

BUILDING MATH FAMILIARIZATION ACTIVITIES IN INTEGRATED ORIENT TO PROMOTE POSITIVE AND CREATIVE ACTIVITIES FOR PRESCHOOLERS IN THE NORTH MOUNTAIN OF VIETNAM

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Abstract. *One of the important contents in the preschool education program is the formation of mathematical symbols. Due to age characteristics, in order to help children understand and remember the initial knowledge of mathematics fully and accurately, building integrated activities is an effective and practical job. The article affirms that building integrated activities is a necessary task in the process of teaching preschool children to be familiar with mathematics; propose suggestions for preschool teachers to promote integration in teaching math in order to encourage the positivity and creativity of preschool children with the desire to contribute to improving teaching effectiveness in schools.*

Keywords: *integrated teaching, math symbols, preschool children.*

1. Introduction. The characteristic of teaching "Forming mathematical symbols for preschoolers" is through organizing fun activities for children to understand and train the necessary knowledge and skills, thereby promoting the positivity, initiative, and creativity of preschoolers. "Forming elementary mathematical symbols for children contributes to intellectual development, comprehensive personality education, and preparation for children's elementary school education" [1]. In order to ensure that children can fully and accurately receive symbols of mathematical knowledge, the construction of activities in the direction of integration in teaching preschoolers to familiarize themselves with mathematics will make the lesson more vivid and attractive, helping mathematical symbols to be formed in children in a more natural and rich way [2]. Therefore, building activities in an integrated direction is a necessary task in the process of teaching preschoolers to familiarize themselves with Mathematics.

2. Integrated teaching perspective at the preschool level

Integration is understood in many different ways, with a wide, narrow range of differences:

- Understanding from a teaching perspective: Children's learning is done through participation in activities that

integrate diversity in the child's environment, ensuring the alignment of knowledge areas by organizing educational program content into topics and integrating multiple subjects in one activity. In the process of discovering an object, a phenomenon, a young being simultaneously discovers many different areas of knowledge, intertwined.

- Understanding from the perspective related to the development aspects of children: Integration is understood as the interweaving of educational aspects, at the same time, it can be in the same teaching and learning activities we accomplish many development goals. The goal is to form in children the psychological functions, the initial basis of personality, the capacity to be human: emotions, social relationships, cognition, language, physical development.

- Understanding from the perspective related to the form of teaching organization: Educational activities for children are carried out through many different forms. Based on the purpose, content, operating conditions, spatial location, and number of children in a class, teachers select certain specific forms to suit teaching activities.

- Understanding from the widest perspective: Integration is understood as a new teaching approach. Teaching is based on children's interests. It also allows teachers

flexibility in planning lessons and assessing children's activities.

3. Contents of math symbols to be formed for preschoolers

The content "Forming math symbols for preschoolers" is built on 5 basic areas. These contents are concretized in the Child Care - Education program [3].

- Symbols about sets, numbers, and counting: there are contents from simple to complex. Firstly, children are taught to recognize the singular and the plural; to arrange according to the rules, and quickly recognize the rules of the sequence. Next, they are taught to count numbers and form generalized representations of numbers within 10. We teach them to compare, add, subtract, and understand the interrelationships between adjacent numbers in the sequence. Finally, children are taught how to separate groups of objects with numbers within 10.

- Symbols of shape includes sensing the shape of objects and geometric figures; recognizing, naming, and grasping the characteristics of shapes: square, circle, triangle, rectangle according to pattern and name; recognizing, naming and grasping the surface features of the shapes: sphere, cylinder, square and rectangular block.

- Symbols of size: Preschoolers are acquainted with, recognize, name the sizes of large - small, long-short, high - low objects. They know how to compare the size, length, width, and height of two objects.

- Symbols of spatial orientation: children are taught how to distinguish, how to recognize the names and placement of parts of the child's body; Define right and left hand. Children know to identify directions: above - below, in front - behind, right - left side of themselves and others.

- Symbols of time: We equip children with systematic knowledge (in the form of symbols) about time such as day, week, month, season, year. In addition, we form in children the activity of comparing and measuring time with the use of calendars and hourglasses, the attitude about time, knowing how to use time rationally and economically.

Many studies show that young children already have a basic understanding of math at preschool age. As well as counting, children can do simple arithmetic, solve problems

(such as puzzles), orient themselves in space, demonstrate skills in geometry, and use logic. Anthony G. and Margaret W. asserted: "Their mathematical thinking is also proven, including demonstrating a number sense and a sense of probability, and carrying out spatial and geometric reasoning" [4].

4. Actual situation of activities of teaching children to become familiar with math in an integrated direction

We have investigated the actual situation of organizing the process of forming mathematical symbols for children at some preschools in Thai Nguyen, Bac Can, Cao Bang, and Ha Giang provinces. In fact, the majority of teachers (accounting for about 88%) are aware of the important role and necessity of forming math symbols for preschoolers. However, their awareness is not complete and profound about the task of this process.

Some teachers (accounting for about 34%) think that it is only necessary to equip children with the knowledge and skills specified in the program to complete the task. The knowledge of mathematics and methods of forming mathematical symbols for children of the majority of preschool teachers is very limited, the physical conditions are poor, the number of children in each class is large (25-30 children / 1 class) so preschool teachers spend their time and energy taking care of the children, the teaching is mostly formal and imposing, the teaching methods are monotonous and less creative.. ., so the mathematical symbols formed in children are still inaccurate, not systematic. They are less interested in learning math. The level of applying mathematical knowledge and skills to recognize math symbols in different activities of children in daily life is still low. The content "Forming math symbols for preschoolers" specified in the preschool education program is applicable to all children in preschools in Vietnam, so it is not really suitable for children in mountainous areas. The cognitive ability, physical conditions and qualifications of teachers in different regions are still different. Teaching in the direction of integrating math education content for children with other educational contents according to educational topics close to children has been conducted in many pre-

schools, but the results are still not really satisfactory desire. In some preschools, many teachers do not clearly see the role and position of building math familiarization activities in an integrated orient and have not understood the measures to organize learning activities in an integrated orient. Classes are also organized according to a rigid pattern. Children passively memorize math symbols. Failing to promote children's positivity, initiative, and creativity during school hours. Therefore, it is necessary to improve lessons, build learning activities in the orient of integrating learning contents to help children absorb lessons better. Exciting and less stressful class hours are suitable to children's perceptions and promote the positive creativity of children in the acquisition of knowledge and skills.

The results of finding out the reality of the process of forming mathematical symbols for preschoolers in some of the above mountainous provinces are the basis for us to make some proposals to innovate this educational process.

5. Some recommendations to promote the positivity, initiative, and creativity of preschoolers through math familiarization activities in the integrated orient

In order to help preschool teachers promote their positivity, initiative, and creativity in teaching mathematics in the integrated orient, we offer the following suggestions:

- Preschool teachers need to determine the goals and choose the content of math knowledge and skills that need to be integrated in educational topics, which is convenient for building math familiarization activities for children according to their needs in the integrated orient

- Build an open learning environment. Preschool teachers need to innovate the way of decorating their classrooms to create an open-ended math environment suitable for each topic. This will create opportunities for children to experience activities and role-play with rich toys to acquire knowledge. Preschool teachers should take advantage of the math environment anytime, anywhere. It is necessary to give children the feeling that mathematics is not something very rigid and dry, just numbers, shapes, blocks, positions...

but math can be everything - phenomena around children. For example, when taking children for a walk in the garden, you can ask the child "how many roses are there in the school garden? How many flowers does this rose plant have?...[5]. The mathematical environment for children is very rich, if they know how to take advantage of it and include it in math instruction for children, the efficiency of lessons will be high, children can learn while they can play, children learn without recognizing as if they are learning.

- It is necessary to use attractive and reasonable visual aids. Visual aids play an important role in children's cognitive activities. Visual aids in preschool are toys, geometric shapes (flat geometric shapes: circle, square, triangle, rectangle, and cubes: sphere, cylinder, square and rectangular block), number cards (from number 1 to number 10), a set of cards with a number of round dots but arranged in different ways, Attractive beautiful objects that attract children's attention, curiosity and discovery, give them psychological comfort to absorb the content of the lessons. But exploiting visual aids must have a logical and logical relationship to the lessons.

- Use methods of games, folk songs, rhymes, puzzles in activities for children to get acquainted with math. Math familiarization activities also take place while children are told stories, read poems, solve puzzles or play in role-playing activities at preschools. Through listening to stories, reading poems, teachers conduct conversations with children about the mathematical elements contained in each story or poem. For example, after telling the story: "The story of banh chung and banh day", we can ask the children the following questions: How many people are there in the story? How many children does King Hung have? Or ask them to tell how Lang Lieu makes cakes? What kinds of cakes does Lang Lieu make? What shape are the cakes?...[6].

- Applying information technology to math familiarisation activities is also one of the effective measures to promote children's positivity. Teachers should exploit online materials and images in their lessons to help children become familiar with math in class. For example, when teaching children about

the number of animals, vivid images of animals appear on the screen with effects and sounds that attract children's attention. Teachers can design some games to reinforce math symbols for children such as the game Secret Door (When the door opens, the child must know how many objects are in that door?)... Applying software to set up creative games to attract children to activities during school hours is really useful.

3. Conclusion

Integration in teaching maths in order to promote the positivity and creativity of

preschoolers not only contributes to helping them master elementary math knowledge, but also helps preschool teachers promote their creative abilities in the process of caring and educating preschoolers, adjust teaching activities to ensure the progress of each child in the class they are in charge. Integration in the formation of mathematical symbols is an effective method to contribute to innovation and improve the quality of education in preschools.

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РАЗВИТИЕ МЕРОПРИЯТИЙ ПО МАТЕМАТИЧЕСКОЙ ФАМИЛИАРИЗАЦИИ В ИНТЕГРИРОВАННОМ ВОСТОКЕ ДЛЯ СОДЕЙСТВИЯ ПОЗИТИВНОЙ И ТВОРЧЕСКОЙ ДЕЯТЕЛЬНОСТИ ДЛЯ ДОШКОЛЬНИКОВ НА СЕВЕРНОЙ ГОРЕ ВЬЕТНАМА

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Аннотация. Одно из важных содержаний в программе дошкольного образования – формирование математических символов. В связи с возрастными особенностями, чтобы помочь детям понять и запомнить начальные знания математики полностью и точно, построение интегрированных заданий является эффективной и практичной работой.

В статье утверждается, что построение интегрированной деятельности является необходимой задачей в процессе обучения дошкольников математике; предлагать учителям дошкольных учреждений предложения по содействию интеграции в преподавание математики с целью поощрения позитивных и творческих способностей дошкольников с желанием внести свой вклад в повышение эффективности обучения в школах.

Ключевые слова: комплексное обучение, математические символы, дошкольники.