Original article

The development of inclusive practices: its application in the subject of Mathematics Teaching



El desarrollo de prácticas inclusivas: su aplicación en la asignatura Didáctica de la Matemática

O desenvolvimento de práticas inclusivas: sua aplicação na disciplina de Didática da Matemática

Received: 22/08/2025 **Accepted:** 10/10/2025

ABSTRACT

Higher education demands a developmental, dynamic, contextualized, and participatory teaching and learning process. This implies intellectual productivity in the cognitive performance of its primary beneficiaries: the students. The professional training of the Bachelor of Primary Education through the blended learning program exemplifies this. In this sense, the aim is to share the results of applying inclusive practices in the subject of Didactics of Mathematics, from the perspective of the Main Integrative Discipline, through a didactic approach. To achieve this, theoretical and empirical methods were employed that, from the logic of dialectical materialism, allowed for the systematization and interpretation of information, the identification of indicators, and their evaluation using instruments such as surveys and observation of student performance. The results revealed

¹ University of Pedagogical Sciences "Enrique José Varona". Havana, Cuba.

shortcomings in the students' ability to implement inclusive practices, as they do not always utilize the necessary didactic resources and support. As a result, a didactic approach was developed that incorporates active learning methodologies, demonstrating the students' capacity, sensitivity, and satisfaction in reflecting on and applying their learning. Inclusive practices, through the use of resources and support in the Mathematics Didactics course, transformed students' approaches to the demands of the learning process.

Keywords: didactic conception; mathematics didactics; main integrative discipline; primary education degree; inclusive practices.

RESUMEN

La educación superior exige un proceso de enseñanza-aprendizaje desarrollador, dinámico, contextualizado y participativo. Esto implica productividad intelectual en el desempeño cognitivo de sus máximos beneficiarios: los estudiantes. La formación profesional del Licenciado en Educación Primaria del curso por encuentros es expresión de ello. En tal sentido, se pretende socializar el resultado de la aplicación de prácticas inclusivas en la asignatura Didáctica de la Matemática, desde la Disciplina Principal Integradora, mediante una concepción didáctica. Para lograrlo, se emplearon métodos teóricos y empíricos que permitieron, desde la lógica de la dialéctica materialista, sistematizar e interpretar la información, identificar los indicadores y evaluarlos mediante instrumentos como la encuesta y la observación del desempeño de los estudiantes. Los resultados revelaron las carencias que poseen para emplear prácticas inclusivas, pues no siempre utilizan los recursos didácticos y apoyos necesarios para conseguirlo. Como resultado, se modeló una concepción didáctica cuyo contenido incluye el uso de metodologías activas, lo cual permitió constatar la capacidad, sensibilidad y satisfacción de los estudiantes para reflexionar y transferir sus aprendizajes. Las prácticas inclusivas, mediante la utilización de recursos y apoyos en la asignatura Didáctica de la Matemática, lograron transformar los modos de actuación de los estudiantes en relación con las exigencias del proceso de formación.

Palabras clave: concepción didáctica; didáctica de la matemática; disciplina principal integradora; licenciatura en educación primaria; prácticas inclusivas.

RESUMO

O ensino superior exige um processo de ensino e aprendizagem dinâmico, contextualizado, participativo e que promova o desenvolvimento. Isso implica produtividade intelectual no desempenho cognitivo de seus principais beneficiários: os estudantes. A formação profissional da Licenciatura em Educação Básica, por meio do programa de ensino híbrido, exemplifica isso. Nesse sentido, o objetivo é compartilhar os resultados da aplicação de práticas inclusivas na disciplina de Didática da Matemática, sob a perspectiva da principal área de integração, por meio de uma abordagem didática. Para tanto, foram empregados métodos teóricos e empíricos que, a partir da lógica do materialismo dialético, permitiram a sistematização e interpretação das informações, a identificação de indicadores e sua avaliação utilizando instrumentos como questionários e observação do desempenho dos estudantes. Os resultados revelaram lacunas na capacidade dos estudantes de implementar práticas inclusivas, visto que nem sempre utilizam os recursos e o apoio didático necessários. Como resultado, desenvolveu-se uma abordagem didática que incorpora metodologias de aprendizagem ativa, demonstrando a capacidade, a sensibilidade e a satisfação dos estudantes em refletir sobre e aplicar sua aprendizagem. As práticas inclusivas, por meio do uso de recursos e apoio no curso de Didática da Matemática, transformaram a forma como os alunos encaram as exigências do processo de aprendizagem.

Palavras-chave: concepção didática; didática da matemática; área principal de atuação; licenciatura em educação primária; práticas inclusivas.

INTRODUCTION

The world's education systems are currently working toward a fundamental goal: raising the quality of education. Achieving a clear awareness of this need is crucial for the development of humanity itself. In this regard, countries are adjusting, modifications, or attempts at transformation to promote equitable learning opportunities.

Creating greater opportunities for access to higher education is a right of every citizen and is based on the certainty that education is a means to help eliminate inequalities, in that noble purpose of achieving education for all (Calderón et al., 2024). Universities face diverse situations as a consequence of a dynamic reality and an increasingly diverse society. Given this panorama,

educational responses must consider the complexity of the phenomena and differentiate between the context and the student body (Clavijo et al., 2024). Faithful to their legacy of training the citizens that society needs, universities are updating their methods of working, thinking, and teaching future professionals.

To achieve this, it is necessary to develop transformative strategies and implement actions aimed at developing skills such as knowing, doing, being, and living together, which is a relevant aspect for the student's successful professional performance and their connection to the training context.

The Bachelor of Primary Education program is situated within this context. From a systemic perspective, it is structured to fulfill the objectives outlined in the professional profile for the degree, offering various study modalities. One of these is the blended learning program, which includes graduates of teacher training colleges, professional staff, primary school teachers from emerging training programs, and those with authorized and certified teaching qualifications, among other options.

The disciplinary and academic year organization also plays a fundamental role in enabling students to apply their knowledge and skills to their work. The vertical disciplinary design emphasizes the Main Integrative Discipline, which Horruitiner (2009) describes as "a sui generis discipline, which, far from obeying the logic of one or more sciences, responds to that of the profession. It relies on the contributions of the other disciplines in the program and incorporates them in its integration to meet the demands of professional practice" (p. 41).

In this discipline, the study-work link is also highlighted, its educational and instructional influence on the training curriculum, and its contribution to the systematization, generalization and integration of the content of the profession for the development of professional skills, with emphasis on intraand interdisciplinary relationships.

In this sense, the course by meetings represents the beginning of a process of modeling and searching for answers to current demands; however, pedagogical practice shows the shortcomings that students have in this modality in relation to inclusive practices from this discipline, which are manifested in the following problematic situation:

- In the program of the Main Integrative Discipline of the bachelor's degree in Primary Education, the suggestions in the didactic-methodological order aimed at the development of inclusive practices are not sufficiently guiding.
- It is not always possible, through the teaching and learning process of specific didactics, to adequately prepare students for the course by meetings for the development of inclusive practices.
- Students in the part-time course generally have little command of the necessary resources that allow them to develop inclusive practices in the classroom group.

The subjects within the Main Integrative Discipline can enhance performance in pedagogical practice by developing the skills necessary to solve the most common and general problems encountered in the professional context. One such subject is the Didactics of Mathematics, which is taught in the second semester of the third academic year of the part-time program. Its content, distributed over 40 class hours, aims to prepare students to lead the teaching and learning process of mathematics at the primary level.

The realization of this objective has materialized in the study guides, with learning tasks and pedagogical situations where the modeling of actions, strategies, activity systems, and classes encourages students to acquire new knowledge. The nature of the teaching resources or supports used can lead to inclusive practices, designed for their professional development and applicable to their performance, which facilitates the systematization and transfer of content. Inclusive practices, according to Duck (2008), are understood as "the set of actions, resources, and supports that seek the participation, maximum learning, and development of each and every one, favoring interaction and mutual enrichment" (p. 132).

For its implementation, the necessary teaching resources and support must be identified, as these can become potential solutions for transforming students' behavior in the teaching-learning process. Teaching resources are mediators that facilitate and enrich the teaching-learning process. Their dynamic nature qualifies and enables communicative interaction with the student for the design and diversification of the teacher's approach. Their focus on addressing diversity enhances the appropriateness of the educational response in relation to the learning situation, which impacts the quality of the learning process (Guirado, 2010). For their part, Booth and Ainscow (2002), when evaluating support, recognize its systemic nature and see its applicability as a way to respond to students' needs according to their learning pace, whether in a general or specific way.

An integrative result in the field of pedagogical sciences and research, in particular, is the conception: this system of ideas, concepts and representations about an aspect of reality or about all of it encompasses philosophical, general and natural scientific aspects (Valle, 2012).

Because of its value, it was determined that its nature was didactic, and thus confirm its relevance as a proposal through the systematization of experiences, a method that, according to the criteria of Expósito and González (2017), is "that critical interpretation of one or more experiences, which, from its ordering and reconstruction, discovers or makes explicit the logic of the lived process" (p. 11).

The present article aims to socialize the main results of inclusive practices from a didactic conception that takes as its center the subject of Didactics of Mathematics.

MATERIALS AND METHODS

The research was conducted at the Faculty of Early Childhood Education, belonging to the "Enrique José Varona" University of Pedagogical Sciences. For its execution, 30 students enrolled in the Bachelor of Primary Education program, in their third year of the part-time course modality at the Central Havana Municipal University Branch, were selected as the unit of analysis.

The dialectical-materialist conception underpinned the research as the general method of science, conceiving knowledge as a constantly evolving process that integrates the theoretical and practical aspects of educational reality. At the theoretical level, documentary analysis was applied to identify the conceptions and approaches related to the development of inclusive practices in the Main Integrative Discipline, and modeling was used to develop the didactic conception as the central proposal of the research.

At the empirical level, various methods were used, including:

- The survey made it possible to obtain criteria about the knowledge, perceptions and experiences of the students in relation to the development of inclusive practices, as well as to identify strengths and weaknesses in their professional preparation.
- The observation of student performance, through which the level of practical application of the knowledge acquired, their level of participation and the strategies used to promote inclusion in the classroom were verified.

• The systematization of experiences, which made it possible to obtain empirical assessments regarding the relevance, coherence and applicability of the didactic conception, based on the critical interpretation of the results of the lived process.

These methods, combined in an integrated way, facilitated a deeper analysis of the object of study and contributed to validating the proposal developed from a scientific, pedagogical and inclusive perspective.

RESULTS

The methods applied yielded the following regularities (documentary analysis)

- Few tools, pathways, or alternatives are suggested from the Integrative Main Discipline program for the development of inclusive practices in the training of the professional in the reference career.
- The methodological guidelines describe methodological procedures in relation to the particularities of the teaching methods and to a lesser extent in relation to the attention to diversity in this mode of study.
- In the programs of particular teaching methodologies, the elements related to the development of inclusive practices are isolated or non-existent.

Regarding the development of inclusive practices, the following manifestations were detected in the students based on the survey applied and the observation carried out:

- Sensitivity and ability to reflect respect for human differences in their training process.
- Insufficient knowledge among students regarding the development of inclusive practices in the training of the Bachelor of Primary Education in the part-time course
- There is little preparation to provide attention to diversity, which is revealed in the learning environments inherent to the training process.
- Poor use of teaching resources and support in the training process for their subsequent professional performance in the educational institution.

In this sense, a didactic conception was proposed that is systematized in the subject Didactics of Mathematics.

This didactic approach had the general objective of *enhancing the development of inclusive practices* among students in the blended learning course of the bachelor's degree in Primary Education, within the framework of the main integrative discipline. Its structure comprised two core components: a theoretical one and a methodological one. The theoretical component integrated the general foundations, principles, and guiding ideas; the methodological component focused on the strategy and its stages. The proposal was distinguished by being open, flexible, contextualized, and developmental.

In accordance with the theoretical cores of the proposed conception, the methodological strategy, as a core of equal quality, allowed the implementation in its four stages of the actions that contributed to transforming the teaching-learning process of the subjects that make up the Main Integrative Discipline, with emphasis on the subject of *Didactics of Mathematics*.

Stage 1: Diagnosis

It was distinguished by the diagnostic process, which included an analysis of professional problems, the object of the profession, the modes, fields, and spheres of action, as well as the constants of the content that aims to be developed to foster inclusive practices. The application of pedagogical instruments made it possible to obtain information about the state of the variables that condition the object of study.

Objective: To identify the main regularities presented by students of the bachelor's degree in Primary Education in the course by meetings in relation to inclusive practices.

Actions to be taken:

- To raise awareness among students and teachers regarding inclusion processes, attention to diversity, and inclusive practices.
- Conduct a study of the programs of the different subjects of the Main Integrative Discipline to verify their contribution to inclusive practices in students.
- Develop the instruments to be applied to students and teachers who participate in the implementation of the concept.
- Apply and process the instruments that allow the collection of information.
- To determine the potential and needs of students in the Bachelor of Primary Education program in the part-time course in relation to inclusive practices.

Stage 2: Planning

This stage builds upon the previous one. It was characterized by the determination of human resources and the identification of the relationships between the Main Integrative Discipline and other disciplines, as well as the clear links between the subjects that comprise it. The planned actions ensure that the didactic and methodological work for achieving inclusive practices among students is projected on the different subjects, along with the resources that should be used.

Objective: To plan actions that contribute to the inclusive practices of students in the Bachelor of Primary Education program in the part-time course.

Actions to be taken:

- As part of the methodological preparation of the Main Integrative Discipline, determine the treatment from each of the subjects to the invariants that guarantee the design of inclusive practices.
- Determine actions, resources and support that can be used by each subject based on inclusive practices.
- Select, from each subject of the Main Integrative Discipline, the learning contexts that promote inclusive practices.
- Select a subject as a model for the implementation of inclusive practices.
- Model the learning guides, which can be developed by subject or integrating several of them, considering activities that enable inclusive practices.
- Model learning situations that allow for debate, analysis, and reflection based on the use of productive methods where students' experiences and insights are applied in their professional performance.

Stage 3: Execution

In this stage, all actions are put into practice. Students identify, formulate, and select solution strategies as part of the professional problems to be solved.

Objective: To apply didactic actions aimed at inclusive practices inherent to the teaching-learning process.

The teaching timetable, in its organization, defines the subjects and organizational structures for each group according to the academic year. In the classroom, students, using the selected methodologies, demonstrate the development of professional pedagogical skills they have acquired and complete the learning guides.

Actions to be taken:

- Diagnose the students of the course by meetings.
- Develop the subject programs that are part of the Main Integrative Discipline.
- Organize methodological work sessions in the subject groups of the Main Integrative Discipline.
- Implementing inclusive practices on the subject of *Didactics of Mathematics*.
- Develop study practices, consultations, class festivals, or other organizational forms where inclusive practices are applied.

Among the distinctive elements, the analysis of the components of the teaching-learning process stands out, which made it possible to determine the common elements between the subjects that make up the Main Integrative Discipline and to identify the invariants for the work based on inclusive practices.

In accordance with the objective, a gradual approach was determined for each specific teaching method. It was fundamental to define the *knowledge* and skills *required* for each subject. In this process, observation, description, identification of qualities (general, specific, and essential), comparison, classification, explanation, exemplification, argumentation, evaluation, problem-solving, modeling, and question formulation, among others, played a crucial role.

Similarly, procedures such as perceiving and understanding the material under study, preparing bibliographic and content cards, summarizing information, preparing reports and presentations, developing models, planning, conducting and proposing experiments, preparing tables and graphs, and using technology served as a basis for more complex tasks.

The content component went through the four types that characterize it, with emphasis on the independent transfer of knowledge and skills to new teaching situations.

Regarding the method, fostering students' cognitive independence and creativity played a primary role. The following were considered invariants:

- The selection and use of participatory and interactive methods, with a focus on research for the development of thought.
- The application of design thinking, problem-based learning, and other active methodologies, in accordance with each program content.
- The construction of models with the possible problems to be found in the school context, for their reproduction and transformation by the students in the treatment of the contents and the attention to individual differences.

The lecture-meeting format was the preferred organizational method, supported by study guides to complement learning in this modality. The constants focused on:

- Formulation of thought-provoking questions or reflections related to the object of the profession.
- Presentation and design of typical situations to solve professional problems.
- Critical analysis and modeling of classes and/or activity systems, as well as the corresponding teaching resources and support.
- Classroom observations to analyze the treatment given to the development of inclusive practices, attention to diversity, and the identification of barriers to learning.

In the evaluation component, it was necessary to search for varied sources of exercises:

- Preparation of individualized worksheets.
- Use of tactile representations, working with real objects and concrete materials, as well as the use of professional games as active knowledge processes.
- Guidance of research tasks based on projects and portfolios for in-depth study and evidence gathering.

The authors considered the following as supports for implementing inclusive practices:

- The signs and alerts to avoid errors or formulate new solutions.
- Providing supplementary data to support the answers.
- Additional guidance explanations.

• Illustrations (drawings, photos, diagrams, statistical graphs), explanations, demonstrations, debates, workshops and other resources such as concept maps, summaries or projects.

Other actions valued as promoting inclusive practices were:

- Use active methodologies based on diversity as a strength.
- Promote teamwork, collaboration, and collective learning.
- Identify learning barriers by subject and focus on eliminating them.
- Apply Universal Design for Learning (UDL) as an integrating principle for addressing diversity.

Stage 4: Control and evaluation

At this stage, monitoring as a management function became necessary to evaluate, measure, record, diagnose, prevent, correct, and adjust actions for inclusive practices within the teaching-learning process carried out in the subjects that comprise the Main Integrative Discipline. The content planned for monitoring includes: the performance of students in the Bachelor of Primary Education program, the use of teaching resources and support for inclusive practices, and the levels of satisfaction with their aspirations.

Objective: To evaluate the outcome of the actions taken for inclusive practices in the training of the Bachelor of Primary Education.

Actions to be taken:

- Modeling actions and/or strategies, learning task systems and class systems for the direction of the teaching-learning process of Mathematics in primary school.
- To direct the teaching and learning process of Mathematics.

The application of the systematization of experiences method allowed the authors to put into practice their experiences and insights related to the work of the Main Integrative Discipline for the development of inclusive practices in students of the bachelor's degree in Primary Education, with an emphasis on the subject of Didactics of Mathematics. This process was developed over three academic years: it began in the 2020-2021 academic year and concluded in the 2023 academic year.

The systematization plan was organized in two moments: a first moment with the actions to be carried out defined in the first and second stage (Diagnosis and Planning) of the strategy belonging to the methodological core.

Results of the **first phase**:

- Analysis of the program of the subject Didactics of Mathematics.
- Application of the diagnostic test to students in this subject to verify their knowledge about inclusive practices.
- Determination of the topics for preparation of the subject group in relation to inclusive practices.
- Identification of possible modifications to the subject program, in accordance with the results of the diagnosis.
- Redesign of the study guides for the subject Didactics of Mathematics.
- Definition of the concept of evaluation to verify the development of inclusive practices.

In the **second phase**, the actions corresponding to the third and fourth stages (Execution and Control and Evaluation) were applied.

The faculty of the *Mathematics Didactics course*, in their methodological preparation session, analyzed the syllabus and possible approaches. The first session focused on a methodological activity about theoretical concepts related to the development of inclusive practices and their importance. The professors updated their knowledge of the topic, as well as its treatment in the relevant guidelines. This meeting also fostered an enriching discussion about the preparation needs of students for leading the teaching and learning process of mathematics.

The second preparation session for the group focused on analyzing the teaching resources and support materials to be used in the mathematics subject. These included: classes with competitive activities, the creation of individualized worksheets, searching for information sources outside of textbooks, the use of tactile representations, working with real objects and concrete materials, play, role-playing, educational games, riddles and puzzles, guiding research tasks, promoting reflection, and using posters and manipulatives to develop number sense.

Active methodologies were explored in depth, and proposals were developed to establish the correspondence between diagnosis, active methodology and content, which made it possible to use

strategies such as learning contracts, flipped classroom, design thinking and project-based learning, among others, according to the particularities of the students and with specific study guides according to the grade and context.

Learning tasks were incorporated into the subject of Mathematics with suggestions for possible support to use, formulation of questions, additional explanations for understanding the guiding basis and teaching strategies aimed at promoting meaningful learning.

Similarly, modeling learning situations facilitated analysis, reflection, and the development of logical thinking. A variety of exercises and activities focused on active learning methodologies were proposed. This knowledge enabled teachers to offer differentiated instruction based on students' abilities and the grade level they teach at the educational institution.

Initially, the students used the models presented in class; later, after preparing independently for each session, they showed interest in carrying out different learning tasks that would motivate their students. They justified the teaching resources and support materials used, raised questions, requested opinions, and met the established deadlines for submission.

In the spaces for analysis and discussion generated with the students in the subject, the following were highlighted -in the responses to the learning guides-: the use of mobile applications for memorizing basic exercises, variations of educational games to learn and systematize numeration, the orientation of mathematical portfolios and the use of rubrics to evaluate problem-based learning, among others.

After the proposal was implemented, the following potential benefits were identified:

- Recognition of the importance of diagnosis in guiding the teaching-learning process.
- The use of varied teaching methods, in relation to the needs of the students.

A significant outcome of this second phase was the Class Festival, held at the *Antonio Maceo* school. Six math classes were presented as part of the subject distribution. The students, after prior preparation, selected the grade level and content for their lesson, characterized the students they would be working with, and discussed with the teachers of the group how to address individual learning needs. They also shared their lesson plans with the teachers and professors assigned to the branch campus.

For evaluation and monitoring, extracurricular activities were planned and organized at the university branch and in the teaching units. One of these was the Scientific Conference, whose purpose was to address existing problems and share practical experiences in managing the teaching-learning process.

Systematizing the experience by combining teaching resources and support within a broader scientific framework, such as the didactic approach presented, transformed the teaching and learning process of the subject of *Didactics of Mathematics* into an experience accessible to all. Furthermore, it developed complex skills and competencies, maintained motivation, and facilitated the meaningful construction of knowledge.

DISCUSSION

Literature frequently addresses the development of inclusive practices from the perspective of disability and its general approach. However, in Higher Education, the focus has been on general objectives, and to a lesser extent on methodological approaches and their implementation in specific courses.

A significant finding was the perception of these practices as being centered not only on disability, but also valued from other dimensions, with the purpose of considering the diagnosis, the student's culture and their strengths to face the training process, among other equally important aspects.

The uncertainty prior to the application of the concept was transformed through the use of diversified strategies inherent to Universal Design for Learning (UDL), applying its basic principles: multiple ways of representing knowledge, expressing it, and promoting motivation and engagement with it (Heredia et al., 2023). As Ainscow and Miles (2008) state, concrete and sustained pedagogical practices that respond to diversity through the application of teaching resources and support are currently required.

Furthermore, promoting new topics for student research contributed to the creation of interest groups for the development of logical thinking. The pursuit of knowledge, innovation, and the evaluation of ideas confirm that research is the quintessential method for generating new knowledge (Martín-Hernández et al., 2024). University teaching should be strengthened through scientific research and fundamental methodological solutions, where the art of teaching prevails (Condor et al., 2025).

The support provided by teachers and the application of the invariants from the Main Integrative Discipline, particularly in the subject of Didactics of Mathematics, proved crucial. For the authors, this suggests that inclusive practices should incorporate essential curricular content and create reflective learning environments, as a link in the training of students in the Bachelor of Primary Education program.

The training process of the graduate in Primary Education must continue in the search for a gradual approach of the student to the object, content and methods of the profession, based on the interaction with the theory and the subjects in their context of pedagogical action, as pointed out by Rodríguez and Figueredo (2021).

The transfer of learning was a significant outcome, demonstrating the application and adaptation of knowledge and skills, support, observation, critical-reflective analysis, and creativity in new learning situations or in problem-solving. The Class Festival, as part of the course design, played an essential role during training and in the results achieved in professional practice (Minte et al., 2022).

University branches can be ideal educational settings for inclusive practices. This requires an institutional vision that considers the diversity of the student body (Paz-Maldonado et al., 2021). Academic programs and the design of activities planned at the university branch for learning or developing skills specific to the profession can positively impact professional performance and practices during the training of primary education graduates. This is a way to guarantee the comprehensive preparation of students during their training process (Paz et al., 2023).

For the authors, this perspective is unique within the Main Integrative Discipline, and specifically within the field of Mathematics Didactics, due to its impact on the bachelor's degree in Primary Education. The results obtained demonstrate the need to strengthen inclusive practices in the training of Bachelor of Primary Education graduates.

Future studies may be oriented towards the application and improvement of the invariants for the development of inclusive practices in other subjects of the Main Integrative Discipline, although it was demonstrated how, from the classes of the subject *Didactics of Mathematics*, it can be achieved.

Similarly, the authors believe that although the evolution of the characteristics and functions of the Main Integrative Discipline is evident in the literature, a significant gap exists between the content

of the training, the methods of delivery, and the student's approach to the subject in their professional practice. The bachelor's degree in Primary Education is no exception.

This study presents evidence relating to the existing shortcomings regarding inclusive practices and the resulting socialization in the subject of *Didactics of Mathematics*, from the Main Integrative Discipline, through a didactic conception in the students of the bachelor's Degree in Primary Education.

REFERENCES

- Ainscow, M., & Miles, S. (2008). Making Education for All inclusive: where next? In: *PROSPECTS*, 38(1), 15-34. https://doi.org/10.1007/s11125-008-9055-0
- Booth, T., & Ainscow, M. (2011). *Index for inclusión: Developing learning and participation in schools* (3rded.). Centre for Studies on Inclusive Education (CSIE).
- Calderón Reyes, E., Rodríguez Veloz, Y., & Veloz Cruz, L. (2024). Contextos Inclusivos en la Universidad. Buenas prácticas para el aprendizaje y desarrollo. *Conrado*, *20*(98), 65-72. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1990-86442024000300065&lng=es&tlng=es
- Clavijo-Castillo, R., Cedillo-Quizhpe, C. & Cabrera-Ortiz, F. (2024). Culturas, políticas y prácticas inclusivas según estudiantes universitarios. *Alteridad*, 19(2), 258-269. https://doi.org/10.17163/alt.v19n2.2024.09
- Condor Campos, B., Balta Sevillano, G. C., Ramos Trujillo, A., Bello Vilcapoma, V., & Párraga Panéz, A. (2025). Avances sobre la calidad en la educación superior. *Revista InveCom*, *5*(1), e501023. https://doi.org/10.5281/zenodo.10975501
- Duck, C. (2008) Modelo inclusivo para evaluar la respuesta de la escuela a la diversidad de necesidades de los estudiantes. Revista educación diferencial. Universidad central de Chile, p. 132. https://revistas.ucentral.cl/revistasinclusivas/article/view/1_1_010
- Expósito Unday, D., & González Valero, J. A. (2017). Sistematización de experiencias como método de investigación. *Gaceta Médica Espirituana*, 19(2), 10-16.

https://mendive.upr.edu.cu/index.php/MendiveUPR/article/view/4429

http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1608-89212017000200003&lng=es&tlng=es

- Guirado Rivero, V. (2010). Recursos didácticos para la enseñanza-aprendizaje de los escolares con necesidades educativas especiales. Pueblo y Educación.
- Heredia Heredia, L. J., Vélez Sarmiento, W. J., Guamán Naranjo, V. A., & Vásquez Ayala, P. R. (2023). Diseño Universal para el Aprendizaje, entre la teoría y la práctica. *Revista Franz Tamayo*, 5(13), 162-177. https://www.redalyc.org/articulo.oa?id=760579090009
- Horruitiner, P. (2009). *La universidad cubana: modelo de formación.* Editorial Universitaria del Ministerio de Educación Superior https://books.google.com.cu/books/about/La_universidad_cubana_el_modelo_de_forma.ht ml?id=r4D1DwAAQBAJ&redir_esc=y
- Martín-Hernández, A. L., Blanco-Oliveros A. F., Zayas-Bazán, M. V., Martínez-Corrales, J. U., Gómez-Gómez, E. E., & Iglesias-López, D. (2024). Acciones para fortalecer actividad científica estudiantil desde el trabajo metodológico de la disciplina investigación científica. *Revista de Ciencias Médicas de Pinar del Rio*, 28(2). http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=s1561-3194202400020008&Ing=es
- Minte Münzenmayer A., Sepúlveda Obreque, A., & Canales Reyes, R (2022). Modelo de autoevaluación, transferencia y monitoreo en Educación Superior. *Revista Cubana de Educación Superior*. 41(1). https://scielo.sld.cu/scielo.php?script=sci_arttext&pid=s0257-4314202200100028&Ing=es
- Paz San Pedro, V. B., Pichs Herrera, B. M., & Martínez Remigio, Z. (2023). Formación profesional de pregrado en la Universidad de La Habana ¿Sistema de créditos académicos? *Cofin Habana*, 17(1). https://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S2073-60612023000100006&lng=es&tlng=es
- Paz-Maldonado, E., Flores-Girón, H., & Silva-Peña, I. (2021). Prácticas inclusivas del profesorado universitario en el aula de clases: una revisión de la literatura. *Revista Universidad y Sociedad*, 14(6), 246-255. https://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S2218-36202022000600246&lng=es&tlng=es

practices: its application in the subject of Mathematics Teaching".

https://mendive.upr.edu.cu/index.php/MendiveUPR/article/view/4429

2025

Rodríguez, Y., & Figueredo, Y. (2021). La formación laboral del licenciado en Educación Primaria desde la disciplina Estudios de la Naturaleza. *Revista Varona*, (73), 1-9. http://revistas.ucpejv.edu.cu/index.php/rVar/article/view/1534

Valle, A. (2012). *La investigación pedagógica. Otra mirada.* Pueblo y Educación. http://www.scielo.sld.cu/scielo.php?script=sci_arttext&pid=S2077-29552017000300013

Conflict of interest

Authors declare no conflict of interests.

Authors' contribution

The authors participated in the design and writing of the article, in the search and analysis of the information contained in the consulted bibliography.



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