



Intellectual education preschool through integrated activities

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Abstract

Integrated activities lay the stress on the development of critical thinking, on the creation of practical competencies, on the qualitative aspect of education, on positive feedback, on measuring and evaluating competences. It cultivates independence, openness to innovation, positive emotions, self-control. Integration is achieved through a coherent script of the contents which correspond to the involved subject areas. The proposed contents have a common subject which is to be investigated and explained after going through the subjects and after achieving the proposed objectives. The integrated approach is a combination of the teaching/learning contents in an attractive and flexible manner which leads the child's activity towards investigation, documentation, research and practical application of the information acquired. The success of teaching integrated contents in kindergarten greatly depends on the degree of structuring the projected content as a whole with taking into account certain aims. The natural learning and the rigorous learning represent extremes which must co-exist within an integrated curriculum. Through approaching the activities in an integrated manner, the kindergarten teacher organizes the process of teaching as a director and helps the children understand and accept opinions, emotions and feelings, the teacher encourages them to be partners in the teaching process.

Keywords: integrated activities; teaching integrated contents; integrated curriculum

Zusammenfassung

Durch das Angehen der Aktivitäten in dem Kindergarten in einer integrierten Form organisiert die Erzieherin das Lehren wie ein Regisseur, indem sie den Kindern hilft, die eigenen persönlichen Meinungen und Gefühle zu verstehen, akzeptieren und zu fördern und sie sollen Partner an dem Lernprozess sein.

Der Vorschüler/Kindergärtner, indem er die integrierte Aktivität durchführt, hat die Möglichkeit die eigenen Meinungen auszudrücken, mit den Anderen zu kooperieren damit sie dann neue Ideen entwerfen, die sie zur Lösung einiger Aufgaben, in der Begründung, benutzen können, indem sie dann aktiver werden und so mehr Selbstvertrauen gewinnen.

Die integrierte Behandlung ist eine Verknüpfung der Lehrinhalte in einer attraktiven Form, flexibel, beweglich, die die Aktivität des Kindes zur Nachforschung, Dokumentieren, Forschung und die praktische Einführung des Gelernten, führt. Das Gelingen der integrierten Lehraktivität der Inhalte in dem Kindergarten hängt im grössten Teil von dem Grad der Strukturierung der geplanten Inhalte ab, in einer gesamteten Darstellung, indem sie einige bestimmte Endergebnisse verfolgt. Das Lernen in einer normalen Denkensart, einerseits und andererseits, das Lehren gemäss einer genauen Einteilung sind Extreme die in dem integrierten Kurrikulum nebeneinander existieren müssen.

Schlüsselworte: integrierte Aktivitäten; Unterricht integriert Inhalte; integriertes Curriculum

Intellectual education preschool through integrated activities

Through approaching kindergarten activities in an integrated manner, the kindergarten teacher organizes the process of teaching as a director and helps pupils understand and accept opinions, emotions and feelings, the teacher also encourages them to be partners in the teaching process. Through participating in integrated activities, the preschool pupils have the possibility of expressing personal points of view, of cooperating with other pupils in developing new ideas, in solving tasks, in supporting ideas, thus becoming more active and involved and gaining more self-esteem.

The proposed contents have a common topic which will be investigated and clarified after going through these topics and after achieving the proposed objectives. Thus, the integrated approach represents a successful mixture of learning contents in an attractive, flexible and active way which leads the pupil's activity towards investigation, documentation, research and the practical application of the learning contents. The success of teaching integrated contents in kindergarten greatly depends on the degree of structuring the projected contents in a unitary manner, taking into account certain finalities. The entire program is achieved through the educational game, the games are not chosen at random, they are rather organised ones, in which the pupil has the possibility of exploring different environments and of achieving different tasks, either individually, or in small groups. The role of the kindergarten teacher is that of organising the activity so as to offer pupils a large range of choices which enables the achievement of the objectives proposed at the beginning of the program.

Types of curricular integration

Specialized literature provides a series of models used for organising and monitoring the integrated curriculum.

a) The branched integration model – the main element of this model is represented by the studied topic, the detailed presentation of the learning experiences is achieved at the first level through the fields of activity included in the curriculum. A second layer includes the instruction experiences structured on different psychophysical individual dimensions: intellectual, affective, social, physical. Having in view the purposes established for these two levels, the teacher chooses the content which pertain to the main topic and which can contribute to the achievement of the purposes.

b) The linear integration model (the hybrid model) – at this level, the curricular integration is achieved via a transfer finality of „development of social behavior” type. Through their complexity and through the integrated specific character, these finalities can represent independent (sub)domains. This model of projection applies for long-term finalities and it is very suitable for projecting differentiated and individualized educational intervention which aim at recouping and development.

c) The sequential integration model – within this model the knowledge pertaining to the same topic is taught in a temporal sequence, yet the approach is different, the teacher facilitates the transfer of the information acquired from one field to another through comments, questions and tasks. The projection on topics, a current requirement in the Romanian preschool education, often highlights this type of curricular integration.

d) The model of infused curriculum – the specific feature of this pattern lies in the fact that it approaches different topics from the perspective of a temporary sphere of interest (for example a complex finality such as understanding the concept of (ir) reversible change, the time-change relationship, etc., the analysis of structures and the comparisons of natural structures with the ones created by human beings). This model can also have a permanent character (for example the study of an optional subject in a foreign language: personal development, in this case the content of learning is taught in English).

e) The model of network integration— represents the integration solution proposed by the Method of the investigation-action projects. Starting from the subject of the project, the children can opt for a network of topics and resources which are related to the main topic. The main field of the topic, as well as the related ones are transdisciplinary and they will be tackled as such. The disadvantage of this model is the fact that its application can increase the risk of multiplying the topic of the project beyond the possibilities of monitoring its solution. The design of the integration network model requires at least two levels of planning:

- The creation of thematic maps in which, starting from the central theme, the sub-themes to be approached are identified;
- The contents that will resolve the project theme will be conducted on categories and types of activities.

f) The polarization model - involves establishing a new area of knowledge (possibly an optional one) around which in order to achieve specific objectives segments of other disciplines are polarized. An example can be represented by the topic „Story time” in which the development of communication skills is achieved through exploiting the contents of the story from the perspective of the multiple categories of activities included in the curriculum.

The specific feature of the didactic game in achieving intellectual education of preschool children through integrated activities

The educational game represents the favorite activity in a preschool pupil's daily activity. While playing the child interacts with real objects or with their images, transposing certain roles and situations encountered in a family or external environment. The educational game also favours the children's intellectual development. Within this game activity there take place two categories of changes in the content and structure of the cognitive processes:

- On the one hand, while playing the child acquires new knowledge about the environment, he also acquires various forms of mental actions which have important influences on the development of perception, of the ability to memorize and of voluntary reproduction, generalization and abstraction;
- On the other hand the game favours the development of the child's imaginative skills, of the capacity of creating systems of generalized images which are typical for objects and phenomena. The game also empowers the child with the capacity of mentally combining these images, the child makes the operations with images as if they are with objects.

The game gives the child the opportunity of reconstructing and thus of reproducing in an intuitive active form, an extensive area of objective reality. For example, with the help of movements, while playing with toys, preschool child actively reproduces the nature and the content of social relations: maternal, occupational, household, etc. This happens when a little girl imitates her mother while taking care of her child and she does the same with her doll feeding her, washing her laundry, taking her for a walk. The data of experimental research reveal the fact that game development according to the principle of developing mental actions undergoes two successive genetic stages. During the initial stage the game actions, by their nature, are deployed to maximum. Yet, to be accomplished by the child, these actions need „material support”. During this stage, in order to acquaint the child with new contents, the kindergarten teacher resorts to external game actions with objects. The word plays an important role in this „substitution” and it replaces the desired toy. It is important that the kindergarten teacher knows that the delays in game development are the result of delays in the development of speech. The child lacks the verbal means which could enable the latter to get rid of the material support in his game.

The second change lies in shortening and generalizing the game actions, as these are uttered in a loud voice at the beginning. Thus, for preschool children of 5-7 the external game actions alternate with internal ones, accomplished in the plan of imagination. This moment marks the transition from external

material objects to the beginning of the ideal game, which develops intensively at the preschool age, almost without materialized game actions.

Based on the actions of the game, the child develops his imaginative ability, the ability of developing a plan of representations and of operating this plan of mental images during the game. Based on this the preschool child becomes able to carry out games with themes and rules. During the game the child's representations become richer and more accurate. The child represents different objects and actions which help him accomplish a certain role in the plan of imagination. On interpreting a role or another the child must represent different people's actions and attitudes. The child's creative imagination manifests itself in that it completes with new elements the themes suggested by the adults, the child initiates new games, independently seeks the means to achieve his intentions. In this way, the images created by the child's fantasy become richer in content. For example, pretending to be a driver the child turns a chair into a car, uses a circle for a wheel, moves in the room and transports imaginary objects, travels to different towns, etc. In this game the child does not just imitate a real situation, he creatively completes a previous situation using his previous observations.

During and after the game the child conveys his impressions and opinions, expresses his wishes and signals the deviations from the rules of the game. Thus, during the game the child's speech develops in close relation with thought and on the other hand, the regulatory function of the verbal system increases. As a consequence, using the game as a means of intellectual education, the kindergarten teacher will act in the following directions:

- Will improve children's impressions about the environment;
- Will extend the sphere of representations, will deepen, mention and correct their content;
- Will stimulate the children's reproductive and creative imagination in achieving the game;
- Will activate the children's thought and the process of communication through which they express their impressions, opinions and wishes to play;
- Will practise verbalizing „game elements”: objects, actions, roles.

Knowing the role the game plays in a child's life, it is easy to understand the efficiency of using the game in the process of education and instruction. Therefore, it is necessary to involve all the children in the game, paying special attention to those who find it hard to get involved in activities, as the game activates both mental functions and biological ones. Thus, the game has the same role for a child which work has for an adult, hence the important role of the game, as it creates and develops the child's personality. The Swiss specialist in pedagogy, Ed. Claparede, in his work „Functional education”, from 1973 stated that: „The child is a human being whose main need is the game... this need to play is something essential to his nature”.

Experimental study regarding the specific contributions of the game in achieving the intellectual education of preschool children through integrated activities

In conducting the experimental study on the specific contributions of the educational game in achieving the objectives of intellectual education we started from the assumption that the game is the main form of activity at the preschool age and as a consequence it has a great value for developing the preschool children's intellectual education.

The hypothesis which supports our research was formulated as follows: suppose that by using the game in the integrated activities conducted with the middle group in kindergarten, we contribute to the improvement of preschool children's intellectual education: the development of their thinking process, the development of children's capacity of investigation, as well as their active participation in acquiring information.

The purpose of the research aimed at during the undergone teaching experiment is to achieve integrated type of learning in preschool education with the help of the educational game, through drawing up a

heuristic methodology; the teacher organizes, mediates and facilitates the integrated learning situations for preschool pupils from Level I - middle group.

The objectives of the research:

- The organization of learning situations and integrated teaching activities with educational and instruction character for Level 1 preschool pupils- middle group;
- Acquainting the children with integrated-type activities;
- Design the training process to organize knowledge in structures and cognitive schemes rather than a quantitative accumulation of knowledge learnt by heart;
- The ensurance of the child's active and interactive role in the learning process and the achievement of knowledge through the educational game;
- Highlighting the role of the kindergarten teacher as organizer, mediator and facilitator of integrated knowledge with preschool pupils;

Among the multiple contributions the game has in achieving intellectual education we analysed the ones in the field of mathematics, the environment, the education of language:

- arranging groups of objects according to certain criteria;
- determining the place of a number in a series of numbers;
- ordering ascending - descending groups of objects;
- recognizing and naming the known geometric figures;
- identifying similarities and differences among persons using certain criteria;
- recognizing and characterizing different types of animals (wild animals, domestic animals);
- developing the listening skill and the understanding of a conveyed message;
- developing the capacity of speech and expressive communication;

In the experiment presented in the paper, the main independent variable is represented by the educational game, especially its contribution in achieving some of the objectives of children's intellectual education through integrated activities. The dependent variables refer to the children's level of instruction and education acquired in:

1. The field of maths skills and knowledge,
2. The field of knowledge and skills in the environmental science,
3. The field of knowledge and skills in the education of language.

The formative experiment

With the aim of making use of the specific contributions the educational game has in developing preschool children's intellectual education through integrated activities, we conducted three experimental didactic activities which aim at preschool pupils' cognitive sphere and we used the educational game in the process of education.

The presentation and interpretation of the research data

In carrying out our experimental research we started from the assumption that by using of the educational game in integrated activities with kindergarten middle group we contribute to the efficiency of preschool children's intellectual education: the development of the thinking process, the development of preschool children's capacity of investigation, as well as their active participation in acquiring information.

Through the educational games within the carried out integrated activities, we had in view to check the children's knowledge, skills and abilities on specific aspects of the environmental science: winter and spring; to strengthen teamwork skills; to stimulate children's ability to demonstrate what they have learned; to develop children's imagination; to perform simple operations working with the material provided; to identify the position and to properly place objects as shown in the figure; to improve

children's curiosity, to stimulate their interest to learn spring vegetables; to strengthen their skill to count from 1-5 recognizing groups of objects and the corresponding figures; to stimulate children's ability to prove what they have learned;

From the activities carried out along our experimental research, we concluded that the stimulation of preschool pupils' interest for intellectual education activities is mainly achieved through the use of the educational game which makes the child stay in his world of fantasy and game, yet, at the same time, he accomplishes things which require intellectual effort. The educational games used in experimental activities required children's emotional involvement, their emotions increased the efficiency of both solving correctly the assigned tasks and of solving the tasks quickly, the children were eager to test their skills, showing availability and pleasure in using the knowledge acquired.

The interpretation of the data within the experimental method implies a series of comparisons and evaluations of the results obtained in the final stage compared to the initial stage, as well as comparing the results of the experimental group and those of the control one. The cumulative results of the initial evaluation and of the final one reveal the fact that, although at the beginning the control group had a slight advantage over the experimental one, after conducting the integrated activities under the form of educational games, the results are in favour of the experimental group.

GENERAL CONCLUSIONS

For studying the specific contributions which the integrated activities through the educational game had in achieving the objectives of preschool pupils' intellectual education, we applied the following activities starting with level one of preschool pupils and continuing with level two:

- Educational games for knowing the environment,
- Educational games for educating language,
- Maths educational games.

Considering the overall results obtained after conducting integrated activities through educational games with children of different age groups, we are fully entitled to state the idea that the game proves to be the most appropriate method for achieving the objectives established for developing preschool children's intellectual education. As a conclusion of the observations we have made so far, we can formulate the following general conclusions:

- By approaching the activities in an integrated manner, the kindergarten teacher organizes the teaching/learning process like a director, helping the pupils understand, express opinions, emotions, feelings, become partners in the teaching/learning process.

- The following benefits can be obtained by applying the integrated activities through educational games:

- The child's personality develops in a democratic environment,
- The child's personality manifests itself in all domains,
- The child learns by working,
- Any topic approached leads to the child's personalised development,
- The motivation of every activity will be the slogan of the working day.

- The most important conclusion which singles out is that intellectual education must not be achieved through taking over types of activities which are specific to schools, it must be achieved through using and applying types of activities which are specific to kindergarten. Since game represents the activity which characterizes kindergarten the most, it also represents the most effective means of achieving preschool children's intellectual education.

- Intellectual education must be analysed from the perspective of developing the psychological processes of cognition, this development represents a prerequisite for integrating the preschool pupil into a new form of activity and into a new period, that of a school pupil. From this point of view the educational game has the capacity to act within the factors and characteristics of children's psychological development, it represents the way in which children's personality is created, manifests and develops itself.

- Among the most important objectives which can be achieved through the educational game, mention should be made of the development of language. A well-organized educational game acts upon children's vocabulary, by enlarging their active vocabulary as well as on the development of their communication skills, children use language as a primary means of communication during their game. One can notice the fact that the educational game develops a series of skills which are otherwise difficult to develop while performing other didactical activities, these skills include: speed in conceiving the message, correctness of pronunciation, voluntary attention in receiving the message and children's capacity to participate in the dialogue.

- Of course, the contributions the educational game involves do not come just from the game itself, they involve the kindergarten teacher's systematic action in designing and achieving the teaching activity in the most efficient way. To this end it is important that the kindergarten teacher does the following things: knows the pupils' age and individual particularities; determines the initial level of preparation and establishes the objectives of the education and instruction process; chooses the most appropriate topics, contents and rules in accordance with the established objectives; continuously evaluates the performances acquired by the children.

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