

Working Through the Senses: Art Therapy for Autism Spectrum Disorders Students

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Abstract: *In the recent years, multiple studies have demonstrated the importance of teaching Art to children with Autism Spectrum Disorders (ASD). ASD affect symbolic and language skills in children, and imply some limitations in the complex and stimulating field of social relationships. Learners with ASD require a well structured environment. For the purpose of this study we propose Art Therapy as a therapeutic process to develop our students' social relationships. In that manner, they will be able to interact functionally and successfully within their social context within which they belong. By using Art Therapy action programme ASD children are expected to develop social and communication skills through emotions and artistic creations as a way to train conversational abilities, anticipate situations and understand emotions and actions.*

Keywords: Art therapy, autism spectrum disorder, education, social skills, clay, Spain

INTRODUCTION

Special education has undergone a profound change in the last years (Evans and Dubowski, 2001; Gimeno *et al.*, 1992; Hogan, 2001; Rivière, 2001; Rubin, 2010). A previous segregating concept has given way to a new integrating framework which advances towards normalisation and diversity. Nowadays, special education is understood as the set of material and human resources which are available in the education system in order to meet students' needs (Battaglino, 2007; Rivière, 2001; Rotatori *et al.*, 2014) appropriately, in this case student with ASD.

The present Art Therapy programme includes the potential solutions for the following educational needs: foster students' autonomy, favour their social and affective relationships and improve their communication with the surrounding environment (Evans and Dubowski, 2001; Battaglino, 2007; Hogan, 2001).

Under such approach, we have designed an intervention programme centred in the art as therapeutic value. Art Therapy importance has been proven by numerous educators (Bassols, 2006; Carvalho, 1995; Evans and

Dubowski, 2001; Añimo, 2003; Hogan, 2001; Serrano, 2008; Corral, 2009) already, and their reasons are clear: our students are not homogeneous, they present different learning rhythms, aptitudes, skills, abilities and personal features which imply some difficulties when interacting with their surrounding environment appropriately. For this reason, Art Therapy is focused on the development of emotional and cognitive skills of children in our educational system as the palliative means to overcome their differences and favour their communication.

The main objective of this paper is to describe an innovative project that is an Art Therapy workshop which opens new ways of communication to students, deeper understanding of their surrounding environment and an improvement in their adaptive behaviour.

1. CONTEXT

The programme of intervention has been particularly designed for students with special educational needs (SEN) associated to autism spectrum disorders. These students are attending first and second years in Primary Education in a public school located in the rural countryside of Murcia (see Decree 254/2008, Decree 286/2007, Decree 359/2009, Decree 198/2014 for a more detailed information about the schedules and organization in the Spanish Primary Education in the region of Murcia, where is placed the school under study). The school aforementioned fosters a multicultural population (ethnical minorities, immigrants, among others) having a total number of students of 326, from which 26 are students with special educational needs. Fourteen of those SEN students were under late process integration, eleven with special curricular needs and one of them was highly gifted. Student group ratio was 1/25.

The teaching staff of the school is constituted of 29 members. There are six instructors and one support teacher in pre-school. Regarding primary school, they are twelve teachers among which we can find a French teacher, two English teachers and a music teacher, two physical education teachers, one specialist in speech-language and hearing (working in two schools at the same time), one teacher of compensatory education, one religion teacher and a specialist in therapeutic pedagogy. The school executive board includes the school manager, the head of studies and the secretary (they also teach mathematics, English and provide support). Finally, there is a part-time physiotherapist ascribed to the team.

2. THE INTERVENTION PROGRAMME

2.1 RATIONALE

In order to favour interaction and communication development in children with autism, we want to develop their plastic expression and creativity. In this manner, we aim to achieve the greatest integration possible and the development of their expressive and communicative competences. The programme is designed in cooperation with the students' tutor and the therapeutic pedagogy specialist with a double purpose in mind:

To identify common basic objectives, and to follow the themes dealt with in the different teaching units throughout objectives, contents and activities. Coordination among the different teaching agents working with the kids is essential. For this reason, weekly meetings have been held in which objectives and contents to work on are identified and structured.

2.2 OBJECTIVES

Considering the different curricular objectives included in the syllabus (within the centre educational programme), general objectives are the following:

- Improve coordination and look for an alternative to stereotypes and mannerisms by means of various group dynamics
- Foster student initiative
- Develop social skills through group activities
- Favour turn taking
- Improve self-esteem by performing successful activities
- Favour verbal language
- Widen the repertoire of communicative resources which facilitate comprehension
- Promote alternative expression means
- Employ clay manipulation as a relaxing activity

As indicated, all the items listed above are the general objectives are aligned to the proposal of a novel methodology so that we can solve typical educational problems in the school's daily life. In this sense, teachers are encouraged to promote innovative changes in curricula that can be seen as flexible and creative and where participation of students can be maximized. Furthermore, the development of these new practicals and proposals must consider student's interests as well as they must be offer answers to the reality in which the school is taking part. In particular, and following Pérez Gómez (2012), the three following key competencies should be achieved (based on the Definition and Selection of Key Competencies, DeSeCo, 2005):

- (a) The ability to use and to communicate knowledge in a disciplined, critical and creative manner.
- (b) The ability of interacting in heterogeneous groups of human beings
- (c) The ability to think, live and act autonomously.

2.3 METHODOLOGY

The line of research that we develop in this paper is based on play and games, action, experimentation and analysis. The work will be based on the following principles globalisation, meaningful learning, motivation, individualisation and flexibility, and generalisation/transfer of learning and functions.

As methodological strategies, the ones explained below will be present in our fieldwork: structured waiting (activities are also structured and require certain order and procedure: kneading, clay ironing and stamping); shaping, incidental teaching, positive support and visual aids by means of pictograms and pictures. During the process of the activity, student creativity and curiosity are fostered. They can and should generate other ways of learning by doing.

ORGANISATION: SPACE AND TIME

People suffering from autism spectrum disorder (ASD) have difficulties to understand the environment (classroom, school, home...). In this respect, it is suggested to establish a perfectly well structured organisation of space and time so that communication, anticipation and prediction of a particular future activity in addition to the memory of the previous activity so that students can become aware of the current activity. Hence, the key points are the organisation of space and time. For instance, for the space organization, it is possible to dedicate some places in the classroom to games, other places reserved to relaxation activities, a corner to tell tales, etc. And, accordingly, for the time organization, teachers can use pictograms, symbols, labels, etc. to help children with ASD to improve their social comprehension so that they can act autonomously.

SPACE

As indicated before, space and time structuring are crucial in our workshop: working spaces are clearly delimited by using pictograms and photographs (Tamarit et al., 1990) Clay workshop room is a wide and light classroom placed on the school first floor (40 square meters, approximately). There is a small ceramic furnace, an electric winch, a water tub, clay, enamels, rollers, wooden sticks, stamps, stamping templates, wooden shapes and organic materials to make textures (sticks, shells, etc.),

rubber and leather gloves, aprons, sponges, trays, brushes, plastic bags, towels and sponges to keep clay wet, etc. All the materials are placed on shelves and cupboards with signs and pictures posted on their doors, indicating what is inside them.

Three different areas (corners) can be distinguished in the room:

1. Clay corner: wide table with enough surface for clay modelling
2. Working corner: individual and/or collective tables to model and paint ceramics
3. Store room: big table and shelves where to place all items for dry and store them

TIME

Students attend the art workshop every Wednesday from 13 to 14. Time will be organised in a flexible manner so that all individual features of learners can be taken into consideration when realising their works. The schedule will be based upon routines and habits, anticipating actions with images or sequential pictures to facilitate comprehension. Working routine will be the following one:

1. Students begin by wearing their aprons and sitting on their corresponding seats
2. Teachers explain the task clearly, helped by visual aids
3. At the end of the session, materials are tidied up
4. Tables and cleared and cleaned
5. Learners wash their hands, put perfume on and get ready to leave

EVALUATION CRITERIA

Through this section, we indicate the different evaluation criteria divided in two categories: first, those concerning the learning evaluation criteria; and second, the ones involving the teaching side of the evaluation. Thus:

- a) **LEARNING EVALUATION CRITERIA**
 - To have initiative in group activities
 - To develop students' own self-esteem and self-concept
 - To progress in the knowledge of their own bodies and senses
 - To foster communicative intention
 - To develop oral language
 - To show growing interest when interacting with classmates
 - To improve adaptive behaviour
 - To show some progress when interacting with their environment and being part of it

- b) TEACHING PROCESS EVALUATION CRITERIA
- To obtain a positive initial evaluation
 - To respect students' learning ways and rhythms
 - To develop activities which motivate students
 - To create a good classroom atmosphere
 - To establish an adequate coordination among all professionals intervening in the teaching process
 - To create appropriate support modes
 - To offer adequate times, space and materials for each of the activities
 - To provide a sound coordination between the school centre and families
 - To set realistic objectives that adjust to the progress of the student accordingly
 - To employ ICTs adequately and sufficiently

RESULTS AND CONCLUSIONS

Once the programme was implemented, and with the results obtained and later transcriptions of observations, registration sheets and audio-visual materials, we entered an initial phase denominated Descriptive Analysis Phase. In such phase, all the collected information is synthesised and associated to the initially established objectives as well as to the research questions. Subsequently, the following phase is the Interpretative Phase of the aforementioned information.

QUANTITATIVE ANALYSIS

Learning process results (A = Always; N = Never; S = Sometimes)

Students	A			B			C			D		
	A	N	S	A	N	S	A	N	S	A	N	S
Evaluation Criteria												
To have initiative in cooperative activities	X				X		x					X
To develop self-esteem and self-concept	X			X			X			X		
To advance in the knowledge of their own body	X			X			X			X		
To develop an emotional learning and sympathy	X					X	X			X		
To develop communicative intent	X					X	X			X		
To trigger children's creative and imaginative skills	X				X				X	X		
To favour turn taking	X			X			X			X		
To improve coordination and eliminate stereotypes	X			X			X			X		
To foster oral language	X					X		X		X		
To show interest in interactions	X					X	X				X	
To improve adaptation behaviour	X			X			X			X		
To improve environment knowledge and their implication			X		X				X			X
To use clay as relaxing material	X			X			X			X		

Results obtained from observations to **A: Student 1, B: Student 2, C: Student 3, D: Student 4**

Teaching process results

Evaluation Criteria	Yes	No	Sometimes
Initial evaluation is appropriate	X		
Student personal learning rhythm is respected	X		
Activities are interesting for students	X		
Working environment is positive	X		
All professionals intervening have worked in a coordinated way			X
Support modes are adequate			X
Time, space and materials have been adequate for each activity	X		
Centre and family are coordinated	X		
Objectives are realistic and can change according to students evolution	X		
ICTs have been sufficiently and correctly employed	X		

QUALITATIVE ANALYSIS

From our perspective, the present proposal is an innovative intervention project where art and environmental relationships are key. Both activities constitute the means to achieve the objectives previously mentioned.

Moreover, from a deeper interpretation of our experiment, we conclude that our students have been in contact with modelling techniques that were new to them, together with artistic expression, communication through art, etc. By means of the proposed indicators, as well as with the information provided by the families, results show that students have considerably improved their self-concept and self-esteem. In addition, stereotypes are controlled and so is their adaptive behavior in the classroom; all communicative aspects have been improved. Our conclusions are in completely agreement with other previous experiences as, for instance, the case study detailed by Emery (2004) showing the importance of art therapy in the treatment of children with the diagnosis of an autistic spectrum disorder.

Regarding the teaching process some difficulties arose when coordinating and organizing all professionals participating in our proposal. Thanks to the specialists' effort and enthusiasm all problems were overcome. This is a pivotal point already recommended by other authors, as for instance,

Gerber and Fedorenko (2006). Thus, and in order to be successful teaching all the students in class, such a close collaboration between the art educator, an intervention specialist, and teaching staff is completely recommended. As claimed by Guay (2006) "Art teachers who need information or assistance should seek out peers and special education teachers willing to share their expertise and visit each other's classrooms, gather for discussion and support, and learn from each other" (p. 11). However, this collaboration was historically complicated due to scheduling issues and the lack of pre-service preparation for teaching students with special needs. Hence, and for the following year, we propose to implement an integrated activity within teaching units, so each student can work with their own group.

We claim that people with autism are able to create art and to communicate through it. An example of this are Martine Lorence's drawings in Belgium and Spanish Peter Meyer's pictures, all exhibited in the Second International Art Exhibition of People with Autism in 2000.

In conclusion, this project aims to provide new techniques and methodologies to obtain solutions to common problems. We should not forget that art and music are excellent means of communication, and that we should not establish barriers where there is not any.

REFERENCES

- American Psychiatric Association (2013). *Diagnostic and Statistical Manual of mental Disorders*. Fifth Edition. DSM-5. Washington DC. American Psychiatric Publishing.
- Bassols, M. (2006). El Arteterapia, un acompañamiento en la creación y la transformación. *Arteterapia. Papeles de arteterapia y educación artística para la inclusión social*, 1, 19-25. Retrieved from: <http://revistas.ucm.es/index.php/ARTE/article/view/ARTE0606110019A>
- Battaglino, L. (2007). Special education around the world. *Bridgewater Review*, 26(2): 11-14.
- Carvalho, M. (1995). *A arte Cura? Recursos artísticos en psicoterapia*. Campinas: Workshopsy.
- Duran, M. (2010). *Arte terapia o psicoterapia por el arte: qué es y cómo se aplica. Exposición ilustrada con un estudio de caso*. Retrieved from: <http://alquercus.webcindario.com/alq05/datos/Arte%20Terapia%2000%20psicoterapia%20por%20el%20arte%20Magdalena%20Duran.doc>

- Emery, M. J. (2004). Art therapy as an intervention for autism. *Art Therapy: Journal of the American Art Therapy Association* 21(3): 143-147.
- Evans, K., Dubowski, J. (2001). *Art therapy with children on the Autistic Spectrum: Beyond words*. London and Philadelphia: Jessica Kingsley.
- Fernández Añino, M.I. (2003). Creatividad, arte terapia y autismo. Un acercamiento a la actividad plástica como proceso creativo en niños autistas. *Arte individuo y sociedad*, 135-152.
- Gerber, S. & Fedorenko, J. (2006). Building collaborative partnerships. In Gerber, B.L., & Guay, D.M. (Eds.) *Reaching and teaching students with special needs through art*. (pp. 161- 176). Reston, VA: The National Art Education Association.
- Gimeno Sacristán, J. y Pérez Gómez, A. (1992). *Comprender y transformar la enseñanza*. Madrid. Ediciones Morata.
- Guay, D. (2006). Special needs students in the art room: a journey. In Gerber, B.L., & Guay, D.M. (Eds.) *Reaching and teaching students with special needs through art*. (pp. 3 - 14). Reston, VA: The National Art Education Association
- Hogan, S. (2001). *Healing Arts: The History of Art Therapy*. London: Jessica Kingsley Publishers
- Miguel Serrano, M.D. (2008). *Arte en la escuela. Un espacio de arte para la educación*. Retrieved from: <http://arteterapiacurso.blogspot.com.es/2008/12/arteterapia-en-la-escuela.html>
- Núñez Corral, A.B. (2009). *Arteterapia orientada a personas con autismo. "Ciento quince muy bien"* (Case Study). Organisation for Economic Co-operation and Development (2005). *Definition and Selection of Key Competences - Executive Summary*. Retrieved from <http://www.deseco.admin.ch/bfs/deseco/en/index/02.html>.
- Pérez Gómez, A. I. (2012). *Educarse en la era digital*. Madrid: Morata. Retrieved from: <http://es.scribd.com/doc/209547416/Arterapia-y-Autismo>
- Rivière, A. (2001): *Autismo. Orientaciones para la intervención educativa*. Madrid, Trotta.
- Rubin, J. A. (2010). *Introduction to art therapy*. New York: Routledge/Taylor & Francis Group.
- Rotatori, A. F., Bakken, J. P., Burkhardt, S., Obiakor, F. E., Sharma, U. (2014). *Special Education International Perspectives: Practices Across the Globe Volume 28 (Advances in Special Education)*. London: Emerald.
- Tamarit, J., De Dios, J., Domínguez, S., Escribano L. (1990). *PEANA: Programa de estructuración ambiental en el aula de niños/as con autismo*. Retrieved from <http://www.ite.educacion.es/formacion/materiales/185/cd/unidad>

[_8/material_m8/programa_peana.pdf](#) Decree 254/2008, first of August, by which the curriculum of the second phase of pre-school education is established in the Autonomic Region of Murcia.

Decree 286/2007, seventh of September, by which the curriculum of primary education is established in the Autonomic Region of Murcia.

Decree 359/2009, thirtieth of October, by which attention to diversity is established and regulated in the Autonomic Region of Murcia.

Decree 198/2014, fifth of September, by which the curriculum of primary education is established in the Autonomic Region of Murcia.