

# Factors to consider for inclusive distance education

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**Abstract:** Distance education is a modality that has come to change people's perception of university education, since it has brought opportunities to a great number of people who had not had them in the classroom. However, just because it is distance education, it cannot be said that it is a modality that is one hundred percent inclusive. For this article and from the author's perspective, several factors or variables must be addressed and put into action by the universities in order to really talk about inclusive education. Each of these factors is approached very generally, although a much broader analysis could be given for each of them in future writings. Inclusive education must be established from the mission of the university. From there, the objective of seeking greater equality, equity and above all justice for those people who have fewer resources and opportunities, and greater problems of access to university education begins. In the same sense, the purpose of this work is to provide insights into the factors that distance education universities must consider in providing inclusive education. What is stipulated here is the author's experience and the different outcomes of distance education academic activities, forums, and conferences attended by students and officials. The conclusion drawn is that universities must develop a guide to implement the strategy of the 15 factors mentioned above, and carry out corresponding control and evaluation, as well as comprehensive and clear management of universities to achieve inclusive distance education.

**Key words:** distance education; inclusive education; quality; equity; equality

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## 1 Introduction

The implementation of distance education modality in different countries has changed the world because it provides opportunities for those who do not originally believe there are opportunities. It is easy to calculate the huge advantages that this learning method provides for people with very low resources and those in areas far from the capital and major urban areas, which is the focus of most universities in the world in face-to-face education.

Distance education was born in an era without the Internet, but it has necessary mechanisms to improve efficiency. Printed teaching materials were provided to students to enable them to study at home, and some face-to-face and telephone tutoring was provided to clarify doubts and strengthen the themes in the textbook. Of course, the arrival of the Internet has changed the world and way of life, and this tool has been a strength for distance education.

When it comes to distance education, we cannot fail to acknowledge the significant contributions made by traditional face-to-face education in different countries around the world. However, it cannot be ignored that millions of people are excluded from higher education in universities and therefore cannot access this face-to-face education model. There are

several reasons, such as entrance exams, tuition quotas, and low territorial coverage.

With the advent of distance education and new information and communication technologies, many educational opportunities and alternative solutions have been opened up to enhance access to the education process, and these opportunities must be utilized to involve people and realize the right to education.

The current characteristics of the university higher education system are the coexistence of public university and private university. Although inclusive education falls within the purview of all institutions, this article will attempt to limit it to public education, which requires the country's economic resources while generating its own resources in order to achieve its goals.

Universities are not 100% inclusive institutions due to their distance education modality. It is necessary to strive and meet a series of factors in order to become a university with an inclusive educational vision and bring added value to society, those who need it the most, and those excluded from higher education in universities.

Therefore, the overall goal of this work is to provide a perspective on the factors that distance education universities must consider when providing inclusive education, which in turn will cooperate with people's social inclusion.

This academic article is based on the author's 38 years of experience in distance education. What is stipulated here also stems from different analyses carried out in workshops, activities, forums and congresses on distance education, with the participation of students and officials of universities that offer this modality. Necessary information was gathered in academic activities that were inputs for planning processes at the State Distance University of Costa Rica from 2014 to 2019. A bibliographic review was also carried out in important articles on updated topics in distance education to 2020, with criteria focused on inclusive education. Important institutional repositories and databases were used for the respective searches such as: Google Scholar, Dialnet, Latindex, Redalyc, SciELO, REDIB and DOAJ.

## **2 Public university**

Since its creation, the public university has been a social institution, whose mission is focused on meeting the needs of society and fulfilling its founding goals. Although university higher education receives funding from the State, it is necessary to generate its own income in order to have the total resources for its annual management. The public, in itself, implicitly carries the concept of social inclusion and implies a joint construction of individuals, the State and society. Even when receiving income from the State, university autonomy must prevail, and this condition should not be seen as incompatible with social goals, as universities must ultimately work and strive for a better society (Garroche y Segura, 2012).

Similarly, the importance of social awareness within public university has also been emphasized. Debate, institutional policies, and research, academia, management, and continuing education projects must be combined to create educational opportunities for people. Therefore, the social responsibility of any public university must be implied in the substantive functions it performs - teaching, research, promotion, and production of textbooks - in line with social aspects and needs.

Public education institutions are unable to respond to the large number of people who wish to enter higher education. It is here that we must mention the warning of the commercialization of university education in many countries, because many private university have proliferated, many of which are of high quality, but others have not met the necessary quality standards, and their goal is only to make profits. Public university must coexist with private university, but they must aim at educational inclusion.

Higher education itself is a public interest and human right. Therefore, it is the responsibility of governments to continue strengthening the university education system. Everyone has access to higher education, which is the only way to reaffirm the public nature of education. It is incomprehensible that in this era, there are still some people in the world who

have not yet had the opportunity to receive university education, and at this time, distance education plays a leading role in creating educational opportunities (CRES, 2008).

### **3 Distance, virtual and online education**

Before introducing inclusive education in detail, it is necessary to clarify the differences between distance, virtual, and online education, which often lead to confusion.

#### **3.1 Distance education**

Before the advent of the Internet, distance education was born with the aim of overcoming some of the gaps that exist due to economic, social, and geographical issues. Universities produced their own physical textbooks or purchased them from other well-known publishing houses (books, study guides, CDs, etc.). After people enrolling in person, these materials were provided to them to start learning at home, providing some face-to-face and telephone guidance to clarify doubts and guide learning, and determining delivery dates for tasks and exams at university headquarters. This distance education model allows learners to set their learning time based on their availability, without necessarily requiring technical knowledge.

Distance education is an effective teaching and learning modality as long as there is dialogue and reflection between teachers and students; its objective is to provide a permanent and open education where spaces and times are shared, supported by new technologies that promote interactivity between students and teachers or among the students themselves (Costa, 2016).

#### **3.2 Virtual education**

It wasn't until 1983 that people went online publicly, and the world underwent a tremendous change. This is a fundamental tool that transcends national boundaries, giving birth to virtual education. In this model, databases, virtual libraries, educational platforms, and emails have been used as the basis for exchanging knowledge and information between students and teachers. Virtual education can be conceptualized as a kind of distance education. At present, new technology is used as a tool to establish learning space (Arkorfur and Abaidoo, 2015; Rodriguez et al., 2020).

Faced with this new educational reality, teachers and students themselves have to adapt to other activities and tasks outside of the classroom, without neglecting the academic quality required by universities. This telematic era has forced changes in the entire university community. In this sense, it is necessary to adjust the content and format of new topics, use new computer applications, redesign schedules, and exams, and also require collaboration between universities (Bracons and Ponce de León 2021).

In order to achieve its goal, universities choose to purchase licenses from educational platforms, while other universities choose open access platforms to adapt to their needs. On these platforms, students read, review, and download files uploaded by teachers, while submitting exams and assignments for review. These platforms provide many conveniences, among others, allow to share and discuss topics and study with their peers. Virtual education has a basic feature: students and teachers do not need to engage in virtual matching at any time to learn. In other words, communication is asynchronous since it is carried out without time coincidence.

#### **3.3 Online education**

Online education is a type of virtual education that increases synchronicity, meaning coincidences in time and space between teachers and students, as well as between students and classmates. In this mode, educational platforms also play a crucial role, allowing video conferences, lessons, meetings and live discussion forums and even real-time evaluations.

This online mode poses a huge challenge for teachers to use new technologies. There is no chance to stay in the past. The use of these technologies must be efficient, as there may be technical situations that affect the teaching process.

Similarly, ethical principles related to the confidentiality and use of data and information for students and the entire university must be maintained (Bracons and Ponce de Leon, 2021).

In this sense, it can be said that distance education is a big umbrella. With the advent of the Internet and new information and communication technologies, virtual and online education has developed. Then it can be added that many universities choose virtualization 100%, but many others also use a hybrid model that combines virtuality with the delivery of teaching by means of printed didactic materials and with some face-to-face tutorials.

It needs to be approved that distance education has democratized education worldwide and provided educational opportunities for those excluded from the university education system due to the aforementioned reasons.

#### 4 Distance education as a factor of social and educational inclusion

##### 4.1 Social inclusion and the mission of universities

At present, universities go beyond just offering university degrees. They must now focus on lifelong learning, continuing education, social responsibility programs, university promotion, social action, free courses, training courses and vulnerable groups programs.

To begin this topic, it is necessary to point out that universities have always been concerned about the number of students they have and this, of course, is very valuable information for decision making within and outside the university environment. However, have universities and governments asked themselves how many students are being excluded from higher education? Are our universities and countries excluding people from access to education because of their poverty, geographic location or other conditions? This issue is even more important than knowing the number of students being served in educational programs.

Castro-Monge (2017) conceptualized social exclusion as a process of marginalization, in which people are not allowed their full participation in society, due to their conditions of poverty or due to the lack of opportunities and basic competencies that they have not had throughout their lives. This is evidently also a result of discrimination. In this same sense, it can be pointed out that "the dimensions of social exclusion can be classified into: educational, labor, economic, political, gender and cultural diversity, among others" (p.11). In addition, cultural exclusion, sexual diversity, disability and geographic location can be added. The summary can be seen in Fig. 1.

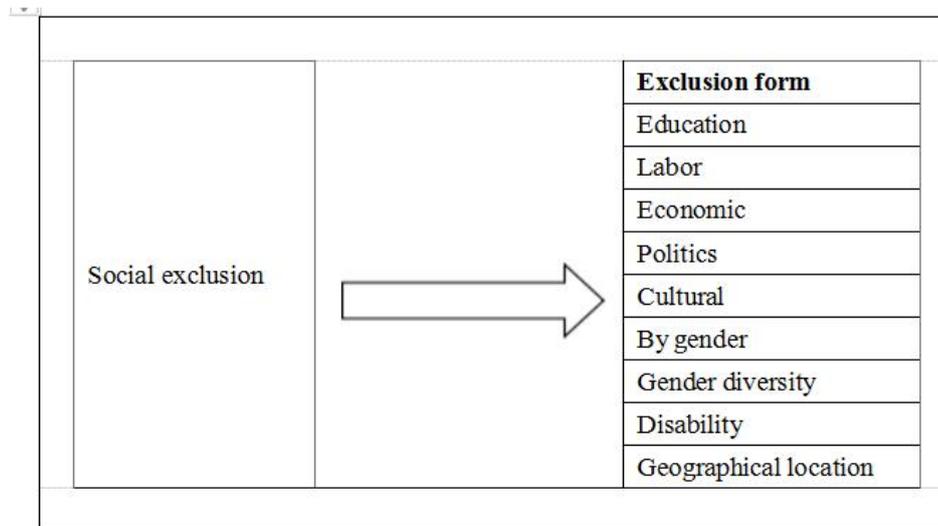


Fig. 1. Forms of social exclusion

Marchesi et al. (2014) point out that social and educational exclusion is a phenomenon that has grown in the world and is the object of analysis in public strategies and policies, especially in Latin America. Social exclusion prevents employment, income and educational possibilities, as well as social, communal and networking activities. Castro-Monge (2017), for his part, indicates that social inclusion is characterized by maintaining a continuous struggle, so that all people can be part of society. When people are excluded, their basic rights are limited to the minimum required for a dignified life and the minimum required for an adequate life.

Social inclusion seeks social, educational, labor, entertainment, and sports opportunities for people. In this era, such an important issue of inclusion must be considered from the mission of the university.

Given different forms of exclusion, this article will only focus on a portion of educational inclusion and the role that distance education universities should play in order to support inclusive education, which in turn would collaborate with people's social inclusion.

## **5 Educational inclusion**

Marchesi et al. (2014) and Plancart (2017) point out that when it comes to inclusion or inclusive education, almost always only students with a certain disability or special educational needs are considered. It is also associated with people living in poverty. Currently, a broader approach is being considered, taking into account people's equal access to quality education without any form of discrimination.

Inclusive education aims to seek greater justice and fairness for those with limited opportunities and difficulties in entering the education process. Inclusive education seeks recognition of minority groups, strives for respect and sensitivity, and attempts to create expectations and new opportunities.

Renaut (2005) points out that universities are pure repositories of knowledge and must be institutions seeking truth. However, there is an understanding that acquiring knowledge for learners is an educational process, which in turn brings new knowledge to universities.

Universities must encourage change and social transformation, position themselves as leaders, and align their mission with the new needs of the new era, new technologies, and society. Therefore, for the new era, a clear and updated task is crucial.

On the other hand, Ainscow et al. (2006) point out that in order to develop inclusive university education, three aspects must be considered: creating culture, formulating inclusive policies, and developing inclusive good practices. The former views diversity as a fortress and fundamental component of inclusive values in universities. The second focus is to enable university policies to undergo organizational and academic transformation to increase participation in society. The third one refers to the elimination of learning disability and the fight against discrimination, and the provision of access to educational space and resources for persons with or without disabilities.

Educational inclusion must know and understand that the objective is aimed at providing equal and high-quality education for all and seeking to eliminate or reduce barriers to entry into the educational environment. This is why the concept of inclusive education is based on being able to adapt the structure of the university to meet the needs of individuals. In adapting the structure, it is possible that activities, physical structure, curricula, processes, procedures and values, among others, may have to be changed. Educational inclusion promotes a philosophy about the right for everyone to access quality education and opportunities (Gross, 2002; Booth and Ainscow, 2015; Reyes and Colquepisco, 2020).

In the era of increasing world inequality, it is necessary to clarify the importance of strategies to encourage inclusive education. As has been pointed out, inclusive education should start from the mission. Similarly, it is necessary for universities to constantly review their mission in order to update it in the context of a knowledge-based global society.

To give two examples, the mission of the National Distance University of Costa Rica and the mission of the National Open Distance University of Colombia are introduced in detail. It is clear that the issue of inclusion starts from the mission itself.

The mission of UNESCO in Costa Rica is to provide higher education to all sectors of the population, especially those who need genuine and equal opportunities for social integration due to economic, social, geographical, cultural, age, disability, or gender reasons (UNESCO, 2020a).

The mission of the National Open and Distance University of Colombia: The mission of the National Open and Distance University is to contribute to education for all through open, remote, and virtual learning environments, through teaching actions, social projection, regional development and community projection, inclusiveness, research, internationalization, and methodological and teaching innovation; utilize information and communication technologies to promote and accompany self-directed learning, which is a creator of culture and entrepreneurship, promoting sustainable economic, social, and human development in local, regional, and global communities through quality, efficiency, and social equity within the framework of global society and knowledge society (UNAD, 2020).

It is evident that the right to education is based on human rights and must apply to all. The sustainable development goals of the United Nations (UN) show that it is necessary to ensure equitable and high-quality inclusive education to promote lifelong learning opportunities for all (UN, 2015).

Therefore, we can ask ourselves: is this goal being achieved globally? This is a question that every country and university must answer. It is obvious that education is not the only means for countries to overcome social exclusion, but there must be certainty that the weaknesses or limitations of education within universities do not lead to greater exclusion.

Similarly, it is necessary to indicate that universities should be continuously reviewing their institutional policies, development plans, strategic objectives and their mission; they should adapt to the new times and, to this end, they must be inclusive, while taking into account the following important factors: 1. access, 2. coverage, 3. equality and equity, 4. attention to populations in conditions of vulnerability (indigenous people, persons deprived of liberty, persons with disabilities, elderly people), 5. scholarship programs, 6. extension, social action and research programs (according to the needs of the regions), 7. gender, 8. university quality (academic and in institutional management as support to the academy), 9. permanence of the student (accompaniment strategies), 10. relevance in the academic offer, 11. belonging of the student, 12. effective utilization of information and communication technology, 13. role of the teacher in inclusion, 14. internationalization as a means of inclusion, 15. inclusive secondary education.

The following is a general description of each of these factors:

#### 1. Access

In many countries around the world, receiving higher education from universities has always been a major issue. This is because many people are unable to enter universities in the public face-to-face education system due to the entrance exams or selective tests conducted by these institutions. Without that exam, they are not allowed to enter the university.

There are many justifications for the performance of such a test:

- Choose the person with the best learning ability or the person with the highest average level.
- Information about the basic learning knowledge acquired during high school studies.
- Clearly define the abilities required for successful acceptance of higher education in universities.
- The limitations of poor physical education ability in universities on students.
- Low budget for student care.

However, even if there are many reasons for taking an entrance exam, the reality is that this exam has always been a filter for students to enter university. Faced with this reality, do universities understand the profile of applicants and excluded individuals, in order to take other necessary inclusive measures?

As Ariño and Llopis (2011) indicate, with respect to this profile, the universities know whether the excluded persons have work experience and whether there are differences according to other characteristics such as age, gender, branch of knowledge, type of degree, socio-family background, origin of secondary education (private or public), migratory status or university tenure, or whether there have been interruptions in secondary school studies.

In some countries, studies have shown that students from private secondary schools have a higher proportion of victories in college entrance exams, and they are to some extent more purchasing power individuals (Valdivieso et al., 2004). On the other hand, others do not find significant differences in the impact of private or public education on university enrollment (Ponsot et al., 2009). Similarly, are universities aware of the quality of secondary education in their country? Correa (2004) point out that the quality of secondary education is a basic factor, which in some ways directly affects the access to social mobility and limits people's opportunities.

There will always be a dilemma about the quality of the secondary education system in different countries, but are universities clear about whether those who study in private schools and institutes are better prepared to enter them than those who study in public institutions? Research on these issues becomes a necessity in order to search for inclusive strategies.

Similarly, people may ask themselves: Have they provided support and advice for students in their final year of high school? Is selective testing suitable for measuring candidate's knowledge?

Distance education has been born to provide opportunities to many people who have not had access to universities with the face-to-face model; however, it is also necessary to know which distance education universities in the world have admission tests.

In short, selective tests or entrance exams will continue to exist. However, universities must find ways to make these tests more inclusive. Similarly, it also mentioned the requirement of the *Sustainable Development Goals* of the United Nations (ONU, 2015): "By 2030, ensure that all men and women have equal access to high-quality technical, vocational and higher education, including university education" (page 19).

For example, the National Distance University of Costa Rica (UNED) was born without a selectivity test and has never conducted any type of admission exam, which has allowed it to provide access and opportunities to thousands of people who otherwise would never have them. This is a model to follow, of course, depending on the characteristics and conditions of different countries.

## 2. Coverage

One of the most important factors for educational inclusion is the coverage of universities. For many years, most universities have been born and developed in the national capital or in the centers of the most populous cities, neglecting rural geographical areas. For example, rural areas and indigenous people have fewer educational opportunities than urban areas, which is a reality (no research is needed to prove this), making this factor a means of exclusion for many people.

Herrera (2013) points out when discussing the issue of coverage in Latin America that the necessary regional equity is not provided, which confirms the previous paragraph that higher education is in many cases born and developed between the capital and major cities, but not in the interior of the countries.

Coverage tells us that there are more physical spaces or university campuses available to excluded populations. Coverage shows an indicator that is related to the demand and supply of higher education systems in universities, and the

higher the indicator, the greater the effectiveness of each country's system. Similarly, the coverage shows the percentage of people who are unlikely to become university students.

Although distance education requires less physical infrastructure investment than face-to-face education, it is also necessary to establish university headquarters to provide effective care in different areas far from major urban areas. Many professionals have different views on this issue. Some people believe that there is no need to invest in the physical infrastructure of distance education, and the author disagrees with this view because it is necessary to have a good university headquarters and basic and appropriate infrastructure to meet the needs of students.

Table 1 shows the information of the United Nations Development Programme in Spain, the United Nations Development Programme in Costa Rica and the United Nations Development Programme in Colombia, which have made many efforts to achieve maximum coverage in their respective countries.

Table 1. The coverage of the university headquarters

University	Headquarters	Country size (km <sup>2</sup> )	Population (2020 estimate)
National Open and Distance University (UNAD, Colombia)	65	1,142,748	50,000,000
National University of Distance Education (UNED, Spain)	61	505,990	47,000,000
National Distance University (UNED, Costa Rica)	37	51,100	5,000,000

Source: Self compiled based on data from universities (2020) and United Nations Organizations (2019).

Therefore, distance education universities must continuously research and analyze the geographical areas of their country that are excluded and require educational opportunities based on their budget and potential, in order to develop necessary coverage strategies to bring higher education to these communities and achieve social inclusion.

### 3. Equality and equity

It is necessary to point out that the concepts of equality and equity are often confused and are thought to be the same thing, which is incorrect. Equality seeks equal treatment for all people, giving exactly the same to all, whether they are equal or not. When analyzing this concept, it can be observed that, on more than one occasion, equality can generate unfair situations, since it is not possible to give the same to people with different conditions. There will only be equality if people have the same possibilities of access to education.

Equity, on the other hand, seeks justice within equality. Equity in education dates back to 1948, with the *Universal Declaration of Human Rights*, which states that equity is the realization of the fundamental human right to education for all (UN, 1948).

De Fanelli and Jacinto (2010) point out that the issue of equity in education "is often associated with equal opportunities in access to educational resources, regardless of students' socioeconomic origin, gender or ethnicity" (p. 64).

Therefore, in terms of education, equality is manifested in giving everyone the same profession or educational program. Under this concept, one can learn the same things without paying attention to differences in human conditions, such as economic level, geographical location, gender, social and cultural aspects, age and disability, etc.

From the above, it can be seen that the importance of equity is to provide and guarantee everyone what they need to learn (Ainscow et al., 2006). It is in this regard that universities must pay attention to and consider these conditions in order to adapt their educational offerings and services to those who require more attention.

It cannot be ignored that in order to achieve educational equity and address disadvantages, more economic resources must be invested, and universities must take measures to provide more care for those in need. In some cases, among other things, new technologies must adapt to these needs, provide personalized services, adjust courses, and have a team of teachers specifically tailored to the needs of people with disabilities.

4. Attention to populations in conditions of vulnerability: indigenous people, persons deprived of liberty, persons with disabilities, the elderly, etc.

When it comes to educational inclusion, taking care of vulnerable groups is one of the main goals of educational equity, and universities must pay more attention to this goal. The care of indigenous people, people deprived of liberty, disabled or elderly people is an example of the need for differentiated treatment in order to combat the injustices caused by the characteristics and conditions of these populations in some way. The different attention given to these people aims to combat failure and student dropouts.

The United Nations 2030 Agenda states in its goals:

Gender equality and inclusion: By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for vulnerable groups, including people with disabilities, indigenous people, and vulnerable children (United Nations, 2015, p. 19).

· Indigenous people

In IES (2012), an analysis was conducted on the issues of higher education and indigenous people, and it was pointed out that the biggest problem identified was the "invisibility" of the existence of higher education and indigenous people due to a lack of data and the omission of statistical data on their overall population importance and important economic and social variables when compiling statistical data (page 199).

Faced with this issue, governments have limited information about indigenous people, which greatly affects the public policies and strategies needed to promote care for indigenous people. Therefore, universities must conduct research on their own or in agreement with the government, in order to develop necessary indicators for decision-making to take care of these indigenous people. One of the best inclusive strategies developed by some Latin American countries is to establish a distance education university headquarters in indigenous population centers.

· Disabled people

For the purpose of this article, it reflects on the concept of disability, as disabled persons or persons with disabilities are very common concepts. It is well known that there are several types of disabilities, so there is one type of person referred to, although it is clear that the term currently used is disabled persons adopted by the *Convention on the Rights of Persons with Disabilities*.

Morón Cívico (2020) points out that, in order to attend to and achieve effective inclusion of students with disabilities, an educational system adapted to the new times and consistent with the social reality must be consolidated. The process must have a holistic approach and be carried out at all levels of education to achieve this goal.

Law 7600 of Equal Opportunities for Persons with Disabilities of Costa Rica states:

Disability: Interactions between individuals with long-term physical, mental, intellectual, or sensory impairments, as well as obstacles caused by attitudes and environments, prevent them from fully and effectively participating in society on an equal basis with others (Costa Rican Legislative Assembly, 2014, p. 1).

The United Nations Organization stipulated in its *Convention on the Rights of Persons with Disabilities* that States must ensure equal access to higher education for persons with disabilities (United Nations, 2006).

Students with disabilities should have full presence and participation in society, only in this way can educational inclusion be achieved. In this way, it becomes essential that governments and universities develop the necessary conditions that offer this population equality to develop at a personal and professional level, and have an effective social inclusion (Ainscow et al., 2006; Muntaner, 2013; Martinez-Pujalte, 2018).

With respect to the above, considerable progress has been made at the level of university education. The concept of discrimination is crucial in ensuring that people receive the best services and their equal right to education is respected. The objective of this attention must be to provide educational opportunities for integration into society and working life. To this end, it is necessary, within the university, to create a department or office to lead the attention, strategies and other action plans to achieve inclusion and prevent student dropout.

As has been emphasized, in order to achieve inclusive education for people with disabilities, strategies must be established both in the most populated urban areas and in rural areas, seeking the elimination of access barriers and allowing their full participation in university life.

- Persons deprived of liberty

Education is a right of every human being that allows him/her to build a bond of belonging with society. For this reason, distance education, due to its teaching model, has come to offer great educational opportunities to persons deprived of liberty. Many universities under this modality have specialized programs and those without these programs should strive to establish these programs. On the issue of coverage, the importance of having university campuses throughout the country was noted, and this has been a strength for coordinating attention in different regions. It is a fact that the flexibility of distance education makes it possible to bring teaching materials and educational content in general to any part of the country, including prisons.

For many years, those deprived of liberty have been marginalized and excluded from education; the sentence for these people is to deprive them of their liberty, but unfortunately they have also been deprived of some human rights, including education. Justified incarceration should not keep this population from the right to be trained and educated (Scarfó, 2002).

In this same sense, universities should work together with the ministries of justice, or whoever corresponds, and the administrations of penitentiary centers, to have the necessary strategies related to security and basic logistics to meet the delivery of teaching in these centers. The penal system, in fact, does not allow people deprived of liberty total flexibility and autonomy in the use of time. Therefore, coordination is necessary when providing face-to-face tutoring and exams. The general conditions of the penitentiary center and whether it adapts classrooms or other spaces for study should also be taken into account.

In the case of the Internet, there are different legislations that prohibit its use inside prisons. For this reason, mechanisms must be found to adapt it and provide this possibility in a regulated manner to inmates.

Even though the educational offer could be the same as in the whole country, there are variables that affect and must be taken into account, including the use of physics, chemistry and computer laboratories, among others, as well as tours and internships in educational, biological or agronomic areas. In this area, the intervention of the administrations of the penitentiary centers and the different endorsements of the responsible ministries is necessary.

There are many aspects that should be considered, because these populations should be given equal attention, without taking into account their criminal record or years of conviction. It is an issue that can lead to debate, in the understanding that one can think of analyzing the background of the person to allow or not to allow them to study some careers, with the certainty that their right to education is not being violated.

Economic resources are another variable to consider, given the conditions of the individuals. In this case, a scholarship could be relevant, as a factor of educational inclusion. The same applies to the strategies of accompaniment by the university, to achieve success and avoid student dropout, who should be clear about the importance of education as a means for social inclusion. In short, mechanisms or reforms should be sought to encourage the study of individuals deprived of liberty.

#### · Senior citizens

The university's care for the elderly has become increasingly important, and a unit has been set up within each institution to lead and determine specific goals according to the needs of the elderly. Many universities already have this department, but other universities have overlooked this issue.

The increase in life expectancy and the improvement of health conditions have led to a greater insertion of older adults in the labor, intellectual, artistic and educational life of societies, which, in turn, entails the need to create spaces for these people in university institutions.

The population growth of the elderly is a reality; therefore, it is essential to meet the needs and demands of this group. Universities become bastions to work hand in hand with governments and it is essential to apply regulations and public policies focused on social security, work, training, extension, social action and family support when required (Torrado et al., 2014; López and Álvarez, 2021).

The strategies and objectives should seek, on the one hand, to train and offer courses, seminars and workshops to those who care for the elderly and, on the other hand, to provide educational opportunities to the elderly population. Universities and public institutions have the social responsibility to plan and execute actions that improve the quality of life of these people and offer alternatives for a dignified old age.

#### 5. Scholarship programs

A fundamental factor of educational inclusion is related to awarding scholarships to those who need them most. Although this may seem very logical, not all universities have efficient processes for awarding scholarships.

In order to be effective in this regard, universities must establish clear university policies, as well as effective procedures and processes for awarding scholarships in the best possible way. Similarly, in all processes, it is necessary to maintain the possibility of obtaining scholarships due to economic issues or high academic standards, and to clarify the intention of educational equity by focusing on vulnerable groups and determining percentages.

The economic resources of the universities should be managed in the best way to search greater opportunities for minorities. The sustainable development goals of the United Nations Organization--"Quality Education", proposes to significantly increase global scholarships, especially for the least developed countries, developing countries and African countries to provide access to higher education, technical and vocational training, and technology, science, engineering and information and communication technology programmes (United Nations, 2015).

#### 6. Extension, social action and research programs (according to the needs of the regions)

People often talk about the regionalization of academic supply in universities. In this regard, the statement made by Rama and Cevallos (2016) is very important, as they point out:

The dominant model of university regionalization in Latin America is the establishment of traditional university headquarters and sub centers in various capitals or departmental capitals. This is manifested in the decentralization of university power, low degree of institutional differentiation, and low level of local empowerment, with proposals often having low regional relevance (page 104).

The degree and graduate programs in universities are designed for the whole country and do not take into account their relevance to various regions. In this way, if it is difficult for universities to provide regional university careers, it is feasible to establish university promotion and social action research and programs according to the needs of different regions.

Each region has its own characteristics, weaknesses, strengths, opportunities, and threats. Therefore, it is necessary to diagnose the regional conditions within universities in order to provide continuing education that contributes to regional social and economic development.

To achieve this goal, universities must collaborate with different institutions and other universities in the country. In the same area, two or more public university continuously provide the same services. However, if they establish strategic alliances with each other, each one could offer diverse continuing education, but different from others, and cover the greatest number of courses between them.

### 7. Gender

In terms of gender and social justice, higher education in universities requires relevant universities to seek educational processes based on the cultural backgrounds and learning experiences of both men and women. Gender perspectives not only involve differences and relationships between men and women, but also include differences between women themselves and men themselves. Distributive justice emphasizes the moral principle of equal treatment of men and women, as well as the creation of educational opportunities by national and university institutions to meet the needs (Donoso et al., 2014).

In recent years, gender has been one of the most important issues. Many studies and research findings indicate that women have a greater impact than men in education and other knowledge fields. Thus, different countries have been obliged to establish ministries, institutes and offices responsible for gender equity in their governments.

The university has set up an office of administration to lead this issue. Its goals include gender equality and equity. The most important thing is to coordinate with other government entities and institutions to seek more opportunities for women. The development plan also includes strategies, cross disciplinary axes, and university policies.

It must be clear that these specialized centers are crucial for leading and coordinating all internal efforts on gender issues. Without these units, achieving these goals would be even more difficult.

Table 2 below shows three cases of gender administrative departments established by distance education universities.

Table 2. A university center specializing in gender issues

Gender Studies Institute (United Nations Development Programme, Costa Rica)
".. It is interdisciplinary, humanism and solidarity in nature. It coordinates with different departments of the university and other national and international institutions in order to horizontally develop the axis of gender equality in different basic areas of work of the UNESCO (teaching, promotion, research and production of teaching materials)" (UNESCO, 2020b).
Gender Studies (United Nations Development Programme, Spain)
Its purpose is to coordinate and promote teaching and research activities directly related to gender equality issues, with the basic premise that gender perspectives are a key component of training and research in any field of scientific knowledge in universities "(UNED, 2020c).
Equality Unit (UOC, Catalonia, Spain)

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"... is a subsidiary entity of the Deputy Director of Globalization and Cooperation at UOC, established in 2008 with the aim of developing gender equality policies within the organization. The main function of this unit is to ensure compliance with existing laws on effective equality between men and women, the principles of equal treatment and opportunity, and non-discrimination on grounds of sex and sexual orientation at all levels of this university" (UOC, 2020).

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Source: Self compiled based on university data (2020).

In order to achieve established goals, it must be clear that there is a different world from role to action, and that what is stipulated in institutional policies is not always achieved. For this reason, it is necessary to establish action plans with established dates, goals and indicators, follow-up, evaluation and control to guarantee the achievement of the objectives.

In this sense, distance education has been seen by women as a factor of educational inclusion, as in many countries, the majority of students in universities are women who are highly capable of utilizing the opportunities provided by this educational approach.

#### 8. University quality

The quality of universities is a factor in educational inclusion, as graduates from low prestigious universities are excluded from many job choices in addition to questioning their learning. The business sector seeks profiles among a larger proportion of reputable universities both domestically and internationally. Therefore, quality is important in academic and administrative management, as well as in paying attention to students.

Currently, higher education in universities is comprehensively planning and coordinating processes aimed at continuously improving quality. These quality assessment processes depend on the structure and internal conditions of each university institution. The educational regulations, organizations that certify this quality, and new learning scenarios accompanying new technologies in each country also affect the process of achieving quality. The continuous attention and reflection of universities on the pursuit of university quality is a positive reality, and as a result of these efforts, many higher education institutions have achieved high reputation both domestically and internationally (Castro Munger, 2017; Córdova et al., 2017; Ortiz et al., 2021).

#### · Academic quality

In the 1970s, when many distance education universities were born, very few people believed in this type of education, especially doubted the quality that new institutions could provide. This is the reason for the small number of students enrolled in the first years since their founding.

At present, distance education has been proven to be reliable and accepted by students around the world. This is largely due to the focus of distance education universities on providing academic quality courses.

The current problem is what quality is and how to obtain it. How to know if one university is better than another. This concept of quality is very complex. Universities can defend the quality of their courses, but how can they prove it and showcase it to society and student groups?

Academic quality is perceived by citizens and directly affects the image of institutions. This is where universities attempt to determine factors of reliability, relevance, efficiency, and effectiveness, focusing on students' evaluations and perspectives. Academic quality must fully meet the needs of students in teaching, therefore the quality of teachers is crucial (Inquilla et al., 2017).

Academic quality must be reflected in the ability of graduates or professionals to act. Demonstrating the country's high-level knowledge, production, economic and cultural processes, as well as skills in their professional fields, to some extent proves the quality of the university education received. Good performance and knowledge creation demonstrate the

ability of professionals to make decisions in departments where they work and contribute to society.

In the same sense, academic quality aims to achieve institutional goals, focuses on the processes, products, and services of the institution, and aims to achieve added value and meet the expectations of student satisfaction levels. Then, academic quality becomes a multidimensional concept that involves the entire organizational system, resources, interaction with the social environment, and the impact on the reputation of a university (Rodríguez, 2017; Viza, 2018).

In order to respond to the above, there has been a shift from thought to action; universities have established academic evaluation processes and have directed their efforts to academic quality accreditation processes. To achieve this, the different governments, together with the universities, have established the necessary regulations at the national level for the accreditation of university higher education.

Universities that have not been concerned about quality will end up suffering the consequences of this weakness, as the education system itself will ultimately prove this; people are already looking for certified university careers to ensure that they will graduate from a prestigious university, thus reducing the problem of entering the working world.

Accreditation has not been easy for distance education universities. As an example, in Costa Rica, the academic quality accreditation processes begin with peer evaluators coming from face-to-face education universities and this become a problematic factor, given that the distance education model must be known in depth; therefore, it is the specialists and experts in this modality who can issue criteria and judgments regarding quality.

The same thing happened with the country's regulations, since the five public universities in Costa Rica were legislated and accredited with the same criteria, four of them with face-to-face mode, without taking into account the differences of the state distance university. Therefore, it is necessary to conduct a fair process of vocational certification for distance universities. The Costa Rican National Higher Education Certification System (SINAES) approved the formal degree vocational certification model of the National Distance Higher Education Certification System in 2011.

It is imperative that distance education has its own accreditation model in the different countries, in order to minimize the errors that may occur if a model is used under the face-to-face modality and with peers without knowledge in distance education.

Table 3 shows the large number of people enrolled in four distance education universities, which demonstrates the high credibility that this modality of education has achieved. In the case of Spain's UNED, it is the university with the largest number of students in the entire country. The UNED of Costa Rica is the second university in student population of the five Costa Rican public universities, which fully demonstrates the high recognition of society.

Table 3. Number of registrations in 2020

UNED Spain	UNAD Colombia	UOC Spain	UNED Costa Rica
250,000	135,000	73,100	32,000

Source: Compiled based on university data from 2020.

#### · Institutional management quality as a support to the academy

Universities cannot only talk about academic quality; quality must be at all levels, since people also require other quality services. It is here where quality in university management becomes a bulwark to support the substantive areas of the university, such as teaching, research, university extension, social action and production of didactic materials.

Institutional management includes a series of resources, procedures and processes that should seek continuous improvement, efficiency and effectiveness in its management and, above all, the quality of university services for the student population (Castro-Monge, 2017; National Commission for University Evaluation and Accreditation, 2000).

Not all universities pay attention to the quality of institutional management. What proves this is that in the opinions of international evaluators, recommendations and proposals for improving university administrative and management procedures have been put forward when evaluating professional quality and programs with certification objectives. Faced with this scenario, universities seek to correct these issues in order to obtain accreditation; however, this effort must be made at a higher level, with the establishment of a unit or an office that leads the entire quality process in institutional management and works hand in hand with the unit that manages academic quality.

The evaluation of institutional management is essential to determine the achievement of the university's objectives in its action and development plans. Establishing a system of management indicators is fundamental to make corrective decisions when these indicators are below the objective.

Castro-Monge (2017) points out that the department leading management quality must be permanent, be part of the organizational structure of the institution and have objectives related to the following purposes:

- ① To promote a quality management model for the university, including comprehensive evaluation and university service models.
- ② Leading the self-evaluation and quality certification of institutional processes.
- ③ Develop a quality manual, including management indicators.
- ④ Coordinate necessary actions with all departments of the institution to continuously improve, especially those derived from the accreditation processes of the university careers.
- ⑤ Establish strategies to follow and control the objectives and action plans that lead to the achievement of quality policies in institutional management.

If the university has not created a unit to oversee quality management, efforts will be made separately in different administrative units and there is a risk of not coordinating correctly internally, having duplication of work, disarticulation and, therefore, not achieving the overall quality objectives.

#### 9. Permanence of the student (accompaniment strategies)

One of the major problems that have been observed in distance education is the high dropout rates, especially among first-time students (Rojas and Castro, 2016). This issue has a direct impact on educational inclusion, because, even if people are provided with coverage and access, if they are not also provided with effective support, there is a risk that they will not be able to stay in university. There are studies that show that, in distance education learning, the percentages of students who drop out of university are even higher than in face-to-face formats (García Aretio, 2019).

In its early years, people believed that it was very easy to study under this modality; however, not everyone can adapt to distance education, since there must be a lot of discipline.

From the perspective of inclusive education, academic failure becomes a problem for the university and society. Although there are variables of exclusion and vulnerability such as cultural, economic, personal or social conditions of individuals, the university should seek to eliminate the barriers that limit the opportunities to remain successfully in the institution.

Those who succeed in distance education universities acquire values that make them responsible, orderly, disciplined and methodical people, as this teaching model requires this approach. Without these characteristics, people tend to abandon their studies.

Table 4 shows some categories of student dropout.

Table 4. Student dropout categories

Jun (2005)	Lee and Choi (2011)	Jancey and Burns (2013)
1. Personal background 2. Motivation 3. Academic integration 4. Social integration 5. Technical environment	1. Student factor 2. Course or program factor 3. Environmental factor	1. Student's personality (attitude, ability, confidence, motivation) 2. Socio economic factors 3. Institutional factors

Source: Compiled by Aretio (2019)

This is how it can be deduced that there are many factors for someone to abandon their studies in distance education, among which the following can be mentioned (Dupin-Bryant, 2004; Moncada Mora, 2014; Morgado et al., 2016; Rojas and Castro, 2016; Castro-Monge, 2017; García Aretio, 2019):

- People come from secondary education with a face-to-face model.
- Basic deficiency in secondary education.
- Lack of counseling or poor choice of university careers.
- Lack of responsibility and discipline to adapt to the distance mode.
- Little time for study, due to work commitments.
- Lack of competition and Internet access problems.
- Lack of motivation.
- Problems of knowledge and adaptation to new technologies.
- Economic problems and poor access to scholarships.
- Lack of understanding that the teacher is a guide that facilitates learning.
- Few or no orientation processes on distance study techniques.
- Inadequate didactic materials.
- Inadequate evaluation tests.
- Lack of academic accompaniment strategies.
- Difficulty of the programs and curricular rigidities.
- Remoteness of the university sites.
- Poor administrative services at the university sites.

In the face of so many factors that impact student dropout, accompaniment strategies are necessary on the part of the university. In this sense, Rojas and Castro (2016) and Castro-Monge (2017) point out that such strategies should be focused on six categories:

1) Those related to the improvement of academic quality and curricular innovation, where improvements and innovations in curricula, quality didactic materials, tutorials, learning evaluation and graduation work are necessary.

2) Academic information, where the importance of induction to study techniques in the distance education modality stands out.

3) The use of information and communication technology indicates the need for training on how to use virtual education platforms such as Blackboard and Moodle, using social networks, WhatsApp, video conferencing, and teletutoring, all to support individual students.

4) Personalized attention to grade repetition, with remedial plans, increased tutoring and plans tailored to the needs of each student.

5) Attention to vulnerable populations, such as indigenous people, people deprived of liberty, the elderly, people with disabilities or those living in remote rural areas.

6) Student life, where the need for scholarships, professional development and motivational workshops, among others, is formed.

There are countless strategies and action plans that can be implemented to support the student population, but for this, it is necessary to have indicators that show the percentages of students who leave the university and their possible causes; only then can corrective measures be established. The development of systems that provide the information required to follow up on student situations will allow the institution to observe the learning of individuals in order to provide them with the necessary feedback and correct the errors that are influencing the failure or permanence of each student in the university.

#### 10. Relevance in the academic offer

Relevance in higher education, according to the World Conference on Higher Education (UNESCO, 2009), is related to the adequacy of what higher education institutions do and what society expects from them, in such a way that the concept directly links the needs and demands of societies with universities.

Thus, there is a direct relationship between the relevance of university degrees and the labor market. If graduates of majors offered by universities are unable to obtain employment, this variable may become an exclusion factor.

It is a reality that, in several countries, there are high unemployment rates, salaries in many cases are not very competitive and the most worrying thing is when there is a high supply of professionals who end up unemployed or working in companies and institutions with activities that have little or nothing to do with their professional training. In this sense, the academic supply of universities must adapt to the needs of the country and the professional skills and qualities required by the labor market, especially the private enterprise sector (Camarena and Velarde, 2009). Faced with this situation, it is necessary to establish connections between universities, business sectors, and public institutions that determine national education policies.

Thus, the concept of social relevance comes into play in the design of careers or educational programs by universities. At that time, it was understood that social relevance required close coordination among universities, civil society, government and business sectors to meet the needs of society (Malagón, 2003).

However, universities have asked themselves, through their research, how many graduates are out of work and why is this phenomenon occurring? During the times of crisis, universities must have an updated vision of social, economic, cultural and environmental problems in order to have an impact and seek the integral development of a more just and equitable society.

Faced with this reality, universities must promote their development through programs that are updated according to the national reality, both in urban and rural areas; emerging programs with relevance and quality. The world is dynamic and changing; therefore, the relevance of careers, with an updated, broad and diverse offer, becomes a fundamental requirement for the economic and social growth of countries and, especially for the democratization of education. Thus, the link between universities, government and the labor sector is a priority in order to ensure the relevance of the educational offerings of higher education institutions (Camarena and Velarde, 2009; UNESCO, 1995; UNESCO, 2009).

#### 11. Belonging of the student

In the early days of distance education universities, there was a big problem with respect to the students' spirit of belonging to the university. They enrolled, picked up their didactic materials and carried out their studies at home; they

visited the university only to hand in homework and take exams, which generated a feeling of little belonging to the institution and this became a variable of student abandonment and educational exclusion.

It has been seen the need to encourage and seek the necessary strategies to promote the feeling of belonging, and therefore, studying the emotional aspects of students is crucial. Thus, Echeita and Sandoval (2002) points out that working for belonging is the basis for the cohesion of the university community and a step towards a welcoming society; therefore, it is a fight against exclusion and a way to collaborate with common institutional objectives.

The belonging and identity of the student population are not born spontaneously; they must be a permanent construction on the part of the university. Many actions must be carried out throughout the country, led by the central headquarters and the different associated university centers, according to the social and cultural context of the region and the students themselves. Encouraging students to participate in different university activities develops and strengthens the sense of belonging, while enabling students and other actors in the university to generate new ideas and initiatives, and strengthening connections between various departments of the university community.

In order to achieve belonging, it is necessary to seek a wide range of student participation activities, linking each student to the university. These strategies include:

- creation of a student federation,
- creation of student associations in the university campuses as part of the federation,
- folk dance and dance groups,
- sports groups,
- ecological and environmental groups,
- sponsorship of high-level sports teams,
- traditional musical groups,
- formation of choirs,
- clean-up and reforestation activities,
- conducting workshops on healthy living.

The creation of student federations and associations deserves a separate point of attention, since the role that each student must play in the university is fundamental to motivate their sense of belonging. The election of a federation's board of directors and the participation of its president and other members in the various higher bodies and institutional work commissions provide the student community with a great spirit of belonging.

## 12. Efficient use of ICT

As already indicated, the Internet came to change the world and gave a total turn in the way of teaching. The advent of Information and Communication Technologies (ICT) has brought great strengths and advantages for distance education; this technological advance must be taken advantage of for the creation of educational opportunities.

Today, the world has the possibility of incorporating ICT in education and the broad development of these should be at the service of different educational modalities. New technologies have changed the interaction between students and teachers; it is no longer essential to be inside four walls to teach and ICT should not be seen as optional; they have become a necessity for the strengthening of education.

The relationship between information and communication technology and distance education can lead to new forms of teaching and positive changes, providing opportunities to acquire new knowledge and seeking social and educational inclusion.

However, not everything is positive when talking about ICTs, as the entire university student community needs access to information and communication technology; otherwise, ICTs themselves could become a factor of educational exclusion. We refer, in this sense, to the fact that people must have access to these technologies and, if they do not, the university must seek mechanisms to make them available, especially to low-income students and students from remote areas, where there is no access to the Internet, nor the capacity to access technologies that exist in large urban areas.

This means that the problem of the digital divide, which, at least in Latin American countries, is wide, cannot be ignored. Currently, communities without Internet access are clearly excluded, with few possibilities for education and development. If we really want to democratize knowledge, we must fight against these differences in access to new technologies.

Inclusive education, in addition to being accessible to all people, requires the use of updated technologies and, to this end, training is necessary for their use and knowledge to achieve digital inclusion. The use of information and communication technology in education is a transformative factor in thinking and doing different things.

If there is a broad knowledge of new technologies, people will have a critical analysis of their use and will be able to benefit from receiving an education that will be reflected in a better quality of life. With this vision, it is possible that we are facing a new right of access to the technological environment and social equity, as part of educational inclusion; however, this digital inclusion is not simple, due to the existing differences in social groups, including cultural, economic and geographic differences. Given this scenario, the opening and development of institutional policies by the university are required, to seek the democratization of knowledge and the impact on the population, as well as the decrease in the digital divide (López, 2009; UNESCO, 2009; Vargas García, 2015; Castro-Monge, 2017).

In support of education, a large number of educational platforms have been created, some of which are very expensive while others are free; the latter also require adaptation to the needs of the university and represent costs for their adaptation, updating and maintenance. With this, it is clear that open access educational platforms are not completely free, since investment is required to offer a good service to those who study.

The constructivist model has a great strength in information and communication technology, enabling students to establish their own actions or programs to solve situations or problems in their environment. Information and communication technology is a valuable tool for individuals to generate knowledge based on their personal relationships with specific environments. Of course, in order to achieve high-quality learning, teachers must effectively use information and communication technologies in the design of appropriate educational content (Alamila Bazán and Zaldívar Acosta, 2011).

### 13. The role of teachers in inclusion

Given the new scenario of education with the use of new technologies, a model is required in universities that gives priority to the training and strengthening of a highly prepared faculty with a broad mastery of ICTs, with an innovative and research profile, and full disposition for educational and social inclusion.

Many researches related to the trend of inclusive education have pointed out an important variable related to the education and training of teachers. They have highlighted the role of the teacher as a key element to develop teaching and learning processes in universities with a clear objective of inclusive education (Florian et al., 2010; Forlin y Chambers, 2011).

In higher education, teachers make use of technologies in very different ways, according to their level in the professional field in which they work. Even today, there are teachers who resist the use of technologies and this attitude is no longer acceptable in the face of the new challenges of education.

The role of teachers must change and adapt to the new times, and their roles must be different. They must be the guide, the link and key actor for the integration of technologies in the current educational process. Their skills and competences in the use of new technologies are fundamental for the success of distance education as a factor of educational inclusion.

Aranda et al. (2014) point out several investigations on the current university situation, whose results are related to the development of inclusive education processes with little or no training for teachers. They point out that teachers lack measures to enhance students' learning, especially those who have few opportunities or are excluded from the education system.

In the times of so much inequality, the teaching staff must take into account new technological tools and solidarity practices for an inclusive education and learning on the part of those who study, with morals and policies that allow for justice, equity and social transformation.

In distance education, it can be said that for learners, the study is flexible and independent, in such a way that some teachers may confuse their role with their students and not understand the role they should play in the planning of learning, in the use of technologies and in the follow-up that should be given to the person, so that there is truly an inclusive education (Litwin, 2008; Ramírez, 2011).

Teaching staff in distance education must have an open attitude towards change, have the necessary initiative in designing content based on information and communication technology, seek interaction with the learners and emphasize analysis and discussion of problems, as well as necessary feedback, to make students feel satisfied with the process. Information and communication technology is a tool, but the role of educators is to effectively build the bond between learning and high-quality education processes. It must coordinate and create new learning space and opportunities, and innovate to become part of inclusive university education.

People with a vision for inclusive education must evaluate whether they have participated in other academic activities at the university, which can help them understand themselves and their students. It can be a teacher- researcher, guiding a thesis or graduation thesis, effectively utilizing information and communication technologies (video conferencing, educational platforms, video tutoring, online tutoring, database usage, etc.), writing and publishing in scientific academic journals. It is not intended that they should do everything, but they should go a step beyond just teaching, given the demands of today's society. Spengler et al. (2007) point out the importance of the teacher-researcher, since he/she achieves the implementation and complementarity of the two methodological strategies and jointly uses the strengths of both to achieve a better professional educational work.

It should be clear that the role of the teacher in distance education requires another way of thinking, a different way of doing things; he/she needs initiatives, training and to be clear about the importance of the inclusion of people in the university education system.

#### 14. Internationalization as a means of inclusion

In recent decades, since the advent of new technologies and especially the Internet, society has changed. The world is different, borders are open for relations between countries (political, social, economic, cultural and technological) and this includes education: it no longer matters where you are in the world; if you have access to new technologies, educational opportunities in other countries will be on the agenda. Therefore, the internationalization of educational supply is a factor in educational inclusion.

Therefore, it is possible to talk about the globalization of education and receive support from technological advancements in greater connections between countries. Information flows in real-time around the world, providing the

latest knowledge about what is happening elsewhere, and enabling society to move closer in the international education process, thus generating a series of educational cooperation projects and strategic alliances among universities.

This educational globalization calls for the social responsibility of universities and demands the creation of educational and participatory spaces, which includes teachers, students, researchers and institutional management personnel, who, in one way or another, must intervene to achieve the institution's objectives.

When talking about internationalization with a perspective of inclusive education, it is necessary to take concrete actions that are oriented towards the quality of universities, as well as equity, coverage and access to education for marginalized populations and those in conditions of vulnerability. The different databases, digital libraries and international portals that compile thousands of documents published in different countries have become means for educational inclusion and access to knowledge.

Even though internationalization is necessary, universities are created, for the most part, with goals and objectives oriented to the needs of national societies, so that strategies for internationalization depend on the objectives of each institution (Ramírez, 2011). Not all universities are international; some remain focused only on the needs of their own countries, while others, on the contrary, take advantage of new technologies to provide educational opportunities in other countries.

Not everything is simple on this issue; universities need certain conditions to be able to carry out internationalization and address, in this case, the inequalities that exist in the world. Human and economic resources, government support and the vision of university authorities are needed to internationalize the institution in an inclusive manner.

Although universities are willing to internationalize, there are many weaknesses and differences between countries. With respect to the support that distance education receives, there are different university policies, laws and regulations within each country; this, on many occasions, does not allow educational cooperation projects to reach a successful conclusion, which negatively affects inclusive education. However, there are also many universities that have given the fight in their countries for the credibility of distance education and promoted new regulations and laws in front of the authorities, which help distance education provide huge opportunities for people, regardless of which country they work in.

#### 15. Inclusive secondary education

Although it is not linked to the work and objectives of university higher education, it is worth discussing distance education at the secondary level. Previously, it has been pointed out that the majority of first-time students entering universities with a distance model come from secondary education with a face-to-face model, and that this could affect student permanence in a high percentage, since the person knows little about the distance education modality.

It is worth mentioning that through an agreement signed between the National Distance University and the Ministry of Public Education, a project was born in Costa Rica to create the National Institute of Distance Education, which is a project with inclusive educational foresight. Among them, it attempts to share the cost. On the one hand, the Ministry of Education pays for faculty and staff expenses, universities carry out registration procedures, and provide infrastructure, logistics, administrative expenses, human resources, textbooks, and other expenses. In this way, after enrollment, students receive teaching materials so that they can conduct semester studies at home, including face-to-face tutoring, exams, and tasks that must be delivered at the university headquarters.

The fact is that the birth of the project is due to the reputation of distance education in Costa Rica of the UNESCO (UNED). The goal of education inclusion led by the university is to achieve secondary education. After several years of thinking, this idea was officially signed in July 2005. It is an initiative for Costa Ricans, especially those from low

economic resources and over 18 years old. Because of many educational exclusion and lack of opportunities, they have never received secondary education in Costa Rica's liberal education (Castro-Monge, 2017).

CONED's enrollment averages around five thousand students and the project has been very beneficial for low-income students from remote areas of the greater metropolitan area. Among its strengths is the fact that the high school students know very well about the distance education model, which allows them to have, when entering the university, the necessary knowledge about this modality. To some extent, this endows it with the strength and advantages of sustainability and success. Therefore, with the support of universities, similar projects in different countries can make significant contributions to society and are an important factor for university inclusion.

## **6 Discussion**

This article aims to express opinions on the factors that distance education universities need to consider in providing inclusive education. The fact that a university has a distance education model does not make it 100% inclusive. Of course, this approach has indeed successfully provided enormous opportunities for those who will never have face-to-face education opportunities.

Distance education is extremely dynamic, especially due to the enormous advance of technologies. For this reason, universities must continually analyze their mission and academic work, in order to find the means and strategies for inclusive education, since education is a means for social inclusion. It is precisely from the mission of inclusivity that the role of universities in achieving inclusive education must be clearly defined.

The issue of inclusion is discussed in the United Nations Organization with the sustainable development goals, it is immersed in the educational policies of the countries and within the universities. However, the development of each country is different because it is unequal. Although the importance of the inclusion of people in university education is clear, governments and universities must work hand in hand and implement everything necessary to truly achieve educational inclusion.

Excluded people are marginalized and do not have access to the opportunities presented in society, which results in poverty and lacks basic skills to opt for work and the necessary income to subsist.

Inclusion has to do with people's rights. It is a responsibility of the universities to put this issue in the discussion of the agendas of the university authorities. At present, inequality and injustice in education cannot be allowed. Exclusion is unacceptable from every point of view and must be addressed in debates, forums and congresses; but, above all, objectives and goals must be set out in development plans and, in addition, action plans must be established, so that everything does not remain on paper.

Similarly, university planning becomes a support for the institution and requires many inputs when making development plans. Universities always analyze and take into account the number of students they have; however, how many universities have asked themselves about the number of people in the country who for different reasons are being excluded from higher education? Having this information is the responsibility of governments and universities; only then will it be possible to take corrective measures within the institution to provide educational opportunities for these people.

It is necessary to point out that education is not the only means to confront and overcome the problems of social exclusion. It has been mentioned that there are several dimensions of social exclusion and that people are affected by labor, politics, economy, culture, gender, sexual diversity, geographic location and disability issues; however, with regard to the educational dimension, university entities must be clear that the limitations and weaknesses that exist within each university should not generate greater exclusion.

The issue of educational inclusion corresponds to distance education as well as to the conventional face-to-face modality. It is a reality that distance education has democratized university education and has reached regions and people who have not had access to education. The continuous advance of ICTs should be used together with the Internet to offer greater opportunities; however, great care should be taken to ensure that these technologies do not become a factor of exclusion, since the digital divide in many countries is still large and many people do not have access to technologies. Universities must provide education with equality and equity, and seek the necessary means to make these technologies available to those who require them, for a truly inclusive education.

Based on the factors mentioned here, strategies and implementation plans must be established to achieve inclusive education: access, coverage, equality and equity, attention to populations in conditions of vulnerability, extension and social action programs in accordance with the needs of the regions, scholarship programs, gender, quality in academia and management, student permanence, relevance of the academic offer, belonging of the student, efficient use of ICTs, role of the teacher in inclusion, internationalization as a means of inclusion and inclusive secondary education. All of them are necessary to be able to discuss inclusive education. The necessary attention must be paid to these factors, in order to establish the necessary activities that impact on the educational inclusion of people. Because although there is much talk about inclusive education today, do universities have in their development plans the necessary strategies to achieve it?

It has happened that the theme of inclusion is found in the discourse, in documents and in university policies; but, within universities, the concept of inclusive education and how to achieve it is often not clear.

Similarly, universities should link the development plans, academic plans and department plans of the institution with the *2030 Agenda*. The issue of educational inclusion should be worked out from university policies, and it is necessary to establish management indicators and basic strategies to implement, control, and monitor the measures required to achieve this thematic goal.

### **Conflicts of interest**

The author declares no conflicts of interest regarding the publication of this paper.

### **References**

- [1] Ainscow, M., Booth, T., & Dyson, A. (2006). *Improving schools, developing inclusion*. Nueva York: Routledge.
- [2] Alamilla Bazán, A., & Zaldívar Acosta, M. (2011) La denagogía como obstáculo para el uso eficiente de las TIC en la educación de la era digital. *Apertura*, 3(1).
- [3] Aranda, R., Rodríguez, A., Andrés, C., Acedo, E., Arias, S., Mendoza, F., & Marchena, R. (2014). La formación del profesorado universitario: mejora de los procesos de enseñanza-aprendizaje del alumnado con discapacidad. *Tendencias Pedagógicas*, 23: 271-300.
- [4] Ariño, A., & Llopis, R. (2011). *¿Universidad sin clases?* España: Ministerio de Educación, Secretaría General de Universidades.
- [5] Arkorful, V., & Abaidoo, N. (2015). The role of e-learning, advantages and disadvantages of its adoption in higher education. *International Journal of Instructional Technology and Distance Learning*, 12(1): 29-42.
- [6] Asamblea Legislativa de Costa Rica. (2014) *Ley No. 7600. Igualdad de Oportunidades para las Personas con Discapacidad*. San José, Costa Rica.
- [7] Booth, T., & Ainscow, M. (2015). *Guía para la educación inclusiva: Desarrollando el aprendizaje y la participación ciudadana en los centros escolares*. Madrid: OEI – FUHEM.
- [8] Bracons, H., & Ponce de León, L. (2021). Educación universitaria a distancia durante la pandemia de la Covid 19: Reflexiones desde el trabajo social. *EHQUIDAD. Revista Internacional de Políticas de Bienestar y Trabajo Social*,

(16): 247–268. <https://doi.org/10.15257/ehquidad.2021.0021>

[9] Camarena, B., & Velarde, D. (2009). Educación superior y mercado laboral: Vinculación y pertinencia social ¿por qué y para qué? *Estudios Sociales*, 17.

[10] Castro-Monge, E. (2017). La educación a distancia como factor de inclusión social: UNED, 40 años democratizando la educación en Costa Rica. *Espiga*, 16 (número especial), 8-39.

[11] Comisión Nacional de Evaluación y Acreditación Universitaria (2000). *Evaluación de la gestión universitaria*. Argentina.

[12] Córdova, L., Solis, M., & Solis, L. (2017). Aplicación de los sistemas e-Learning en las Universidades. Tesis Doctoral. Ecuador: Universidad Estatal de Milagro.

[13] Correa, J. (2004). Determinantes del rendimiento educativo de los estudiantes de secundaria en Cali: un análisis multinivel. *Sociedad y Economía*(6), 81-105. <http://www.redalyc.org/articulo.oa?id=99617648003>

[14] Costa, I. (2016). *Metodologías do ensino à distância*. Salvador: Universidade Federal da Bahia.

[15] CRES. (2008). *Conferencia Regional de Educación Superior de América Latina y el Caribe*. Cartagena, Colombia.

[16] De Fanelli, A., & Jacinto, C. (2010). Equidad y educación superior en América Latina: el papel de las carreras terciarias y universitarias. *Universia.net*, 1(1).

[17] Donoso, T, Montané, A., & Pessoa, M. (2014). Género y calidad en Educación Superior. *Revista Electrónica Interuniversitaria de Formación del Profesorado*, 17 (3): 157-171. <http://dx.doi.org/10.6018/reifop.17.3.204121>

[18] Dupin-Bryant, P. (2004). Pre-entry variables related to retention in online distance education. *American Journal of Distance Education*, 18(4): 199–206.

[19] Echeita, G., & Sandoval, M. (2002). Educación Inclusiva o educación sin exclusiones. *Revista de Educación*, 327, 31-48.

[20] Florian, L., Young, K., & Rouse, M. (2010). Preparing teachers for inclusive and diverse educational environments: studying curricular reform in an initial teacher education course. *International Journal of Inclusive Education*, 14(7).

[21] Forlin, C., & Chambers, D. (2011). Teacher preparation for inclusive education: Increasing knowledge but raising concerns. *Asia-Pacific Journal of Teacher Education*, 39(1).

[22] García Aretio, L. (2019). El problema del abandono en estudios a distancia: Respuestas desde el diálogo didáctico mediado. *RIED. Revista Iberoamericana de Educación a Distancia*, 22(1): 245-270. <http://dx.doi.org/10.5944/ried.22.1.22433>

[23] Garrocho, C., & Segura, G. (2012). La pertinencia social y la investigación científica en la universidad pública mexicana. *Ciencia Ergo Sum*, 19(1): 24-34.

[24] Gross, J. (2002). *Special educational needs in the primary school: A practical guide (3 ed.)*. Maidenhead: Open University Press.

[25] Herrera, M. (2013). Identificación y relación de los principales elementos del proceso de regionalización de las instituciones de educación superior públicas en Colombia. Tesis de grado. Colombia: Universidad Pontificia Bolivariana.

[26] IES. (2012). *Educación superior y pueblos indígenas y afrodescendientes en América Latina: Normas, políticas y prácticas*. Instituto Internacional de la UNESCO para la Educación Superior en América Latina y el Caribe.

[27] Inquilla, J., Calsina, W., & Velazco, B. (2017). La calidad educativa y administrativa vista desde dentro: caso Universidad Nacional del Altiplano-Puno-Perú 2017. *Revista Comuni@cción*, 8(1): 5-15.

- [28] Jancey, J., & Burns, S. (2013). Institutional factors and the postgraduate student experience. *Quality Assurance in Education*, 21(3): 311-322, <https://doi.org/10.1108/QAE-Nov-2011-0069>
- [29] Jun, J. (2005). Understanding E-dropout? *International Journal on E-Learning*, 4(2): 229-240.
- [30] Lee, Y., & Choi, J. (2011). A review of online course dropout research: Implications for practice and future research. *Education Technology Research Dev*, 59, 593-618. 10.1007/s11423-010-9177.
- [31] Litwin, E. (2008). *Prácticas con tecnologías: El oficio de enseñar, condiciones y contexto*. Buenos Aires: Paidós.
- [32] López, E., & Alvarez, E. (2021). Estrategia en ciudades inteligentes e inclusión social del adulto mayor. *Revista de Tecnología y Sociedad Universidad Popular Autónoma del Estado de Puebla*, 11(20).
- [33] López, P. (2009). Inclusión digital: Un nuevo derecho humano. *Revista Educación y Biblioteca*, 172.
- [34] Malagón, L. (2003). La pertinencia en la educación superior: Elementos para su comprensión. *Revista de la Educación Superior*, 127, 113-134.
- [35] Marchesi, A., Blanco, R., & Hernández, L. (2014). *Avances y desafíos de la educación inclusiva en Iberoamérica*. Organización de Estados Iberoamericanos.
- [36] Martínez-Pujalte, L. (2018). Los principios básicos del Derecho de la Discapacidad; propuesta de sistematización y algunas reflexiones. En *Nuevos Horizontes en el Derecho de la Discapacidad: Hacia un Derecho Inclusivo* (pp. 41-64). España: Aranzadi Thomson Reuters.
- [37] Moncada Mora, M. (2014) La integración académica de los estudiantes universitarios como factor determinante del abandono de corto plazo: Un análisis en el Sistema de Educación Superior a Distancia del Ecuador. RIED. *Revista Iberoamericana de Educación a Distancia*, 17 (2): 173-196. <https://doi.org/10.5944/ried.17.2.12683>
- [38] Morgado, N., Neves, A., & Teixeira, A. (2016). Acolhimento e integração como valor estratégico: análise do sistema institucional de apoio ao estudante virtual da UAb. En Cruz, M. & Sánchez-Elvira, A. (Editores). *Claves innovadoras para la prevención del abandono en instituciones de educación abierta y a distancia: Experiencias internacionales* (pp.27-55). Santo Domingo, República Dominicana: Ediciones UAPA.
- [39] Morón Cívico, B. (2020). El derecho a la participación política y pública del estudiantado con discapacidad en las universidades y su importancia para la consolidación de una educación superior inclusiva y democrática. En Díez Gutiérrez, E. J., y Rodríguez Fernández, J. R. (coords.) *Hacia una práctica crítica, inclusiva y comprometida socialmente* (pp. 31-40). Barcelona, España: Ediciones Octaedro, S.L. Bailén.
- [40] Muntaner, J. (2013). Calidad de vida en la escuela inclusiva. *Revista Iberoamericana de Educación*, 63, 35-49.
- [41] ONU. (1948). *Declaración Universal de Derechos Humanos*. Paris, Francia.
- [42] ONU. (2006). *Convención sobre los Derechos de las Personas con Discapacidad*. New York.
- [43] ONU. (2015). *Agenda de Desarrollo Sostenible 2030: Objetivos de Desarrollo Sostenible*. New York.
- [44] ONU. (2019). *Perspectivas Mundiales de la Población 2019*. <https://population.un.org/wpp/ContactUs>.
- [45] Ortiz, A., Olmos, S., & Sánchez, J. C. (2021). Calidad en e-Learning: Identificación de sus dimensiones, propuesta y validación de un modelo para su evaluación en Educación Superior. *RIED. Revista Iberoamericana de Educación a Distancia*, 24(2), 225-244.
- [46] Plancarte, A. (2017). Inclusión educativa y cultura inclusiva. *Revista de Educación Inclusiva*, 10(2): 213-226.
- [47] Ponsot, B., Varela, L., Sinha, S., & Valera, J. (2009). Un modelo de regresión logística del rendimiento en los estudios universitarios: Caso FACES-ULA. *Actualidad Contable Faces*, 12 (18): 81-102.
- [48] Rama, C., & Cevallos, M. (2016). Nuevas dinámicas de la regionalización universitaria en América Latina. *Magis, Revista Internacional de Investigación en Educación*, 8(17): 99-134. doi: 10.11144/Javeriana.m8-17.ndru

- [49] Ramírez, A. (2011). Condiciones para la internacionalización de la educación superior: entre la inclusión y la exclusión en un mundo globalizado. En *Globalización e internacionalización de la educación superior. Revista de Universidad y Sociedad del Conocimiento* 8(2): 152-164.
- [50] Renaut, A. (2005). La función de las universidades en el desarrollo de una cultura democrática europea. En *Legado y patrimonio de las universidades europeas*. México: CENEVAL.
- [51] Reyes, J., & Colquepisco, N. (2020). La educación superior inclusiva: retos y posibilidades en la Universidad Pública de Lima Sur. *International Journal of Latest Research in Engineering and Technology*, 6.
- [52] Rodríguez, D. (2017). Diagnóstico organizacional. México: Grupo Editor Alfa y Omega.
- [53] Rodríguez L., Zamora, M., Rodríguez, J., Paredes, W., Altamirano, J., & Cruz, M. (2020). Teaching challenges in COVID-19 Scenary: Teams platform-based student satisfaction approach. *Sustainability*, 12(18).  
<https://doi.org/10.3390/su12187514>.
- [54] Rojas, R., & Castro, E. (2016). Estrategias de acompañamiento para promover la permanencia de la población estudiantil en la UNED de Costa Rica. En *Claves innovadoras para la prevención del abandono en instituciones de educación abierta y a distancia: experiencias internacionales*. AIESAD.
- [55] Scarfó, F. (2002). El derecho a la educación en las cárceles como garantía de la educación en derechos humanos. *Revista IIDH, Instituto Interamericano de Derechos Humanos*, 291-324.
- [56] Spengler, M., Egidi, L., & Craveri, A. (2007). El nuevo papel del docente universitario: el profesor colectivo. En *Undécimas Jornadas, Investigaciones en la Facultad de Ciencias Económicas y Estadística. Universidad Nacional del Rosario*. Argentina: Departamento de Matemática, Escuela de Estadística.
- [57] Torrado, A., Sánchez, L., Somonte, R., Cabrera, A., Henríquez, P., & Lorenzo, O. (2014). Envejecimiento poblacional: una mirada desde los programas y políticas públicas de América Latina, Europa y Asia. *Revista Novedades en Población*, 10(19): 18-29.
- [58] UNAD. (2020). Misión. <https://informacion.unad.edu.co>
- [59] UNED. (2020a). Misión. de la UNED Costa Rica. <https://www.uned.ac.cr/rectoria>
- [60] UNED. (2020b). Instituto de Estudios de Género de la UNED Costa Rica.  
<https://www.uned.ac.cr/ieg/informacion-general/mision-y-vision>
- [61] UNED. (2020c). Centro de Estudio de Género. UNED de España.  
<https://www.uned.es/universidad/inicio/en/unidad/centro-estudios-genero.html>
- [62] UNESCO. (1995). *Documento de política para el cambio y el desarrollo de la educación superior: Disyuntiva actual de la educación superior: documentos*. México, Praxis–UNAM.
- [63] UNESCO. (2009). *Conferencia Mundial sobre la Educación Superior 2009: La nueva dinámica de la educación superior y la investigación para el cambio social y el desarrollo*. París, Francia.
- [64] UOC. (2020). Unidad igualdad.  
<https://www.uoc.edu/porta/es/universitat/responsabilitat/social/igualtat/coneix/index.html>
- [65] Valdivieso, M., Monar, K., & Granda, M. (2004). Análisis de los determinantes del rendimiento de los estudiantes de Espol, 2002. *Revista Tecnológica*, 17(1): 213-218.
- [66] Vargas García, D. (2015). *Las TIC en la educación*. Colombia: Instituto Pedagógico, Universidad de Manizales.
- [67] Viza, J. (2018). Gobernabilidad y calidad académica en la Universidad Nacional Micaela Bastidas de Apurímac. Tesis doctoral. Perú: Universidad Cesar Vallejo.