Guidelines for Providing Educational Support to Students with Visual, Hearing, and Physical Disabilities in the University Context

DrC. Yiddishy Rodríguez Veloz [1]*, Mgtr. Lorena del Carmen Bodero Arizaga [2], MSc Lourdes Veloz Cruz [3]

[1] Senior Lecturer: University from Cienfuegos, Cuba.

[2] Master's degree in Higher Education. Bolivarian University of Ecuador.

[3] Assistant Professor. University of Cienfuegos, Cuba.

*Correspondence Author: DrC. Yiddishy Rodríguez Veloz, Senior Lecturer: University from Cienfuegos, Cuba.

Abstract

Higher Education faces a series of complex challenges linked to structural, pedagogical, and sociopolitical factors. Among the main ones are: insufficient funding mechanisms; unequal student access and retention; the need for teacher training based on professional competencies; and continuous improvement in teaching, research, and institutional services. Likewise, the obsolescence of certain curriculam, the need to guarantee the employability of graduates, the effectiveness of the formulation of international cooperation agreements, and the equity in the distribution of benefits are identified. One of the most significant challenges is ensuring equity in access and academic development, especially for students with disabilities. Their effective inclusion in the field of Higher Education requires the implementation of integrative and transformative educational policies that promote substantial change in organizational cultures, in the epistemological conceptions of the teaching staff, and in institutional educational offerings. This transformation also implies the recognition of the universal right to quality education, regardless of the individual characteristics associated with functional diversity. Consequently, a reconfiguration of conventional pedagogical practices and the strengthening of ongoing training processes for academic staff are required, aimed at developing competencies that respond to the needs of a heterogeneous student population. This approach is framed within the paradigm of inclusive education, which demands a profound critical review of the regulatory, curricular, and methodological structures in force in higher education institutions.

Keywords: higher education; educational care; disabilities

Introduction

The university is a social institution that objectively emerged at a specific historical moment and from the conditions, possibilities, and needs generated by society itself. Throughout its history, it has transformed and adapted to different historical and social situations.

The above means that Higher Education institutions in Cuba must guarantee the full development of capacities in students, with a sense of social responsibility, a critical sense, and an ability to analyze problems and seek solutions that respond to the interests of society, thereby promoting changes that foster equality and justice for each and every one of their students, including those with disabilities, as an essential element for fulfill the role that the University must play in terms of sustainable development and the fulfillment of the objectives of the 2030 agenda.

For 60 years, the Cuban government has paid special attention to people with disabilities, in response to the ideas contained in international declarations and documents that have established guidelines for their care. These include: the Universal Declaration of Human Rights (1948); the Warnock Report (1978); the Salamanca Declaration and Framework for Action on Special Needs Education (1994); and the World Education Forum, Dakar, Senegal (2000), among others.

In Cuba and other countries in Latin America and the Caribbean, there is a research movement for the inclusion of students with disabilities. Some authors stand out: Borges and Orosco (2012); Leyva (2013); Mendoza (2015); Estévez (2015); Ortega (2016); Padrón and Granados (2018). In general, their results are limited to projects, models, programs, strategies and actions aimed at the educational attention of students with disabilities at the

primary and secondary levels, without particularizing at the university level. There are minimal experiences aimed at strategically satisfying the needs and premises of the improvement of university teachers in the educational attention to students with disabilities.

The study of the contributions offered by the referenced authors allowed the authors of the research to clarify that, in general, the inclusion of people with disabilities in Higher Education focuses fundamentally on their admission, permanence, and progress; the importance of the role played by teachers in serving students with disabilities is highlighted; the need for them to have the necessary tools to respond to their demands; cognitive and procedural needs are identified and described to guarantee educational attention to students with disabilities.

In Cuba there are few studies related to the subject Vázquez, et al. (2015), characterize the process of educational attention to students with disabilities in the Faculty of Social and Human Sciences of the University of Pinar del Río and consider improvement necessary for educational attention to students with disabilities in different university contexts, highlight the importance of the role of the teacher, but do so in a descriptive manner.

In Sancti Spiritus, Lazo (2018) explores the integration of academic, labor, and research components through the professional development process for teachers specializing in Accounting in Technical and Vocational Education at that University; he proposes a methodological strategy.

According to statistics reviewed by a group of researchers at the University of Matanzas, they determined that the programs with the greatest success in inclusive processes in Cuban Higher Education are Law, Computer Science, Technical Sciences, Physiotherapy, Education, Special Education, and Physical Education; it was Law that first opened its doors to these students.

A total of 21 students with disabilities have been admitted to the University of Cienfuegos in the last five years. They are represented in the Faculties of Social Sciences, Education, Agricultural Sciences, Physical Culture, and Engineering. Visual, physical, and hearing disabilities, in that order, are the most prevalent (Instruction No. 3/11, Guidelines on the Treatment of Young People with Disabilities Aspiring to Higher Education).

The analysis carried out confirms that there is little background on scientific results that contribute to the professional development of university professors in providing educational services to students with disabilities. It is also highlighted that the topics covered do not always respond to the educational reality and needs that arise in the classroom, which hinders reflection and analysis regarding their own teaching practices.

Therefore, the authors considered it necessary to delve into "how" to facilitate a set of guidelines for the educational care of university students with disabilities.

Development

The presence of students with disabilities in Higher Education at an international level has occurred with greater or lesser influx in different times and countries, understanding said educational level as an indicator of personal achievement, of greater possibilities for job placement, economic integration, social recognition, personal fulfillment by carrying out activities in line with their occupational and cognitive interests, and all of this as an expression of normalization within the educational and professional fields.

Since its inception, the term disability has been used to refer to people with a condition that somehow limits their full performance in a physical or intellectual function. This term has changed, and there have been significant shifts in its study.

The approval by the World Health Assembly of the International Classification of Functioning, Disability, and Health in 2016 gave rise to a new concept of disability by specifying that it should be understood as the restriction or absence due to impairment of the ability to perform an activity within the range considered normal for a human being.

According to data published by the World Health Organization in November 2017, people with disabilities are one of the most marginalized groups in the world, experiencing the worst health outcomes, lower academic performance, less economic participation, and higher poverty rates than people without disabilities.

The World Health Organization (2018) states that disability should be understood as limitations in activity and restrictions in participation that a person may have as a consequence of the interaction between the aspects inherent to their health condition (body functions/structures), activity (limitations in activity), participation (restrictions in participation), related to contextual factors (environmental and personal) that cause negative results.

For Zurita (2015), they are those people with long-term physical, mental, intellectual or sensory deficiencies who, when interacting with various barriers, can prevent their full and effective participation in society, on equal terms with others.

Leyva and Gómez (2015) point out that it is not a characteristic, nor an invariable state or disease, but rather a condition of development and functioning that, due to a deficiency in some part or function of the organism, the person presents. Limitations in performing expected activities and failure to fully participate in social life; this condition varies depending on support, individual disposition, and context.

For their part, Guirado and Rivero (2019) understand that disability is currently a human reality perceived differently, in correspondence with the incident socio-environmental factors: and it is related to a condition considered deteriorated, with respect to the general standard of an individual or their group.

The authors consider that, from a biopsychosocial perspective, disability is a consequence of the interrelationship between health characteristics and contextual factors. However, the variability in development and the psych pedagogical specificities of these young people are determined to a greater extent by the socio-educational situation in which they have lived. Therefore, it is not necessary to focus on biological or neurophysiological impairment, but rather on their potential.

Cuba shows encouraging results, finding students with disabilities in classrooms, residences and different university spaces, who access through different routes, but almost always have had the experience of participating in special education or other modalities of attention, support and aid that are guaranteed, either by the National Education System or by the Ministry of Public Health and endorsed in different resolutions such as: Circular No. 1 of 2011 on the treatment of young people with disabilities who aspire to study in Higher Education; Instruction No. 03 / 2011 Treatment of young people with disabilities who aspire to study in Higher Education; Teaching Organization Regulations; Ministerial Resolution No. 56 / 2008; Ministerial Resolution No. 120 / 2010; Resolution No. 2/2018; Joint Circular of the MES-MINED of 10/30/2003 that stipulates differentiated treatment for young people with visual, physical or hearing disabilities who aspire to continue their studies in Higher Education.

For Ocampo (2013), educational attention is a strategy to support the educational work of teachers to address disabilities; it must take into account components that facilitate spaces for reflection, training and teamwork.

These components are: research, education and awareness-raising, appreciated as the development of pedagogical knowledge and teaching skills.

For Hernández (2018), it constitutes a system of actions that are carried out essentially in the institutional context with the participation of other educational agents and its purpose is to contribute to the development of the students' personality, where the teacher facilitates and integrates the set of educational influences.

It is important to note that the bibliographic search aimed at delving deeper into the educational attention to students with disabilities in Higher Education in Cuba allowed the authors to obtain results that are relevant to other levels of education, but not to Higher Education.

Below, we analyze some definitions that various authors have offered regarding educational attention to students with disabilities.

For Castellanos (2003), educational attention implies making permanent efforts to create conditions that stimulate the development of individual potential in each and every student.

González (2010) conceives it as a task of development stimulation, in which prevention actions occupy a hierarchical place in the entire system of educational influences.

López (2011 ab) states that educational attention is based on the need to adapt the response to the peculiarities that students present in their educational process, which requires knowledge on the part of teachers of aspects related to disability.

Borges and Orosco (2012) state that educational attention requires a properly structured system of actions to influence the development of each student's personality. It involves perfecting the processes of diagnosis, characterization, and direction of the educational process.

Guerra (2013) considers it the process where coordinated actions are projected that act in several areas of personality development and are structured strategically, in such a way that it allows them to face the social and personal demands that arise with the greatest possible success.

In this regard, Santaballa (2015) states that in order to achieve educational attention, the role of psychopedagogical diagnosis is significant, with the aim of delving into the characteristics of the student's development, understanding their relationship with the environment, and determining their needs and possibilities; this knowledge is of vital importance to organize their educational response and enhance their development.

According to Zurita (2017), regardless of the disability, educational attention should focus on the aspects that must be developed taking into account individual differences based on the principle that all students are trained under the same laws of bio-psycho-social development, which underpins the assumption of a curriculum for all.

The definitions of the aforementioned authors have been analyzed by the authors of this research. They identify common points, including the emphasis that educational attention to students with disabilities constitutes a system of sequential and interrelated actions that begin with an initial state and consider the objectives proposed for the educational level at which they are enrolled. It allows for the conscious and intentional direction and organization of the pedagogical process and the comprehensive development of students. It takes individual characteristics as a starting point for educational intervention, emphasizing the needs and capabilities of each individual.

They agree that educational support should also combine psychopedagogical and rehabilitation interventions; however, the dynamics of this relationship are not clearly established, which in many cases leads to the fragmentation of the system of educational influences by teachers; educational support is not always contextualized to the specifics of the educational context.

It is also considered that attention to students with disabilities in Higher Education must be a continuous concretion of decision-making that is reflected from the teaching project to the development of the teaching units, implying the diversification of teaching-learning procedures and strategies. It is agreed with Batanero (2011), that the response to the diversity of the university student body necessarily implies directing all efforts towards a series of objectives ranging from raising awareness in the university community to providing guidance for job placement once higher education is completed.

In Cuba, Vázquez et al. (2015), when referring to educational attention to university students with disabilities, conceive it as a consolidation of proposals and agreements that have a social function, seeking access to knowledge, science, arts, technology, and other cultural goods and values.

Taking into account the analysis carried out previously at the theoretical level and the reflections of the authors of this research, it is considered necessary to determine *the guidelines that should distinguish the educational attention to students with disabilities in Higher Education*.

University students with hearing impairments

Place the student in a place where he or she can see the teacher.

Avoid noises that could further distort sound reception through your prosthesis and place it in a well-lit area, avoiding direct light on your face.

Place the student in a suitable position so they can look directly at the teacher and the board, with an overview of their classmates, to facilitate participation in the different dynamics taking place in the classroom. A second row can also be a suitable location to articulate clearly.

Speak in a normal tone and at a slow pace.

Support oral expression with body and facial gestures. Support oral sign language (bimodal)

Do not obstruct the view of your face and mouth with a mustache, dark glasses, pens, hands, or chewing gum.

Don't talk with your back to him.

Do not exceed two meters of distance when speaking to the group.

Speak slowly, pausing during explanations or stories. Enunciate clearly, but without exaggeration.

When speaking to someone, you must keep in mind that language must be appropriate between the words spoken, the situation, and the facial and body expression.

Establish individualized interaction and adapt oral language to your understanding capabilities.

Anticipate the topic of conversation Check what he or she has understood.

Ensure visual attention and respect its characteristics. Explain individually.

Start teaching by using situations that are familiar to the student. Support explanations with strategies and visual aids.

Explaining content in different contexts or with different materials. Provoking situations of cognitive conflict in the student.

Help in the organization and relationship of knowledge.

Organize teaching in small groups or by corners to help students control the information and facilitate their participation.

Help integrate new content into their knowledge frameworks. Promote independent and comprehensive learning.

Ensure visual attention and respect their characteristics: Get the student's attention before beginning the explanation to ensure they are paying attention. Students with hearing impairments cannot divide their visual attention between two stimuli at once, so they will have difficulty writing and following explanations; a time-out period will be necessary.

Support explanations with visual aids:

– Write the outline or script of the explanation on the board.
– Write the key words on the board.
– Present conceptual maps.
– Use transparencies, slides, power point.

Use understandable, simple language in explanations to make it easier for the student to understand what is being said.

Use redundancy: At the end of the explanation, go back to the main points and repeat them again.

Help you ask questions when you have doubts. Provide notes.

Regarding exams: preferably do not perform them orally and in cases where they are performed

In writing, it is advisable, on the one hand, to adapt the questions to simple terms without diminishing their level. On the other hand, it would be advisable for the exams to be presented as multiple-choice, matching, and direct questions, the latter of which should also be presented in writing. The instructions to be followed should be specific and explicit, considering the duration and the methods of answering. All this is based on the fact that the level of knowledge is being assessed without it being undervalued due to communication barriers.

University students with physical disabilities

Specially, we will ensure that students with physical disabilities can remain in a stable environment, ensuring physical accessibility and as close as possible to the source of information. We will refer to the teaching staff as the main agent, who will focus on oral and body communication by projecting and maintaining eye contact with the student, facilitating the communicative moment in the event of possible exchanges with clarifications, questions, or issues.

In the case of activities or environments outside the classroom in larger spaces, special attention must be paid to maintaining stability with the environment, reducing risks through proper planning of the activity, prior recognition of reality, and also during the development of the activity, ensuring understanding of rules and aspects related to safety.

Teachers must be aware that writing speed (either handwritten or digital) can be affected, as can handwriting, so arranging and organizing time appropriately for our activities is essential.

One helpful measure is to have the content to be worked on available in digital format prior to class to make it easier for students to read.

Conditions hygienic: it is related to the construction situation of the premises intended as a classroom, the material and human resources available. The selection of the classroom in the school should be on the ground floor as close as possible to the bathroom, and should be spacious enough so that anyone using a wheelchair or other means of mobility can move freely within it without disturbing other classmates.

Classroom climate: This includes the emotional state, level of satisfaction, involvement, and conscious participation felt by students and teachers during classes. This is evident in the communication established between teachers and students; verbal and extraverbal language; collaboration and support within the group; the independent work students do and the compensatory attention teachers provide; and the stimulation of self-esteem and self-worth through verbal and verbal recognition of students' work and their efforts to achieve results.

Students with visual impairments

Regarding reading the boards, it is recommended to assess the optimal distance from which the student achieves best performance, and to avoid reflections from natural and artificial light sources. If reading the board is impossible, alternative methods should be used, such as dictation, photocopies, or pre-prepared writing and exercises on cards. It is recommended to thoroughly clean any chalk residue after erasing. When writing on the board, consider leaving extra space on each line so that students can easily copy what is written.

Allow the student to approach the board whenever he or she needs to.

The board should be matte to avoid glare and enhance contrast. If it's black, use white chalk.

Provide verbal descriptions of what is being done on the board. This way, you can place the student in the task at hand. When writing an order, read it. Allow additional time to complete reading and writing.

Consider reasonable adjustments related to location within the classroom: there are no set rules for one student or another, as visual conditions are unique to each individual. Therefore, explore the different locations within the classroom with the student to determine the most appropriate location. If the student, He needs to get up to see what is on the board, he needs to be allowed to do so, that is his resource.

Classroom lighting affects visual efficiency. It's important to assess the classroom's lighting needs to be placed closer or further from light sources (windows or additional lamps) and determine the specific type and position required.

Lighting, both natural and artificial, must be carefully considered, as it can be distracting or dazzling for students. Generally speaking, it's best to position students with their back to the light to avoid glare. Proper lighting, both in terms of quantity and quality, based on the student's condition, contrast sensitivity, and adaptation to the amount of light, ensures reduced fatigue and better utilization of residual vision.

The fall of light directly on the eyes produces glare, reducing the perception and increasing fatigue.

Sudden changes in brightness disrupt visibility, even reducing it completely for a period of time. Time which varies from one subject to another and when this occurs, it is necessary to grant the time necessary until the accommodation to the new occurs atmosphere bright.

As a general rule, it is recommended to atmosphere of diffuse lighting and alight powerful beam directed at the task at hand from above and behind to avoid glare.

Any aspect related to blindness will be discussed freely whenever the situation requires it.

Avoid using there, over there, and here, as these are words with purely visual meanings and therefore meaningless to blind people. Instead, use words like to your right, left, above, in front of, behind, etc.

The terms "look" and "see" should be used without hesitation.

Verbally explain the information contained in images (photographs, video, slides).

Provide clear reference standards, accurately indicating the location of objects. Provide fixed reference points for spatial orientation.

Students will be able to complete classwork like their classmates, but using adapted or specific materials and media. Students with visual impairments will be able to write (for note-taking or exams) using a Perkins writing tablet or typewriter, and they will also be able to use recordings.

It is suggested that teachers give students more time to complete the exercises or reduce their number. All notes and written materials provided by the teacher should also be given to students with visual impairments, properly transcribed into the reading and writing system they use. It is easy to provide these materials in digital format so that students can print them in Braille.

Use appropriate contrasts: the best contrast: black and white, preferably. Value the work fairly.

Encourage the use of vision in each and every activity in the teaching process for the acquisition of knowledge.

Always ask students about the most convenient ways for them to learn. The student will be a good guide.

The guidelines described above allow the authors to propose that they constitute a reference for educational attention to students with disabilities.

Conclusion

Universities are facing new, different, and complex situations as a result of more dynamic realities, a more demanding society, and users who are more aware of the quality of the services they require. In this context, educational responses must take into consideration the complexity of these phenomena and be differentiated according to the context and the group of students with disabilities.

Educational support for students with disabilities at universities must generate a culture of respect and safeguard the full exercise of these students' rights. Therefore, it is necessary to create special access measures and ensure an infrastructure with adequate spaces to ensure effective participation in all the opportunities the university offers in terms of access, support for continued enrollment, and successful graduation.

References

1. Batanero Fernández, J.M. (2011). Teaching competencies for the inclusion of university students within the framework of the European Higher Education Area. Journal of Inclusive Education, 4(2), 137–147.

2. Borges Rodríguez, SA, & Orosco Delgado, M. (2012). An approach to the pedagogical concept of educational inclusion. XII National Seminar for Educators. Rebel Youth.

3. Castellanos Rodríguez Fleitas, X. (2003). Diagnosis of the bilingual communicative competence of deaf schoolchildren. (Doctoral thesis). University of Havana.

4. Esteves, A., & Santos, D. (2015). A look at the social inclusion of people with disabilities: The FLACSO Ecuador experience. In, M., Rifà, L., Duarte, & M., Ponferrada (Edit). New challenges for social inclusion and equity in higher education institutions. (pp. 233-251). MISEAL

5. González, AO (2010). Systems of action based on a model for the prevention of emotional and behavioral disorders in schoolchildren with mental developmental delays. (Doctoral thesis). Enrique José Varona University of Pedagogical Sciences.

6. Guirado, VC, & Rivero, O. (2019) Didactic-methodological requirements as units of analysis of educational practice in Special Education. IPLAC Journal, (2).

7. Hernández, L. (2018). Continuing education for secondary school teachers in providing educational support to academically talented students. (Doctoral thesis). University of Cienfuegos.

8. Lazo Rodríguez, M. (2018) The integration of academic, professional, and research components from the professional development process. (Doctoral thesis). University of Sancti Spíritus.

9. Leyva, M., & Demósthene, Y. (2013). Educational inclusion and special education: A unique and diverse horizon for equalizing development opportunities. Latin American Reference Center for Special Education.

10. Leiva, J.J., & Gómez, M.A. (2015). Inclusive education as a pedagogical construct for primary school university students. National and International Journal of Inclusive Education, 8(2), 185–200

11. López Machín, R. (2011a). Schoolchildren with special educational needs. People and Education.

12. Mendoza, A., Hernández, I., & Calzadilla, O. (2015). Inclusive Education. Challenges and Current Events. People and Education.

13. Ocampo, A. (2013). Inclusion of students with disabilities in higher education. Challenges and opportunities. Latin American Journal of Inclusive Education, 6(2), 227-239.

14. Organization World of the Health. (2018). International Classification of the impairement, disability and hándicap (ICIDH-2). https://apps.who.int/iris/bitstream/handle/10665/41003/92415412 61_eng.pdf?seq uenc

15. Ortega, L. (2016). Special Pedagogy and Educational Inclusion. MINED.

16. Padrón, R., & Granados, L. A. (2018). Challenges of pedagogy in the face of socio-educational inclusion of children, adolescents, and young people with disabilities. Redipe Bulletin, 7(12), 93–105.

17. Zurita, CR (2015). Special Pedagogy and Inclusive Education. Science and Technology Directorate – MINED.

Ready to submit your research? Choose ClinicSearch and benefit from:

➢ fast, convenient online submission

➢ rigorous peer review by experienced research in your field

➢ rapid publication on acceptance

➢ authors retain copyrights

➢ unique DOI for all articles

➢ immediate, unrestricted online access

At ClinicSearch, research is always in progress.

Learn more https://clinicsearchonline.org/journals/international-journal-of-clinical-research-and-reports