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THE STUDY OF DRAWING AND PAINTING ABILITIES IN PRESCHOOL CHILDREN

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Abstract: the aim of this research is two-fold: first, to offer preschool children new learning situations in order to develop their drawing and painting abilities and second, to learn new techniques in a shorter period of time. The paper is grounded in the theory of creativity. Creativity is defined as the ability to propose something new, original and accurate. The research hypothesis states that if preschoolers are offered clear instructions on drawing/painting and are carefully monitored during fulfillment of the task, then they develop new drawing and painting abilities in a shorter period of time. The independent variable is the working task, while the dependent variable for this study is the final output. The sample consisted from 15 children enrolled during 2011-2012 at "Raza de Soare" Kindergarten Cluj-Napoca. The content of the drawings included specific topics related to natural sciences: flowers, leaves etc.. 12 experimental learning contexts were proposed. The research hypothesis is confirmed. We concluded that future research should consider fewer instructions in order to allow children to internalize the working tasks. Also, this will also facilitate the statistic measurement of the progress.

Key words: abilities, preschool children, progress

1. Introduction

The problem of interest

In this paper we analyzed the progress children make in developing specific drawing and painting abilities. The learning context was proposed by a graduate student from Art Highschool and currently training as a future teacher in Elementary and Preschool Education. We started from the assumption that children can develop easily their abilities if they are supervised by a competent person in visual arts.

We asked ourselves how we can support children in learning in a shorter period of time new drawing and painting techniques. We noticed that children like to draw familial elements; therefore we chose content related to their proximal environment (themes from natural sciences). Preschoolers draw these elements in an age-appropriate manner [2]. In this research we did not aimed at developing creativity, but we focused on children following the precise instructions given. They had to use materials in a correct manner and to be efficient as possible in terms of time and working space. In this experiment we aimed to help children in working properly, in being careful with their compositions, in accurate and realistic placing elements on the paper, in being flexible in combining shapes and colors. We monitored the individual progress from one task to the other. We also focused on the manner these abilities could be developed also by teachers. They will need to further support children in their educative activities.

Several premises also informed the tasks we proposed. We analyzed the drawings and paintings that were delivered by children at the end of the each learning situation. We focused on what tasks the national curriculum is proposing children. Two main questions emerged: Are preschool teachers aware of the importance of the task in developing abilities? Are preschool teachers offering tasks that stimulate specific skill development or the tasks are chosen randomly? We studied the characteristics of children drawings at different ages and we identified the main steps. We were interested in how do children draw, what they draw, if they like drawing, what and who influences them more, what are the connections between their representations and their acts.

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Starting from these problems we aimed to study the manner we can develop flexibility in drawing and painting for preschool children. Five indicators were followed: skillful, flexibility, elaboration and synthesis.

Theoretical background

In different dictionaries, the term 'ability' is used with several different meanings: skill, know-how, capability [4]; skillful character; capacity to carry on everything in a easy and good manner; dexterity; skillful; ingenuity and finesse [5]; the quality of being skillful; dexterity; know-how; aptitude in doing something [6].

Intellectual or motric ability is learnt manner in replying adequate to a series of specific tasks [3]. Opposed to 'capacity', 'ability' has several specific attributes: is the result of the learning process while capacity might be inherited at birth and is developed later on; compared to capacity which might be placed at different developmental levels, ability is a procedural knowledge that reached the highest level of perfection; unlike capacity, which is hidden, ability is visible; if capacity can not be evaluated, ability can be assessed and measured in a specific way [1].

Procedural knowledge (abilities) can be developed only if the child is placed in a stimulating environment [1]. In order to develop them, the author also points that learning situation should be offered. The following table is an example of these learning steps mediated by the teacher.

Table 1. *Educational interventions that stimulate development and consolidation of abilities* [1]

Phases	Steps	Teacher's activity	Student's activity
Acquiring procedural knowledge	I. Cognitive step	Reveals the specific situation (case, problem).	Perceives and codifies the situation.
		Places the procedure and the ability in a significant context.	Does not know the procedure (technique).
		Explains the relevance of the procedure and the ability.	Codifies the relevance of the procedure, ability and the expected output.
		Demonstrates/shows the procedure (technique).	Perceives the procedure (technique) as a whole.
		Describes and executes the procedure (technique) in small steps.	Perceives the procedure (technique) in small steps.
			Codifies the actions for every step of the procedure (technique).
		Answers the questions.	Asks questions, requires additional clarifications.
	II. Associative step	Offers instruments to practice prior abilities (games, questions, graphs).	Fill in the tasks.
			Corrects the errors.
		Offers the context and the means to practice the procedure (technique).	Executes the procedures for every step.
		Observes and evaluates the procedure chronologically.	Corrects the errors.
Consolidation of procedural knowledge (ability)		Offers a context to apply the procedure (technique).	Self-evaluation.
		Demonstrates and explains one more the procedure (if the students did not acquire it).	Compares the procedure with the teacher's.
			Identifies and corrects the errors.
		Offers new contexts (exercises) to apply the procedure (technique).	Applies the procedure (technique) in the new context.
			Applies the procedure (technique) in a correct manner, autonomous, and less aware of the rules to follow (automation, refining, improving the procedure).

A procedural knowledge, an ability, a capacity can be developed through exercises in different contexts [1]. The students must be transposed in different learning contexts with different learning content in

which they will apply different learning techniques. The student acquires procedural knowledge and develops the abilities through active learning. The result of this active process is a personalized output. The actions that children carry on in order to develop abilities related to painting are similar to the actions carried on by artists. The main method employed is exercise.

2. Method

Aim

The objective of the research was two-fold: first, designing, organizing and carry on activities aiming at developing abilities related to painting for preschoolers and second, learning new painting techniques with little time resources. The outputs were evaluated for the efficiency of the learning process involved.

Research design

The hypothesis of the current research stated that *preschoolers who receive clear instructions on painting and are closely monitored by a competent person, display good abilities in painting and drawing and learn new techniques in a shorter period of time*.

The working task represents the independent variable, and the output for each painting is the dependent variable.

Participants

During the school year 2011-2012 an educative activity was carried on with 15 children from the "Raza de Soare" kindergarten (Cluj-Napoca). The activity was moderated by Andreea Rus. Children were selected from a group of 29 children enrolled at the kindergarten. The level of development for intellectual capacities of children was heterogeneous distributed among the sample.

Procedure

In order to test for the baseline, during October 2011 we applied the initial test to the experimental group. At the initial test each child drew a picture for 30 minutes. We evaluated the general aspect and the composition. Each drawing was graded as follows: *skill* - 1-2 points for the manner of using the materials; *elaboration* - 1-2 points for the accuracy of the execution; *flexibility* - 1-2 points according to the differences among children's drawings (qualitative evaluation); *synthesis* - 1-2 points according to the general layout of the compositions. By adding these scores, the total score ranged between 4 and 8.

During the formative experiment, we involved children from the experimental group in 12 learning situations. Several contexts were offered and several painting and drawing techniques were employed: painting by folding the paper ("Butterfly" and "Sun"), painting using toothpaste ("Blossoming tree"), painting by finger-print ("Leaves"), painting using dots ("Peacock"), drawing circles ("Ladybug"), wet painting with salt ("Lizard"), painting by pulling a wet thread ("Morning glory flower"), paining with the finger ("Field with flowers"), painting by blowing color ("Flowers"), painting wet on wet ("Clouds"). For each case we followed all the steps presented in table 1. Children were given specific instructions to follow when they draw. These were acting both as restrictions and as directing learning to specific techniques.

In their drawings children used as model objects placed in the classroom, objects form the environment, other paintings that were previously analyzed with the teacher.

This paper describes the learning contexts and the conclusions drawn from these. During the experiment we measured the degree children followed the given instructions, the manner of working – the degree they used the techniques and their level of development. For data collection we used systematic observation. After the paintings were received we conduct content analysis. The results were then interpretated.

The research ended in January 2012 with a final test. Each child drew something for 30 minutes. These outputs were then compared to the initial compositions.

3. Results

At the initial drawing test, children from experimental group obtained the following results (Fig. 1). Figure 2 presents results from the initial painting test.

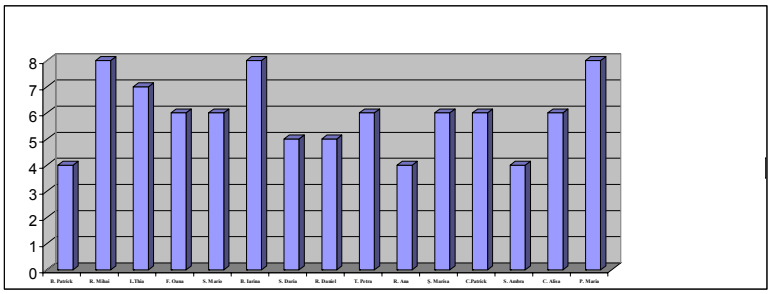

Figure 1. *Children's results to the drawing test*

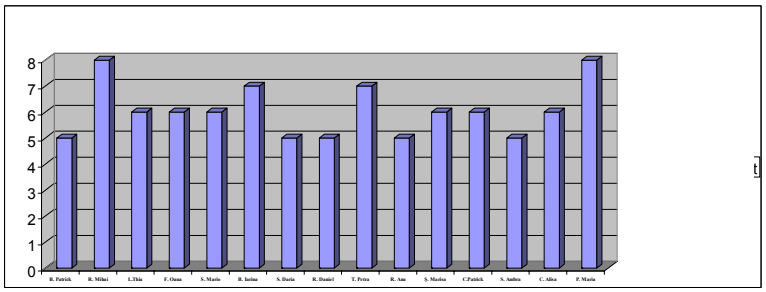

Figure 2. *Children's results to the painting test*

Based on the results from the initial drawing test, preschoolers were grouped into three samples: with minimal abilities (below 5.1 p) – 4 children, medium abilities (5.1-6 p) – 7 children, and high abilities (6.1-8) – 4 children. Similarly, according to the results from the initial painting test, children were also grouped into three samples: with minimal level (5 children), medium level (7 children), and high level (3 children).

Table 2. *The level of children's abilities to the initial drawing and painting test*

	Minimum level	Medium level	High level
Drawing test	4 children	7 children	4 children
Painting test	5 children	7 children	3 children

Fig. 3-14 presents children's outputs from the 12 learning situations they were exposed to. Several aspects emerged from the analysis of these compositions. In respect to *the level of flexibility*, we notice that children's compositions are similar; therefore they displayed low flexibility, but they followed all the instructions given. As for *skill* and *elaboration*, we notice the high level of execution; therefore we talk about a progress in these areas. We mention that children were asked to redo the composition if they were careless. For *synthesis* criterion we conclude that outputs are well done, the compositions are accurate and placed on the paper in an acceptable manner; therefore they also displayed a higher level of synthesis.

Figure 3. *Butterfly*

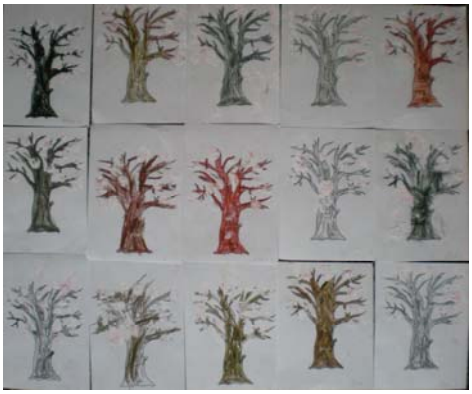

Figure 4. *Blossoming tree*

Figure 5. *Leaves*

Figure 6. *Peacock*

Figure 7. *Ladybug*

Figure 8. *Lizard*

Figure 9. *Morning glory*

Figure 10. *Blooming*

Figure 11. *Flowers*

Figure 12. *Field*

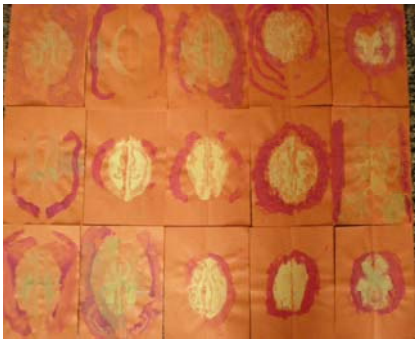

Figure 13. *Sun*

Figure 14. *Clouds*

The results from the final drawing test are presented in the figure 15, while figure 16 presents the final results at painting.

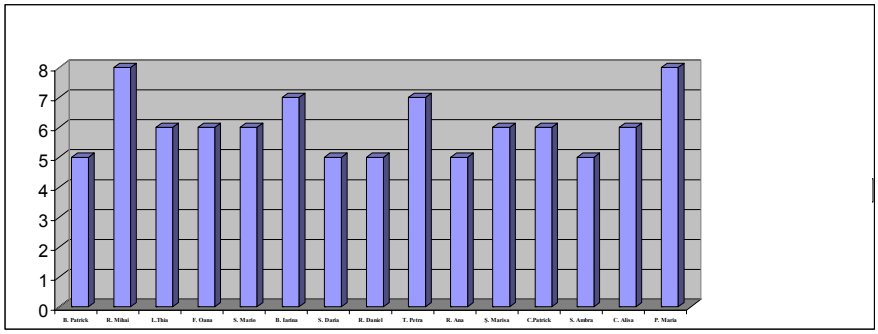

Figure 15. *Children's results at the final drawing test*

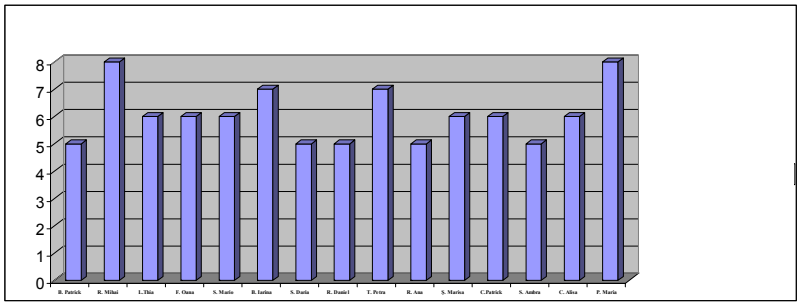

Figure 16. *Children's results the final painting test*

Based on the results from the final drawing test, 2 children displayed a minimum level of drawing ability, 6 children are placed in the medium range, while 7 have a high level. Similarly, at final painting test, 3 children have a minimum level, 6 have a medium level and 6 have a high level.

Table 3. *Results at the final tests*

	Minimum level	Medium level	High level
Drawing test	2 children	6 children	7 children
Painting test	3 children	6 children	6 children

In both cases we notice a raise of their abilities between the two tests.

Table 4. Results at the initial and final test

	Minimum level		Medium level		High level	
	Initial test	Final test	Initial test	Final test	Initial test	Final test
Drawing test	4 children	2 children	7 children	6 children	4 children	7 children
Painting test	5 children	3 children	7 children	6 children	3 children	6 children

A simple comparative analysis reveals that children obtained better results in the end. Therefore they progressed as the result of their involvement in the experimental learning situations. Their progress in noticeable in their drawings and thus is reflected in their final grade. Children learnt the new painting techniques and they developed the abilities up to a certain point. Therefore our hypothesis is confirmed.

References

[1] Dulamă, Maria Eliza (2009), *Cum îi învățăm pe alții să învețe*, Editura Clusium, Cluj-Napoca.

[2] Dulamă, Maria Eliza, Ilovan, Oana-Ramona, Vanea, Cornelia (2009), Study on the features of 6 and 7 years old children's drawings, in *Studia Universitas Babeş-Bolyai, Psychologia-Paedagogia*, 2, pp. 153-164.

[3] Dulamă, Maria Eliza, Ilovan, Oana-Ramona, Vanea Cornelia (2009), Several characteristic features of children's representations, in *Acta Didactica Napocensia*, vol. 2 nr. 4, pp. 75-90.

[4] *Dicționarul explicativ al limbii române* [DEX] (1998), Academia Romană, Institutul de Lingvistică "Iorgu Iordan", Editura Univers Enciclopedic, Bucureşti.

[5] *Noul dicționar explicativ al limbii române* [NODEX] (2002), Editura Litera Internațional, Bucureşti.

[6] *Marele dicționar de neologisme* [MDN] (2000), Editura Saeculum, Bucureşti.

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