

Messy Play as a Therapeutic Program for Autism Spectrum Disorder

A. Teza¹ & A. Vafeiadou²

¹ Master of Science in Adapted Physical Education, Special Vocational Education and Training School (EEEEK) of Serres, Greece. Email: aretonik@yahoo.com

² Higher School of Fine Arts, Greece. Email: annavafeiadou78@gmail.com

Correspondence: A. Teza, Master of Science in Adapted Physical Education, Special Vocational Education and Training School (EEEEK) of Serres, Greece. Email: aretonik@yahoo.com

Received: July 22, 2026
doi:10.65343/erd.v2i3.124

Accepted: August 20, 2026
URL: <https://doi.org/10.65343/erd.v2i3.124>

Published: August 26, 2026

Abstract

The present Messy Play program was implemented at the Special Education and Vocational Training School of Serres (EEEEK of Serres) and was addressed to students with Autism Spectrum Disorder (ASD). The aim of the program was to utilize sensory and experiential play as an educational tool to enhance students' s active participation, autonomy, communication and social interaction. Through structured yet flexible activities, students had the opportunity to explore different textures, colors, materials and sensory stimuli, while engaging in free experimentation and self-expression. The activities were adapted to each student' s individual sensory profile, abilities, preferences and pace of participation with an emphasis on creating a safe and predictable learning environment. Participation in the program provide opportunities for sensory exploration and regulation, development of fine motor skills, enhancement of attention, expression of emotions and communicative intentions, as well as the development of cooperation and interaction skills. At the same time, the emphasis on the process rather than the final outcome allowed students to experience play as an enjoyable and creative activity. The implementation of the program highlighted the potential of Messy Play as a flexible, inclusive and student-centered educational approach in the education of students with autism, providing meaningful opportunities for exploration, self-expression, communication and social participation.

Keywords: Messy Play, sensory exploration, experiential learning

1. Introduction

The education of students with Autism Spectrum Disorder requires the development of a learning environment that responds to their individual needs, abilities and characteristics. Sensory processing, communication, social interaction, attention and active participation in the learning process are important areas that can be supported through appropriately designed experiential and play-based activities. Messy Play, as a form of sensory and experiential play, provides children with opportunities to freely explore different materials, textures, colors and sensory stimuli through the use of their bodies and senses. The process of free exploration and experimentation creates an environment in which children can develop autonomy and creativity without the pressure of achieving a predetermined outcome. For students with autism, the use of sensory-based activities can provide meaningful opportunities for exploration, communication and interaction, while also promoting participation with a safe and supportive environment. Furthermore, allowing students to choose materials, ways of engaging and their level of participation enables activities to be adapted to each student's individual preferences and sensory needs. Within this context, the Messy Play program implemented at the Special Education and Vocational Training School (EEEEK) of Serres was designed to harness the potential of play and sensory experiences as a means of enhancing the active participation of students with autism. Through a series of structure and individualized activities, the program aimed to create an enjoyable, safe and inclusive learning environment in which each student could explore, express themselves, communicate and interact in their own way and their own pace.

The purpose of the scenario is for the students to:

The purpose of this teaching scenario is for the students, with regard to:

The Motor Domain

- ✓ Develop fine motors through squeezing, pouring, mixing scooping, grasping and manipulating materials.
- ✓ Support gross motor development through larger movement-based activities

The Moral - Emotional - Social Domain

- ✓ Support emotional expression, self-confidence, self-esteem, sense of achievement, enjoyment and

emotional regulation.

- ✓ Encourage interaction with peers, cooperation, sharing, turn-taking, joint attention and participation in group activities.
- ✓ Create natural opportunities for verbal and non-verbal communication, expressing preferences and needs, requesting materials, following instructions and developing vocabulary.
- ✓ Increase motivation, active participation, curiosity and sustained engagement by making learning enjoyable and meaningful.
- ✓ Encourage students to make choices, initiate activities and complete simple tasks independently.
- ✓ Reduce anxiety and tension.
- ✓ Develop a sense of autonomy and control.

Cognitive Domain:

- ✓ Promote problem-solving skills, cause and effect understanding, attention and concentration.
- ✓ Enhance the creative thinking, cognitive flexibility and learning through exploration.

The Experiential / Sensory Domain

- ✓ Provide opportunities to explore different textures, temperatures, smells and consistencies in a controlled environment.
- ✓ Support sensory awareness and tolerance of different sensory experiences.
- ✓ Promote learning through direct experience, active, participation, exploration, discovery and hands-on learning.
- ✓ Encourage imagination, creativity, self-expression, choice-making and independent exploration without necessarily having a “right” or “wrong” outcome.

2. Description of Teaching Practice

Messy Play is a child-centred, sensory-based teaching approach that encourages children to explore, experiment and learn through sensory experiences using a variety of open-ended materials. During the teaching practice the teacher create as safe and stimulating environment where the students could freely investigate materials such as water, natural objects and other age-appropriate resources. The activities were designed to support students creativity, curiosity and confidence while allowing them to learn through hands-on exploration. The teacher act as a facilitator, guiding students through open-ended activities that foster curiosity, communication, collaboration and independent thinking. The teacher encourages the children to touch, squeeze, pour, mix, splash and manipulate the materials in their own ways. Rather than directing the students towards a specific final product, we focused on the process of exploration and allowed them to make their own choices. Throughout the activity, the teacher observed the children closely and supported their learning by asking open-ended questions, introducing new vocabulary and encouraging them to describe what they could feel and discover. We also promoted cooperation by encouraging children to share materials and participate alongside their peers. Messy Play provide opportunities to develop a range of skills, including fine and gross motor skills, sensory awareness, communication, problem-solving, social interaction and creative thinking. Finally, the self-check style is implemented (self-assessment and criteria cards, Tables 1 & 2).

Table 1. Self-assessment of students

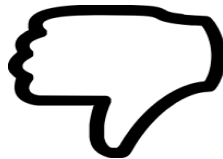
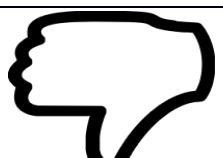
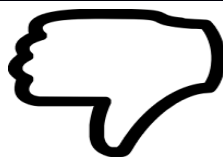
	YES	NO
Did I enjoy today' s messy play activity?		
Did I try something new or different?		
Did I work well with my classmates?		

Table 2. Evaluation of the learning teaching

	YES	NO
Were the materials appropriate, safe and engaging?		
Were all children able to participate according to their individual needs and abilities?		
Did the teacher provide appropriate guidance while encouraging independent exploration?		

3. Conclusions

- The script could, with the appropriate modifications, be applied and to students with a diagnosis of different types of disabilities.
- The present script could be implemented cross-curricularly in collaboration with the school's occupational therapist.

References

- Bundy, A. C., Lane, S. J., & Murray, E. A. (2020). *Sensory integration: Theory and practice* (3rd ed.). F.A. Davis Company.
- Ginsburg, K. R. (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*, 119(1), 182-191. <https://doi.org/10.1542/peds.2006-2697>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological process*. Harvard University Press.

Annex

Teaching Script: Identity

IDENTITY OF THE TEACHING SCENARIO

Title: Messy Play as a Therapeutic Program for Autism Spectrum Disorder

Educational Level-Class: Inclusive instruction involving students from different classes of the Laboratory of Special Vocational Education and Training (E.E.E.EK.) of Serres

Involved Cognitive Areas and Combject Areas:

Subject Area: Moral - Emotional - Social Education

Thematic Field: Experiential / Sensory

Thematic Unit: Alternative Forms of Exercise and Recreational Activities

General Expected Learning Outcomes: Learning, Exploration, and Discovery

ORGANIZATION OF TEACHING AND REQUIRED HARDWARE INFRASTRUCTURE

Class organization: The teacher acts as a facilitator, organizer and observer. The teacher prepares a safe and stimulating environment, provides appropriate materials, encourages exploration and creativity, supports students according to their individual needs and observes their development and participation.

- In the present scenario, the classroom environment should be carefully arranged to ensure safety, accessibility and opportunities for free movement. Materials should be organized in a way that allows students to access and use them as independently as possible, while taking into consideration each student's individual sensory, motor and communication needs (Bundy et al, 2020).
- Within an inclusive education framework, messy play activities can be implemented individually or in small groups, depending on student's abilities and needs. The teacher acts as a facilitator and supporter of learning, providing appropriate guidance and assistance while encouraging students' initiative, creativity and active participation (Vygotsky, 1978; Ginsburg 2007).

Educational Material

The school dining hall will be utilized. The selected activities will be individual in nature.

Nature materials: sand, soil, leaves

Sensory materials: rice, pasta, pulses, foam, jelly, water and dough

Art materials: paints, brushes, sponges, paper, glue

Containers and tools: bowls, spoons, tweezers, containers and funnels

Reusable materials: plastic toys, figures, moulds and building funnels.

DETAILED DESCRIPTION OF THE TEACHING PROCESS

Homework (40')

The teacher, in collaboration with the students' parents, sends a link containing a YouTube video titled "*Keeping Play Areas Safe and Clean*" (YouTube-duration approximately 8'19'').

Thematic Unit 1: Messy Play-Halloween

Halloween Magic World-Sensory Exploration through Messy Play

Students participate in a Halloween-themed sensory play environment. They explore sensory trays containing materials such as coloured rice, corn, pasta, foam, natural materials and Halloween objects (pumpkins, spiders, bats and decorative items). Students are encouraged to touch, mix, sort, transfer, create and experiment with the

materials according to their abilities and interests. Activities include creating “magic potions”, searching for hidden Halloween objects and design their own Halloween creatures using playdough and sensory materials. (Picture 1).



Picture 1

Thematic Unit 2: Messy Play-Exploring the Ice Age through Sensory Play

The classroom is transformed into an Ice Age sensory environment. Sensory trays include ice cubes, artificial snow, water, white and blue playdough, cotton wool, transparent acrylic gems and small Ice Age animal figures such as mammoths, saber-toothed tigers, reindeer and woolly rhinoceroses. Students are encouraged to touch, explore, sort, transfer, build and experiment with the materials. They search for hidden animals trapped in the ice, rescue them using different tools, create frozen landscapes and construct their own Ice Age habitats (Picture 2).



Picture 2

Thematic Unit 3: Messy Play-THE Little Architects in the Sand

This messy play activity invites students to explore sand through hands-on, creative and sensory experiences. Using sand, water, buckets, shovels, molds and other natural materials, children design and build their own castles, towers, roads and imaginative structures. Throughout the activity, they experiment with different textures, solve simple construction challenges and collaborate with their peers. The teaching practice promotes sensory exploration, creativity, fine and gross motor skills, problem-solving, communication, teamwork and language development (Picture 3 & Picture 4).



Picture 3



Picture 4

Possible Extensions -Adaptations of the Teaching Scenario

- The script could, with the appropriate modifications, be applied and to students with a diagnosis of different types of disabilities.
- The present script could be implemented cross-curricularly in collaboration with the school's occupational therapist.

Copyrights

The journal retains exclusive first publication rights to this original, unpublished manuscript, which remains the authors' intellectual property. As an open-access journal, it permits non-commercial sharing with attribution under the Creative Commons Attribution 4.0 International License (CC BY 4.0), complying with COPE (Committee on Publication Ethics) guidelines. All content is archived in public repositories to ensure transparency and accessibility.