ORIGINAL RESEARCH PAPER

Implementation of teaching principles for the development of preschoolers' creativity through integrated activities in kindergarten

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Abstract

Preschool education provides the foundation for the formation of each individual's personality, facilitating the development of the mental processes necessary for integration in diverse activities, as well as the traits of will and character that support development. Identifying the specific characteristics of creativity at pre-school age and the psychopedagogical conditions which can stimulate or inhibit its development are essential guidelines for the educational process in nursery schools. The development of creative abilities, however, is achieved as a result of the design and implementation of activities geared to the psychosomatic characteristics of pre-school children, in accordance with the methodological, scientific and teaching aspects specific to the age level. Providing a didactically adapted legislative framework can ensure the success of activities and better results with pre-school children.

Keywords: early childhood education, preschool, creativity, didactic principles, psychopedagogical conditions

Introduction

The organization of the education system is based on the existence of legislative rules in force, but also on pedagogical aspects, which govern in the same sense the design and implementation of educational activity. The teaching principles are part of this normative framework, ensuring the applicability of content of an organizational nature in the teaching context.

"The principles are not identified with the laws, but they express their existence, having the role of guiding and regulating the activity of organizing and carrying out the educational process..." [Bunescu V. et al, 1982, p.89].

Also, Constantin Cucoş [Cucoş C., 2014, p. 63] distinguishes between institutional normativity and functional normativity, the first having to do with the organization of the educational process at a given moment, being more politically influenced, the second being concerned with the ability with which teachers design and carry out educational activities.

The system of didactic principles orients educational practice from a pedagogical, psychological and scientific point of view, particularizing learning situations in order to optimize the results of the learners. Given that their development must be in line with social requirements, an integrated approach to content is required from the point of view of forming complex, creative, easily adaptable personalities.

Materials and methods

Materials

Based on the study of the didactic principles of learning [Tiron E *et al*, 2019, p. 66-69, 4, p. 45-47], the principles of preschool education from the Curriculum for Early Education 2019 [MEN, 2019, p. 5] and the specifics of the development of human creativity, we propose the following principles for the effective development of preschoolers' creativity:

1. The principle of contextual assurance and compliance with psycho-pedagogical conditions: psychosomatic peculiarities of preschool children's development and pedagogical knowledge regulate the design and implementation of activities in kindergarten, so as to achieve maximum efficiency in the activities realized, achieving the proposed objectives.

The contextual provision of psycho-pedagogical conditions refers to the adaptation of tasks, content, ways of approaching learning, environmental conditions, type of approach to learning according to certain contexts that give specificity to certain moments in the activities, in accordance with the operational objectives pursued and with the aspects of psycho-somatic and affective development that the educator aims to develop in preschoolers. This respects individual characteristics, including those of age, in accordance with the child-centered learning principle referred to in the Curriculum for Early Childhood Education. This principle facilitates the individualization of learning, given that not all children have scientific interests and abilities and require more time to understand and solve tasks.

Contextually, the educator can go back to explaining and demonstrating the realization of a task or return to a concept, making sure that the preschoolers have a good understanding of it. These aspects are not included in the design, but can be realized during an activity depending on the receptiveness of the preschoolers.

Also depending on the evolution of the children's performance, more difficult tasks can be introduced or others can be made more accessible, leaving out certain aspects of content. If the pre-schoolers are particularly involved in the proposed activity, additional tasks and requests can be introduced to create problematic situations, stimulating the children's creativity.

The didactic design is based on general methodical aspects, taking into account the curriculum regulations, but it cannot foresee all the situations that may arise during an activity and to which the educator must adapt, calling on knowledge of pedagogy and child psychology.

Thus, the psycho-pedagogical conditions for the optimal development of integrated activities can be the basis of the design from the very beginning, but also the benchmarks according to which the educator regulates the instructional-educational process, depending on the context. Likewise, ensuring the conditions of the educational environment and the provision of appropriate materials is an important aspect of contextualizing the psychopedagogical conditions, since the teacher must take into account the ability of some preschool children to concentrate and to keep them away from disturbing stimuli, or to ensure their visibility and perceptive field for certain actions, depending on their specific disabilities.

Also, some pre-schoolers require more varied, richer, more suggestive material to grasp a concept or a skill, while others intuit actions and meanings more quickly. Identifying the psycho-pedagogical conditions for making educational activities more effective, integrating them into the teaching plan and referring to them throughout the educational process, and in particular ensuring that they are contextualized, are essential prerequisites for achieving better performance by pre-school children.

2. The principle of combining various forms of creativity and strategies of action in the development of preschoolers' creativity: in achieving the integration of content in order to develop preschoolers' creativity, the educator can use various forms of organization of activities, depending on the aims and selected content. The children can work individually, but also in pairs or small groups, by centers of interest, solving creative tasks.

The nature and type of the task differs according to the form of creativity towards which the educator is oriented. The joint updating of knowledge, the analysis of problems, the negotiation of solutions and the selection of the best option are all aspects that facilitate group creativity where the consolidation and transfer of knowledge and skills is not achieved individually.

Of course, group creativity does not exclude individual creativity, as the group is made up of different personalities, who contribute to solving the common task. In this respect, an important contribution is made by the teacher, who knows the individual characteristics of the preschoolers, their creative abilities, and can give specific tasks according to the potential of each preschooler.

Along with the right strategies to facilitate the development of critical thinking, the possibilities of combining and recombining the acquired skills, the ways of realizing activities based on creative learning can foster the development of creativity in preschoolers.

These strategies are based on discovering the content together with the children, intuiting the tasks that can be accomplished with certain materials, substituting some materials with others to accomplish given tasks, finding other working algorithms than the known ones, giving roles by rotation within the group creativity, stimulating learning through discovery, trial and error, using individual skills based on the theory of multiple intelligences, etc. Strategies also include the teaching style of the teacher, which can encourage discovery and the development of valuable products by suggesting details or aspects less visible at first sight.

3. The principle of maximum exploration of the child's intellectual, affective and motor potential: respecting the principle of systematization and continuity in learning, as well as that of conscious and active learning, it is required that any activity be designed taking into account the existing intellectual, affective and motor acquisitions of each preschooler, so that new content is "built" on the structure of the existing ones, providing the binder for the formative evolution.

Knowing the individual and age particularities of the preschoolers, the educator will take into account their bio-psycho-affective capacities in order to involve them in the activity at times when they could positively influence the learning of all the other children. The fact that a pre-schooler has in-depth knowledge in a subject area or has superior skills in performing a mathematical algorithm can be a learning advantage for other children, as it is known that pre-schoolers learn better and more easily from peers than from adults. Thus, these children could become resources to facilitate learning.

The possession of some skills can also bring with it more complex tasks that provide opportunities for creative expression. In order to ensure that preschoolers have a sufficiently broad range of knowledge and skills to enable them to draw on a variety of knowledge to develop their creativity, it is necessary to provide as many personal experiences as possible, through which children can assimilate concepts, form representations, acquire skills, learn rules and form algorithms. All of these aspects can only be achieved if the development of pre-school children is not only intellectual (cognitive acquisition), but also emotional (emotional intelligence, emotional balance, emotional motivation) and motor (skills, skills, fine motor skills).

The child expands its cognition space from the moment it is able to move on its own. Subsequently, the interactions they have with objects, the environment and adults lead them to diversify their activities, which contributes to the development of both gross and fine motor skills. Thus, all these experiences are sources of learning, cognitive, physical and skill development.

From this perspective, in integrated activities with mathematical content, it is necessary to provide tasks that address both the intellectual and the motor aspects, without omitting the emotional aspect, as the foundation of learning in pre-school children. Movement, interacting with others, manipulating objects, autonomy in action, independence in action are some of the characteristics of physical development that need to be taken into account when designing integrated work tasks.

The more the pre-schooler has the opportunity to explore by moving from his place, to interact, to experiment, to choose his own work materials, to look for motor solutions to solve tasks, the more his physical development will be optimized. At the same time, these experiences foster a range of experiences, emotions and feelings that can reinforce learning and help to build motivation.

As, in integrated activities with mathematical content, unlimited possibilities of knowledge transfer and interactions based on assimilated skills are facilitated, preschoolers have the opportunity to develop their intellectual potential at their own pace, discovering and realizing causal links, innovating strategies for solving tasks, operating with new algorithms.

4. The principle of motivating and stimulating creative behavior of pre-schoolers in formal, informal and non-formal activities: the cognitive and skill resources provided by all forms of education offer unlimited ways of combining and realizing creative learning, innovation and inquiry. All activities in which pre-schoolers are involved are inexhaustible sources of information and experiences which, when internalized, are transformed into material that can be used in the creative process.

Organizing and carrying out activities in an institutionalized environment, under the coordination of specialists, provides certainty about the information transmitted and the objectives pursued in the training of pre-school children. Educational partners, other environments which can facilitate learning, complement what is achieved in the organized nursery setting. Life experiences provide learning that can reinforce or to which preschoolers can refer in solving a creative task. Conversely, on a daily basis, they are

confronted with different concepts and terms, regardless of how learning is organized, so that they are prompted to use the specific knowledge and skills they have to adapt to new situations in everyday life.

In this way, the design of integrated activities in kindergarten creates the right environment for them to be creative by solving tasks by interest centers, drawing on mathematical knowledge and skills, through skills reinforced in non-formal or informal contexts. The same content can be activated and used in non-formal activities, when the pressure to give correct answers or display expected behaviors is reduced and children can express themselves freely and creatively using their mathematical acquisition.

Motivating and stimulating creative behaviors in each of the forms of education realizes a link and a unity of all the environments that influence the development of pre-schoolers, developing their interest in knowledge, investigation, finding solutions, learning through trial and error. The application of this principle guarantees superior performance in pre-school children's activities and in the development of their personalities, drawing on all the learning they have acquired in whatever form.

5. The principle of creating contexts of free expression and manifestation of children's actions in the process of accomplishing mathematical tasks: the development of preschoolers' creativity through integrated activities implies the pursuit of building a typology of creative personality, having as one of the main characteristics the ability to express and manifest freely, to interact and act independently, to search for their own solutions.

Given the fact that mathematics primarily develops logical thinking, the working concepts and algorithms need to be understood and assimilated consciously, which can be achieved through conversations, additional explanations, formulating helpful questions from preschoolers who should be used to ask them every time they do not understand or have a new idea.

The free expression in the action with objects can lead to the discovery of new working techniques, new algorithms, especially when they have at their disposal diverse materials from different centers of interest. Formulating one's own opinion on how to solve a problem, taking an attitude to the choice of teaching methods or solution strategy can lead to high performance in pre-school children's activities and also in their individual development.

The educator must facilitate the manifestation of these types of behaviors through the strategies approached, by stimulating and encouraging preschoolers to ask questions, to go back over the solutions given without being penalized when they are wrong, to propose invalid solutions or to try to transform algorithms or use materials in a different way from everything they have done up to that point, without being certain of success.

The identification of effective psycho-pedagogical conditions, adapted to the possibilities of action of preschoolers, as well as their provision in the context of applying principles directly aimed at developing the creativity of preschoolers will lead to superior performance in educational activity in terms of ensuring independence and initiative in action, active involvement in identifying solutions to solve problems in everyday life.

Methods

In order to put these principles into practice, a pedagogical model for an integrated approach to kindergarten activities has been proposed to facilitate the development of the creative personality of pre-school children.

The proposed integrated design model is derived from the Activities by experiential domains which, through integrated design according to the provisions of the Curriculum for Early Childhood Education, respects the methodology of each category of activity in particular, but distributes the specific actions of the stage of Achievement / Ensuring retention and transfer on areas of stimulation / centers of interest which, as their name also mentions, also taking into account the integration of content, not only thematic, favoring the development of skills necessary for the formation of the complex personality of preschoolers, mainly autonomy in action and creativity.

If on that day one activity aims to familiarize preschoolers with a new skill, and the other activity aims to reinforce some content, you can start with the educational approach focused on the formation of skills, and on the centers of interest to find the content, in task variants that propose their consolidation, along with deepening the newly learned skill. A balance between the cognitive and the practical is thus achieved by planning two activities that are different in terms of their impact on the development of pre-school children, without putting pressure on the exclusively cognitive or exclusively practical side. Planning activities in this way strikes a balance in the children's actions and their development, without over-emphasizing any one area of development.

From another perspective, the fact that the children are given the freedom to act on the centers of interest that they find interesting, creates pressure on the teacher in terms of task design for each of these.

The educator must ensure that, whatever area of stimulation the child chooses during the day, he/she has the opportunity to practise the intellectual and practical work skills that the teacher has proposed for the day, in close connection with the project theme, the experiential areas and the other planned activities. In this way, the principle of child-centered activities and respect for the child's individual pace of work is respected, while ensuring equal opportunities of access to the same content and skills.

Design has an essential aspect in this type of activity, all the more so as the integration of knowledge and skills to be practiced, translated into new situations, investigated and learned must be carried out, as a priority, on each center of open interest. With this approach, the preschoolers should not feel pressured to go to each center in turn, being free to linger at any center they wish, and the educator is certain that, whichever center the preschooler is placed, she ensures that the knowledge and skills integrated from the two activities are fixed in the two proposed experiential areas.

Moreover, at the stage of downloading activities by interest centers, the educator must ensure intradisciplinary and interdisciplinary integration, taking into account the specificity of each interest center. Thus, if a mathematics activity is integrated with a plastic education activity, the Science and Art centers will be compulsorily opened for practicing contents and skills, where a double integration will be achieved: at the Science center, in addition to the mathematical contents proposed by the mathematics activity, there will be at least one task that will practice the skill of plastic education, and at the Art center, in addition to the skill proposed by the plastic education activity, there will be at least one aspect of content from the mathematics activity. For other centers that do not correspond to the activities on experiential domains that have been planned, a triple integration is achieved, in that the activities at those centers will respect the aim pursued by the respective stimulation area in child development, to which will be added aspects from the activities on experiential domains that have been integrated. Practically, at the Construction center, the basic activity will be the manipulation of pieces in order to build an object, taking into account an aspect of mathematical content from the Mathematical Activity and solving a task that will be related to the skills of Plastic Education. It would be optimal to integrate a predominantly cognitive activity with a skill-building activity in order to achieve a balance in terms of the hygiene of the intellectual effort and to encourage the combination of theory and practice. The integrated design model we propose can be summarized as follows:



Figure 1 Integrated activity design model by experiential domains

The defining feature of all types of integration is the presence of a generic under the aegis of which the whole activity will take place. The theme, however, does not constitute the integration of content and skills, but merely provides a common theme that can be developed through different activities.

Obviously, all this approach will respect the time allotted by the curriculum, but also the provisions of the didactic principles according to which the age and individual characteristics of preschoolers must be respected, as well as ensuring accessibility and individualization in learning. In this respect, the educational approach, carried out under a unitary theme, will include transitions and routines to ensure a relaxing transition from one activity to another, from one type of organization to another, taking into account individual needs (going to the toilet, water break, etc.)

Through this integrated design model, the educator ensures that the preschooler, even if he/she will not be able to reach all the centers, will practice the knowledge and skills corresponding to the proposed experiential domain activities in any of the chosen stimulation areas. In this way, each child's own pace of work and interests in knowledge are respected: some children are attracted to certain centers and allocate extended time to accomplish tasks in them. At the same time, practicing and choosing the centers develops the preschoolers' independence in action, the teacher becoming only a guide who supports the children when they fail to accomplish the tasks. The proposed themes are subordinated to the proposed project, and the novelty of the day will become a benchmark for the whole day. Even if the approach to content takes on a different structure in the context of integration, the specific method of organizing and carrying out the instructional-educational activity in kindergartens must be a scientific constant in order to ensure logical and conscious assimilation, the only aspects modified in the above examples

being the reorganization of content and work tasks, and the teaching-learning-evaluation process.

Results and discussion

As with any model or strategy, the Integrated Design Model of activities by experiential domains has a number of advantages:

- it allows children to intervene in the activity, in accomplishing tasks at their own pace;

- gives children the opportunity to act in a relaxed, non-judgmental and non-judgmental environment;

- allows you to draw on knowledge and skills from more than one subject area to accomplish the given tasks;

- Pre-schoolers can allocate as much time as they feel is necessary to complete tasks, giving them the opportunity to revisit solutions and go through the process again until they are happy with the outcome;

- ensures the practice and reinforcement of knowledge and skills proposed by the Activities on experiential domains at all centers, regardless of whether preschoolers will be able to access all of them or not, achieving equity in education;

- facilitates the environment for the transfer into practice of the knowledge and skills proposed by the Experiential Domain Activities through diverse tasks, but with the same aim;

- stimulates cooperation, empathy, acceptance of different views by preschoolers;

- stimulates the development of representations and convergent thinking, which underpins the formation of divergent thinking, necessary for an anti-routine attitude and adaptable to diverse living conditions;

- respects the children's age-specific peculiarities in terms of attention span, ability to exert effort and preschoolers' possibilities of learning through age-specific action: play.

In addition to the advantages, there are obviously limits to the application of this model:

- the need for the teacher to develop observational skills and distributive attention in order to be able to carefully monitor the activities of all children when they are working on centers of interest;

- thorough professional training of teachers in terms of ensuring a variety of teaching strategies, from one day to the next, depending on the activities to be integrated and the centers to be opened;

- the need to design and provide a consistent volume of teaching material (made or selected from nature) for each center of interest where double or triple integration is carried out and different from one day to another;

- the difficulty for pre-school children to develop independent working skills and autonomy in action, as well as their compliance with the rules for working in a group (interaction, tone, character traits that facilitate cooperation, etc.)

- coordination of activities by focus by one teacher, without assistant/support person.

The change in the vision on the design of kindergarten activities comes as a result of external demands from society and international policies, which emphasize the development of autonomy and skills that enable the individual to integrate into social life

and the labor market, so that he/she can secure a decent and satisfactory standard of living. From this perspective, the educational ideal of pre-school education has undergone changes, covering the whole period from birth to 6/7 years and continuing with the vision of lifelong development.

Conclusions

Stimulation of individual creative potential is the result of a complex system of ways of organizing and carrying out educational activities, focused on stimulating curiosity, initiative in action, development of motivation and self-esteem. This development does not come about by itself with age, but requires continuous and organized stimulation and activation using a teaching strategy that promotes creative learning. If pre-school children are motivated and stimulated to express their own opinions and knowledge in a novel way, without being limited by the thought of making mistakes, they would no longer be hindered by the barriers imposed by conformity and the fear of making mistakes. It was found that the use of affective motivation, verbal as well as nonverbal appreciations, helped to stimulate the preschooler's creative behavior, together with the use of rich and attractive teaching materials, approving and participative attitude that amplified the creative process. The way in which activities are designed and carried out in the kindergarten is also an important factor in achieving better quality results

References

Bunescu, V., Giurgea, M. 1982. *Principles of organization and conduct of the educational process*. In Didactica (coord. D. SALADE). București: EDP, ISBN 978-606-31-0783-2

Cucoş, C. 2014. Pedagogy, Polirom Publishing House, Iaşi, ISBN 978-973-46-5156-6)

Ministerul Educației Naționale. 2019. Curriculum pentru educație timpurie, București, 42 pag.

Stoica, D., Stoica, M. 1982. *Psihopedagogie școlară*, Craiova: Editura Scrisul românesc, 1982, 217 p., ISBN/COD:3281981IPCRAPS

Tiron, E., Stanciu, T. 2019. Teoria și metodologia instruirii. Teoria și metodologia evaluare, București: Editura Didactică și Pedagogică, 280 pag., ISBN 978-606-31-0783-2