

The knowledge of the natural world: its treatment from the training in the special education career

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ABSTRACTS

The training of the Special Education professional is modeled in accordance with the delimitation of theoretical cores common to Early Childhood Education, in the program Didactics of Natural Sciences in the 4th year of the Encounter Course, the knowledge related to Knowledge of the natural world is worked on. The use of scientific methods made it possible to detect the need to investigate how to provide methodological treatment from the training. The proposed actions made possible the preparation to provide attention from the particular, with a preventive, individualized, corrective-compensatory approach to children who are attended in a regular context in conditions of inclusion.

Keywords: Inclusion; Training; Especial education

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Introduction

The training of the Special Education professional is aimed at aligning a professional who demonstrates day by day, a solid preparation, capable of performing a flexible and innovative educational work that can effectively respond to the educational and learning needs of their learners, from a transdisciplinary perspective, (Ministry of Higher Education, 2016).

Attention to diversity in the educational field has been studied by several pedagogues. Its treatment is imposed from the different programs with an inclusive vision where the future teacher can materialize it in educational practices.

Leyva (2017, p. 2) reviews, this professional also destines his preparation to know about the inclusive education of children in the preschool age. The study plan of the career is aimed at offering psychological, pedagogical, didactic and methodological tools that make it possible to eliminate existing barriers so that children can reach the expected developmental achievements.

The Didactics of Natural Sciences program in the 4th year of the Encounter Course addresses content related to the natural world, content belonging to the preschool curriculum. It includes in its knowledge system didactic and methodological tools for the future professional to develop an educational process with more quality and professionalism, from inclusion.

In order to achieve an adequate training aimed at the attention to the inclusion of children, a particular inclusive didactics is required, that is, an enriched way of teaching (through the use of all the necessary resources, supports, creativity that each one requires) and enriching (because it develops the peculiar rhythm of each learner and optimizes their possibilities and potentialities), (Leyva, 2017, p. 5).

The attention to children in regular context, who present Special Educational Needs (SEN), focuses on attending to individual differences under the premise that all are formed according to the same laws of development, as biopsychosocial beings, which underpins the assumption of a curriculum for all, (Leyva, 2017, p. 4). However, there are still insufficiencies in how to organize didactically in an efficient way the methodological treatment to the contents referring to the Knowledge of the Natural World to children in conditions of inclusion in preschool.

From the Third Improvement of Education, a comprehensive, flexible, contextualized and participatory curriculum is addressed. It must also have an open look to the search and projection of methods, procedures and novel means that improve educational

practices from the initial training of students, content aimed at Early Childhood, (Leyva, 2017, p. 4).

Analyzing the experience from the work with the program Didactics of Nature Sciences in the 4th year of the Special Education Course by Encounter, we set ourselves the task of proposing as the objective of the work: to elaborate methodological actions that facilitate the inclusive treatment to the contents of Knowledge of the Natural World in Early Childhood from the subject Didactics of Nature.

Development

The training of future professionals should enable them to be able to apply in the workplace the concepts learned during their formative stage at the university; as well as to argue and solve problems with a high degree of autonomy, highlights (Lopez, 2005, p. 235).

The (World Health Organization, 2013, p. 1) refers that Early Childhood, deals with a crucial stage of growth and development, because early childhood experiences can influence the entire life cycle of an individual. And for children with disabilities, it is a vital stage to ensure access to interventions that can help them develop to their full potential.

Program of Didactics of Natural Sciences in the Special Education career.

According to the Ministry of Higher Education (2016, p.127), the discipline Particular Didactics, for the career of Special Education, responds to the demands that the current Cuban society states to education professionals, from the challenge of education in and for diversity.

The document continues expressing that one of the current challenges of Special Education is the achievement of attention to diversity, therefore, it is necessary to project pedagogical practices towards a heterogeneous educational response and offer all the opportunities for the development of students with special educational needs, whether associated or not to disability.

The Didactics of Nature program is taught in the 4th year of the Special Education course in the Encounter Course. It distributes its knowledge system in three topics, related to the subjects taught in the subsystem (Knowledge of the Natural World - Early

Childhood; The World in which we live.1st to 4th grade; less intellectual disability that is taught until 6th grade in the Improvement, natural sciences and Geography of Cuba from 5th and 6th grade).

The program Didactics of Nature provides treatment to the knowledge system of Knowledge of the Natural World in theme II, where it works:

- The Knowledge of the Natural World in early childhood suggests as a system of knowledge, its importance for the knowledge of natural sciences.
- The direction of the educational process for the knowledge of the natural world of learners with special educational needs, associated or not to disability in regular education centers, special and non-formal ways.

This program prepares future teachers to work on content related to early childhood children with SEN.

Knowledge of the Natural World in Early Childhood implies working on the intellectual, psychosocial and environmental development of children, the importance for the knowledge of natural sciences and the development of language.

It also contributes to stimulate the development of the relationship between thought and language, expanding the vocabulary with the use of cards, stories and nursery rhymes. It makes it possible to develop oral communication through exercises that stimulate articulatory motor skills, pronunciation and vocabulary.

Attention to children diagnosed with SEN requires more specific resources, actions and methodologies for greater affordability and accessibility to the development of skills and abilities from the educational process in different educational centers.

Contents of the program Knowledge of the Natural World in Early Childhood

Early childhood is a dynamic process in which children acquire skills in several related areas: sensory-motor, cognitive, communication and socio-emotional, according to the Convention on the Rights of Persons with Disabilities (2006, p. 3). Development in each domain is marked by a series of milestones or steps and typically involves the mastery of simple skills before more complex skills can be learned.

It should be recognized that children can play an active role in the development of their own skills and that their development is also influenced by interaction with the environment. The Natural World Knowledge program has the potential to positively influence this.

Early childhood education guarantees the possibility for children of all ages to achieve a progressive integral development. In order to achieve this integral development, special attention should be paid to the contents related to the knowledge of the natural world (authors' collective 2011, p. 22).

In the Special Education subsystem, this program is also taught, especially to children with hearing, visual, physical-motor, communication and intellectual disabilities (retarded mental development).

The natural environment for its richness and diversity in shapes, textures, colors, smells, flavors, interrelationships and variety in the manifestation of phenomena; is a source of inestimable value for the stimulation of curiosity and enrichment of the experiences and experiences of children about the world around them, (authors' collective, 2011, p.22).

The contents of this program, due to its proximity to the child, favors direct contact with the child from birth, and makes it possible to make available different types of relationships: spatial, temporal and even cause-effect.

Knowledge about nature favors the gradual formation of general relationships about time, space, the living, the non-living, change and transformation.

It should also be noted that nature is presented as an ideal medium for the aesthetic and ethical development of preschoolers, which should be used to its full potential for the integral development of the child's personality.

The observation of daily pedagogical practice has shown that educational agents are not always prepared to offer children this knowledge on a scientific basis.

Access to appropriate support from the educational process, such as early childhood intervention and education, can make the rights of children with disabilities a reality, promoting stimulating and satisfactory learning, elements that must be guaranteed from the training of future teachers, preparing them for full and meaningful participation in adulthood.

Therefore, a pressing problem is the need to search for alternatives that contribute to the improvement of the preparation of educational agents, in this case the future teachers of the Special Education career.

Methodological actions that facilitate the inclusive treatment to the contents of Knowledge of the Natural World in Early Childhood from the subject Didactics of Nature.

Diagnosis of the students who carry out the investigative work practice with children with SEN.

The teacher performs a diagnosis to know the students who perform their investigative work practice in Children's Circles or Preschool in Special Education schools.

It is important to carry out the distribution of tasks so that all students perform the teaching activities of independent work with higher quality.

1. Creation of working groups, where each group includes a student who works with children with SEN.

Work groups of up to 3 students are created. In each group there must be a student who performs his or her practice in Early Childhood with children diagnosed with some type of disability. In each team, students who have a preschool or preparatory school in their teaching unit must be included.

2. Systematization of the psycho-pedagogical characteristics of the different disabilities to face the methodological treatment of the Natural Knowledge program.

During the first classes of the program, psycho-pedagogical characteristics of children with some type of disability will be systematized. The teacher will guide independent study to reinforce this knowledge necessary to carry out the actions that follow.

3. Familiarization with the texts and materials that will be used to work on the contents of the Natural World Knowledge program..

The searching of materials, documents and texts related to the program. The teacher orients the bibliography and in the study guide the students will search for specific contents by year of life, as well as their study in other texts such as

Natural and Social World Knowledge Readings, where a system of knowledge is reflected that will nourish them with the necessary knowledge for the planning of the activities.

4. Treatment of the glossary of terms of the subject.

Students must know precisely the terms most commonly used in the subject, the so-called technical words. They will be able to use digitalized materials or the telephone for their treatment. In all classes the treatment of the technical words will be carried out. Example. Nature, natural environment, world, natural, environment, ecology, sustainable development, environmental education, pollution, early childhood, educate your child program.

5. Characterization of the program from the theoretical and didactic components in regular education and SEN.

The teacher guides the realization of the characterization of the program in a general way. The students, through study guides, will investigate the main characteristics of the program knowledge of the natural world, taking into account:

- Rationale for your study
- Objectives
- System of knowledge, skills and behaviors to be developed.
- Most used methods
- Means of teaching and forms of organization used
- Evaluation

1. Determine the objectives to work on in each year of life, according to the disability to be worked on.

It is oriented to investigate the system of knowledge and objectives to be worked on in each year of life in order to plan activities in correspondence with the age group.

Exchange with tutors in the teaching units on the contents of the program.

2. En las unidades docentes intercambiarán con tutores, coordinadores de grado o maestros de experiencia sobre el contenido del programa.

3. To develop study guides to investigate methodological treatment to the contents of the Natural World Knowledge program.

4. The oriented study guides will be developed according to the topics worked on in class; they will be able to use ICTs. They will do research in their teaching units or others that have the preschool grade or in children's circles.

5. Elaboration of inclusive didactic activities aimed at the Natural World Knowledge program.

With the support of their tutors in the teaching units, they will elaborate didactic activities directed to the content of Knowledge of the Natural World to be carried out with the Early Childhood children. They will take into account the didactic and support resources that respond to the SEN of the disability to be treated. The discussion will be carried out in practical classes for its evaluation and assessment.

1. Methodological workshop for the presentation of teaching aids that respond to the disability of children with disabilities who work in the teaching unit.

They will carry out a final activity as a workshop where each group of students will present their experience on the activities carried out in the program and with the didactic components most used in the educational process. They will include teaching aids that respond to the children's disabilities in order to facilitate their learning.

Elaboration of a corrected written report to be filed as study material for future student groups.

Conclusions

It can be concluded by stating that the training of future Special Education teachers is of great importance. The attention to children with disabilities is of great importance because it is a vital stage to guarantee access to interventions that can help them develop their full potential.

The proposed methodological actions enable students in training to have a better algorithm for the didactic appropriation to the treatment of the program Knowledge of the Natural World to children with SEN from the program Didactics of Nature.