight-week instructional program in creative dance/movement on the social competence of low-income preschool children revealed positive gains over time in the

children's social competence and behavior (Lobo & Winsler, 2006). By creating new contexts in kindergarten routines, for example offering expressive/creative movement and dance activities, we give many new opportunities to young children to understand and negotiate the world, exploring their skills (Lorenzo-Lasa, Ideishi, & Ideishi, 2007). In this point of view, children can learn to have initiative that can enhance communicative relations, because dance is a field where creativity, self-expression, co-operation and acceptance of others are reinforced by initiative and decision making by the children. According to Price-Mitchell (2015), initiative can be defined as a life skill, which can direct children's attention towards a challenging goal, it can help them overcome obstacles and it can be developed especially through creativity, autonomy and by making a difference for others.

In any case, although it is widely believed that movement and psychosocial skill are connected, there seems to be a gap in bibliography, regarding the effect movement programs have on the psychosocial skills of the students (Spanaki, 2014). Questions relative to this issue are: What could be the form of a creative dance program in kindergarten, in order to contribute to the social-emotional development of the children? Could such a program be applied, in typical Greek kindergarten conditions so teachers can support it?

This paper's goal was the creation and the evaluation of a creative dance program, appropriate for the conditions of an average public kindergarten, in order to have the potential development of social skills and movement expression of kindergarteners investigated.

## Method

Formulated hypothesis of this study was that a suitably designed creative dance program with an emphasis on co-operative teaching and responsibility providing methods can help improve communicative relationships among children and their movement expressivity. An intervention research was designed in order to evaluate the suitability of such a program.

## **Participants**

A total of 49 kindergarten children (M=21, F=28, n=49) participated. Twenty-five (25) of them were set, as they were divided into their school classes, as experimental group (EG) and the rest 24, as control group (CG). The implementations of the program lasted eight weeks and involved two organized dance activities per week, 25 to 30 minutes duration each time. It was carried out by a preschool educator, member of the co-authors in this study, as

she took on the role of the "dance teacher" in the experimental group. At the same time the control group followed the kindergarten's typical program PE activities and free movement play.

### Basic points in the program content

Expressivity, brainstorming, communication, responsibility and decision-making in dance activities by the children, under the dance teacher's discreet guidance, were the core of the program and they can be classified into the following types:

- Explorations of body movements and locomotor skills, guided and free improvisations, individual or in pairs, in small or larger groups a) as creative dance on a variety of auditory (music, percussions, environmental sounds), visual (picture, photos, colors, lights) and kin-aesthetic stimuli (touching, using materials such as fabrics, papers e.c.t.), b) as drama-dance on stories where the children are motivated for brainstorming, problem-solving, initiative, decision making and expressing feelings for common entertainment.
- Short dance compositions on rhythm and music, guided by the teacher or created by the children with her help.
- Rules provided by the teacher in accordance with the kids and team motivation for responsible behavior, such as participation and initiative in preparing the space area transformation for dance, the placement of materials e.c.t. before, during and after every dance activity.
- Diverse dancing co-operation, discussion, movement problem-solving, decision-making, individually, in pairs or in groups, aiming for the acceptance of others and care for a common purpose.

#### **Procedure**

#### Measurement instrument

Based on theory of authentic assessment (Wiggins, 1990), we created observation protocols in the form of tests, related to the needs of the evaluation. A rating system (a

Rubric) was designed and an identified description for every score was given in the form of a tripartite Likert scale for every test. Social-emotional skills, expressivity and aesthetic forms of movement in preschool age obviously could be better evaluated during a pleasant educational process in a safe environment, so children can show spontaneity and explore their abilities. Therefore, the tests were incorporated into dance activities and implemented on groups of 6-8 children, before and after the interventional program.

Three trained non-participant observers, separate from one another, evaluated every child into his/her small group, aiming at the evaluation of this program's suitability on the assessment criteria described below.

#### Evaluation factors and sub-factors

Two evaluation factors, represented as seven sub-factors under certain assessment criteria were defined for every case: 1) communicative relations among children and 2) movement expressivity. The first one included four sub-factors, while the second one included three. Specifically, communication relations were represented as a) co-operation in pairs or small groups when asked (abridgment: "co-operation"), b) taking responsibility in the class rules for movement problem solving at the use of materials, space area etc, before, during and at the end of the activities (abridgment: "responsibility"), c) taking initiative to propose new ideas for co-operation during activities (abridgment: "initiative") and d) giving solutions for a common entertainment on the dance/drama issues, when asked (abridgment: "common entertainment"). The communicative relations sub-factors were based, as a general idea, on the Social Behavior Checklist for Teachers ("Early Steps", 2007 p.43).

Movement expressivity was represented as a) movement expressions with all body parts (abridgment: "body"), b) using materials expressively (abridgment: "material") and c) presenting meaningful ideas after auditory or visual stimuli (abridgment: "concept").

# Results

In Table 1 means and standard deviations are presented in communication relations (co-operation, responsibility, initiative, common entertainment) and in expressivity (body, materials, concept) for all participants, and each group (experimental-control).

**Table 1.** Means and standard deviations in communication relations (co-operation, responsibility, initiative, common entertainment) and in expressivity (body, materials, concept) for all participants, and each group (experimental - control).

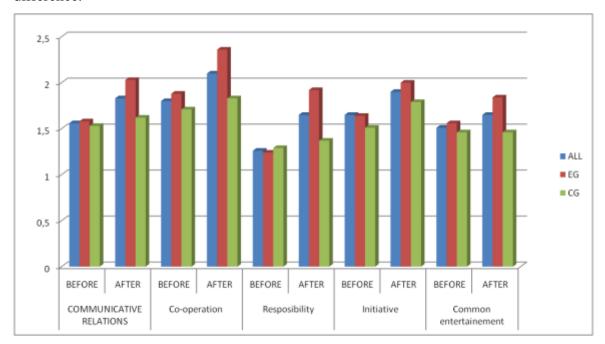
	All participants		Experimental group		Control group		Sig	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-	Post-
	M(SD)	M(SD)	M(SD)	M (SD)	M(SD)	M (SD)	test	test
Communicative	1.56 (.51)	1.83 (.52)	1.58 (.56)	2.03(.54)	1.53 (.46)	1.62 (.42)	.74	.004
relations								
Co-operation	1.80 (.68)	2.10 (.62)	1.88 (.73)	2.36 (.57)	1.71 (.62)	1.83 (.56)	.38	.002
Responsibility	1.26 (.45)	1.65 (.66)	1.24 (.44)	1.92 (.70)	1.29 (.46)	1.37 (.49)	.69	.003
Initiative	1.65 (.63)	1.90 (.55)	1.64 (.70)	2.00 (.58)	1.67 (.56)	1.79 (.51)	.88	.19
Common	1.51 (.71)	1.65 (.69)	1.56 (.82)	1.84 (.75)	1.46 (.59)	1.46 (.59)	.62	.05
entertainment								
Expressivity	1.44 (.38)	1.74 (.50)	1.49 (.41)	2.04 (.45)	1.39 (.35)	1.43 (.33)	.34	.00
Body	1.57 (.54)	2.00 (.58)	1.60 (.58)	2.32 (.48)	1.54 (.51)	1.67 (.48)	.71	.00
Materials	1.20 (.41)	1.51 (.54)	1.24 (.43)	1.84 (.47)	1.17 (.38)	1.17 (.38)	.53	.00
Concept	1.55 (.68)	1.71 (.71)	1.64 (.76)	1.96 (.73)	1.46 (.59)	1.46 (.59)	.35	.01

# Differences between groups before and after intervention

One-way repeated measures ANOVAs were conducted to compare separately factors communicative relations and expressivity, and each sub-factor (co-operation, responsibility, initiative, common entertainment, body, materials, concept), before the intervention (pre-test) and after the intervention (post-test) between groups (EG and CG).

Concerning Communicative Relations, there was a significant interaction effect between time and group (Wilks' Lambda= .56,  $F_{1.47}$ = 37.140, p<.001, partial eta squared=.44). There was no significant difference in pre-test between EG and CG (p=.74) but in post-test EG had higher scores than CG ( $F_{1, 47}$ = 9.00, p<.005). Repeated measures separately for each group showed that for CG there was a difference ( $F_{1,23}$ = 11.50, p<.005, partial eta squared= .33) and for EC there was a difference ( $F_{1,24}$ = 69.43, p<.001, partial eta squared= .74) (Figure 1). Afterwards, we examined each factor separately. In *co-operation* there was a significant interaction effect between time and group (Wilks' Lambda= .85, F 1.47= 8.18, p<.01, partial eta squared=.15). There was no significant difference in pre-test between EG and CG (p=.38) but in post-test EG had higher scores than CG ( $F_{1, 47}$ = 10.58, p<.005). Repeated measures separately for each group showed that for EC there was a difference ( $F_{1,24}$ = 22.15, p<.001, partial eta squared= .48) and for CG there was no significant difference. In *responsibility* there was a significant interaction effect between time and group (Wilks' Lambda= .68,  $F_{1,47}$ = 22.09, p<.001, partial eta squared=.32). There was no significant difference in pre-test between EG and CG (p=.69) but in post-test, EG had higher scores than

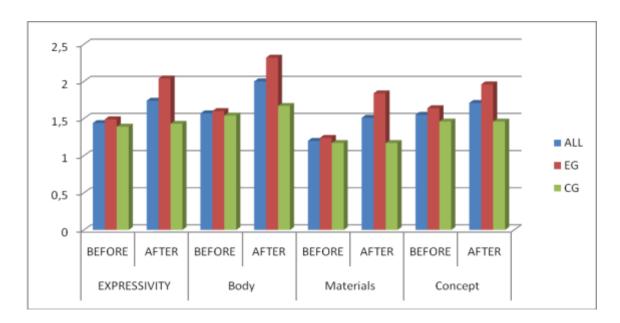
CG ( $F_{1,47}$ = 9.79, p<.005). Repeated measures separately for each group showed that for EC there was a difference ( $F_{1,24}$ = 37.29, p<.001, partial eta squared= .61) and for CG there was no significant difference. In *initiative* there was not significant interaction effect between time and group (p=.06). In *common entertainment* there was a significant interaction effect between time and group (Wilks' Lambda= .84,  $F_{1,47}$ = 8.95, p<.005, partial eta squared=.16). There was no significant difference between EG and CG in pre-test (p=.62) and in post-test (p=.053). Repeated measures separately for each group showed that for EC there was a difference ( $F_{1,24}$ = 9.33, p≤.005, partial eta squared= .28) and for CG there was no significant difference.



**Figure 1.** Means in communicative skills and each sub-variable for all participants and each group separately, before and after intervention.

Concerning Expressivity there was a significant interaction effect between time and group (Wilks' Lambda= .39,  $F_{1,47}$ = 71.85, p<.001, partial eta squared=.60). There was no significant difference in pre-test between EG and CG (p=34) but in post-test EG had higher scores than CG ( $F_{1,47}$ = 28.46, p<.001). Repeated measures separately for each group showed that for EC there was a difference ( $F_{1,24}$ = 102.40, p<.001, partial eta squared= .81) and for CG there was no significant difference (Figure 2). Afterwards, we examined each sub-factor separately. In *body* there was a significant interaction effect between time and group (Wilks' Lambda= .64,  $F_{1,47}$ = 26.58, p<.001, partial eta squared=.36). There was no significant difference in pre-test between EG and CG (p=.71) but in post-test EG had higher scores than

CG (F1, 47= 22.80, p<.001). Repeated measures separately for each group showed that for EC there was a difference ( $F_{1,24}$ = 61.71, p<.001, partial eta squared= .72) and for CG there was no significant difference. In *materials* there was a significant interaction effect between time and group (Wilks' Lambda= .58,  $F_{1,47}$ = 34.53, p<.001, partial eta squared=.42). There was no significant difference in pre-test between EG and CG (p=.53) but in post-test EG had higher scores than CG ( $F_{1,47}$ = 30.01, p<.001). Repeated measures separately for each group showed that for EC there was a difference ( $F_{1,24}$ = 36.00, p<.001, partial eta squared= .60) and for CG there was no significant difference. In *concept* there was a significant interaction effect between time and group (Wilks' Lambda= .85,  $F_{1,47}$ = 7.92, p<.001, partial eta squared=.14). There was no significant difference in pre-test between EG and CG (p=.35) but in post-test EG had higher scores than CG ( $F_{1,47}$ = 6.92, p<.05). Repeated measures separately for each group showed that for EC there was a difference ( $F_{1,24}$ = 8.26, p<.01, partial eta squared= .26) and for CG there was no significant difference.



**Figure 2.** Means in expressivity and each sub-variable for all participants and each group separately, before and after intervention.

#### **Discussion – conclusion**

The aim of this research was to evaluate an interventional creative dance program's suitability, focusing on the improvement of communicative relationships among children and movement expressivity for preschoolers, in average kindergarten conditions.

The implemented interventional program improved both communicative relations and movement expressivity in all of seven sub-factors for the experimental group, so the hypothesis posed is confirmed.

Although in communicative relations it seems that both EG and CG have improved, when sub-factors were examined analytically, it showed that EG has improved in cooperation, responsibility, common entertainment, though CG was not. These findings are in accordance with Pollatou's (2003) and Pavlidou's (2001) findings in relative researches mentioned in the introduction of this study and with Mead's research (2009) on a study of young children's creative dance classes in Taiwan, where he found that, positive effect was most evident in moments with humor and playfulness that they perceived as fun, and in moments where discovery was part of the learning process. Also, there is accordance with Melchior's research (2011) where findings indicate that collaborative process in a creative way in dance activities integrated into the classroom program is a key to increase connectedness between children and each other, teacher and children and children and dance.

In initiative, there was no difference between two measures for any group. It is possible that the small (but important) improvement of CG in initiative is caused by the typical kindergarten curriculum, where initiative, as a life skill, is promoted through many other activities in every subject in the kindergarten (Dafermou et al., 2003).

In expressivity, EG was improved. Studying separately the sub-factors, EG was improved in all three, body, materials and concept, though CG had the same middle score at the end as in the beginning of the program in materials and concept. This finding shows that the creative dance program affected creativity and artistic understanding, helping children of EG to explore their movements and enrich their dancing experiences in connection to kinesthetic (use of materials), auditory (music, hearing a story) and visual (pictures, video) stimuli. These findings are in accordance with Pavlidou's (2001) findings in a relative research mentioned in the introduction of this study. The findings on the improved movement response on various rhythmical music stimuli are in accordance with Phillips-Silver and Trainor (2005) findings that even as infants, the children tend to react bodily through spontaneous movement when exposed to auditory rhythmic stimuli.

In all cases, the teacher's role was important, because she encouraged and facilitated appropriately children's expressivity with various stimuli and children's communicative

relationships on a student-centered approach. This is in accordance with the results of a research on creative dance in kindergartens (Liu, 2012), where findings show that always being interactive with children, and encouraging interaction among them, teachers facilitate their creativity through the children's bodies.

All of the above indicate the significance of creative dance programs in improving communicative relations and bodily expressivity of preschoolers. This specific program could be proposed to be applied in every kindergarten by the teachers themselves. It is obvious that knowledge on the subject is needed. But, as Belicha and Imberty (1998) claim, it is not at all necessary for the teacher to be (or to have been) a dancer, because his/her offer is mostly pedagogical on an enthusiastic spirit and on a clever use of space and materials.

Nevertheless, further research on this subject is proposed, to examine creative dance's components in depth regarding young children's benefits and teachers' needs on creative dance's education.

#### References

Amabile, T.M. (1996). *Creativity in context: Update to "The Social Psychology of Creativity."* Boulder, CO, US: Westview Press

Belicha, I., & Imberty, N. (1998). La danse a l ecole maternelle. Paris: Ed. Nathan.

Bergstein Dow, C. (2010). Young Children and Movement. In *Young Children-The Performing Arts: Music, Dance, and Theater in the Early Years*, March 2010, pp 30-35. Retrieved on 15 January 2017 from <a href="https://www.naeyc.org/tyc/files/tyc/fil

Cleland, F. E. (1994). Young children's divergent movement ability. *Journal of teaching in physical education*, 13, 228-241.

Cohen, J.W. (1988). *Statistical power analysis for the behavioral sciences* (2<sup>nd</sup> ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Cross-Thematic Curriculum Framework for Nursery School (ΦΕΚ 304B/13-03-2003) Pedagogical Institute. Retrieved on 10 February 2017 from <a href="http://www.pi">http://www.pi</a> schools.gr/download/programs/depps/english/25th.pdf

Dafermou, Ch., Koulouri, P. & Basagianni, E. (2006). *Preschool Educator's Guide: educational Planning – creative environments of learning*. Athens: Ministry of Education – Pedagogical Institute. [In Greek]

Davies, E. (2006). *Beyond Dance – Laban's Legacy of Movement Analysis*. New York – Oxon: Routledge.

Denham, S. A., & Weissberg, R. P. (2004). Social-emotional learning in early childhood: What we know and & where to go from here? In E. Chesebrough, P. King, T. P. Gullotta, & M. Bloom (Eds.), *A blueprint for the promotion of prosocial behavior in early childhood* (pp. 13–50). NewYork: Kluwer/AcademicPublishers.

Dyson, B., & Strachan, K. (2000). Cooperative learning in a high school physical education program. *Waikato Journal of Education*, 6: 19-37.

"EARLY STEPS": promoting healthy lifestyle and social interaction through physical education activities during preschool years. (2007). Social Behavior Checklist for teachers. Socrates Program – Comenius, Action 2.1

Eisenberger, R., & Shanock, L. (2003). Rewards, Intrinsic Motivation, and Creativity: A Case Study of Conceptual and Methodological Isolation. *Creativity Research Journal*, Vol 15(2-3), Apr 2003, 121

130.

Galani, M. (2010). Dance in Education. Athens: Ion, ed. Hellin, [in greek]

Gallahue, D. (1996). *Developmental physical education for today's children*. Dubuque: Brown & Benchmark

Giguere, M. (2011). Dancing thoughts: an examination of children's cognition and creative process in dance. *Research in Dance Education*, V. 12 (1): 5-28.

Gilbert, A.G. (2002). *Teaching the three Rs through movement experiences*. Silver Spring, MD: National Dance Education Organization.

Gruber, J. (1986). Physical activity and self-esteem development in children: a meta-analysis. In: Stull G, Eckern H, eds. *Effects of physical activity on children*. Champaign, IL: Human Kinetics, 1986:330 48.

Hellison, D. (1995). Teaching personal and social responsibility in physical education. In S. Silverman and C.D. Ennis (Eds). *Student learning in physical education: applying research to enhance instruction* (pp. 269-286). Champaign, IL: Human Kinetics

Hyson, M. (2004). *Emotional development of young children: Building and emotion-centered curriculum* (2nd ed.). New York: Teachers College Press.

Joseph, G. E., & Strain, P. S. (2003). Comprehensive evidence-based social-emotional curricula for young children: An analysis of efficacious adoption potential. *Topics in Early Childhood Special Education*, 23, 65–76.

Liu, S-Y. (2012). The use of scaffolding in the teaching of creative dance by kindergarten teachers. In S.W. Stinson, C. Svendler Nielsen & S-Y. Liu (Eds.), *Dance, young people and change*: Proceedings Of the daCi and WDA Global Dance Summit. Taipei National University of the Arts, Taiwan, July 14th – 20th 2012. http://www.ausdance.org/

Lobo, Y.B., & Winsler, A. (2006). The Effects of a Creative Dance and Movement Program on the Social Competence of Head Start Preschoolers. *Social Development*, 15, 3, pp 501-519.

Lorenzo-Lasa, R., Ideishi, R.I. & Ideishi, S.K. (2007). Facilitating preschool learning and movement through dance. Early Childhood Education Journal, V. 35 (1): 25-31

Magkotsiou, E., & Goudas, M. (2007). Collaborative learning as a means for the development of social skills in physical education. *Inquiries in Physical Education & Sport*, 5 (1), 82-94.

Mead, D. (2009). A creative ethos: Teaching and learning at the Cloud Gate Dance School in Taiwan. (Unpublished doctoral thesis). University of Surrey, Surrey, UK.

Melchior, E. (2011). Culturally responsive dance pedagogy in the primary classroom. *Research in Dance Education*, V. 12 (2): 119-135.

Mumford, M.D. (2003). Where have we been, where are we going? Taking stock in creativity research. Creativity Research Journal, 15, 107–120.

New School (21st-century school) – New Curriculum Framework of Pre-school Education, horizontal action MIS, 295450 (2011), ESPA 2007-2013, second part: [in greek], retrieved on 21 February 2017 <a href="https://drive.google.com/file/d/0BxM0yUGj01rDNDU1MDY5NGEtODJkYy00ZGZkLTgxY2QtNjMQzjEwNjIy/view">https://drive.google.com/file/d/0BxM0yUGj01rDNDU1MDY5NGEtODJkYy00ZGZkLTgxY2QtNjMQzjEwNjIy/view</a>

Pavlidou, E. (2001). Rhythm and movement as means of education in early childhood: a rhythm and movement education's combinational program. Proceedings of the 3rd Panhellenic Conference of OMEP with D.O.E. co-operation "Postgraduate studies: evolution and perspective in early childhood education", Athens: ed. Greek Letters, pp 168-178, [in greek]

Pavlidou, E. (2012). *Movement and Rhythmic Education in Early Childhood Education: from theory To practice.* Thessaloniki: ZYGOS. [in greek]

Phillips-Silver, J., & Trainor, L. (2005). Feeling the beat: movement influences infant rhythm perception. *Science*, V. 308: 1430

Pickup, I. (2007). The Importance of Healthy Lifestyle and Social Interaction. In "Early Steps" EU Socrates Program. Comenius 2.1 Action, (Ed) Alexandrio Technological Educational Institute of Thessaloniki, University of Cyprus, Roehampton University, University of Jyvaskyla.

Pollatou, E. (2003). Basics General Gymnastics programs establish a multifaceted development of motor and social skills in children aged 4 to 8 years old. *Inquiries in Physical Education & Sport*, 1 (3), 238-243. Price-Mitchell, M. (2015). *Tomorrow's Change Makers: Reclaiming the Power of Citizenship for a New Generation*. Washington, U.S.A., Eagle Harbor Publishing.

Russel, J.(1992). *Creative dance in the Primary school.* (4th ed.) Plymouth, U.K., Ed. Northcote House Publishers Ltd.

Spanaki, E. (2014). The effect of psychomotor education with elements of dramatical play on preschoolers' development with and without special educational needs. Doctoral dissertation [in greek] Patras University / Nimertis. Retrieved on 21 February 2017 <a href="http://nemertes.lis.upatras.gr/jspui/handle/10889/8288">http://nemertes.lis.upatras.gr/jspui/handle/10889/8288</a>

Staiano, A, & Calvert, S. (2011). Exergames for physical education courses: physical, social, and cognitive benefits. *Child development perspectives*, 5 (2), 93 – 98.

Stinson, S. (1988). *Dance for young children: Finding the magic in movement*. Washington, DC: American Alliance for Health and Physical Education

Torrance, E. (1995). Why fly? A Philosophy of Creativity. Norwood, New Jersey: Ablex Publishing Corporation

Trehub, S.E. (2003), The developmental origins of musicality. *Nature Neuroscience*, V. 6 (7): 669-673 Von Rosseberg-Gempton, I., Dickinson, J., & Poole, G. (1998). Creative dance: Potentiality for enhancing social functioning in frail seniors and young children. *The Arts in Psychotherapy*, 26, 313–327.

Wiggins, G. (1990). Integration of the desciplines authentic assessment description. ERIC Digest 328611. In: Oikonomopoulos, Tzetzis, & Kioumourtzoglou.(2006). Students evaluation in physical education. *Inquiries in Sport & Physical Education* V. 4 (2), 260 – 277