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ednorman@poligran.edu.co
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Chicas Sierra, Sandra; Arias Vera, Julian

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Editorial

INCLUSIVE BUSINESSES IN HIGHER EDUCATION: TEACHING ADMINISTRATIVE SCIENCE STUDENTS

Sandra Chicas Sierra smchicas@poligran.edu.co

Politecnico Grancolombiano, Colombia

Julian Arias Vera jarias@poligran.edu.co

Politecnico Grancolombiano, Colombia

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Abstract: Inclusive businesses are a commercial trend that connects members of society and improves people's quality of life through the possibility of being an active part of productive chains as suppliers of goods and services or consumers, adding value to companies. The field of higher education has been concerned with generating spaces that allow to create initiatives that follow this vision, which is the reason for this article. This paper aims to identify whether students from the administrative sciences departments in four universities in the country could generate inclusive businesses through learning acquired in their virtual academic programs. A methodology with a quantitative approach was used in this research, through the application of a survey with a probabilistic tendency to 359 students with ($1-\alpha=95\%$ y $e=\pm 6.9$) using a non-experimental descriptive scope. Results show that the four institutions strive to promote entrepreneurship and inclusion as a task of social responsibility, but that they must strengthen pedagogical tools and methodologies to achieve the purpose and include the topic of inclusive business as part of their curricula. For future studies, it is considered pertinent to compare successful cases of business generation that are regarded as inclusive.

Keywords: Virtual higher education, inclusive business, entrepreneurship.

INTRODUCTION

The Sustainable Development Goals (SDGs) are a roadmap for countries to join forces against poverty, inequality and to guarantee the protection of the environment by 2030. The purposes of the SDGs encompass aspects such as quality education, reduced inequalities, sustainable cities and communities and responsible production and consumption. The integration of SDGs occurs in all dimensions, from the conservation of the planet, the fight against inequality, the promotion of social inclusion to inclusive economic growth. Within the dimension of sustainable cities and communities and reducing inequalities, the topic of inclusive businesses emerges as a tool to contribute to the achievement of these goals proposed by the UN (UNESCO, 2020).

Education is one of the SDGs set by the UN; advancements in information and communications have migrated education towards

virtuality. Consequently, higher education institutions face the challenge of promoting the generation of inclusive business models through their virtual programs (Vilaverde, 2020).

The purpose of this research is to identify whether students enrolled in international businesses and business administration programs at Politecnico Grancolombiano, Fundacion Universitaria del Area Andina, Universidad Francisco de Paula Santander (Ocaña branch) and Universidad de Manizales could generate inclusive businesses through the learning acquired in their virtual academic programs. To do so, a Likert scale instrument was designed and applied to a population of 359 students enrolled in international businesses and business administration programs in the aforementioned institutions.

This paper is divided in four sections. The first one presents a theoretical approximation of the study problem; the second consists of the definition of the methodological aspects and instruments proposed alongside a team of experts in inclusion in education; the third refers to an application of the instruments to collect information; and finally, the fourth section introduces information processing and analysis to project the results.

From the Millennium Development Goals to the Sustainable Development Goals

Addressing the SDGs implies going back to the Millennium Development Goals (MDGs), eight goals agreed upon in the Millennium Summit 2000, which took place in New York, and that were set to be completed by 2015. These goals included eradicating hunger and poverty, achieving universal primary education, promoting gender equality and empowering women, reducing child mortality, improving maternal health, combating HIV/AIDS and other diseases, ensuring environmental sustainability, and developing comprehensive cooperation for development. Subsequently, in Rio 2012, Colombia proposed what are now known as the Sustainable Development Goals, with the support of the UN. These new objectives tackled goals such as: quality education, sustainable cities and communities, and responsible consumption and production. These goals are meant to go hand in hand with science, technology and innovation; therefore they comprise innovation and inclusive businesses (Chavarro et al., 2017).

Thus, the SDGs are seventeen goals suggested by the UN pertaining to social, economic and environmental topics. The 193 member states of the UN committed to work towards the completion of the goals by 2030 with the aim of improving the life conditions of people around the world. International organizations such as the UN and the OECD have promoted the SDGs and have brought many countries together in the pursuit of these goals (PNUD, 2020). According to Farah (2018), the SDGs were designed to be differentiated from their predecessors, the MDGs, because they keep in mind different social and cultural realities, as well as each countries' development levels. The SDGs were implemented in 2016 with 169 associated objectives. In the framework of the SDGs, the dimension of inclusive businesses is addressed in the 8th (the list is not a

ranking); and Giunta and Davalos (2020) suggest it aims at inclusive and sustainable economic growth and decent work; an approach that would make businesses focus on people instead on infinite profit.

Concept of Inclusion

The concept of inclusion came about in UNESCO's conference, held in Thailand in 1990, in which the idea of education for all was promoted not just as principle, but as educational policy. Then, in 1994 the Conference held in Salamanca established that inclusion's main goal was for educational systems to be flexible and adapt to students' special needs and requirements: it is the system that needs to be adapted, not the students (Porras, 2010).

The UNESCO, cited by Ramirez-Valbuena (2017), defines inclusion as the process to respond to students' needs through inclusive practices in the learning process. While authors such as Cedeño-Angel, cited by Acosta (2013), frame it as an attitude that focuses on listening, speaking, accepting and fostering the needs of everyone, not just of people with disabilities. In that sense and taking UNESCO's definition as a basis, the concept of inclusion must be understood from a social dimension, in which there is universal access to quality education to train students in skills that are suitable to face the challenges of the business world, a condition that is fundamental yet challenging for a country such as Colombia.

Social Inclusion in Colombia

Colombia has had shortcomings with inclusion in many social aspects such as education, health, unemployment, forced displacement, victims of violence or people with disabilities. Camargo (2018) states that Colombia is a country with accentuated inequality at educational and social levels. Socioeconomic levels in the Colombian population are noticeable and are exemplified in very poor sectors that barely survive daily, and in wealthy people who live top lifestyles comparable to those in developed countries.

Colombia's social inclusion problem comes to light in different areas such as access to education, health and opportunities of dignified work. As a result, the government created the General Education Law 115 in 1994, its goal was to urge inclusion for all Colombians, regardless of their color, gender and religious or political beliefs. This Law defines the provisioning of services of formal, not formal and informal education to children, teenagers and adults of ethnical groups, farmers, people with physical disabilities who require social rehabilitation, whose applicability is deemed arguable (Congreso de la República de Colombia, 1994). Thus, education became a key tool to increase social inclusion, encouraging cultural diversity and adapting curricula and pedagogical strategies to the needs of the excluded population. Inclusive education makes it possible to promote inclusive businesses as spaces in which students can understand the country's problems and contribute to closing the gap of social inequality, a topic developed ahead.

Concept of Inclusive Businesses

The concept of inclusive businesses goes back to the 90s, with the boom of business privatization, deregulation and liberalization of trade.

Afterwards, the concept was reprised by the World Business Council for Sustainable Development (2016) (WBCSD) merging philanthropy with business with the goal of improving life conditions of the poorest with the generation of decent jobs. Therefore, the inclusive business model is perceived nowadays as the integration of companies' internal resources with their ecosystem (Likoko & Kini, 2017). According to Desai (2014), the term inclusive businesses refers to sustainable business solutions that go beyond philanthropy, expanding the offer of goods and services to low-income communities in a way that is commercially feasible and profitable (Puentes-Bedoya, 2020). In that sense, the inclusive business model is associated with business strategies in favor of corporate social responsibility and shared value entrepreneurial ventures that benefit the poor and the excluded (Pouw, Bush, & Mangnus, 2019).

Speaking of inclusive businesses means integrating them in three dimensions: well-being, empowerment and environmental sustainability. Well-being refers to suitable living conditions; empowerment is the capacity of poor and marginalized people to take control of their lives and decisions, as well as to have a voice and participate and be listened to; and environmental sustainability deals with the connection between businesses and the environment. Therefore, the inclusive business model brings economic value and social values together, combining profits with community needs (Ros-Tonen et al., 2019). The inclusive business model aims to fight poverty, integrating marginalized people (often considered the base of the pyramid) to value chains such as consumers, suppliers or distributors, backed by the SDGs to achieve zero poverty, zero hunger, zero inequality and responsible production and consumption in urban and rural areas with excluded populations. Information and communication technologies play a significant role in the inclusive business model, they provide more information, transforming practices and conditions in value chains (Speelman, Rodela, Doddema, & Ligtenberg, 2019).

According to Parra (2016), inclusive businesses must be understood as business initiatives that contribute to social advancement and that enhance the well-being of people considered to be at the base of the pyramid; the base of the pyramid being the sociodemographic segment that survives with less than two dollars a day. Likewise, Lashitw, Bals and Tulder (2018) affirm that inclusive companies that combine their bottom line with high social impact don't just have the potential to alleviate poverty, but to create employment and innovation opportunities for the people at the base of the pyramid.

This new business modality seeks to engage in collaborative work with the poorest sectors, which requires restructuring companies' traditional vision to lead businesses that are both sustainable and profitable. For a business to be considered inclusive, the poorest population must be part of companies' value chain. In that regard, the strategy promotes the concept of shared value in inclusive business models, whereby companies generate income and profitability whilst embracing social inclusion. According to Hernandez (2018), Alvarez Polanco et al.,

(2019), Cuartas Galvis (2019), this can be achieved in three different ways. First, redesigning products and markets: focusing on developing products aimed for low-income people with the objective of improving their quality of life. Second, redefining productivity in the value chain: training people at the base of the pyramid in order to have qualified labor. And third, promoting the creation of clusters: generating a better connection between companies and communities.

Inclusive businesses are a new commercial trend that links all of the members of society to benefit companies and communities, it enhances people's quality of life because it offers the possibility to actively participate in productive chains, be it as suppliers or consumers, driving value for companies and their families. For Mendez and Gomez (2017), this type of initiatives are an opportunity for private companies to comprehend the behavior of their environment and help communities, turning them into allies in the search for profitability and competitiveness, and of the common good; all of which translate into better living conditions in aspects pertaining to health, education, dignified housing and decent jobs. For their part, Parody, Guardiola and Perez (2019), claim that more and more companies are considering the population at the base of the pyramid as potential clients to create opportunities of employment that, directly or indirectly, will cover the needs of that population.

In other words, the inclusive business model offers advantages and opportunities to the productive sector and to excluded populations, because according Jenkins et al. (2011), this model helps companies view this population as new consumption markets and sources of provisioning, while giving marginalized populations the chance to attain goods and services through a model that can be scaled and that is economically feasible. According to CECODES (2016), the significance of inclusive businesses as business model is given because it adds value to a company and results in a win-win situation between low-income communities and organizations, thus contributing to local and business development.

The inclusive business proposal represents a challenge for productive and educational sectors, that is why it requires a collaboration between them to fulfill companies' commercial interests and communities' development. It is imperative that not only large organizations follow this model, but that SMEs and entrepreneurial ventures being developed in classrooms move towards this new way of incorporating the poorest to companies, to generate a win-win situation between the productive sector, education institutions and (Morioka, Evans, & Carvalho, 2016).

Consequently, it is necessary to identify if students may create inclusive businesses based on learning acquired in their academic programs, with the aim of contributing to the generation of more and better inclusive businesses ideas to benefit the underprivileged, incorporating them to productive processes. Therefore, education is considered an important element in the promotion of this initiative, especially in times like these, in which the Covid-19 pandemic has made it more necessary to implement information technologies to encourage inclusive

entrepreneurial ventures. Nevertheless, training in inclusive business in virtual higher education becomes highly relevant to motivate the use and application of ICT in the generation of business ideas that include the most vulnerable at the base of the pyramid.

Virtual Education and its Relationship with the Promotion of Inclusive Businesses

Education is one of the UN's SDGs and it is an essential element for countries' economic and social development. Moreover, the advancement of ICT has migrated education towards virtuality, allowing more

vulnerable or excluded people to access training programs. Hence, virtual education is suggested as a strategy for vulnerable people to access education, and subsequently, create inclusive businesses and contribute solutions to problems in their communities (Vilaverde, 2020). The inclusive business model must be reinforced in higher education institutions since its mission is linked with social projection, and it is there where concrete job offers must be encouraged among students to include the most vulnerable community; pedagogical practice must train new generations to understand the needs of the poorest and to generate opportunities of inclusion through employability (Valladares, Betancourt, & Norambuera, 2016).

In the academia, the promotion of inclusive businesses aims at students acquiring different skills and knowledge in business management, market opportunities, digital competences, and even how to export. Through education, students must change the paradigm of traditional businesses and understand that people can engage in businesses that are socially responsible and inclusive, and profitable and sustainable at the same time (Fondo Multilateral de Inversiones, 2015). In parallel, Kestin et al. (2017), state that higher education institutions –due to their role in society– are called to have a fundamental role in the fulfillment of the SDGs, particularly in generation and dissemination of knowledge. Through education, innovation, research and leadership, higher education institutions help society overcome the challenges entailed by the seventeen SDGs.

Far Fernandez de Navarrete et al. (2015), students who are currently enrolled in university are the managers or businesspersons of tomorrow, therefore education institutions must encourage social responsibility and inclusive businesses (Niño-Benavides & Cortes, 2018) with activities of awareness or volunteer work in communities, considering that many students in the virtual modality are based in remote areas with unlikely access to face-to-face education. However, virtual education can contribute to the generation of business ideas and sustainable companies, academic proposal must include environments that are suitable for the feasibility of sustainable business ideas, binding them with the vulnerable population to become aware of their needs and promote the creation of effective solutions to these problems by students. The educational offer should strive to improve graduates' occupational profile to have more possibilities to create a business that enhances the quality of life of people in their surroundings (Pineda & Falla, 2016).

Virtual education can foster the creation of inclusive businesses and contribute to the creation of shared value among students, university or educational sectors, productive sectors and community, because the vulnerable population can be part of the inclusive business model as client, distributor or supplier. Likewise, virtual education brings awareness to students about the importance of creating inclusive businesses and allowing low-income groups to participate in the activities of the value chain as the base of the business pyramid (Schoneveld, 2020).

Mirvis (2020) expounds that virtual education gives SMEs the chance to be trained in how to scale their businesses, learning from other employers, and receiving training to guarantee an adequate preparation in terms of business and social inclusion. In that regard, virtual education is a useful tool for business training and social inclusion, which should encourage social and inclusive entrepreneurial ventures to fulfill the SDGs in terms of reducing poverty, inequality and hunger. Higher education institutions must create curricula that focuses on entrepreneurial ventures or inclusive businesses with online learning materials and activities assisted by ICT (Fermín, 2019).

In the same way, Garibay et al. (2017) believe that the virtual education model is a key element in the promotion of inclusive businesses based on the fact that the alliance between universities and companies may cross geographic borders, enabling the exchange of knowledge and innovations that culminate in the development of new employment, products and services, boosting the business spirit and culture in partnership with the most vulnerable population.

Asongu et al. (2019) offer another point of view, they mention that virtual training in inclusive businesses empowers the most vulnerable to become active contributors in society, taking part in business activities and strengthening the university-productive sector relationship. Similarly, Marin (2017) explains that ICT-mediated education has a direct relationship with inclusive businesses by providing learning opportunities and competences to students to boost their citizen participation, understanding society's problems to deliver scalable and sustainable solutions.

Therefore, a direct relationship between virtual education and inclusive businesses exists, especially in the current global scenario of the Covid-19 pandemic –in which virtuality and virtual businesses have thrived–, consequently, ICT must be tapped into in educational models to promote inclusive businesses and to help closing the gaps of inequality and unemployment deriving from the pandemic.

Institucion Universitaria Politecnico Grancolombiano, Fundacion Universitaria del Area Andina, Universidad de Manizales and the Universidad Francisco de Paula Santander (Ocaña branch) have virtual programs in place to train professionals in business competences, yet it is considered important to measure the efficiency of their virtual education models to assume the challenges faced by professionals at the moment of generating jobs and include society's most vulnerable. Accordingly, the following problem or research question is considered: Do students

at institutions which are the object of the study identify opportunities to create and implement inclusive business models through their virtual programs?

METHOD

The research was conducted in the second semester of 2020 by researchers with PhDs following the suggested topic. The purpose was to identify whether or not students in the virtual modality were able to generate inclusive businesses based on knowledge acquired in the programs of international business and administration at Politecnico Grancolombiano (IUPG), Fundacion Universitaria del Area Andina (FUAA), Universidad Francisco de Paula Santander Ocaña (UFPSO) and Universidad de Manizales (UM). A quantitative approach was selected to accomplish the objective of the research, applying a cross-cutting, non-experimental design with a correlational descriptive approach; the instrument applied by the research was a Likert scale survey which was designed and validated by a group of experts.

The topic's population was students enrolled in the academic programs of business administration and international business, in its virtual modality, offered by the four aforementioned institutions. From that total population, a sample was extracted of 359 students (with $1-\alpha=95\%$ and $e=+/-6,9$) who were enrolled in one of the two programs in the virtual modality in 2020, and for each institution, the sample was randomly selected according to the number of students of each department, as follows:

$$n = \frac{N * p * q * Z^2}{(N - 1) * e^2 + p * q * Z^2}$$

Where,

N=Size of the studied population

p=Probability of occurrence of the event

q=1-p= Probability of the event not occurring

E=Maximum allowed tolerance error

Z=Level of trust

n= Size of the studied sample

The study of this sample considered five (5) inclusion dimensions and categories to determine if these are included in the academic programs' pedagogical models to encourage the creation of inclusive businesses. The five dimensions and categories were:

| Inclusion Dimensions | Analysis Category |
|-----------------------------------|--|
| Philosophy of inclusion | Respect to fundamental rights and promotion of participation of the university community, without distinction. |
| Principles of inclusion | Promoting a fair, equitable and cooperative society through programs and subjects. |
| Inclusive approach | Pedagogical models focused on empowerment and entrepreneurial thinking. |
| Technological tools and equipment | Access to platforms and technological equipment to develop activities in class. |

Table 1.
Dimensions and Analysis Categories

Source: compiled by the authors (2020)

The information collection process started with the definition of the instrument's criteria and dimensions, as well as with the selection of the questions and sample to work with. Subsequently, students were contacted via e-mail to inform them about the intention to apply the survey and to inquire about their voluntary intention to participate –the use of information as a group and anonymous nature were explained. Following that, the survey was virtually applied with the aim of identifying if students were able to generate inclusive businesses based on their programs. The dimensions were evaluated taking into account five possible answers, as shown in Table 2:

| Dimension | Always (5) | Almost Always (4) | Occasionally (3) | Almost Never (2) | Never (1) |
|-----------------------------------|------------|-------------------|------------------|------------------|-----------|
| Philosophy of inclusion | | | | | |
| Principles of inclusion | | | | | |
| Inclusive approach | | | | | |
| Technological tools and equipment | | | | | |
| Inclusive employability | | | | | |

Table 2.
Dimensions of the Instrument Applied to the Students

Source: compiled by the authors (2020).

Note: dimensions for the generation of proposed inclusive businesses.

Likewise, the research procedure was divided in four stages. In the first place, a review of specialized documents took place with the purpose of providing theoretical support to the study; secondly, the methodological aspects and instruments proposed were defined along with a team of experts in inclusion in education; thirdly, the instrument was applied to collect information; finally, the information was processed and analyzed to project the results and the discussion.

RESULTS

359 students participated in the measurement, characterized as follows:

| Variables | No. | % | Variables | No. | % |
|---|------------|-------------|----------------------------|-----|---------|
| | 162 | 100.00% | | 126 | 100.00% |
| Average age in years IUPG | 23 | | Average age in years UFPSO | 24 | |
| IUPG Students | | | UFPSO Students | | |
| Gender | | | Gender | | |
| Female | 78 | 48.15% | Female | 66 | 52.38% |
| Male | 84 | 51.85% | Male | 60 | 47.62% |
| | 52 | 100.00% | | 19 | 100.00% |
| Average age in years FUAU | 24 | | Average age in years UDM | 23 | |
| FUAU Students | | | UDM Students | | |
| Gender | | | Gender | | |
| Female | 25 | 48.08% | Female | 10 | 58.00% |
| Male | 27 | 51.92% | Male | 9 | 42.00% |
| Global Results of Characterization | 359 | 100% | | | |
| Average age in years of the institutions | 24 | | | | |
| Gender | | | | | |
| Female | 179 | 60,00% | | | |
| Male | 180 | 40,00% | | | |

Table 3.
Sociodemographic Characterization of the Object of the Study
Source: compiled by the authors (2020)

According to the object of the investigation and the instrument designed for that purpose, initially, responses pertaining to the first dimension were identified which delves into the philosophy of inclusion. Students responded always (54%) and almost always (36%) referring to the fact that the institutions in which they are enrolled respect their fundamental rights and promote participation in the university community without any distinction whatsoever, but that there is a different treatment when servicing and satisfying their specific needs, as seen below:

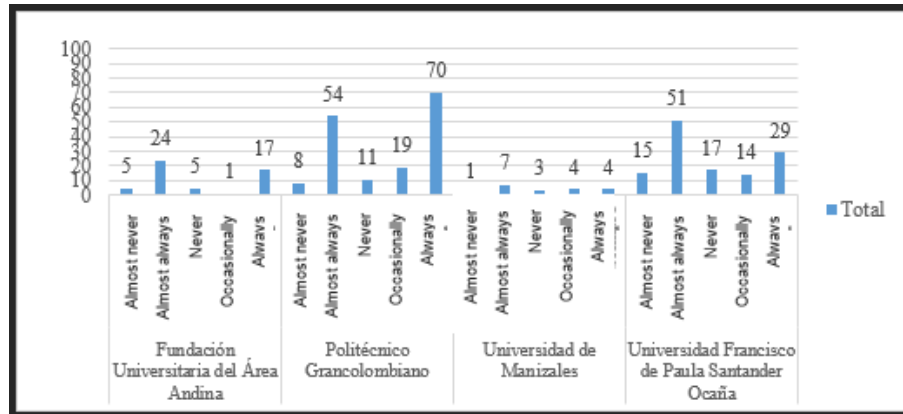


Figure 1.

Philosophy of Inclusion: Promotion of Participation in the University Community

Source: compiled by the authors (2020).

However, a notoriously low share of answers is registered in the never (6%) and almost never (4%) criteria, pertaining to the presence of a philosophy of inclusion oriented towards excellence and concerned about the overall well-being of the student community.

Regarding the instrument's second dimension, the principles of inclusion, an aim to acknowledge that their programs and subjects are appropriate is evinced, showing that cooperation and collaboration among students and teachers exists. Additionally, it is perceived that the institutions are more and more committed in the quest for a society that is fair and equitable and respecting of diversity. There is special emphasis, in general, on teaching actions to generate new business ideas through entrepreneurship, each time focusing more on inclusion and participation of diverse people, aimed at preserving natural resources, as seen in Figure 2.

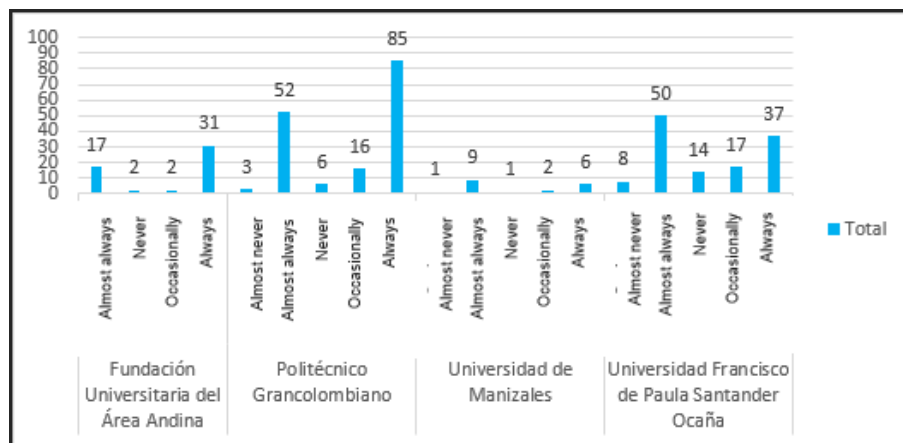


Figure 2.

Learning About the Generation of New Business Units with Equal Opportunities

Source: compiled by the authors (2020).

In terms of the inclusive approach, another dimension of the instrument, there are perceptions at institutional and class level. On the former, it is identified that the institution focuses on classes and

not on the student (to prevent distinctions or preferences), which is a relevant principle of inclusion, but that it also fosters responsibility and empowering in the undertaken activities, directly placing the student as lead of training processes. On the latter, classrooms show an outright aim to boost entrepreneurial thinking, which allows to confirm that they are going beyond fostering the generation of new businesses, materializing some initiatives; an example is the favorability towards inclusive and diverse entrepreneurial ventures, as illustrated in Figure 3.

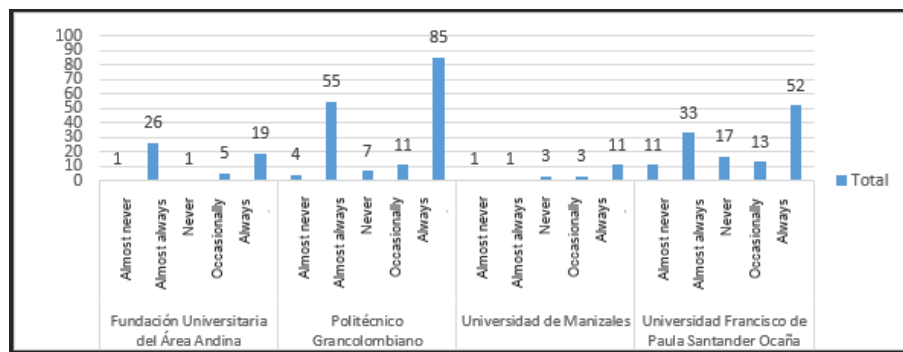


Figure 3.
Outcome of Entrepreneurial Ventures Resulting from Classroom Learning
Source: compiled by the authors (2020)

At institutional and class level there is a share above 90% evincing an approach towards environmental sustainability, resulting from teamwork, but limited to an internal impact, i.e., not oriented towards external environments and communities.

In terms of the dimension pertaining to inclusive employability, results show that the four universities promote the generation of inclusive entrepreneurial ventures through their virtual programs and subjects, students learn tools and competences to create sustainable and inclusive business ideas, as seen in Figure 4:

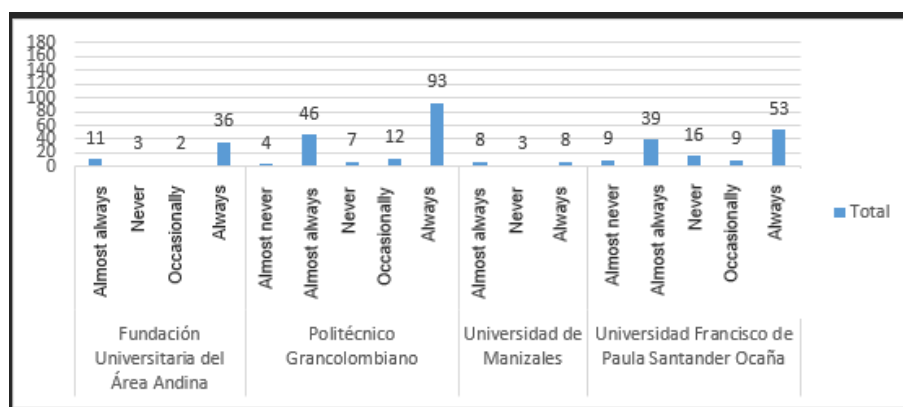


Figure 4.
Promotion of Entrepreneurship from Virtual Programs
Source: compiled by the authors (2020).

Finally, the dimension of tools and equipment used leads to affirm that all of the students have a technological platform to undertake their training process; approximately 70% have a laptop or desktop to develop

their activities, which makes it difficult for the remaining percentage to be effective in the development of their class goals. The remaining population (30%) has to share or borrow equipment for classes, activities and presentation of final exams, with a similar proportion when it comes to the internet connection. Figure 5 shows this situation, which is not conducive to the generation of inclusion in equal terms.

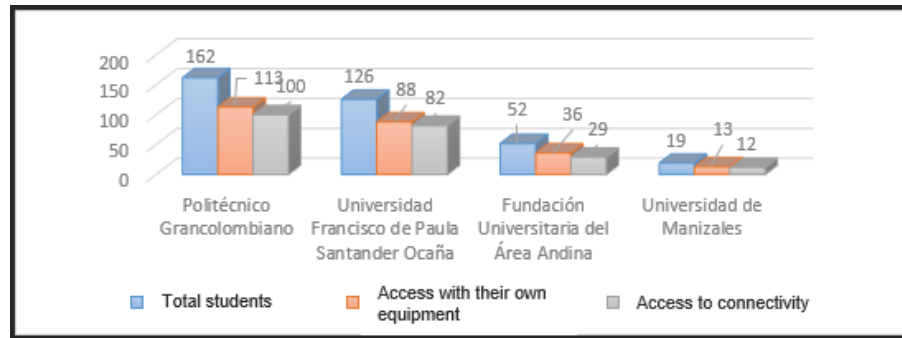


Figure 5.
Use de of Technological Tools and Equipment
Source: compiled by the authors (2020)

DISCUSSION AND CONCLUSION

A large share of students in the four institutions perceive that their academic programs and virtual subjects are generating awareness in terms of entrepreneurship and inclusive businesses. However, the survey applied to the 359 students was useful to identify institutions' weak points and strengths regarding the promotion of inclusive businesses in their virtual programs, already mentioned as part of the strategies in the document proposed by Diaz, Tarango and Contreras (2019). Based on the analysis of the information presented, overall, the four institutions encourage participation of students with the community with the goal of getting informed on their needs and demands, and to incentivize new ideas and entrepreneurial ventures, which shows commitment with social responsibility and inclusion. Nevertheless, there are important challenges regarding equity and inclusion, specifically in the use of equipment and tools, technology in general and access to internet, which coincides with what the CEPAL (2020) has indicated and has been exacerbated by the Covid-19 crisis.

Promoting inclusive businesses from virtual education must begin with the pertinence of academic programs and subjects; in that point, results favor Politecnico Grancolombiano and illustrate that, more and more, the institution is worried about designing educational models that revolve around social inclusion and the generation of social and inclusive entrepreneurial ventures.

Fundacion Universitaria del Area Andina, Universidad de Manizales and Universidad Francisco de Paula Santander (Ocaña branch) must steer their virtual curricula and programs towards the creation of social entrepreneurial ventures and inclusive innovative ideas; this interesting

challenge should aim to align their subjects and academic programs with community needs to contribute with the generation of more and better inclusive business.

Virtual education, as perceived nowadays, is a key element in the promotion of entrepreneurship and inclusive businesses, above all, to fulfill the UN's SDGs by 2030, such as zero hunger and poverty, equity and education of quality for all. That is where educational institutions play fundamental roles in designing their programs, methodologies and virtual materials to train citizens who are aware of social issues and who can generate solutions, fostering education of inclusive businesses in virtual learning environments. The Covid-19 pandemic has risen awareness in terms of entrepreneurial ventures that include the most vulnerable of the pyramid. But there is a process to be followed by higher education institutions in Colombia to design curricula and pedagogical activities aimed at the generation of inclusive businesses, especially if ICT incorporation in education and new models of digital businesses are considered.

It is important for further studies to delve into the generation of inclusive businesses through virtual programs. Models must be proposed aimed at improving diverse ecosystems, especially the digital ecosystem, according to society's new reality; the result would help decrease the unemployment rate and generate actions towards achieving full education coverage in equal conditions and identifying new educational gaps.

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