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Architectural criteria that influence and contribute to the educational training and rehabilitation of children and young people with disabilities in *cebes* and surroundings of the city of arequipa

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Abstract

The concepts of accessibility and integration have been included in regulations, texts, laws, etc. educational, despite this, reality shows that these concepts fail to be evidenced in a concrete way in our physical environment. It is in this context, that the present investigation develops a study focused on the spatial educational needs that are required to solve the insufficiencies that students with some type of disability endure every day, in their training centers. For this, the research needed to take into consideration contributions from different disciplines such as pedagogy and environmental psychology, evaluating the proposal with different perspectives to formulate an architectural proposal

Keywords: *Educational architecture, people with disabilities, universal accessibility, resource center*

Introduction

Since the privatization of Colombian ports in the nineties, cargo capacities have increased, maritime traffic has been more efficient and logistics processes have become more effective. It is an initiative of the national government, the Colombian Navy and all public and private entities involved in maritime trade to maintain development. Children, women and the elderly are often mentioned as the most vulnerable social groups in a humanitarian emergency; however, another relevant vulnerable group is forgotten to be mentioned in this type of situation; the group of people with disabilities. Unfortunately, this type of exclusion in which we all participate in an "involuntary" way is reflected in many other more common everyday situations and contexts; as the simple fact of moving, accessing a place, or even communicating.This minority group of people with disabilities, generally located in a lower step than the rest, put there due to the "involuntary" thoughts, again, of an "invulnerable" majority, were the main reasons for exploring how to deal with this indolence, and therefore on the contrary, reinforce the capacities of this group through their training. Access to educational training in Peru still has conflicts and shortcomings; and this sector of the population is no stranger to it; in fact, it has a greater impact on people with disabilities, this is due to the fact that educational centers aimed at people with disabilities depend significantly on other sectors, such as social assistance, health, and urban planning. Therefore, joint actions are required to offer access to a good quality of life for everybody.

Context of the research

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Today, special education centers are specialized assistance institutions for people with multiple disabilities, because the inclusive approach allows children and young people with disabilities to be progressively inserted into regular centers. The spaces for this type of daytime educational stay contain activities in order to integrate their users into society, for the maximum development of the abilities of each student and also to promote their personal independence in order to develop activities, skills, social behaviors and attitudes.

Within our national and local reality, we can visualize the complexity of activities planned in spaces of this type, which, as will be seen throughout this document, must be comprehensive in order to facilitate the day-to-day life of its users. Therefore, this educational center will be supported by another institution that will provide the necessary resources for its operation. It is highlighted that these centers must consider within their physical infrastructure design characteristics elaborated through a complex and interdisciplinary process within which its parts (planning, programming, design, possible construction and equipment) must be of multiple efforts and professionals. In addition to being a center that respects the educational structure by levels, as such this center must be a pre-employment training and technical space together with the socio-rehabilitation function to respond to the special needs of its users.

Aims and methodology of the research

The main aim of this work is to recognize the contribution of architecture and the influence of the surroundings conditions in the educational training and rehabilitation of children and young people with disabilities in Arequipa.

To achieve these objectives, there was a need to develop a methodology based on two features: on the one hand, getting the analysis on the perspectives of other centers in order to have a wide vision of the necessities and techniques, on the other, extending the focus to get information about different systems of learning

Case studies

Case 1: Library México José Vasconcelos

The library is located in a building from the end of the 18th century, within the Historic Center of Mexico City. "La Ciudadela" is a colonial architectural complex. In 2011 the building was restored and gave way to "La Ciudadela, la ciudad de los libros ". The project also included innovations and technology in an 18th-century building, reading rooms, digital services, a children's room, an area for the visually impaired, an exhibition gallery, and circulation recovery[1].

In 2011 they proposed the Braille area (or room for the blind), the multipurpose space, digital literacy, the baby library and the toy library, organized around the patios inside the complex.

The room for the blind has an area of 510 square meters; the intervention was carried out in two galleries, of the old tobacco company; the space was used upwards, establishing a circulation that contemplates routes without obstacles for users. The first level was reserved as a meeting place, utilitarian spaces such as the playroom and the area for blind or not blind children; the space is not only for the blind community, but also for their family and friends who do not always share that condition. Whereas, the second level houses 12 high-tech booths, six super-equipped and six for recording; which are accessed by the design of a perimeter circulation, around which the booths are located, designed for acoustic insulation and to give privacy to the user.

The general requirements for this type of places are paths for canes, signs in Braille, extensions in corridors of 1.80 meters, wide elevator. Elements in yellow were included in all braille inlays. The room also has an elevator, a booth, and a play space close to receiving games adapted for boys and girls, six booths that have

Braille Mountbatten multifunction equipment, a computer with JAWS software and a topaz amplifier with a screen, and six reading-writing booths where They make face-to-face recordings and have the most recent version of the Sara talking scanner. On the other hand, furniture design such as bookcases have the quality of being identified with touch due to their texture, as well as being multifunctional. They are used for the sound part as small grilles equipped with horns through which the sounds come out.

Case 2: Developmental learning center – Warren for Autistics

The Developmental Learning Center (DLC), is a school for children with autism located in New Jersey-USA, it has an area of 167,000 square feet and its design was developed by USA Architects, the concept they used was to replicate the social settings where students would normally travel "off campus" to experiment.

The "Main Street" corridor is lit to simulate a downtown street with storefronts (learning labs) that simulate real locations, such as a bank, hardware store, and hair salon, offering vocational training and life skills within a " real life"; it is an autonomous and structured environment. Its hallways are filled with colorful posters, photographs, and student artwork. Many parents ask if there is too much stimulation. But the center's focus is that its students need to learn in "real" settings if they are ever to have the opportunity to use their acquired skills outside of the classroom. It sought to replicate spaces of daily life for the integration of the child with autism, a false complete apartment, as well as public spaces such as a cafeteria[2].

Case 3: Children's Hospital Teletón de Oncología- México

It is a health facility that cares for children with disabilities in the city of Querétaro, Mexico. This is how the ideals of the Children's Hospital were designed to support children with cancer and disabilities in general. The total area of the land is 45,130 m2, a large part of which is destined for an ecological reserve and another part reserved for future expansion. The institution has a shelter, "La Casa Teletón" where patients who need to sleep and study are temporarily housed inside. The staff is made up of 60 doctors and 82 specialist nurses[3].

The architectural concept is based on a chain of cells with different movements, which represent the principle of cell regeneration. Each of these cells is represented by an architectural volume, a total of 9, within which the entire project is developed, which as a whole has a curved shape.

The entrance to the building is through the central part of the bar, it is the main general entrance that takes you to a reception area followed by a waiting room1, decorated with pouffe furniture so that adults and children feel more comfortable, adjacent to this is the first core of vertical circulation made up of two elevators and an emergency staircase. On its sides, in the opposite direction, there are two corridors that lead to the two wings of the building, distributing the conformation of attention bodies.

The building is made up of nine elements, some of these spaces are: Imaging, nuclear medicine, radiotherapy, blood bank, laboratory, they have a comprehensive laboratory for studies of pathology, cytometry, cytogenetics and molecular biology. It has intensive therapy rooms, both oncological and: physical therapy rooms equipped with walkways, and physical assistance machines, as well as a mini-gym for motor stimulation for cases of loss of mobility. Non-medical therapy workshops, such as painting workshops, and game rooms.

Case 4: Playgrounds Melis Stokepark y Van Campenvaart.

Ciudad de la Haya, in 2007 asked the architecture and landscape studio CARVE to design two public "integrative play facilities"; the overriding requirement for these play areas was that they be suitable for children with and without disabilities,

Both universal use play areas designed based on the abilities, not the limitations of children with disabilities[4]. The starting point is that each child wants and can discover their possibilities and be able to overcome their limits. The important thing about the project is that the play areas do not immediately show that possible limitations (visual, auditory, physical and mental) have been taken into account; if not, that they offer increasing challenges for all children and therefore contribute to all-round play.

The playground at Melis Stokepark consists of an ascending ring that is both a curved route to the slide, and a two-sided climbing boundary. Two paths in the park tangentially surround the courtyard, as a result of these tangencies result in three entrances. Two smaller wooded gardens and an extension of green area also wooded, surround the patio, these help to improve the sunlight in four sectors where the urban furniture (bench) is located that serve as rest and surveillance of parents and guardians to the children. minors who use this space. The patio is limited by the circulation ring at ground level and by the ring of ramps programmed for children with restricted mobility. In the center there is a free area that acts as a multiple function patio, into which the slides or raised openings flow. to the wall ring on a slope that can be climbed inwards.

At Melis Stokepark the ring encloses an indoor area with undulating blue slopes and a sandpit. Several passages lead to and from this indoor area and offer their own seating and play possibilities. The privacy of this indoor play area offers a secluded spot for kids who have a hard time keeping up in the big outdoors. Around and in the ring there is ample space for challenging active play, repetitive motion play (spinning, sliding, jumping and swinging).

The Van Campenvaart complex is divided into three sectors according to its function, the first locates the inclusive park proposal, the second includes a sports field with artificial grass and an expansion of natural grass, and the third a natural wooded area and a natural slope. , have tree-lined boundaries and level differences, due to the typographic nature of the terrain. This space shows that accommodating children with disabilities need not have additional costs for specific play items for children with special needs in particular ways.

This park presents a relief that allows the creation of a staggered level of sequence of ramps and between them other spaces are developed that are also part of the play area; its circulations are both functional and part of the game design; and finally, its wooded area serves as a natural limit, to maintain a degree of protection when being inside the park.

They also highlight the variety of unconventional activities within the playground, as despite housing children with disabilities, their mission was to blur the design to the point where "integration" did not exist, simply because the differences were not part of the concept, this is achieved by including conventional activities and games such as a slide or slopes, normally not included in spaces for children with special needs, with the aim that each child wants to discover their possibilities and be able to overcome their limits. However, the intersecting routes allow differently abled children to come together and help each other.

Caso 5: Centro educativo, alojamiento y entrenamiento Trinity Hill

In 2015, the Trinity Hill Accommodation and Training Center designed by the architectural firm Heffernan Button Voss Architects (HBV) was inaugurated. It is an architectural complex for temporary residence and educational training. Its primary commitment is to provide quality and sustainable services for low-income people in Tasmania - Australia, who are homeless, or living with a disability, its facilities are recreational and training[5].

The design proposal groups all the residential units in a single sector, on the Elizabeth street side, where a

higher density can settle more comfortably as a result of the unevenness; except 8 located on the upper margin near Church Street. All units are north facing to maximize sun and perspective. The urban profile shows a staggered architectural complex, which takes advantage of the already established topographic relief, this allows the buildings or blocks projected along the land to have different heights; Thus, the lower façade facing Elizabeth Street maintains a height of up to four levels from the residential building towards the street, not counting the 1m drop. from the track to the entrance; while the profile that adjoins the upper Church street is maintained at the same street level, since this serves as a vehicular entrance to the parking area, and the central part is located at an intermediate level connected by a bridge between blocks as well as vertical circulations (stands and elevators for the disabled) with the restored area, which is a single-level block with a reticular shape in plan and vaulted in certain sectors as a volume.

After reviewing all these other cases, it can be said that all organizations propose simple distributions with easy access from open spaces, such as centralized, sectorized patios and linear distribution circulations. Space recognition is applied through the perception of sound, aromatic and tactile sensory elements to guide the user during the tour and use of spaces. The circulations use connecting elements such as bridges, ramps, elevators and stairs so that they connect the spaces in an optimal and universal way.

In the field of interior and exterior spatiality, the alternation of open and closed spaces is proposed, varying the spatial sensations. All the examples present the green areas as instruments of control, sunbathing and essential recreation for their users. The teaching environments included are replicas of intimate daily life spaces such as a house with rooms. Ss.hh., kitchen, dining room; and public spaces such as shops, cafes, auditoriums. Recreational and sports spaces are an elementary part of the recognition of diversity and tolerance, therefore, they are inclusive training spaces; The spatial concept they have is that each child discovers his possibilities, exceeds his limits, appreciates differences, recognizes similarities, accepts and tolerates them.

Regarding the shape and materiality, it can be said that: the building levels are up to two levels, with horizontality predominating, and in the cases of more levels, they are proposed according to the urban profile and the use of unevenness so that the elevation difference is progressive. Despite the fact that the designs seek to be simple and functional, the use of rhythm and alternation between emptiness and volume benefits the design with sensations of movement. The shapes used also represent concepts and intentions with a meaning, as is the case of the cancer hospital, in which they seek to represent a chain of cells with different movements.

Regulatory framework

The *Consejo Nacional para la Integración de la Persona con Discapacidad*, an executing agency attached to the *Ministerio de la Mujer y Poblaciones Vulnerables de Peru*, together with representatives of the Central Government and contributions from different organizations specialized in persons with disabilities, developed the regulations of Law No. ° 29973: General Law of Persons with Disabilities. The standard for the design of special basic education premises, which has established the criteria and guidelines that must be taken into account in the design projection, was taken as important information.

The design criteria for special basic education premises aim to establish the tools and/or criteria for the design of the educational infrastructure, which is why it presents the normative bases to generate a flexible and adaptable architecture, which allows it to adapt to technological changes, pedagogical and environmental and geographical conditions where the infrastructure is located. and prepare the conditions of the space, in terms of comfort, quality, accessibility and safety of the environments of the Special Basic Education Center (CEBE). One of the most outstanding points of this regulation is Article 13: Criteria for

architectural design.

Likewise, it is important to consider what is established in the National Building Regulations and the Arequipa Metropolitan Development Plan; thus, all the regulations agree that sizing is essential to design a comfortable and easy-to-move design, since design standards and conditions functionally establish the minimum requirements for the operation of educational facilities.

Disability and education facing architectural barriers

There is a break between awareness campaigns and the verifiable application of the inclusive approach in our context, that is, that despite promoting empathic thinking that includes diversity in all areas of people's lives, it is not observed that this thinking impact on inclusive results evident in the physical space. The first result of this break is to deny spaces to people. We might think that this situation only directly affects people with disabilities; but the truth is that many times we are all excluded, but not in an obvious way. In several Latin American cities, a singular behavior has been seen repeated in public spaces by the authorities or other citizens, in which parks, streets, and even neighborhoods, have been surrounded by a physical limit for their entry; the truth is that fence a park, close a street, is also denying the use of it[6].

However, let's imagine the position of an inhabitant with a disability, in which an element such as a fence is not necessary to thwart the use of physical space. If you are hanging from a wheelchair, it is easy to find sloping streets that only have a stair system, or want to go to a park, but only be able to access one space, because it does not have ramp circuits; or that we are blind and do not know where we are if on the track or the sidewalk, or even something simpler, wanting to ask where the whereabouts are, that nobody understands you or worse, that there are no signs indicating the direction.

This shows that what is simple and every day for one sector without disabilities is not only a difficulty for the other with disabilities, but many times they become physical barriers, which they face every day as a challenge, because there is no more options. It is important to note that the context does not prevent free mobility, access and show how the architectural element excludes a group of users.

Accessibility as a premise in any design is the condition that a space, place and/or physical scenario must meet in order to be usable by all people, safely, comfortably and in the most autonomous way possible. The reference to "all people" is associated with an essential reality: individual, contextual and situational diversity of each person with physical limitations that makes them different from others. However, accessibility facilitates mobility for people, allowing them to reach their destination, enter, use the services and be able to graduate, for this reason it must be considered in the generation of the design parameters of educational spaces so that they are inclusive[7].

Current situation

Site Analysis and diagnosis.

Circulation distance map

This map allows you to specify the kilometers between the E.U (Educational Unit). and the CEBE CRIEBE Nucleus to which they are interconnected through the indicated routes. Such routes or displacement of users from the U.E. external, they are superficially analyzed, but they leave a database that serves as support, either by fixing collective transport routes or by granting individual transport aids[8].

Likewise, in this map the distances of private service and public service are observed, since it was prepared taking into account the shortest, fastest routes and measuring the issue of traffic that occurs within them.

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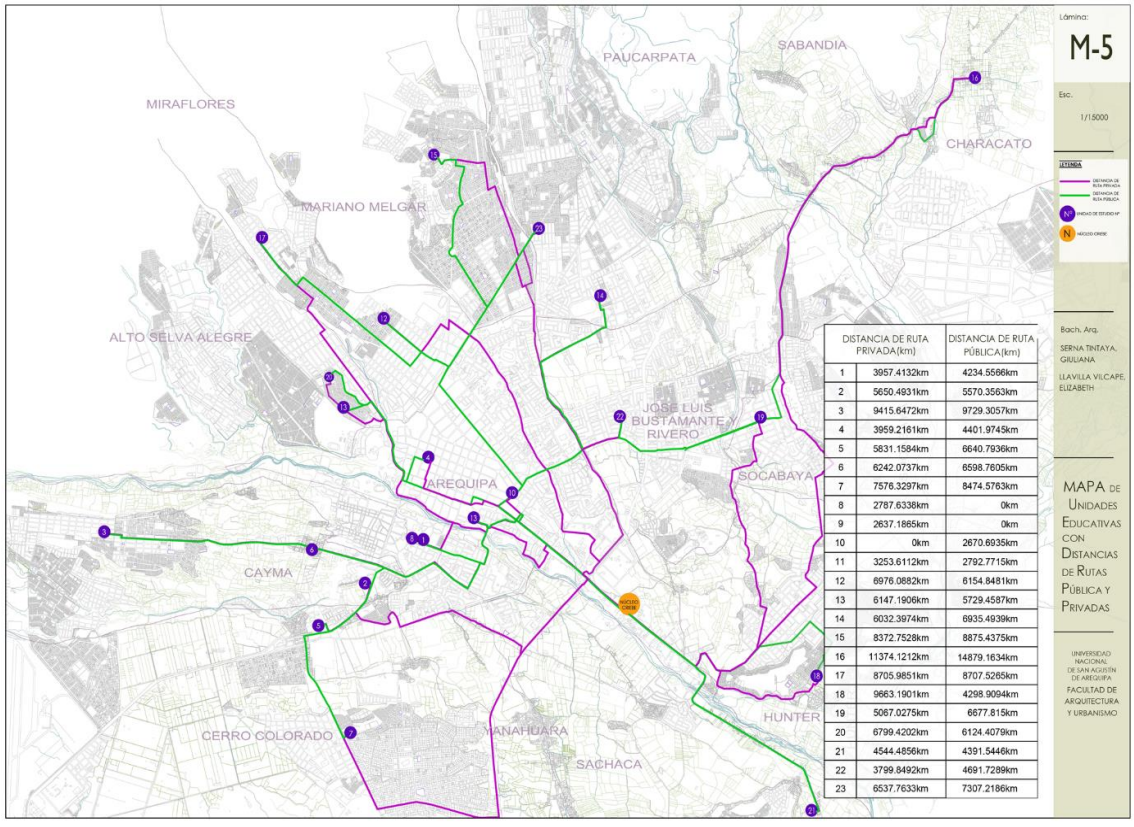
First, the mapping of private service distances was carried out, obtaining an average distance of 5883.9580 km. The shortest distance is U. E. 10 – Santa Lucia with 2637.1865 km and the longest distance is U. E. 16 – María de la Esperanza with 1 1374.1212 km.

The mapping of public service distances continued; In order to obtain these distances, 1 to 4 public service transport units are accessed in order to reach the CRIEBE Nucleus. So, the shortest distance of the U. E. 10 – Santa Lucía with 2670.6935 km and the longest distance the U. E. 16 – María de la Esperanza with 14 879.1634 km.



	DISTANCIA DE RUTA PRIVADA(km)	DISTANCIA DE RUTA PÚBLICA(km)
1	3957.4132km	4234.5566km
2	5650.4931km	5570.3563km
3	9415.6472km	9729.3057km
4	3959.2161km	4401.9745km
5	5831.1584km	6640.7936km
6	6242.0737km	6598.7605km
7	7576.3297km	8474.5763km
8	2787.6338km	0km
9	2637.1865km	0km
10	0km	2670.6935km
11	3253.6112km	2792.7715km
12	6976.0882km	6154.8481km
13	6147.1906km	5729.4587km
14	6032.3974km	6935.4939km
15	8372.7528km	8875.4375km
16	11374.1212km	14879.1634km
17	8705.9851km	8707.5265km
18	9663.1901km	4298.9094km
19	5067.0275km	6677.815km
20	6799.4202km	6124.4079km
21	4544.4856km	4391.5446km
22	3799.8492km	4691.7289km
23	6537.7633km	7307.2186km

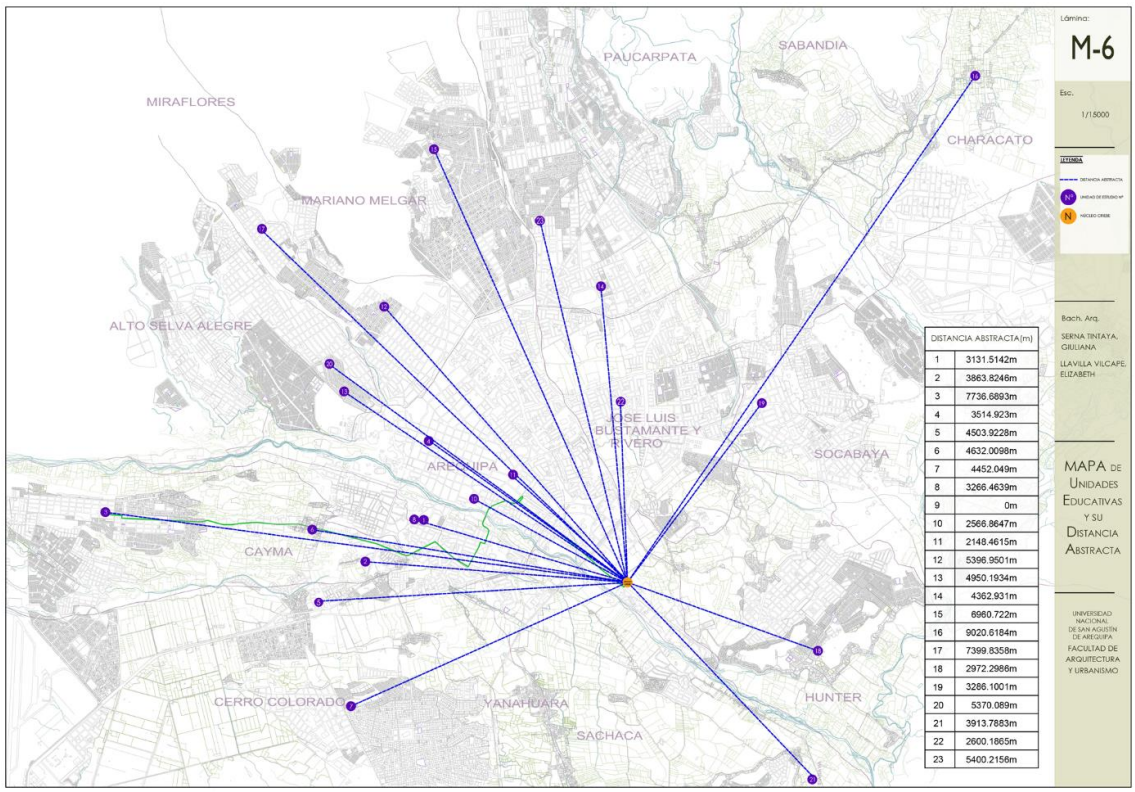
Figure 1: Circulation distance map

Abstract distance map

It is a map that records abstract distances of the 23 Educational Units towards the CRIEBE Nucleus, we can immediately perceive the distance in which each Educational Unit is found. The average abstract distance of the Educational Units is 4410.8979 m, the closest abstract distance is U. E. 11 – Nueva Esperanza calle 28 de Julio 609 located in the Cercado district with 2148.4615m and the longest abstract distance has U. E. 16 – María de la Esperanza main street s/n, located near the main square in the district of Characato with 9020.6184 m.

Likewise, we can observe the great abstract distances found in the E.U. 17 San Martin de Porres, Junín street located in the Miraflores district with an abstract distance of 7399.8358m, U.E. 3 Nuestra Señora de la Candelaria, Chanchan 307 avenue located in the Cayma district with an abstract distance of 7736.6893m

and U.E.15 Señor de los Milagros, Los Pinos street s/n located in Mariano Melgar with an abstract distance of 6960.722m. We also find the closest abstract distances in the E.U. 10 Santa Lucia calle 28 de Julio 609 located in the Cercado district with an abstract distance of 2566.8647m, U.E. 18 Nuestra Señora de la Consolación Bolognesi D-19 street located in the Jacobo Hunter district with an abstract distance of 72.2986 and the U.E.22 Manos Unidas in Quinta Tristán Mz Z4 Lt6 located in the José Luis Bustamante y Rivero district.



DISTANCIA ABSTRACTA(m)	
1	3131.5142m
2	3863.8246m
3	7736.6893m
4	3514.923m
5	4503.9228m
6	4632.0098m
7	4452.049m
8	3266.4639m
9	0m
10	2566.8647m
11	2148.4615m
12	5396.9501m
13	4950.1934m
14	4362.931m
15	6960.722m
16	9020.6184m
17	7399.8358m
18	2972.2986m
19	3286.1001m
20	5370.089m
21	3913.7883m
22	2600.1865m
23	5400.2156m

Figure 2. Abstract distance map

Analysis and prospecting of the sector

Indicators and physical-environmental conditions

Arequipa is a city that presents a varied topography, different altitudes and variations in its climate; warm on the coast, the prevailing wind is the trade wind; In the mountains the climate is dry and varies according to the altitude from warm temperate to intense cold, and with seasonal rainfall, between the months of October to March.

The temperate season in Arequipa lasts for 2.2 months, from August 25 to October 31, with an average daily high temperature above 70°F. The hottest day of the year is September 27, with an average high temperature of 23°C and an average low temperature of 10°C. Regarding cloudiness, the average percentage of the sky covered with clouds varies extremely throughout the year. The clearer part of the year begins around April 17; It lasts for 6.2 months, ending around October 22. On August 3, the clearest day of the year. The cloudiest part of the year begins around October 22; It lasts for 5.8 months, ending around April

17.

Regarding precipitation, the wetter season lasts 2.4 months, from January 1 to March 12. The drier season lasts 9.6 months, from March 13 to January 1. The rainy period of the year lasts for 2.0 months, from January to March 11, with a sliding 31-day rainy window. The rainless period of the year lasts for 10.0 months, from March 11 to January 9. The approximate date with the least amount of rain is October 28. While the length of the day in Arequipa varies throughout the year, the average shortest day is June 20, with 11 hours, 9 minutes of daylight; the longest day is December 21, with 13 hours and 7 minutes of daylight.

Radiation is very intense during the day, while in the afternoon it decreases, "In winter it is necessary to highlight the cold wall effect, where the walls that have not received direct sun and give shade, the climate is very frigid" (Llanque, 2003), however, the walls that receive direct sunlight maintain very strong radiation.

The average hourly wind speed in Arequipa generally stays in the range of plus or minus 0.8 mph to 10.1 mph. The wind most often comes from the north-west and west for 6 months, from April to October. The wind less often comes from the south for 6 months, from October to April.

Institutional political analysis

Special basic education, like other basic state services, has a hierarchical organization by scales. Thus, the organization that precedes this scale is the Ministry of Education (MINEDU), entity of the Executive Branch in charge of education throughout the country; this has to be decentralized in each region in specialized and smaller-scale entities called DIGEBE (General Directorate of Special Basic Education) these are directly in charge of the operation and attention of the CEBES in their designated region and direct coordination with the UGE; and these cover the management of the CEBES of each region.

User analysis

It is inevitable to carry out an analysis and identification of the user or group of users, in this case only children and students have or present some risk of acquiring a disability or some type of disability.

a) Users who provide the service

Educational staff: As this is a school-based educational training center, it needs educational staff, which includes not only teaching staff but also auxiliary and support staff in the educational center, they will use common spaces with students (such as classrooms, for example) as well as exclusive spaces for them, such as tutoring, meeting room, teachers' room, among others.

Medical personnel: Given the complexity of the architectural proposal within it, the presence of different specialist health workers is necessary to achieve an objective: the rehabilitation of users. This staff includes doctors, nurses, rehabilitation specialists and early stimulation.

Psychotherapeutic Personnel: It is the group of specialists in psychology that cares for children and young people with disabilities, also provides guidance to the closest environment (parents, guardians and relatives) of these; they also apply the best and most recent learning methodologies in accordance with the teachers.

Administrative personnel: the workers that belong to this group are: administrators, receptionists, cashiers, assistants, secretaries, drivers, accountants, security and support personnel. This group of workers is of vital importance given that their work is the basis of the operation of the institution, it is on these workers that the institutional management and their exclusive and direct dedication rest. Within this group, strategic management and planning activities of the educational entity are developed.

b) Users who get the service

All students between the ages of 0 and 20 who have some type of disability, or have multiple disabilities, and need comprehensive support, stimulation and educational training. Within the spectrum of disability of users who access these services we have:

Users with hearing disabilities: It is the restriction in the function of perception of extreme external sounds, alteration of the mechanisms of transmission, transduction, conduction and integration of the sound stimulus, which in turn can limit the ability to communicate. Deficiency includes the ear, but also the functional structures associated with it[8]. Users with intellectual disabilities: They are characterized by limitations in intellectual functioning and adaptive behavior to their environment, with varying degrees of delay in learning processes.

Users with neuromotor (physical) disabilities: It is the sequel of a condition and its late secondary effects in the peripheral central nervous system or both, as well as in the musculoskeletal system and that does not allow the normal mobility of the person.

Users with visual disabilities: They have a partial or absolute deficiency of the organ of vision, and of the functional structures associated with it; they can be alterations in visual acuity, visual field, ocular motility, color vision or depth, which can sometimes be corrected in the best of cases, and sometimes not.

c) Floating user

Floating user to that user who is not included in the personnel that provides the services, nor does he receive them, but visits the equipment. Due to the search for the projection of inclusive coexistence spaces, it is important to include among the users people who do not necessarily belong to this sector, but who are interested in knowing and learning from this group. For this reason, the floating user is any user who accesses the resource center, whether for reasons of accompaniment, search for a coexistence, orientation, or personal training. These may include relatives, friends, volunteers, or anyone who is interested in learning more about the community of people with disabilities.

Having specified all users and their qualities, we also specify what type of services they can receive and within this group specify who accesses them.

d) Users and provisiono of services

Those who receive comprehensive rehabilitation: They are all disabled children and youth who need to try to reach the highest possible functional levels and integrate into society. However, the age and disability at which the child or young person is diagnosed is important and this can affect each one in different ways.

If the user is a young person, they should focus on reintegrating them into working life, if this user is a child or adolescent, this rehabilitation should also help them to be a social and increasingly independent being, this being part of their learning, in both cases.

Those who receive educational training: All those people who, regardless of their age, are in a mental stage of learning or equivalent to it, these people will receive education similar to what an average person would receive in a school educational center, but much more emphasis on social reintegration.

Those who receive pre-professional education: This type of users are those who have successfully completed educational training, and in this way can enter the labor market, thus integrating into society, this transitional stage will teach them the basic skills applied to a daily and paid work according to their level of adaptability achieved.

Those who receive orientation: They can be people close to users with disabilities, or anyone who is interested in receiving information or training aimed at the general public.

Arquitectural criteria and guidelines

The criteria operate on the following foundations: spatial, functional, formal and environmental.

And the architectural premises, interpret the concepts that cover each criterion:

- The spatial criteria include accessibility, dynamism and perception.

- The functional criterion covers the concepts of grouping, adapting and linking

- The formal criterion relates semiotics and form as a tool.

- And finally, the environmental criteria is framed in terms such as habitability, orientation and energy efficiency.

Concept on the micro scale

The concept of integration through a network, is also translated into the Architectural Party, the foundation of connecting, places the ***unidades*** like ***nodos*** and the circulation routes, bridges, ramps, stairs and elevators as ***segmentos articuladores***. The party raises two ***ejes*** of organization, which intersect forming a centrality as a ***núcleo***. We call this centrality the Integration Square.

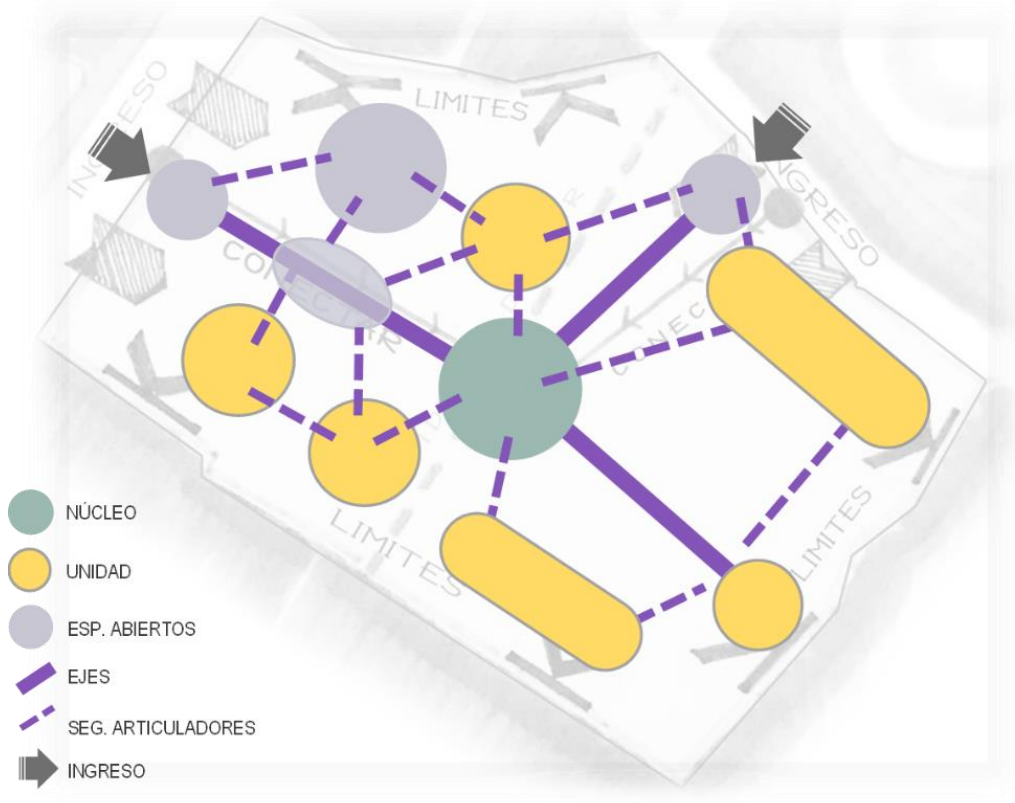


Figure 3. Concept of the project proposal

Conclusions

Interdisciplinary relationships and direct coexistence with users are important factors for a proposal to project solutions to users' spatial needs and model efficient environments that stimulate educational training and at the same time assist in the rehabilitation of children and young people with disabilities. in Arequipa.

The importance of researching and designing a center with the appropriate characteristics is to offer a modern project that considers the improvement of the quality of life of the users and that they feel comfortable in these facilities; Likewise, promote investment in this type of project to public and private entities since the need for improvement in the educational infrastructure in general and in the special education sector in particular is evident. This new institution will house students with different special needs and social classes in an integral way, also thinking about the human, physical, social and emotional quality for them.

A new educational institution designed for people with disabilities requires going through various stages, which will make the Special Basic Education Resource and Research Center (CRIEBE) and the Special Basic Education Center (CEBE) a complex in which various educational activities operate, from Therapeutic and rehabilitation support that are carried out in an environment that favors all users through spaces specially designed for this.

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