

## Implementation and application of the [PIAR] in undergraduate students with disabilities

### Implementación y aplicación de los [PIAR] en estudiantes de pregrado con discapacidad



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### Abstract

The main objective of this article was to describe how to strengthen the inclusion process in undergraduate students with disabilities at the Universidad Surcolombiana de Neiva Colombia, through a care pathway, for the construction and implementation of the Individualized Plan of Reasonable Adjustments [PIAR], so initially a characterization of students was made and according to the results a care pathway was designed and implemented; likewise the impacts of the same in the construction of an inclusive education according to the needs of students were evaluated. On the other hand, the research adopted a qualitative methodological route of Action Research type and with a participation of 15 students; as for the data collection instruments, an interview and a field diary were adopted. It concluded that the need was identified to strengthen the inclusion policy and awareness in the educational community, and to know deeply the regulations and the specific needs of students with disabilities; in addition, a detailed attention route was designed and implemented that guides each step of the process, from the initial

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identification of the student to the continuous evaluation of the Individualized Plan of Reasonable Adjustments [PIAR], demonstrating an institutional commitment to the creation of an inclusive and accessible environment. Ultimately, the implementation of this pathway has been a significant step toward eliminating discriminatory barriers and stereotypes, thus promoting a more inclusive and equitable society for all.

**Keywords:** Teaching strategies, PIAR, disability, inclusion and care pathway.

## Resumen

El presente artículo planteó como objetivo principal describir de qué manera se fortalece el proceso de inclusión en estudiantes en condición de discapacidad de pregrado de la Universidad Surcolombiana de Neiva Colombia, mediante una ruta de atención, para la construcción y la implementación del Plan Individualizado de Ajustes Razonables [PIAR], por lo que inicialmente se realizó una caracterización de los estudiantes y según los resultados se diseñó e implementó una ruta de atención; así mismo se evaluaron los impactos de la misma en la construcción de una educación inclusiva según las necesidades de los estudiantes. Por otro lado, la investigación adoptó una ruta metodológica cualitativa de tipo Investigación Acción y con una participación de 15 estudiantes; en cuanto a los instrumentos de recolección de datos, se adoptó una entrevista y un diario de campo. Concluyó que se identificó la necesidad de fortalecer la política de inclusión y la sensibilización en la comunidad educativa, y de conocer profundamente la normatividad y las necesidades específicas de los estudiantes con discapacidad; además, se diseñó e implementaron una ruta de atención detallada que guía cada paso del proceso, desde la identificación inicial del estudiante hasta la evaluación continua del Plan Individualizado de Ajustes Razonables [PIAR], demostrando un compromiso institucional con la creación de un entorno inclusivo y accesible. En última instancia, la implementación de esta ruta ha sido un paso significativo hacia la eliminación de barreras y estereotipos discriminatorios, promoviendo así una sociedad más inclusiva y equitativa para todos.

**Palabras clave:** Estrategias de enseñanza, PIAR, discapacidad, inclusión y ruta de atención.

## Introduction

The research focuses on the importance of inclusion, attention to the needs of students and the promotion of meaningful scenarios for the integral development of each person at the educational level. In every school environment and at every level up to the university, institutions must look after students and generate strategies to create equity and equality, so it is a challenge of qualification for the actors involved in the teaching-learning processes; so that, from pedagogy and vocation, teachers as academic managers should have an objective look at curricular flexibility and panoramic inclusion to reduce discrimination or absence of students in the classroom.

Globally, disability is one of the most important issues to increase inclusion and opportunities for each person without distinction; but there are still aspects and obstacles to improve, since there are cases of exclusions, vulnerability of rights and partial closures to education in the world. According to the World Bank (2023), to achieve inclusion requires social participation with awareness and empathy, since it is estimated that 15% of the world's population has a disability condition with economic limits, access to education, lack of transportation, health conditions, mobility and quality of life.

In the same context, the United Nations (2024), express that in the conditions of higher education in the world an estimated population of 15% with disabilities and with borders, estimates and rejections, so it is necessary to have care routes, support strategies and guarantees in the quality of the right to education. Faced with the problem of inequality, the United Nations (2015), promotes with the participation of countries around the world to meet the commitments of the Sustainable Development Goals [ODS], especially number 4 of quality education and 10 of reducing inequalities. This issue makes everyone participate at a general level and to have an inclusive look for a society that needs it today and to consolidate it in the future.

On the other hand, this problem of inequality in education for people with disabilities not only occurs worldwide, but also in Colombia, where the realities of discrimination, low social participation and school schemes that are not for everyone are also shown. According to Sistema Nacional de Información de la Educación Superior, more than 9,000 people with disabilities are enrolled in undergraduate programs in different technical, technological and university programs (Pontificia Universidad Javeriana, 2020); however, there is a lack of strategies to link more people with disabilities, new

institutional policies and support to ensure quality as support. Under this perspective, Oviedo and Hernández (2020), argue that education in higher education requires support, elimination of prejudices and conceptions that make erroneous stigmas, thus generating an incorrect assessment of people which increases inequality gaps; also expresses that inclusive education allows students in condition of human development and states that:

(...) Undoubtedly, there is a long way to go to consider these educational institutions as inclusive organizations, since there are still many factors to be strengthened. Among these must be considered educational policies, the removal of architectural barriers to curricular adaptations, attitudinal barriers of university members, among others (p.417). (p.417).

In consideration of the above, creating inclusive environments for students in education is one more challenge against the social current, political deficiencies and other comprehensive supports that could make a difference. It is from this need that the present research sought to design an attention route for the construction and implementation of the Individualized Plan of Reasonable Adjustments [PIAR] in undergraduate students of the Universidad Surcolombiana de Neiva, Colombia. It should be emphasized that the PIAR according to the Secretariat of Education of Bogota is characterized by being:

It is a tool used to guarantee the teaching and learning processes of students, based on the pedagogical and social assessment, which includes reasonable support and adjustments, curricular, infrastructure and all others necessary for their participation, permanence and promotion. (p.13).

Although, the PIAR is also part of the teachers' planning in their classes or interventions with strategies for all students, so it responds to the curricular criteria of the universities, the Ministry of National Education, among other pillars of education in globalized contexts. The PIAR are tools to strengthen the teaching-learning processes and for students to have a pedagogical route that achieves the proposed objectives with equity and inclusion. According to the important elements of the PIAR, this research focused on the design of an integral attention route for its implementation in the Universidad Surcolombiana de Neiva where there are problems of disarticulation with the needs of the students who in the long term will be the leaders of tomorrow's society.

Taking into account the problems worldwide and in Colombia regarding inequality in education for students with disabilities and specifically in higher education, it is found that in the Universidad Surcolombiana de Neiva there is not a route of attention to build and implement the PIARs that guarantee inclusive spaces and transformations for all and for those with disabilities to have a quality of life, education and constant support for their needs.

It is worth mentioning that, although the Colombian Ministry of National Education generates school guidelines as formative, each Higher Education Institution has autonomy, responsibility and empathy to create in their school contexts an education for all with inclusion, equity and empathy for diversity; that is why projects, plans, activities, policies and curricular changes are made to ensure equality, but in the case of people with disabilities it is required to put an extra mile with PIAR and with other actions of administrative, curricular, infrastructure and pedagogical practices adjustments taking into account the context of the students. According to the Ministry of National Education (2015), PIARs are pedagogical strategies that increase the permanence of students in their formative processes and leave significant traces.

Similarly, given the importance of PIAR, there is an opportunity for improvement and linkage of these in the Universidad Surcolombiana, since the same, since the agreement 053 of 2020, the Institutional Policy of Inclusion is designed and socialized, being a breakthrough for equity and social development (Superior Council of the Universidad Surcolombiana, 2020). Although belonging to a policy does not mean that there are comprehensive spaces for inclusive education, it is a specific problem that new and current students with disabilities at the university do not have a route of attention for the implementation of PIAR according to each context, causing a gap of inequality, discrimination and absence. Below is an outline of the problem tree. Then, it is evident that the Universidad Surcolombiana requires the design and future implementation of an attention route for the construction and implementation of the Individualized Plan of Reasonable Adjustments [PIAR] in students in condition of disability in undergraduate. Otherwise, the scope of the inclusion policy would not be fulfilled and high levels of absenteeism and dropout would be created, affecting the teaching-learning process of students and educational quality without barriers. Cancino and Villegas (2021), recognize that higher education institutions can appropriate the PIAR to improve higher education and establish a positive management with quality, equality and

inclusion to minimize differentiating barriers that are still present today.

## **Materials and methods**

The research focuses on proposing strategies to implement and apply Individualized Plans of Reasonable Accommodation (PIAR) in higher education settings in a Colombian university. It adopts a qualitative approach, focused on the participation of researchers and a sensitive understanding of the social reality to achieve true inclusion. It is not based on theoretical consolidation or statistical comparisons, but on understanding reality and proposing improvements. Action Research is used to transform the social reality of the lack of inclusion in the university environment, with a focus on identifying problems, designing action plans, implementing changes and evaluating results.

As for the population studied, it focuses on students with disabilities enrolled at the Universidad Surcolombiana de Neiva. The importance of guaranteeing equal opportunities and access to universal human rights for this vulnerable group is emphasized. The study is developed in four phases: characterization of the problem, analysis of results, design and implementation of an attention route, and impact evaluation. Qualitative instruments such as interviews and field diaries are used for data collection and analysis, and emphasis is placed on the importance of maintaining ethics and protecting the privacy of participants throughout the research process.

## **Results**

The main findings of the research are described below.

Characterization of undergraduate students with disabilities enrolled in the school accompaniment processes of the Universidad Surcolombiana de Neiva, Colombia.

To achieve this first objective, a characterization instrument was implemented and applied to students with disabilities at the Universidad Surcolombiana de Neiva (See Annex B. Student interview questionnaire - Characterization). This instrument was applied with the full consent of the students and with the protection of their sensitive information. The following is a description of the

findings identified without highlighting the personal data of each student.

In the first question of the instrument, they were asked if they consider that the university promotes the inclusion of undergraduate students; furthermore, 80% consider that the university promotes inclusion, but an additional 20% say that it does not. It is worth mentioning that, based on the findings, the institution can think of significant improvements to raise awareness of inclusion and accessibility alternatives, but also propose improvements from contexts and positive listening to the context of each student.

To complement, the students were asked the reasons for their answers, finding these transcripts where it is evident if they generate inclusion by the accompaniment, spaces and social awareness that goes hand in hand; but they also highlight an opinion of silence. Based on the above, generating an accompaniment route for students with disabilities is usually a favorable alternative that could occur in the long term within the institutional and managerial reforms. Estrella et al. (2023), argue that in the university the training spaces must be inclusive in order to be guarantors of an education for all without inequalities and non-compliance with the right to education; in this case, teachers should seek strategies to facilitate learning according to each need and without segregation or exclusion.

In the second question of the instrument, students were asked if they were aware of any current regulations on disability, finding the following picture.

From the context it is determined that 93% of the students do not know any current regulations on disability and 7% mention that they do; likewise, the justification of the students is described below. It is also shown that the students believe that in general they do not know the regulations and their protection of rights and duties. It is also evident that in the face of ignorance, a juncture can be created to continue with the ignorance or non-compliance with the norm as well as with public policies that promote inclusion in higher education. Pérez (2022), considers that it is one of the main dilemmas of society today, the lack of knowledge as an inability to comply by the actors involved. There is an opportunity to generate spaces for socialization of the regulations that support inclusion, but in a cultural way without imposition or only socialization for compliance, but with social responsibility.

On the other hand, 60% of the students consider that the university does have inclusion policies, while 40% consider that it does not. To

complement this, the students were asked if they knew which policies they knew about, to which they responded. According to the transcripts, it is evident that, although 60% of the students affirmed that there are inclusion policies, they do not know exactly which one it is.

In this case, there is a need for the university to socialize these policies to the entire community in order to comply with them and generate a cultural boom of inclusion for the development of all. In the next question analyzed in the instrument, students were asked if the university attends to the needs of undergraduate students with disabilities, to which they responded.

From the analysis in the first instrument, it is shown that 73% of the students believe that the university does meet the needs of students with disabilities and 27% respond that it does not; in addition, they were asked why they consider their response and the following was found. According to the students' answers, it is evident that they consider that the university somehow has support for their needs; however, most of them think the opposite or do not say anything. Finally, the students were asked if they know of any attention route for students in condition of disability, finding the following.

In the last question analyzed, it is evident that 60% consider that the university does have a comprehensive care route for students with disabilities and 40% mention that it does.

It is determined that students do not know the meanings of the comprehensive care route, so they confuse it with actions for inclusion. From the results found, it is possible to understand the need for the design and implementation of a comprehensive care route for the community with inclusion of the Surcolombiana University.

Design and implementation of a care pathway for the construction and implementation of the Individualized Plan of Reasonable Adjustments [PIAR] in undergraduate students with disabilities at the Universidad Surcolombiana de Neiva, Colombia.

### Design

According to the results of the first objective, the opportunity was found to create an attention route for the construction and implementation of a PIAR for students with disabilities, therefore its implementation is sought as a guiding principle and generator of inclusion, equity and university space for all. The route designed



according to the needs of the Universidad Surcolombiana de Neiva is shown below.

Taking into account the route created for the construction and implementation of the PIAR for students with disabilities, it is possible to significantly determine that this would be part of a navigation map for the promotion of inclusion and equity in university scenarios, eliminating exclusive barriers and discrimination; in addition to promoting an education for all and where each student is visible.

Thus, the first step is the reception of the student, where upon arrival at the University, their needs are known, they register for the admissions process and the first approach is made with the disability office, so that there are constructive spaces for socialization, empathy, visibility and permanent support for adaptation to university life. Students also have the university's doors open at all times without exclusions, but on the contrary in empathetic means for all.

The second step of the route is the identification of the student, where their needs are deepened under a characterization, a socialization of the inclusion policy so that they feel a support and at the same time a direction is created for teachers, who have a continuous qualification to make their practices more flexible and allow the holistic formation of students. In the same sense, the unique capabilities of self-recognition are deepened so that the entire educational community is part of the promotion of an inclusive culture without barriers in the formation of the next leaders of society.

The third step is the formation of the team of professionals to support disability [PRAD], at this point the University generates an open call for the participation of the educational community and consolidates a group of professionals in the areas of psychology, law, counseling and graduates in space education; so that each professional has their contributions that eliminate exclusion gaps in the University and generate strategies for inclusion and compliance with internal policies.

In the fourth step, the student's situation is analyzed, so a deep analysis of the student's reality is made, including the medical history, the certification of the cognitive disability is validated, the record is made in the academic history and the program is presented to the head of the program and the team to initiate the needs of the

students, being a holistic support network for personal and school success.

The fifth step is the training of the teachers of the program, so the University makes a disclosure of the inclusion policy, makes spaces of deepening in disability and inclusion and generates the filling out of PIAR formats. In view of this, the university has a commitment as a social responsibility so that each teacher can improve their work with an inclusive look and eliminating barriers that are marked in society for people with disabilities.

Likewise, it should be emphasized that this route contributes to having a larger professional population with disabilities so that they can participate in society, be autonomous and have a better quality of life.

The sixth step is to fill out and apply the PIAR forms, so here all the actors involved participate, socialize the needs and contexts of the students, fill out the associated documentation; then commitments, guidelines and actions are assigned to strengthen the learning of students with disabilities.

Finally, the seventh step is the evaluation of commitments and implementation of the PIAR where the whole community is active again, the commitments fulfilled are verified and decisions for improvement are made. Thus, successively in a cyclical way, an inclusive education with social commitment is provided for the new generation of students who have dreams and goals to achieve in a society that still has biases with disability and blocks that prevent them from developing their lives.

It is worth mentioning that the University seeks that inclusion is more than a policy and generates sensitivity in each student and internal actor to build a citizenship of peace, empathy and equity; therefore, there are continuously qualification spaces, workshops, among other courses to learn Braille, sign language and molds infrastructure for all. To complement, this attention route generates important school contributions in three specific aspects: the first in the adjustments of pedagogical practices, the second in the curricular diversification, plus the evaluation and the third in the participation from values and rights; that is why the University seeks to continue understanding its diversity day by day.

#### Implementation

Now, regarding the implementation, this has been a process where the University has had open doors because of its importance for the

educational processes of students with disabilities, so to achieve its execution it is integrated with the inclusion policy and continues with the participation of the entire educational community in all steps of the care route. For this academic semester of 2024 we started with this route, starting, fulfilling each step.

Students in the first characterization as in the initial admission can say that the university can meet their needs and make their educational environment more flexible with the help of empathetic professionals who seek the personal growth of students in training.

When students are characterized, the inclusion policy is socialized, so that the entire community feels the support of the University and can have environments for all. It is worth mentioning that, within the implementation, there is the consolidation of professional experts who are also key to the objectives outlined in the scope of the PIAR.

According to the established route, a significant change was achieved in the University and a clearer vision of inclusion from the continuous accompaniment of students with disabilities.

Evaluation of the impact of the attention route for the construction and implementation of the Individualized Plan of Reasonable Adjustments [PIAR] in undergraduate students with disabilities at the Universidad Surcolombiana de Neiva, Colombia.

In the first place, it is important to emphasize that with the attention route designed and implemented, impacts were achieved, for example, in the fulfillment of the traceability of the objectives of the inclusion policy, the promotion of visible and empathetic environments for students and the possibility of having a better accompaniment according to their needs. In this case, the attention route considerably improves the quality of life of students with disabilities and promotes an inclusive culture throughout the university, giving priority to diversity.

Another favorable element that shows the impact of the route is the attention to the initial problem where the lack of knowledge and the lack of processes did not allow students to understand their support networks and their possibilities of making their formative processes more flexible in the different university programs they are enrolled in. Likewise, there are impacts on community participation, integrity and promotion of inclusion for the consolidation of a better citizenship of tomorrow.

In addition, it should be emphasized that, with the attention route, there is awareness of the diversity of the school population and the

need to integrate decolonial actions for students, especially in compliance with educational quality, inclusion and society without barriers that discriminate. From this point, a favorable impact is generated in accessibility, participation, reasonable accommodation, social empowerment and change in society to value the population with disabilities and eliminate stereotypes of disability and vulnerability.

## Discussion

Returning to the guiding question that was: How is the inclusion process strengthened in undergraduate students with disabilities at the Universidad Surcolombiana de Neiva Colombia, through a care pathway for the construction and implementation of the Individualized Plan of Reasonable Adjustments [PIAR]? It is possible to conclude that, there is a true inclusion from the school flexibilization of students in condition of disability with the seven-step attention route, being this a conditional creation according to the realities found in the University; in the same way, inclusion is strengthened from the empowerment of inclusive education from innovative strategies and able to adapt flexibilization as the curricular diversification as in the pedagogical practices.

In this case, the general objective was achieved within each of the specific objectives developed; so, for the first objective, which was to characterize the undergraduate students with disabilities enrolled in the processes of school accompaniment of the Universidad Surcolombiana de Neiva, Colombia, it is concluded that, although 80% of the students value inclusive education at the university, 20% of the total do not consider it so, so it is key to continue deepening the inclusion policy throughout the community; In addition, it is concluded that knowledge of the regulations is required, to promote the development of inclusion policies and to meet the needs of students with disabilities.

It is concluded that a continuous promotion of inclusion and new diffusive and participative channels should be generated for future generations as truly competitive professionals.

For the second specific objective, which was the design and implementation of a care route for the construction and implementation of the Individualized Plan of Reasonable

Adjustments [PIAR] in undergraduate students with disabilities at the Universidad Surcolombiana de Neiva, Colombia, it is concluded that the route was created from seven steps; this route was designed specifically for the needs of the institution, it is presented as a detailed map that guides each step of the process, from the initial reception of the student to the continuous evaluation of the PIAR.

Additionally, the design of the pathway is based on the recognition of the need to create an accessible and welcoming university environment for all students, eliminating exclusive barriers and fostering an inclusive culture. Each step of the pathway, from the identification of the student to the creation of a team of disability support professionals, is focused on providing comprehensive and personalized support to ensure the academic and personal success of each student. The implementation of the pathway was a gradual but significant process, integrating the university's inclusion policy and counting on the participation of the entire educational community. This continued focus on inclusion and personalized accompaniment demonstrates the institution's commitment to creating an educational environment that values and respects the diversity of its students.

Finally, it is concluded that for the last objective, which was to evaluate the impact of the attention route for the construction and implementation of the Individualized Plan of Reasonable Adjustments [PIAR] in undergraduate students with disabilities at the Universidad Surcolombiana de Neiva, Colombia. this route has contributed to the fulfillment of the objectives of the inclusion policy, promoting visible and empathetic university environments, as well as providing a more effective and personalized accompaniment to students, thus improving their quality of life; in addition, it has generated a cultural change throughout the institution, prioritizing diversity and consolidating an inclusive culture that benefits the entire educational community.

The route has effectively addressed the initial problems related to the lack of knowledge and processes, allowing students to understand and access their support networks and make their formative processes more flexible. This approach has promoted community participation and integration, contributing to the formation of a more inclusive and diversity-conscious citizenry. Ultimately, the implementation of this route has generated a positive impact on accessibility, participation, reasonable accommodations and social empowerment, thus contributing to the transformation of society towards one that fully values and respects people with disabilities, eliminating stereotypes and discriminatory barriers.

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