Education, virtuality and innovation

Case study for the consolidation of a leadership model in inclusive and quality education.

Jaime Alberto Leal Afanador

NATIONAL OPEN AND DISTANCE UNIVERSITY OF COLOMBIA (UNAD)- 2021

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Foreword

We are pleased to present this book written by university president Jaime Alberto Leal Afanador on "Education, Virtuality and Innovation". This is an innovative educational model that has transformed the educational environment in Colombia and has inspired other processes of open and distance education in Ibero-America as a whole. President Leal offers us, in this book, the opportunity to learn first-hand about the exciting educational adventure developed by the National Open and Distance University (UNAD) from its birth in 1981 to the present day, with its different processes of change and permanent commitment to improvement and educational quality in accordance with international standards.

From the author's hand we will discover the development of a competitive strategy, promoted under the leadership of Mr. Leal, which has managed to consolidate the first public mega-university in the country with an effective social balance and commitment. This work is a valuable contribution to the knowledge and debate on education not only in Colombia, but also in the entire framework of the educational processes of the nations that speak the language of Gabriel García Márquez. The experience of UNAD gives us, in this way, light to face the endemic problems of education in the region such as its low quality, its scarce population and geographical coverage and its elusive contribution to social equity, problems that are exportable to other latitudes and that make the author's considerations even more valuable.

This work that Mr. Leal is delivering to the Colombian educational community, and in general to societies on both sides of the Atlantic interested in the future of education, is therefore particularly timely. The crisis caused by the Covid-19 pandemic has revealed the shortcomings and precariousness of education at all levels. Here are some

valuable reflections for the state of the art in the university field. Improving quality and ensuring access and equal opportunities are challenges that have been accentuated today by the socio-health situation and are common, with their different nuances, to the countries that speak, think, train and do science in Spanish.

In Colombia, this mission of "quality and inclusion" was assumed since its inception by UNAD, a pioneer institution in distance education in that country, with a clear and permanent commitment to public service. This book is rich in data that rigorously document the complex history of the construction of an educational institution that is already a reference in the country's higher education system and that will certainly be a model in the post-Covid era. Likewise, the reflections collected here, the result of the experience of the different teams that Mr. Leal has led, represent a valuable contribution to promote quality and innovative educational models.

In this context of accelerated paradigm shifts that the 21st century has brought us, Jaime Leal's leadership has been key to making UNAD a relevant player in the world of education in Spanish-speaking countries. He has been a pioneer in understanding that the educational system has in technology a key ally to face the challenges of the future. Thus, his commitment to the progressive universalization of access to technology and digitization by the university community is undoubtedly a valuable contribution to the ambition for greater social justice that inspires his educational ideal, but it is also a necessary condition for the desired sustainable development in the framework of the fourth industrial revolution and in the era of artificial intelligence. The lack of connectivity is not only a technological barrier; it is a handicap of the greatest importance - as has become evident in the current health situation - for access to education, health, social services, work and economic and labor development in general. The digital transformation of our countries, more than a technological process, is an imperative at the beginning of the Third Millennium, which implies a cultural change of historical significance. Access, usability, digital skills, the proper use of data and trust and security in the online environment are among its essential pillars.

All these factors are determining factors in the educational innovation processes carried out by UNAD.

This is a book made in times of pandemic. A book that transits between the world we knew before Covid-19 and the world to come. A pandemic that has conditioned, and is conditioning to unimaginable extremes, the lives of citizens and the performance of institutions. Although it is worth remembering that many of the effects attributed to Covid-19 have their origins further back, in a system that has been sending out signals of clear social, environmental and economic unsustainability for some time now, and which has been sending out alarm signals and calls for change at least since the global financial crisis of 2008, The consequence of the massive and irresponsible deregulation of the markets fed since the last decades of the 20th century and which, as is well known and analyzed by numerous political scientists around the world, has called into question the very functioning of our democratic systems.

Mr. Leal has been right to read well the opportunities that this era of change and transformation represented for education. UNAD has become one of the most outstanding institutions in Colombia by ensuring access to education, both from the social point of view and from the territorial variable, so decisive in the Colombian context. In this sense, it is fair to call attention to how UNAD has become one of the most effective state institutions in promoting social mobility and equal opportunities.

The growing digitalization process we are experiencing is transforming the way we learn, educate, work and lead projects, people and organizations. The book that we greet today with enthusiasm allows us to learn first-hand how UNAD has been able to promote changes to serve society by training people prepared to live and work in a globalized and increasingly competitive world. Thus, the reader will find in these pages the path that has led UNAD to be recognized as an institution committed to the great challenges of our time: social justice, the defense of equality, diversity and the fight against all forms of discrimination, starting with its firm commitment to gender equality.

A University that promotes, in short, the cultural identity of the territory it protects, Colombia, in a dialogue with universal culture. A commitment that is at the core of the essential transformations that the two founders of our institution, the philosopher José Ortega y Gasset and the physician Gregorio Marañón, called for in order for societies to be able to build "a common life project", to quote Ortega's definition of Nation.

The UNAD of nowadays, whose construction process Jaime Leal describes in this book, is thus a University prepared to face the challenges of the post-pandemic. Prepared to defend life, rights and freedoms, justice, democracy and the generation of opportunities for Colombians. Prepared for what the prominent European thinker Jacques Attali proposes in his book "The Economy of Life. Preparing for what is coming". It is a matter, Attali argues, of prioritizing a social and economic model whose essential mission is the defense of life - in the broad sense of the term and in line with the Sustainable Development Goals and the 2030 Agenda: health, education, food, agriculture, clean energy, access to the digital world, culture. UNAD's educational offer is not only an excellent platform today to train professionals in these fields, but the action of its graduates broadens and improves the Colombian context -following Ortega's own definition of people's biography as a conjunction of the trinomial vocation, circumstance and chance-. The academic development offered by UNAD makes it possible for all Colombians, regardless of their social status or place of birth, to realize their aspiration to have an education that prepares them for the challenges presented by the new global scenario. A University whose vocation to promote equal opportunities offers its graduates the tools to adapt to the demands of contemporary society in order to, from their own commitment, face the threat of growing inequality and poverty that we have been facing in recent years.

Likewise, in these times of vertiginous changes, UNAD has kept in mind that the first task of the University is to form free citizens committed to the development of their nation. UNAD, as a public university, has assumed as its own the promises made to Colombians by Article 67 of the 1991 Political Constitution. Thus, the defense of democracy requires that democratic institutions be useful to citizens. Fulfilling this

commitment is undoubtedly the best way to legitimize democracy in these times of populism and general distrust in the future.

To conclude this prologue, I would like to recall the well-known work of José Ortega y Gasset "The Mission of the University" published almost a century ago, but, like most of Ortega's writings, it is still very relevant today. In his writing, the Spanish philosopher reflected on the essential functions that the university has in its societies, namely: the university as an institution for the training of professionals, as a space for the promotion of scientific and humanistic research and as a center for the dissemination of culture. In this same work Ortega, referring to his well-known generational theory, pointed out that "each generation fights fifteen years to win and its ways are valid for another fifteen years". It is worth noting, in this sense, how the UNAD plays and must play a decisive role in the Colombian university scenario at the present juncture. It is also evident how Jaime Leal's extensive and recognized trajectory as an academic and as an educational manager is a guarantee and an example in his efforts to give the University the functions that Ortega attributed to it. Mr. Leal has thus emerged as one of the most relevant educational leaders of his generation, whose determination and commitment have become the hallmark that distinguishes the National Open and Distance University (UNAD) in the world of higher education in Spanish language.

For us, both the Fundación José Ortega y Gasset-Gregorio Marañón (FOM) and the Ortega y Gasset University Research Institute (IUIOG), the prologue to this book is, without a doubt, an honor that we would like to thank Mr. Jaime Leal, but, above all, it is an opportunity to testify to our recognition of his work and the efforts made by the institution he leads, which has managed to forge its own path and become a bastion and reference for an educational model ahead of its time, in a nation subjected for too long to all kinds of scourges. Today, Colombian citizens have a public university of which they have reason to be proud.

It is with great satisfaction that we welcome this book, which proves to be a valuable contribution to the construction of innovative educational models in the complex times in which we live. It is also the expression

of a singular trajectory of one of our most outstanding Ibero-American educational leaders: Jaime Alberto Leal Afanador.

Antonio Fernández Poyato
Director for Latin America
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Preface

To speak today of virtuality and innovation in education no longer seems like a gimmick of an ideal, but rather a constant challenge to those of us who are part of this sector in all parts of the planet. In times past, particularly in the twentieth century, education was so immovable in its own self-conception that no storm could shake the strong foundations of a tradition inherited for the good of the few and the exclusion of the many. Today, more than one storm has passed and the educational panorama has not changed radically.

This book seeks to show the path taken by the National Open and Distance University (UNAD), created in the early eighties of the former century, to become a pilot of open, distance and virtual education, thanks to a clear determination to break the ties and molds (as has happened in other continents of the planet, particularly in nations today considered highly developed) and that, both in Colombia and in much of Latin America and the Caribbean, have not allowed this sector to assume its social vanguard to forge a widespread welfare, In Colombia, as well as in a large part of Latin America and the Caribbean, this sector has not been allowed to assume the social vanguard that it deserves in order to forge an extended wellbeing in populations of young people and adults excluded from education due to different situations.

The successful evolution of UNAD and its social acceptance today, as well as the presence of a range of educational institutions with similar purposes, confirms that it is no longer possible to continue thinking that, in education, all times past were better. On the contrary, the best will always be to be discovered and to be done, especially when the cause of educating with quality and relevance drives intelligent and productive work with the aim of serving the environment surrounding an educational organization.

This book only seeks to show, from the knowledge of the experience and evolutionary course of UNAD, how a prospective built from the innovative and participatory thinking of a community of leaders can lead to transform educational realities immersed in scenarios of permanent crisis by challenges planned on rigorous readings of problems and constant opportunities. UNAD's effective social balance, motivated by paradigmatic changes, turned it into the first Colombian public mega-university.

To understand this evolutionary transformation requires, especially from the conceptual point of view, an open mind that knows how to read how the positive effect achieved by the change of paradigms in times of transformation, such as the one we are now experiencing on the planet (the pandemic, among others), allows us to understand why, how and why UNAD has managed to strategically model its educational social action, with an intensive use of tools such as planning, foresight and exponential technologies with holistic sustainability effects over time.

Before the crisis caused by the Covid-19 strain, the results achieved during the last decade by UNAD were by far the best in its history, and they have become visible and tangible, thanks to the understanding of its mission and vision by hundreds of academic and administrative leaders who work in it and who, regardless of the system, network or region in which they work, have dedicated their knowledge, expertise and energy to give life to the strategic postulates formulated in five Development Plans chained together from the beginning to the end of the decade, regardless of the system, network or region to which they belong in the role they play, have dedicated their knowledge, expertise and energy to give life to the strategic postulates formulated in five Development Plans chained from 2004 to the current plan 2019-2023 "More UNAD, More Country". In these, it has been possible to demonstrate the maturity of this University and its capacity to sustain with effective results the coherence and relevance of its organizational actions, becoming a viable and quality educational prospect for Colombia, which will hopefully serve as an example for the education sector in Latin America.

All this effort has been framed in a new form of institutional management and in a concept of the value of intelligent and productive work aimed at generating holistic organizational sustainability. This implies a strict conviction in the consolidation and management of the Networks of Academic and Administrative Leaders which are vital for the development of the substantive responsibilities of an organization that calls itself intelligent. Also, for the transformation of the necessary academic roles in this model that, without asking permission, became one of the main educational options in Colombia.

This transformation of roles in the exercise of a new leadership positions the teacher to provide support to students under the parameters of a pedagogical and didactic action focused on learning.

On the other hand, the intensive use of multimedia technologies seeks to strengthen this model of educating with innovative information and guided didactic communication strategies, making it effective not only by transmitting, but especially by knowing how to manage knowledge. Thus, more options are provided for students to actively and dynamically intervene in their meaningful self-learning, in collaborative work and in the development of autonomous and constructive thinking in the face of the challenge of the competencies to be developed in their respective formative process.

Also, the scheme of the transmitting teacher is radically changed by a role centered on accompaniment based on an interaction enriched by motivation, which redistributes learning in an equitable manner in order to guarantee an increasing formative quality by incorporating new media variables and pedagogical and didactic mediations.

By virtue of the above, I would like to share with you, dear reader, the strategies and competitive advantages of UNAD and its results during these last 17 years of transforming management, with positive indicators in training, research, social projection, innovation, inclusion and internationalization, among others. However, I cannot fail to mention how various obstacles had to be overcome which, from the beginning, have had to be overcome in these forty years of UNAD's educational service.

I am convinced that beyond Covid-19, education in the Knowledge Society will no longer be the same. On the one hand, because the key value of virtuality in the multiple fields of economic and social activity has been revealed to all, especially for those who have the option of access to technology, but also as an opportunity to provide coverage to the majority of the population that is suffering a growing deterioration in the budgetary handicap of families, which in the case of the educational sector has affected a significant number of students. Thus, thanks to virtuality, retention, permanence, promotion and graduation indicators have evolved significantly, which is why it is time to promote innovative strategies motivated by citizens and educators, related to the reengineering of educational projects, to be defined as routes committed to offering viable solutions to communities, and to promote the fulfillment of their academic and research goals and expectations, supported by disruptive technologies, with creative strategies of pedagogical and didactic dynamics, and guarantees of sustainable financing. With this, it will be feasible to respond to the needs and expectations of students and parents, both in our country and throughout our Latin American continent.

I also hope that these lines will contribute to validate the relevance of a new educational approach and its true impact at the social level, thanks to the inclusion and equity with formative quality of this type of systemic models, in the search to sow hope and viability in every Latin American heart, until today mostly excluded from the opportunity of a pertinent and quality education.

I believe that when an organization, such as UNAD, looks inward to assess the impact of its work, it can find some pleasant truths and others not so pleasant. When things do not work out and goals are not met, multiple explanations emerge from its members and main responsible parties, some of them propositive and creative and others in the form of apologies and promises that this will be the last time and that everything will change for the better in the future. For example, in 2003 nothing was progressing well at UNAD and it seemed more likely to disappear from the Colombian educational environment, in the worst case scenario, or to be attached to one or more other regional government universities. Fortunately, neither of these options occurred

and what we collectively baptized as the "First Great Opportunity" appeared so that UNAD could make a qualitative leap from within and reinvent itself, and fortunately this has been the case.

Here I share what we have done, what we do and what we dream of being and doing at UNAD, how we measure it and how we value it, especially to increase the degree of satisfaction of our students and the significant contribution to their self-learning processes, through the creation and dynamization of multiple strategies and pedagogical, didactic and technological resources, permanently placed at the disposal of the improvement of quality and educational relevance.

In summary, I seek to communicate my own experience and that of hundreds of leaders who have worked tirelessly for this educational social cause. I hope that this experience can serve as an object of study to find motivations that can be transformed into opportunities for improvement at the organizational, curricular, pedagogical, didactic, techno-pedagogical and teacher accompaniment levels in various educational scenarios, and that through these understandings we can, together, enable the continuous improvement of the educational sector in Colombia and Latin America.

I am sure that in the years to come, education will not be inferior to this challenge that today is imposed on it in the global world, and that we will be able to guarantee the place of innovative leadership that, we must recognize with humility and rigorous self-criticism, is a debt to be paid, particularly by the education sector, towards the societies that make up the conglomerate of Latin American countries.

Thanks in advance,

Jaime Alberto Leal Afanador

Introduction

The 21st century undoubtedly marks for humanity the necessary recognition of a fascinating revolution that poses both a challenge and a defiance for all types of sectors that make up nations and, of course, for all of us who make up the future of humanity today, breaking, as never before, with the traditions of the existing order and creating new terms in the search for understanding and creating these new realities.

Unlike other times, the changes that take place today in our daily lives are rapid and sometimes vertiginous, leaving behind those long processes that slowly transformed our ways of living on planet Earth. Today it is a matter of recognizing new expressions of power where the collective takes on transcendence, as never before in the history of humanity.

The most relevant aspect of this revolution, compared to others that have taken place throughout history, is its global condition, because for the first time information does not belong to a few but to all and, of course, it is the first time that we have political, economic and social references to transform, as a great opportunity, the old expressions and actions on the domination and exploitation of some people over others.

We are in the early years of an unprecedented revolution, which began to radically change our relationship with the planet itself, with our awareness of its management and in terms of human relationships that for three decades have been marked by advances in knowledge and the disruption of new technologies, creating new perceptions of our individual and collective selves to transform us as unique individuals but, at the same time, belonging to networks of various kinds with / for others.

Education is one of the guests of honor to this transformation that has to be initiated within its own bosom to be able to radiate, with the ethical and moral authority that corresponds to it, the transformation of the individuals and societies that it educates and to contribute to form by referencing in its performance the value of each person as a social being, as a person and as a professional being endowed with multiple skills and competencies in specialized knowledge. It is here where one of the main intentions of this book is born: the value of learning to learn.

Consequently, the pleasure of writing about the history of the National Open and Distance University (UNAD) and its organizational transformation is matched only by the emotion of recalling the dreams of collectively building the path of a leading and committed organization with a clear vision of service, in coherence with its duty as a public university and pioneer in the Colombian higher education system (composed of the other 32 public universities, 84 private universities and nearly 180 other institutions of higher education), of an educational model that has transcended to the most remote populations, and also to those most in need of educational opportunities.

That UNAD has become an institution that has transformed the educational background of Colombia and has impacted other areas of Latin America has also meant learning from mistakes and overcoming resistance, obstacles and threats from different sources, nuances and interests.

Like the best day-to-day practices, when the dream is clear, organizational transformation becomes a good cause and good causes, unlike dreams, involve not only the individual vision, but the inspiration for others to share and contribute to a collective vision that today makes the National Open and Distance University UNAD a modern institution that addresses, with enthusiasm and positive attitude, the challenges of the knowledge society.

For this reason, in the first chapter “Beyond educational orthodoxy” I explain this concept, what the resistance of traditional education to

distance education consists of, and I analyze the evolution of human societies with the help of futurists Alvin Tofler and Steve Case, in order to offer greater understanding of the social value of those who possess knowledge today as a collective conglomerate, meaning nations or multinationals, but also for individuals who, as knowers in constant learning, can be located anywhere on our planet to facilitate the management of new knowledge and technological progress.

In the second chapter, "The techno-pedagogical keys of virtual education", I address the aspects that I consider relevant to gain convictions about what has been the fascinating collective construction of an innovative-didactic pedagogical model, with the interest of being not only one more state university, but an inclusive social and educational cause called UNAD, the first university dedicated to distance and virtual education since its origin in 1981. To this end, I analyze the keys to the new paradigm of virtual distance education, the main learning methods related to alternative pedagogical currents, and their applicability in learning networks, and explain the meaning of the paradoxical statement that the greatest achievement of distance education is not, precisely, to be at a distance but rather to be distance-free.

In "The principles of the pedagogical model in the Distance University", which is the third chapter, I describe how the principles and educational purposes of distance learning and the UNAD Pedagogical Model (UPM) are managed, the meaning and sense of learning assessment, the didactic role played by the educational media and resources as a support for knowledge, as well as the planning stages and instruments of virtual education and its differences with respect to conventional models. I dedicate special attention to the role of the teacher in distance education, and specifically in UNAD, and his role as motivator, dynamizer of new paradigms and, above all, recognizer and enhancer of intelligence in students, based on the principles of neuroscience.

"From UNISUR to UNAD" is the name of the fourth chapter, in which I outline the historical context and the main events that have marked the evolution of the University since its legal founding. Likewise, I men-

tion those who anticipated me in the role of University President, the milestones that have marked the evolution, the change of name and the necessary turn in its direction, to move from an uncertain sustainability, to become the Colombian mega-university.

The actions implemented, with the leadership team, in the progress towards the consolidation of the dream of an inclusive and quality educational model, as we have envisioned the University, is what I show in the fifth chapter "Strategic axes of the organizational evolution of UNAD". My doctoral dissertation work for a PhD in Instructional Design and Distance Education at Nova University in the United States (described in my book "Dreams and Resistances of an Intelligent Organization", 2011), which reflects the metasystemic reengineering, provided a valuable input to intervene in the organization with situational strategic planning and structural foresight, which I briefly detail in the chapter.

"The Metasystem and the UNAD Governance and Management Structures" is the title of chapter six, in which I describe how UNAD has been conceived as a metasystem with duly confirmed and public criteria for action among the entire university community. Here I analyze how the concepts of the British Stafford Beer are put into practice, based on a modeling of viable integrated systems, oriented to give strategic value to the construction of a metasystemic organization, which, like UNAD, is guided by axiological and epistemological principles and designs its own organizational structure and at the same time different from those of other Colombian educational institutions.

In chapter seven, entitled "UNAD 4.0 and the revitalization of today's University", I explore the urgent need for the University, as a social organization, to review its procedures if it seeks to have the leadership it has had at some point in history, and show how, in the face of the global alerts facing the University's management model, the UNAD metasystem - identified as UNAD 4.0 - is the product of a planned evolution open to the new challenges of the Knowledge Society and the social expectations of today's world.

Thus, I describe how the University has been generating added value through the development of macro-projects such as the Organizational Center for Advanced Studies and Qualification of Human Talent-COACH, the Metasystemic Global Plant, Campo-UNAD, the Regional Intersystemic Observatory-OIR, the Open University System-SUA, the Professional Technical Institute ITP, UNAD Virtual TV, and the Integrated Institutional Intelligence System SIIUNAD 4.0, among others.

I have entitled chapter eight "Things Right", as a play on words in reference to the colloquial expression that suggests that for events to happen better, logic, order, common sense and the recognition of what is due must prevail, in reference to the late, but fair, meritorious and necessary decision of the Ministry of National Education to approve the UNAD, and for the first time in Colombia and in its higher education system, the professional undergraduate degree in law in virtual modality. I analyze the significance of this fact, how this launches UNAD as a pioneer in virtuality and, above all, how it favors an important advance in favor of social equity.

In chapter nine, "Exercising transforming leadership", I reflect in depth on the detachment from the orthodox and bureaucratic forms that, in general, accompany the performance of public administration under a bicentennial institutionalism that is full of scarce effectiveness when it comes to accountability for its management and social impact. I also analyze how, in the case of education, structural ruptures are required on the being and doing of all those who integrate the educational communities so that this sector assumes the true social vanguard that, by principle, corresponds to it, and I show how, according to human nature and university culture, the values of the university leader should be highlighted.

Finally, in chapter ten, "Final Reflection around a good Colombian coffee", I allow myself to think aloud and share some of my personal life, my origins, family, principles, the context in which I was formed and worked, and how all this contributed not only to the shaping of my character but, more importantly, to the passionate conviction to dedicate my life to

making UNAD an educational social cause. There I also talk about my experience as university president and the legacy that, in a humble way, I hope will be infinitely enriched by those who continue this task.

All this is important to remember when trying to explain the reason for the name of this book: "Education, Virtuality And Innovation", because throughout the text the reader will find a particular metalanguage developed as a consequence of a continuous transformation, which describes the change achieved so far and which I will try to explain with the simplest definitions of the components of the Metasystem called UNAD.

I hope to clarify the process of organizational reengineering, which was used as a great opportunity to reconstitute a modern public university, committed to the pursuit of educational excellence extended to all, and thus significantly influence the hope of creating opportunities for access and educational excellence for Colombia and Latin America.

It is also a purpose to show this experience to the directors and governors of Latin American educational institutions, with whom the history, but also the statistics of the sector, show that in addition to the language we share, we also have in common the structural problems of exclusion, inequity and lack of quality and educational relevance for our communities.

It is also true that we are facing a great opportunity to provide an effective response to the burdens of inequity and social exclusion, and therefore it is important to understand other ways of strengthening our educational models with a sense of relevant social impact, taking advantage of the benefits derived from new technologies for development and growth and, of course, from the evolution of knowledge in a wide variety of fields.

Thus, I invite you to approach this text in a reflective manner, which is accompanied by graphic supports that seek to facilitate its understanding so that this experience of transformation, creativity, talent, inspiration and educational innovation in which we have collectively committed

thousands of UNAD leaders, inside and outside Colombia, may gain in the initiative of "yes, it is possible", inside and outside of Colombia, will gain in the initiative of "yes, it is possible", and so that analysts, leaders, researchers and teachers, among others, who carry out or have to do with the educational social mission throughout Latin America, do not hesitate, at least, to try to break the routines of their daily action.

I invite you once again to raise your concerns with us so that we can listen and learn from your observations and thus promote the argumentative dialectic on these issues, which I hope will be of interest and discussion.

Thank you for choosing this book..

Chapter 1

Beyond educational orthodoxy

After almost a thousand years of face-to-face university education (counted from the appearance of the University of Bologna - Italy, in 1088), distance education and virtuality, understood as its major development, have come to consolidate to respond to the expectations of humanity, and to contribute to leverage scenarios of participation, inclusion, democracy and social progress.

Historically, the recognition of distance and virtual training has been minimal since it is only now beginning its positioning, and for this it has had to overcome resistance in terms of volume, by number of actors; the power of those who have legislated for decades and, above all, the prejudice of what I call the "educational orthodoxy", and which corresponds to the paradigm - retrograde - of those who consider that quality training is only possible if it is face-to-face and, therefore, despise or reject distance and virtual training.

Hence the title of this first chapter. Orthodoxy (in Spanish), according to the Royal Spanish Academy, means one who acts in accordance with generally accepted habits or practices, As a rule, the orthodox perpetuate their thoughts, like good religious faithful who do not question

the doctrine, because that is how it has always been done, because that is how they have learned it and because they have not visualized other options. Something similar has happened in the educational system, on which the Church has had much influence, although Education is not Religion. Most of the directors, university presidents and even teachers of today's higher education have been trained in the traditional model of classroom education, and have mistakenly believed that an alternative form of education (such as distance education, in its various expressions), does not respond to the methods adopted by them and, therefore, they believe that these should not be good for the education system.

Even the learning that the Covid 19 pandemic brought to humanity has not seemed to be enough for those orthodox ones to recognize that technology at the service of education is not a possibility or an alternative, but the way to guarantee and respond to the expectations and needs of both the Knowledge Society and the new generations and the productive system. The positive explosion of social networks, communication platforms (such as Zoom, Teams, Skype, WhatsApp, Meet...) following the mandatory quarantine that most countries have faced due to the epidemic, caused a favorable lack of anticipation and acceptance of virtuality as an equal, or better, means for production in almost all aspects of daily life, entertainment, relationships, expression of religious faith and education.

Here I will present how this evolution has taken place, how it has impacted educational models and how distance education has had to overcome prejudices to consolidate itself as a social option for the transformation of Colombia and, perhaps, of Latin America.

A glance at the history of mankind shows how higher education has always been (even in this era), for the most part, characterized by a common element: the professor transmitting knowledge to students who passively receive his ideas and work with them. The images of the Socratic philosophers lecturing to hundreds of people gathered in the agora; the apprentice priests reading the Holy Scriptures in the Italian classrooms of the late Middle Ages; the German philosophers sharing ideas around the "new" books that had just come off the press.

The wealthy sons of the French bourgeois class who learned to train as good bureaucrats of the Napoleonic State from the single professorships, and the rising Latin American middle class that considered university access a luxury, until a few decades ago. In all these scenarios the professor dictates, the student repeats and there is a unique means of validation of what was seen in the class sessions (the book and the notes).

Education is the key to the historical value of a society, but to my way of regarding distance education as a generator of that healthy social balance, it was underestimated in Colombia at the beginning, turning the great opportunity for change into one of the most naïve postures, believing that it would quickly take hold in the face of the educational orthodoxy already installed for centuries in our country and, by analogy, in Latin America.

It did not take long for the status-quo of university orthodoxy to take a sidelong glance at this distance modality, which it qualified as a supplement to face-to-face attendance, in the best of cases, and as a social swindle, in the most extreme position. To whom would it occur -said the background of thought - to replace the sacred role of the teacher "dictator of classes", and the privileges of having his knowledge distributed without further pedagogy and didactic support for a group of unenlightened (students), who gathered (gather) in the sacred classroom, at set times to listen and copy on predetermined topics in a syllabus that, year after year, refused to be modified, despite the evolution of knowledge and repeated endlessly for dozens of generations of new students.

My experience and relevant research in this regard have confirmed that all educational organizational forms have been dedicated to repeating the hierarchical structures derived from the tradition that has accompanied classical and orthodox education, cloistered since the thirteenth century, and imported from other cultures far away in time and space, without major transcendental adjustments to the educational needs of the Colombian reality, and I am sure, to the events of the Latin American educational institutions.

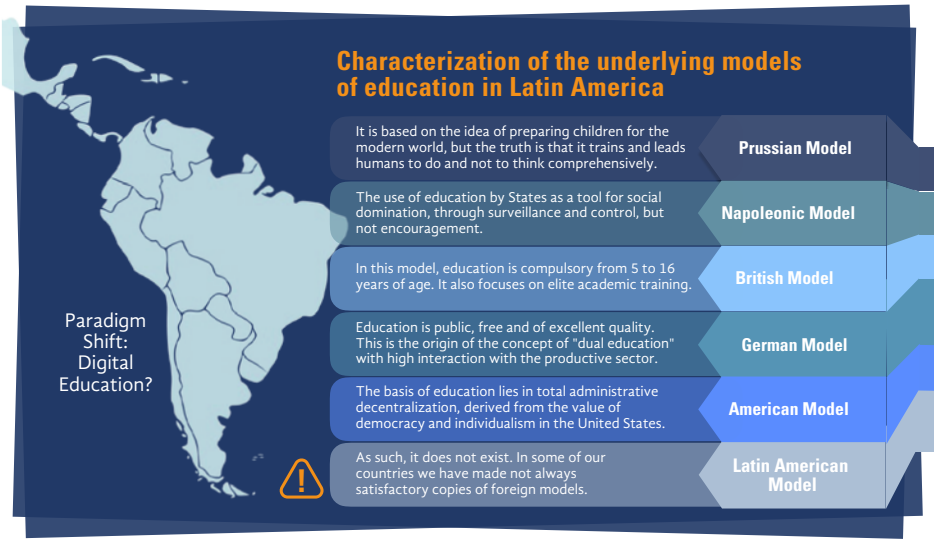


Image 1. Characterization of the underlying education models.
Source: Own elaboration.

Because before industrialization, the expansion of mass media and the globalization of analog technologies, teachers and educational institutions were, almost by default, the masters of knowledge. Ideas were kept in physical libraries and there were even proscribed texts that were difficult to access. Certain and "unique" truths were learned, repeated and replicated, taught without means of contrast, by students who, in classrooms, repeated the lessons without departing from the script, and whoever dared to do so was easily disqualified, almost to the level of heretic, in the absence of practical, argumentative and demonstrative ways of proving the veracity of their assertions.

Education in the knowledge society

The emergence of a Knowledge Society, or that which began to experience information with free access, the professionalization of services and the revision of educational concepts as a result of new developments in industry and disciplines, as well as the shift of the economy from artisanal and agricultural models to industrialized and professionalizing ones (read, among others, Drucker, Castells, Stehr and Bell), ended up constituting the environment for a new educational insti-

tutionality that could provide all populations with opportunities for transformation and wellbeing.

Thus, a great schism began to emerge from the solid and traditional conventional teaching of the instructor and his face-to-face students in predefined times and spaces with a clear dominance of the discourse of knowledge transmission, as an extended characteristic of the orthodox scheme that has accompanied our Latin American countries and their restrictive and inefficient educational systems since colonial times.

Mass access to knowledge, to the comparison of sources, to training in other physical and learning environments began to be seen as possible, just as the monopoly of knowledge by a few also began to crumble.

Nowadays, the Knowledge Society gives power to those who possess knowledge and has enhanced the transformational character for the individual and for the collective groups that make up our nations, particularly in Latin America.

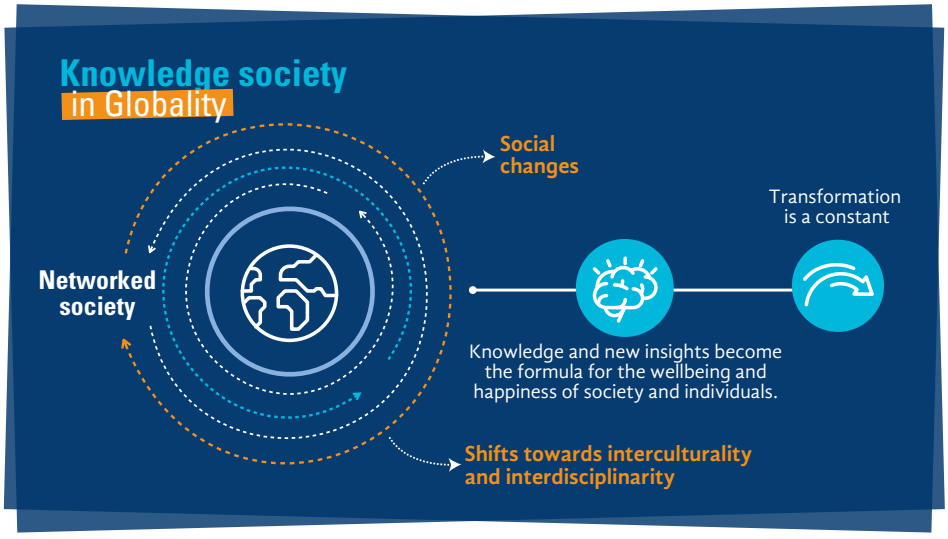


Image 2. Impacts of the Knowledge Society.
Source: Own elaboration.

Societal transformations and education systems

In order to better understand this evolution of Humanity and its impact on educational systems, I return to one of the classic visionaries who, in a masterly way, explained this evolution in his book "The Third Wave". I am referring to Alvin Toffler, who synthetically refers to this evolution as follows:

First Wave: It occurs from the year 8,000 B.C. and extends until the middle of the XVIII century of our era. It is characterized by the enduring dominance for thousands of years by the so-called agricultural society, the power of feudalism and the slowness of one-to-one communications. Of course, education counted for little, since power was exercised by those who had the dominance of physical force and the possession of productive land.

Second Wave: Toffler locates it from the mid-18th century to the mid-20th century, a period during which the so-called "Industrial Revolution" took place, characterized by the creation of large factories, the mass production and distribution of consumer goods, which radically modified human coexistence, as explained by the First Wave, in the countryside and rural areas, to give life to the urban and massified society, composed of large conglomerates, whose education consolidated different forms of collective training, especially the Prussian model of mass education (in which children had to go to schools to learn according to certain levels), and as a result of the evolution of the educational traditions established since Ancient Greece, whose precursors were the philosophers Socrates, Plato and Aristotle. The forms of communication established since then have been characterized by the dissemination of information and knowledge from one - the teacher - to many - the students - in a predetermined place and at a predetermined time.

Third Wave: Toffler describes it as the disruption in Humanity of new technologies, different from the printed one, and in particular of information and communication innovations, and locates it from the early 1930s, with the arrival of mass radio and television, to the present day.

The first manifestations of the information and knowledge era emerged, the Internet was born and the concept of globality was introduced for the first time.

For the visionary Alvin Toffler, humanity, in awe, recognizes the importance of the information age and mass communications as follows: "An illiterate will be one who does not know where to go to find the information he/she requires at a given moment to solve a particular problem" The Third Wave, 1979.

In this emerging evolution, another visionary, an outstanding disciple of Toffler, Steve Case (former president of America Online, and visionary entrepreneur of technology companies), notes that, within Toffler's Third Wave, three other new waves are developing, from the last two decades of the 20th century to the present; that is to say, in the last 40 years.

First New Wave: It is located at the beginning of the 80s until the end of the 90s of the twentieth century, in which the infrastructure and founding pillars of what we know today as the digital world were developed, developing the first phases in the construction of human platforms led by engineers who, together with computer equipment, and the development of new programming languages and technological networks, begin to make it possible for ordinary people to connect with each other through the Internet in writing and with the early development of mobile telephony, with restrictions only for voice calls.

It is the beginning of the first technological revolution with the birth and spectacular growth of the so-called www, World Wide Web or system capable of incorporating in its first phase massive written communications (1G) through the computer, and whose genesis dates back to 1969 when DARPA (Defense Advanced Research Project Agency), developed an effective system to prevent the disappearance of key military information in the times of the now disappeared "Iron Curtain", and later also incorporated images and sounds (2G) with better processing levels and volume.

This First New Wave led to the birth of today's well-known multinationals SISCO, Hewlett-Packard, Microsoft, Apple, IBM, among others..

Thus expands and from there, the already developed for the time of the late twentieth century, Distance Education Modality, whose origins are

determined with the training of mass groups of farmers through the written press, as is the case of "The Boston Herald", and a successful case in Colombia where, in addition to the written press with the weekly "El Campesino / The peasant", The radio station "Radio Sutatenza" was created, which was successful for nearly three decades with significant impact on literacy and education of thousands of Colombian farmers, through the social project called Popular Cultural Action ACPO (1947-1994), headed by Mgr. José Joaquín Salcedo Guarín and, on behalf of the UNAD, the first university president, Hernando Bernal and Miguel Antonio Ramón Martínez, Vice president of academic affairs.

Second New Wave: According to Case, in most cases, a good part of this new world was born in the garages of the houses where brilliant young minds lived at the beginning of the 21st century. There, images, videos, repositories, among others, were created from the very evolution of data transmission capabilities; and the original mobile telephony of voice and written data also emerged.

An impressive qualitative leap of the Internet network, which has gone from a basic service of information transmission and connectivity of medium proportions to the 3G and 4G phases with protocols of immediate transmission of large volumes integrated with search engines such as Google and many others, have since made it easy to explore and find specific answers in a matter of seconds on artificial intelligence devices, based on the network management of an orderly traffic of information that helps to answer questions of particular or collective order, giving way to a new area of knowledge called Infotechnology.

Simultaneously, in this Second New Wave, hardware technologies are evolving with countless new and increasingly intelligent devices in the world of cellular and mobile telephony that are becoming mass consumption at affordable costs available to millions of people on the planet, while at the same time the first evolutionary phases of software as a service are appearing, starting with providers such as Facebook, Twitter, Instagram and YouTube, in the Western world; and in the Eastern world, the developments of Web chat, Weibo, Baidu, among others. Understanding this represents a determining challenge in the

evolution of the convergence between Knowledge - Communication - Education and Technology.

This approach is radically visible in education as a disruptive action that challenges it to transform itself or disappear under the rigid canons and orthodoxies that still surround it.

Third New Wave: Steve Case recognizes it as the ubiquity of the Internet and, in his prospective vision, goes ahead to recognize that it will no longer belong to companies as we know them today, and that, although all products and services will need the Internet, it will already be linked to the added value of information and communication with the emerging and thriving "Internet of things", or real-time web interconnection of objects with each other.

Here appears the connectivity of exponential volumes and rates linked to the 5G Internet already implemented, of course, by an unparalleled evolution towards studies characterized by the 6G and 7G Internet.

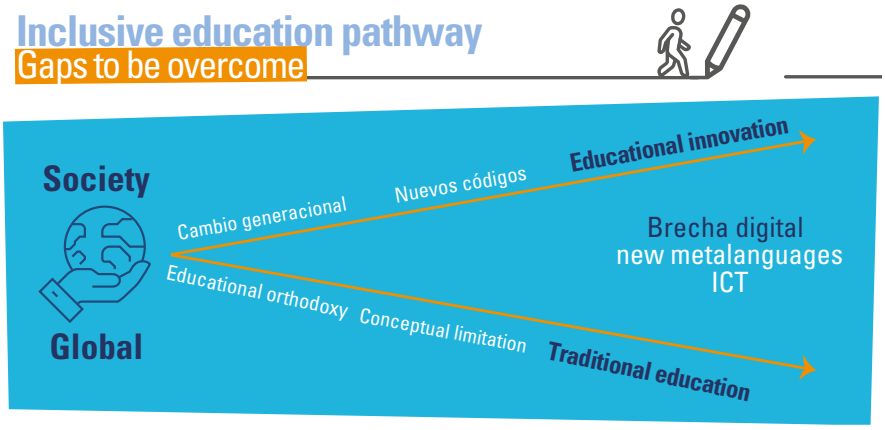


Image 3. Necessary evolution in closing the digital divide from 1G to 5G and prospectively 6G and 7G. Source: Own elaboration.

The third New Wave emerged to revolutionize our way of teaching and learning: Technologies enable teachers to relate differently with students in real time, to know about their behavior and academic evo-

lution, instead of reducing them to mere numbers in the educational institution, the new tools will integrate them in the most coherent and responsible way, derived from having learned to learn for life.

In synthesis, these two visionaries, Alvin Toffler and Steve Case, showed us the scanography of human evolution related to education and, of course with its prospective, which links it as a sector of society with innumerable challenges in its models and standards of integral education.

Linked to this disruptive scenario of technologies, the digital world is evolving, and there is a paradigmatic change with the modality of distance education and its expressions of virtuality, which some also call online education or e-learning, as well as its contributions as B-learning or blended or mixed learning (face-to-face - virtual) and M-learning or mobile (learning on portable devices), which I analyze later.

The training paradigm behind distance education

The "rudimentary" (in its forms, in today's eyes) distance education of the early seventies of the last century (with radio classes, papers and books sent by physical mail or television sessions), offered different options to the classic model of face-to-face teaching, which has been based on unidirectional communication. Traditional training obeyed more to previous experiences of educational offers that, in the strict sense of the term, had little or nothing to do with the specific characteristics of the paradigm of meaningful learning and autonomous thinking that it was hoped to promote as a pedagogical model substantially differentiated from the classic classroom model.

Distance education began a new learning paradigm called "learning to learn", consubstantial with the dynamics of a new era of humanity, in which knowledge becomes more fluid, of significant and immediate applicability and of continuous evolution, given the intensive development of technologies that since that time do not cease to amaze, and that among themselves are surpassed daily and by far, affecting the reality of millions of humans without distinction of race, gender or geographical and economic location, among others.

Unlike the traditional model (orthodox, conditioned and unidirectional), in distance education the motivation and effort of each individual to learn, to know and to improve himself/herself becomes valuable. Learning to teach, which has been a very typical model of classroom training, can certify teaching skills, but it is no guarantee of learning. Learning to learn is, in other words, what has also been called "active learning" because it is the student who designs his or her own learning paths and times and demands a higher level of commitment and discipline in the work, with the guidance of a tutor. Hence, it is incontrovertibly linked to self-training and to the necessary reality of wanting to learn how to learn. In the beginning, this purpose was called "autodidaxy" and whoever did it at his own risk was an autodidact; even so, many of the main wise men in history did it and produced great advances in human knowledge.

Maturation and positioning of distance education

Some might think that the adoption of distance education in the educational institutionality of a country or, in a particular way within an institution of higher education, is very easy, and the truth is not so. Many orthodox, and also some merchants of education, have erroneously interpreted the concept of distance education, and have believed that the use of the mediations (at the beginning analogous and now digital), constituted the end when, as the same name indicates it, they are means that favor this learning to learn. In some phases of this evolution, an ambiguous mixture of "compressed semi-presence", as one Colombian education leader called it, was woven, which socially affected, with few exceptions, the credibility of the quality and relevance of this new way of educating and training, and of course, the institutional reputation and image.

The main mistake of those who criticize this modality is to think that the form and means of education are its essence.

The following considerations constitute some of the most common misconceptions about distance education:

- That it is sufficient to incorporate computer rooms and connectivity networks to deliver face-to-face classes at a distance.

- That responds to a need to incorporate conditions to create HTML texts that can be formatted with some images and evaluations to connect teachers and students.
- That, as it was believed for decades, it worked if it could act as a complement to face-to-face education, a fact that even today is part of the imaginary of the low potential of the modality and its poor quality of training.
- That distance education is impersonal and does not allow personal relationships, when the Internet and the Covid 19 pandemic have shown humanity the ability to recreate itself, reinvent itself and maintain coexistence and filial relations, friendship and collegiality thanks to the networks.
- That attitudes towards the study cannot be controlled, when the situation responds to a personal behavior and is not attributable to the environment as such.
- That distance education does not have the capacity to develop the substantive responsibilities of integral formation, rigorous research, and social projection that is the responsibility of any institution of higher education, and that in the opinion of the orthodox is only possible in face-to-face training.

The aforementioned prejudices have had too much influence to ensure that, in most Latin American countries, government or state policies have not even been configured to strengthen, for the benefit of the majority of the population, the open and distance education modality, and one of its main methodological expressions, virtuality. In some countries of the region, even their Ministries of Education and University presidents still hold to orthodox thinking, and consider that distance - virtual or virtual - distance education (which for practical purposes is the same thing) does not provide the quality desired by them, without having objectively measured the potentials of one or the other.

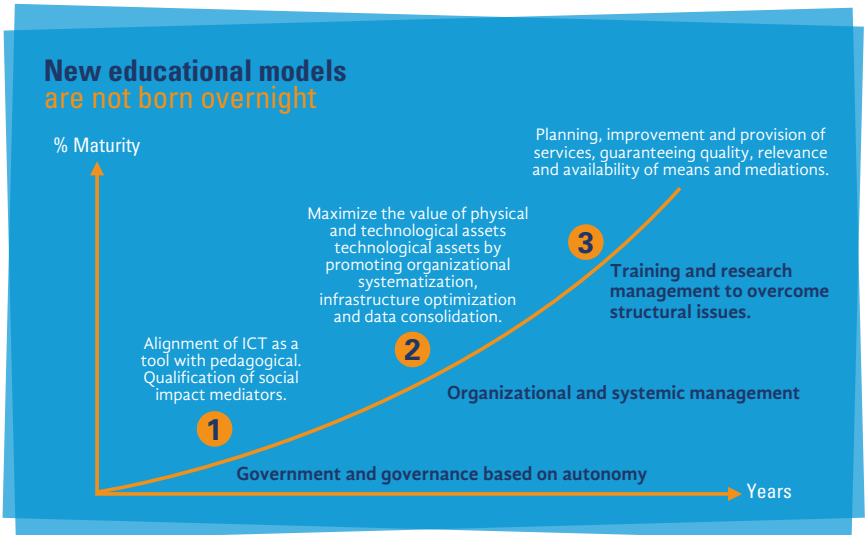
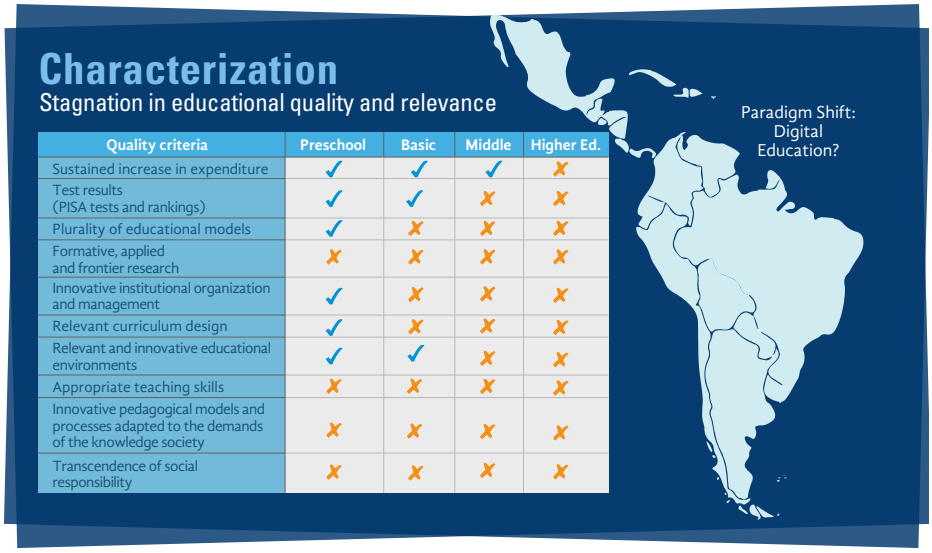


Image 4. Maturation of effective distance education.
Source: Own elaboration.

The previous image shows how distance education must respond to the strengthening, in time, of key components that allow the educational model to reach a qualified dimension and social impact in the spheres of action where it has been implemented. That is, the maturation of distance education must take place in an environment of government and governance in the exercise of university autonomy, of planned and systemic organizational management (as I will explain later), and of formative and investigative management that allow to analyze and overcome structural problems, thanks to the management of human, technological, pedagogical and didactic platforms to maximize the value of the assets placed at the service of educational interaction, promoting talents that propitiate quality, innovation, info-technological security and social impact.

This should lead, throughout Latin America, to the investment of significant resources and time necessary to create a new educational culture that will face, with sufficient response capacity, the educational challenges for a society that expects to guarantee an effective distribution of spiritual and material wealth (image 5).

However, it should be clarified that virtual and distance education is not easy or cheap as some have thought and of course requires sustained investment over time to ensure high standards of quality training, relevant research and innovation with a focus on responsiveness and effective social impact.



Quality criteria	Preschool	Basic	Middle	Higher Ed.
Sustained increase in expenditure	✓	✓	✓	✗
Test results (PISA tests and rankings)	✓	✓	✗	✗
Plurality of educational models	✓	✗	✗	✗
Formative, applied and frontier research	✗	✗	✗	✗
Innovative institutional organization and management	✓	✗	✗	✗
Relevant curriculum design	✓	✗	✗	✗
Relevant and innovative educational environments	✓	✓	✗	✗
Appropriate teaching skills	✗	✗	✗	✗
Innovative pedagogical models and processes adapted to the demands of the knowledge society	✗	✗	✗	✗
Transcendence of social responsibility	✗	✗	✗	✗

Image 5. Characterization of stagnation in Educational Quality and Relevance in Latin America. Source: Adapted from UNESCO / CNA, 2018.

Distance education as an engine for regional development

The following image shows, with the concept of icebergs as a reference, how in most of our countries education manifests a series of problems still scarcely identified and, therefore, not sufficiently solved under the conventional educational model due, in particular, to the limited vision of why and for what purpose to educate in the coming decades.

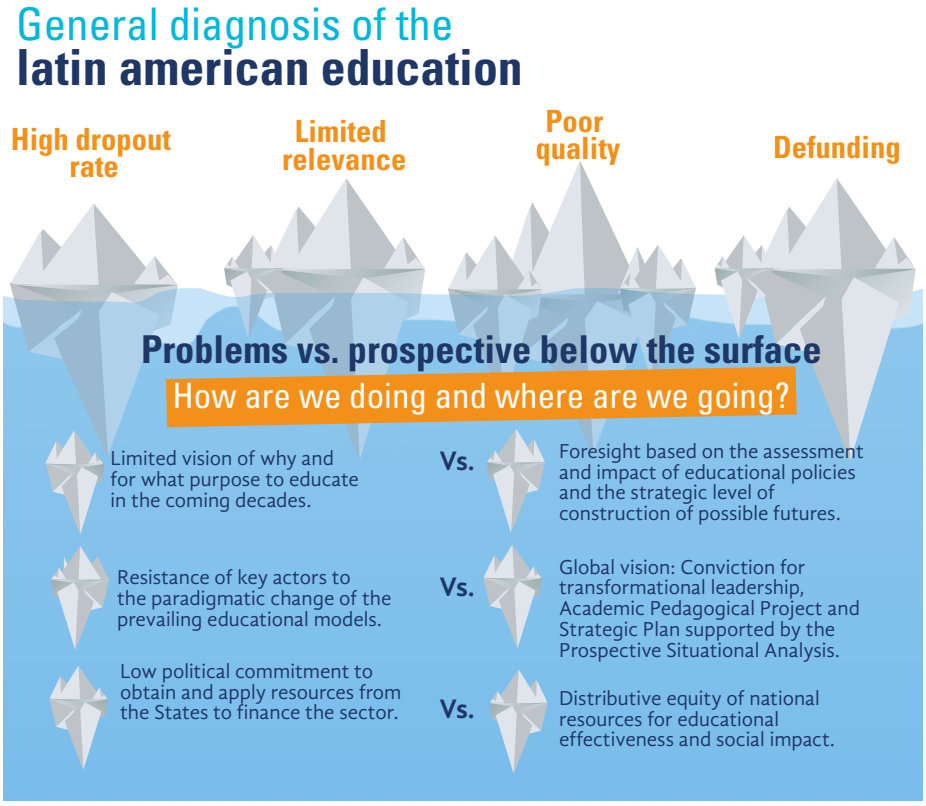


Image 6. General diagnosis of Latin American education.
Source: Own elaboration.

This could help, among others, to understand why the marked historical dependence of our education, its social remoteness with the problems that surround us and its scarce applicability of the principles of academic quality, frontier research, administrative efficiency, formative relevance, among others, given that the opportunity of access and permanence was a privilege for few citizens. I recommend, in order to deepen this statement, to read the study of the Los Andes University, *"La Lotería de la Cuna. La movilidad social a través de la educación en los municipios de Colombia / The Lottery of the Cradle. Social mobility through education in Colombia's municipalities"* 2015, by Sandra García, Catherine Rodríguez, Fabio Sánchez and Juan Guillermo Bedoya, which describes and details, with clearly researched figures, this historical phenomenon in our country and in our continent.

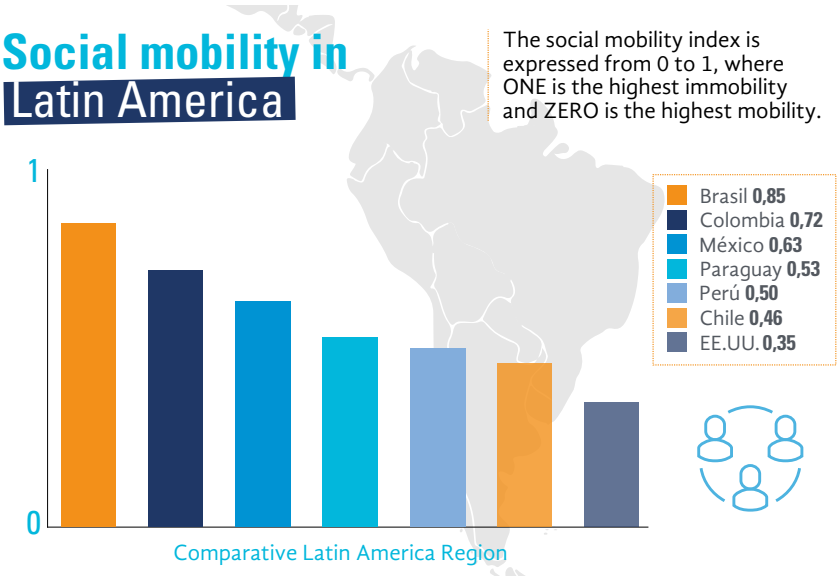


Image 7. Social Mobility in Latin America.
Source: Social Panorama of Latin America and the Caribbean, ECLAC..

For generations, Latin Americans were denied, and still are in many sectors, the opportunity to be well educated, due to the absence of educational policies for the great majority of the population of our continent. This awareness also helps us to explain how this historical tradition becomes a mental limitation to implement paradigmatic changes in the educational organizations of our continent, with several options for innovation and transformation that were implemented for other cultures and countries that today proudly show us the excellence of their educational systems.

Distance and virtual education would guarantee effectiveness in the quality of education, with equity policies, pertinence programs and the expected motivation of our children and young people to find an education they are passionate about, because they have learned to learn about how knowledge is generated, transferred, disseminated, exchanged and applied (with the help of technology), when it is linked to meaningful and autonomous thinking, when it motivates, with the experience of their own environment, to transform for the better the reality that surrounds them, or to create new realities through the par-

ticipatory work that calls for building solutions and taking advantage of opportunities collectively.

I reiterate that education, no matter the modality in which it is developed, allows, above all, to manage the purpose of the integrality of each human being who accesses and remains within it, starting with the family nucleus itself, and articulating with the educational institutionality. This implies the interest in forming a social being, a person and a being with the competencies and knowledge to act in the world of trades or in the life of the disciplines.

Such education must allow the extension of the axiological value that is instilled in the family, or at least it should be, on respect for others, solidarity, ethics and coherence of the integral being.

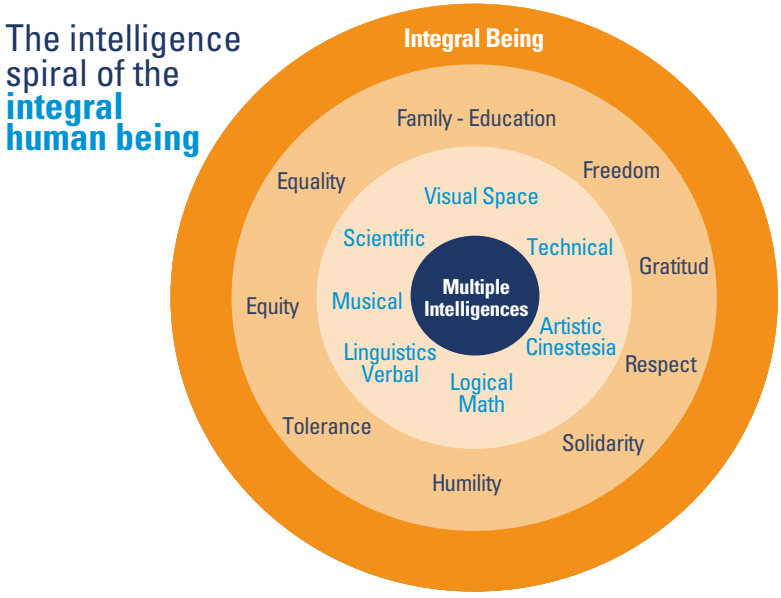


Image 8. The Spiral of Intelligence of the Integral Human Being. Source: Own elaboration.

It is also clear, at the same time, that education and in particular modern education, must privilege active pedagogies and didactics so that each person trained encourages and strengthens their understanding, consolidates their listening skills, reinforces their learning of team and

collaborative work, and motivates their inspiration and creativity so that, finally, they recognize the importance of innovation and entrepreneurship as key tools to ensure the success of each life project while contributing to the success of others.

Distance education -whose epistemological foundation and methodological understanding in the National Open and Distance University (UNAD) I develop later- is consolidated in the current and projected conditions of humanity at this moment of its history as a unique opportunity to favor access to knowledge for students through effective public policies. Distance education is synonymous with inclusion, antonymous to the traditional orthodox exclusion derived from rigid formats and conditions.

It is worth recalling the following advantages of distance education as defined by the leading Spanish academic and scholar of the subject, Lorenzo García Aretio:

For the student or participant	For governments and society in general
• More open access with a wider range of possibilities for learning knowledge, skills, values, attitudes and relationships; • Overcoming time barriers, geographical barriers, personal restrictions, social and cultural obstacles or educational infrastructures; • To combine study with work, family or other study obligations; • To be the true protagonist of learning, as it is centered on the person; • Save costs related to travel, leaving the workplace, etc.: obtain training of equal or higher quality at a lower cost. • Choose priorities and the organization of their own learning; and • In case of unforeseen situations of epidemics or diseases, or in a forced confinement, to have the opportunity to continue the teaching/learning processes.	• Allow access to this training to sectors and groups that, by conventional means, would be more restricted, for example, in the current pandemic situation; • Offer citizens more opportunities for education and training; • Lowering the costs of training; • Diversification of training offerings; • The control by the Administrations, regarding the quality of the training provided, becomes more feasible in digital teaching and learning systems, due to the existence of evidence (records) difficult to find in face-to-face training.

Image 9. Advantages of distance education for students, businesses and governments. Source: Why distance education systems are winning?. Lorenzo García Aretio, 2020.

In this sense, Latin American education today, as never before, has a great opportunity to humanize (dignify, empower, provide better liv-

ing conditions) millions of its inhabitants, as long as it is capable of overcoming the educational orthodoxy gap and recognizes the challenges imposed by other gaps such as the generational and conceptual gaps seen here, in addition to the so-called "digital gap" (coverage and connectivity below 50% in many regions of the continent). Our Latin American education is challenged to accept new codes and metalanguages (which I will explain later) coming from diverse technologies, especially those of information and communication.

It is necessary to understand, then, why it is important to outline regional policies that broaden the framework of educational management, in order to achieve the promotion of Latin Americans capable of acting ethically at local, regional and planetary scale, and of course, so that these human beings are aware of the need to establish collective power, unlike the generations that preceded us, which privileged the particular good, thus withering the democracy of most of our nations and closing spaces of well-being to large majorities.

In synthesis, politics and economic power, as they are known today, may, with the help of distance education, be approaching a great metamorphosis, born of globality and the digital world, and of course in education we must be prepared to participate in the conscious construction of new ideological and theoretical frameworks for intercultural relations, For this reason, the new way of teaching must, at the same time, participate in the self-creation of new policy frameworks for pedagogical management, inspired by the sociology of digital networks and by the responsible leadership of new movements that will emerge with different purposes than those that have kept conventional education in force until now.

Humanity is experiencing a decisive turning point in its social history, and for this reason we must make room for models that promote education without time and distance, that motivates integral talent to act locally and globally, for active and autonomous citizen participation in politics and to understand how, in the medium term, we can be participants in economic models no longer dominated by a few, but focused on the interest of intelligent multitudes as an expression of the expansion of collective power.

Futurologists warn that two decades ahead, the variation in the conventional scenarios of economics, politics, education, production and effective cultural transformation will become visible without difficulty, which is why it is an illusion to think that technology, by itself, will threaten humanity. On the contrary, it will serve to strengthen research and development in any disciplinary field by guaranteeing relevant, fluid and rapidly applicable knowledge.

This is confirmed by the spirit of the new emerging companies, or start-ups, that are emerging to finance multiple innovative projects and to encourage the open nature of collaborative science and the new sense of ownership, because all players have the right to win. It is about thinking positively and proactively about a world that, through well-conceived and applied technology, will reward creativity and relentlessly promote innovation for individual and collective well-being. UNAD 4.0, which I will also explain below, assumes this scenario of open culture in the mission scenario of innovation with the development of Learn Startup, or learning incubators in multiple areas of its activities.

According to the SMIT analysis or Social Media Tic and Training, human satisfaction needs, formulated about 80 years ago by Abraham Maslow, necessarily today and in the future have a new meaning in terms of our millennials and now young centennials, as well as those who are born and grow up in the future; because they have and will have new needs for self-realization, recognition, affiliation, security and of course, will change the inspirational needs of human talent. Moreover, unlike the majority of the orthodox (for there are young orthodox, though little is believed), the new generations of students were born and live, by natural adoption and not by imposition, with technology.

Image 10. Maslow's needs in a New Era
Fuente: SMIT Social Media, TIC´s and Training.

This allows each student to become an agent of change in order to generate training strategies that make it possible to turn ideas into projects, through mechanisms for the application of such learning in academic network environments, research networks and innovation networks, all with an appropriate use of the various digital technologies. And this is, in itself, one of the central goals of education, whatever the formative modality it develops.

Chapter 2

Techno-pedagogical keys to virtual education

Managing virtual and distance education, beyond the theories that accompany it from Constructivism and Connectivism, generates unprecedented challenges to project it into practice. It implies recognizing the valuable developments of pedagogies focused on learning, the unprecedented value of neuroscience, the valuable pedagogy of the freedom of creative thinking, the art of asking questions and, in particular, the paradigmatic rupture of knowledge transfer towards knowledge management as a prospective vision of all educational institutions in the course of this 21st century.

Today, its evolution in the National Open and Distance University (UNAD) has helped to concretize an innovative educational model, as a response to the challenges of the Knowledge Society (as I showed in the previous chapter), over the frantic pace of evolution of information and communication technologies.

Supported by technologies -now virtual-, but above all by the possibility of providing an effective response to the learning needs of today's society, virtual and distance education has arrived to settle definitively in our global society.

This virtuality is just one of the options that modernity asks of conventional education in order not to collapse, but which the orthodox have underestimated, falling into the misconception that virtuality is the essence of distance education. They still believe that quality education is only possible in classrooms, in the same places, at the same times and with the same methods as always, among other biases.

In this section I will refer, fundamentally, to the keys of the new paradigm of virtual and distance education, beginning with a conceptual approach to it and to the principles that govern it. Likewise, I will develop the main learning models related to the alternative pedagogical currents, which could well contribute to sustain the new educational environments circumscribed in virtuality, as well as their applicability in learning networks, with the basic characteristics of E-learning, Mobile-learning and Blended-learning, which, without doubt, are already the seed of the virtual learning communities that today guarantee the new dynamics, in the so-called "educational cyberspace" of several institutions and universities dedicated to manage virtual and distance education.

On the fundamentals of virtual and distance education

The concept of "education" is unique in all places, contexts and levels. The term involves contributing in a qualified way to a person's integral formation through the reinforcement of key values for existence, and the strengthening of knowledge, talents, competencies and skills for a better development of being, knowing and doing in his or her life project. It entails the challenge of contributing to the perfective development of the person, within a continuous process that is born with us and should die with us.

Lifelong education, or traditionally identified as continuing education, constitutes an accumulation of processes and intermediate results that emerge from the fact that no one will ever be sufficiently educated to feel or say that there is nothing new to learn or to do, which is why the final result of what we were or are, is projected in the motivation to become a "perpetual student", as far as the expression allows, in the finite cycle of life.

In a remote place and time, and in various remote places and times, education has been perfecting itself since the emergence of homo sapiens, cultivating the intellect of one and many with questions and answers linked to existence and how to approach it. Strictly speaking, its evolution is linked to human evolution, and its explanation would be too long and complex for the purpose of this book, but as I stated in the previous chapter, it has always been and will always be subscribed to the transformation of societies, and especially to what is now known as "the era of the Knowledge Society", which brings many challenges ahead.

When, over the centuries, the on-site educational institutionality was installed, which ended up "condemning" in several cases the desire of each person to be formed according to their own tastes, merits and talents in correspondence with the projection of their spirit of self-improvement, a machinery immersed in educational rigidity was created in parallel. In common terms: the obligatory intervention of some agents -teachers- who taught in preconceived and recognized times and places such as schools, institutes, teacher training colleges and universities, among many other names. This constituted the so-called educational tradition. The route or format of teaching from one to many (a teacher to a group of students) made a career and professions as outstanding as teaching or professorship were born. To talk about it and describe it would be, in a way, foolish, since all readers have lived this experience and each one rates it according to the results and experiences they have had.

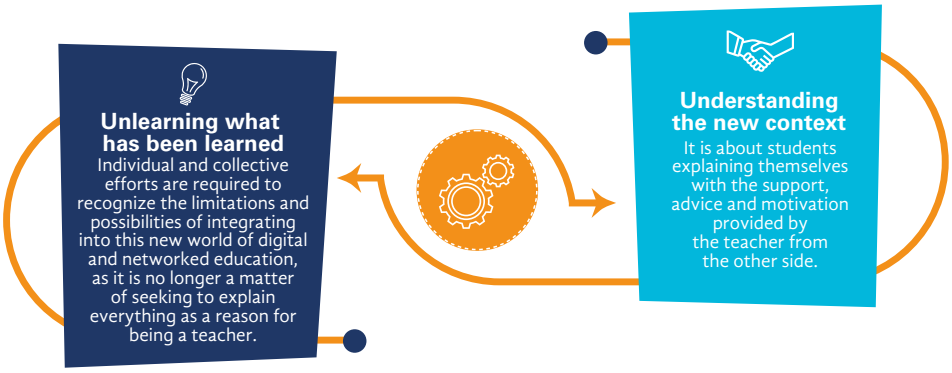


Image 11. Radical transformation of the teaching role.
Source: Own elaboration.

Distance education does not escape from this same genesis or formula (a teacher and a group of students), but, unlike the way it was adopted in traditional face-to-face training, the focus of the process is not seen from the teaching side, but from the learning side, and this entails a substantial change in the pedagogical paradigms underlying these two training models, since they are based on very different versions of the motivations of the person to assume new roles, both of the learner and of the one who guides, orients and motivates the learner, giving rise to a differential pedagogical model, but at the same time enriched with other didactic and technological components.

The conception of distance, interpreted as remoteness, is erroneous, since there is nothing closer to self-training than human interaction between subjects who share the same enthusiasm for an object of knowledge in order to learn how to manage it, no matter whether the distance is meters, kilometers or oceans. It is from there that distance education makes sense for itself and confers meaning for the actors in the process that is being developed.

Teachers and students have modified their conventional role, exercised for centuries in different societies from a worldview focused on physical spaces and barriers of time and knowledge, which are often removed from the true purpose of good to contribute to society.

In practice, there has been a minimal pedagogical convergence between conventional education centered on teaching, and distance education decentralized in multiple learning. Paradoxically and in the opposite way to the imaginary that has been given in the educational sector, today, the greatest achievement of distance education is not, precisely, to be at a distance, but to be distance-free. It is a very profound play on words. To speak of distance education without distances is the greatest achievement of this educational model that seeks to benefit populations with educational opportunities, synchronous and asynchronous, regardless of their geographic, economic, age, creed, among others, that could restrict access and permanence in the scenario of educational institutions.

The Internet and its unlimited expansion have allowed these purposes to be accentuated over time and allow multiple sources of information to give way to the generation of new knowledge.

In this way, distance education is located, then and from now on, in the so-called virtuality, and will surely grow much more at the pace of the evolution of the Internet, integrating in a coherent way the diverse actors of the educational fact, through both technological and human platforms. While purely face-to-face training has been around for millennia. In the panorama, other forms of interaction such as virtuality, supported by technological developments, have a very promising future.

Distance education and virtuality are connected to chart the new course of education, since a large part of the transformation and social mobility of millions of people depends on it. This educational model is much more powerful in societies that seek widespread wellbeing and promote happiness as the raison d'être of education and sustainable human development as a collective good.

In the midst of the pandemic caused by Covid-19, the interrelations between pedagogies and technologies in a planned manner challenge our governments to promote radical changes. The time of digital transformation is here to stay in all sectors, but even more so in the education sector, so let us hope that this great opportunity is not wasted.

Conditions to enhance open and distance education

Accumulated centuries of creation, innovation and renewal, both in science and technology, have created new challenges for institutional educational projects, especially because they must combine foresight and planning in order to learn to face the constant evolution of technical-disciplinary knowledge and its social impact.

Education must go beyond the simple transmission of knowledge, and forge new competencies in each student to learn how to learn and, from there, to recognize the value of information to be transformed into knowledge.

Education as an engine of human and social empowerment needs to be considered in light of the following conditions:

- The broad, relevant and continuous qualification and expansion of teachers to facilitate the teaching and learning process.
- The expansion of connectivity so that virtual education is accessible to the majority of the population, at affordable prices and free of charge for vulnerable segments, within the framework of the right to connectivity, as a way of contributing to the dignity of social relations.
- The increase in technological networks and the increase in their broadband speed, as well as fiber optics for better access to the Internet from mobile devices.
- Free accessibility to wireless connections to improve access to virtual campuses as a daily learning environment for students.
- The promotion of new technological competencies, so that the institutions themselves have installed capacity for entrepreneurship and development of applied software and virtual contents and repositories, through open educational systems that comply with international quality standards.
- The incorporation of technological platforms appropriate to each institution, with potential scalability to meet the progressive demands for information and knowledge in various fields and disciplines of knowledge.
- The necessary and rigorous quality assurance in the supply of services and programs to safely satisfy the multiple virtual educational demands, through techno-pedagogical platforms that allow high quality educational access through various mobile and portable devices.
- The necessary guarantees so that knowledge management and learning can favor virtual pedagogical and didactic communication between teachers and students.
- Mechanisms to ensure that navigation on virtual campuses is as intuitive as possible to the characteristics of the target population, so as to facilitate access to vulnerable populations through appropriate technological devices.
- The management of big data protection mechanisms and the use of geo-localization and sensory and biometric recognition tech-

nologies (voice recognition, facial and fingerprint identification), to improve the conditions for ensuring academic assessment, and to serve as a mechanism for promoting student learning.
- The implementation of simulated laboratories as a complement and preparation to real laboratories and as a basis for the creation of competencies and skills necessary for the successful performance of trades, professions and occupations.
- The design and management of curricula committed to the development and management of knowledge to solve environmental problems and take advantage of opportunities, encouraging students' sensitivity and social solidarity, and the creation of proposals that give meaning to their learning and allow the development of their autonomous and critical thinking.
- The creation of bilingualism opportunities combined with the power of cultural and intercultural integration, which consolidate the constitution of knowledge and research networks.

With the application of several of these key principles, the frontiers of access to knowledge will be expanded and the historical gaps will be reduced, since not only privileged minorities will be able to access qualified education, but the entire population.

However, it should never be forgotten that technologies are only tools and that their indiscriminate use does not guarantee the success of distance and virtual education. A planning process that articulates pedagogy and didactics with training purposes under standards and rules that promote applied research and entrepreneurial innovation must prevail.

The principles enunciated above determine new objectives and purposes for education in the 21st century, which is why I believe it is possible to build with them the educational disruption that challenges us today.

Learning models that support virtual education

The unprecedented evolution of technologies has brought about transformations in all areas of human interaction, which is why the formative paradigm of learning to learn (managing one's own learning process, in a tutored manner) that accompanies virtual education is closely linked to the capacity of educational institutions to generate new educational

resource environments that can be disseminated through new didactic and pedagogical perspectives.

These are the models that, supported by learning and its clear interaction with the vertiginous developments of exponential technologies, are fully developed in virtual and distance education:

e-learning

It refers, fundamentally, to learning processes managed from a virtual campus through the Internet. It involves digitizing, creatively and pedagogically, each of the components that make up a curriculum through the use of theories and methods that facilitate the creation of environments, virtual learning objects, virtual repositories, and multiple multimedia devices, in which the student and the teacher take advantage of the resources derived from the network itself and its different platforms, support software and all the various technological tools that could be integrated to the capabilities of a computer from which the student can access the so-called virtual metacampus, designed with electronic resources and devices in a conjunction of mathematical algorithms in multilevel systems integration.

In the early years of the Internet, connectivity and networks boom, among others, e-learning was differentiated from m-learning, or mobile learning, applied to learning mediated by the use of portable electronic devices, such as tablets and cellular telephony equipment, but in the integration that has taken place between these and fixed or desktop computers, the mass coverage and connectivity and the accessibility of most of the population to the same equipment, the difference has been considered overcome, and it is already assumed that all e-learning is configured under principles similar to those of mobile learning.

E-learning (also m-learning) strengthens the characteristics of virtual and distance education from the learning paradigm, and allows an unprecedented revolution in the traditional forms of education, using intensively new didactic and pedagogical devices at the service of the student and the teacher, both synchronously and asynchronously.

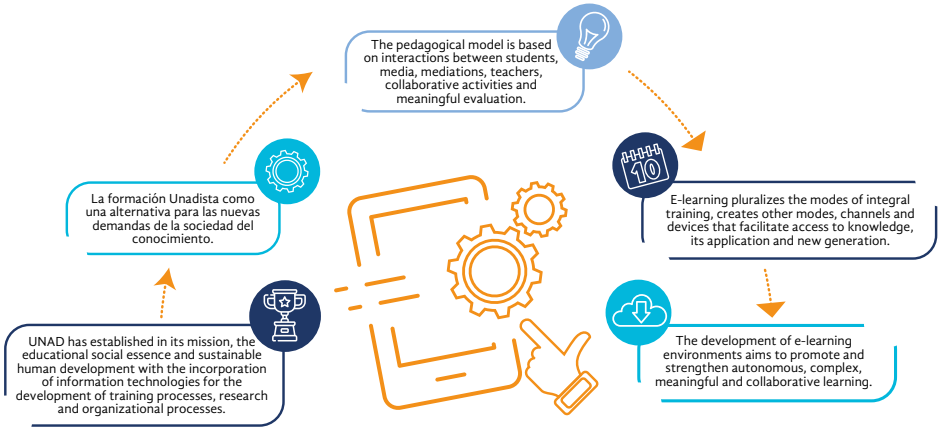


Image 12. Components of the E-Learning pedagogical model.
Source: Own elaboration.

b-learning

The so-called blended learning model, mixed or blended, is the model that integrates e-learning processes (synchronous and asynchronous) with face-to-face meetings.

In blended learning it is possible to use different technological resources that, as means, favor performance and allow, in a harmonic way, to transform the conventional schemes of the traditional unilateral pedagogical relationship.

It is also an accompaniment strategy that is developed by making simultaneous use of interaction in the multicampus/virtual campus and in situ, for the development of activities both in courses (micro-curricula) of first enrollment and in courses of high academic complexity defined in each curriculum to practice trades or disciplines. These sessions seek to encourage students' interest and deepening in the learning of the area through active learning exercises.

Blended learning is a clear opportunity for face-to-face educational institutions to coherently develop collective and individual experiences so that their students and teachers can strengthen these new roles, under the new pedagogical perspectives that promote meaningful learning. The Covid 19 pandemic was an opportunity for this.

* * *

Never before has the consolidation of newly related human links from cyberspace become so visible to humanity as seen in the pandemic. Multiple family, social and business links have been forged so that millions of people are developing activities of all kinds, through the services and platforms that make up the Internet.

Several decades ago, references to cyberspace had already been established in education as a scenario for sharing experiences and knowledge to establish training skills and competencies, thanks to a new world that determines different anthropological and sociological approaches to education, and which uses technology as a relevant phenomenon for socialization. This technology does not require immediate physical contact to establish relationships between people with diverse social practices, but with objects of common knowledge.

Of course, the planning of educational activities and the necessary adaptability of practical activities in the context of virtuality determine a higher requirement for these to be understood by the educational actors, so that they themselves can strengthen and create new constituent features of qualified and relevant education.

A model of education that is characterized by developing dynamics inspired by the so-called Social Constructivism, as a support structure in which human interrelationships are developed that promote interdisciplinarity and interculturality.

Hence, the so-called Internet of Things with all its potential for interactivity, synchrony and asynchrony, is integrated into a space of convergence to promote an exponential growth of educational coverage with quality, through networks of institutions throughout the educational world that accept the disruptive challenge that, paradoxically, is set in the same objectives, meanings and contexts of sustainable human development.

The aforementioned conventional education must then be prepared to learn to learn the why, what, how and wherefore of such innovative resources, in order to control and make sense of information

as an imperative to transform it into applied knowledge. It is about strengthening collective experiences, to turn them into individual learning experiences for educational actors, motivated by the purpose of promoting greater interest in knowledge, and finally, by an unprecedented transformation towards the way of evaluating learning, changing the wistful episodes of short-term rote evaluation, for the new characteristics of meaningful, motivational and comprehensive learning in students, managed, among others, as suggested in the next chapter of this book.

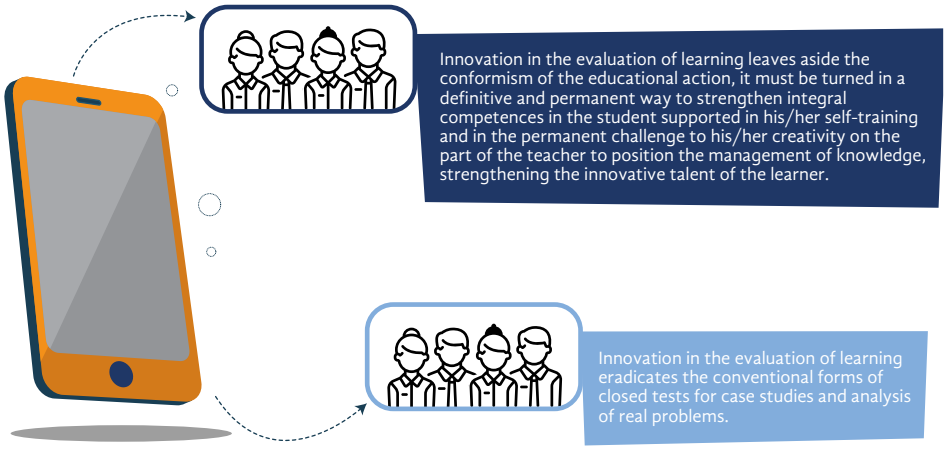


Image 13. Innovación y evaluación de aprendizajes.
Fuente: Elaboración propia.

All of the above can be complemented with philosophical, axiological and teleological positions, and of course, with the due guarantees of the coherent exercise of pedagogical and systemic thinking at the same time, to guarantee the effective impact of the techno-pedagogical scenario mentioned above.

Chapter 3

The principles of the pedagogical model in the distance university

Learning to learn does not happen by itself with the interaction with technology. The formative process in distance education demands, as in all education, a due orientation in the forms, stages, purposes and results of learning.

The Distance and Virtual Modality, per se, is trans-territorial and trans-border; that is, it is global by nature, and through different methodologies makes use of various technological resources, methods and pedagogical mediations, to facilitate learning and training of the student, through monitoring and permanent accompaniment, either synchronous or asynchronous. In this modality, pedagogical and didactic strategies are used for integral training, which articulate different technologies in multiple learning environments, guaranteeing the development of interaction and activity processes for the autonomous, meaningful and collaborative learning of students and teachers.

The Distance University, as an educational structure in general and particularly the National Open and Distance University (UNAD), in Colombia, represents the intentionality that promotes ways for learning, educational inclusion and the appropriation of knowledge at any time and place. Its action is decisive to ensure that the learning objectives and competencies to be demonstrated by students, whatever the field of training or discipline of knowledge chosen, are curricularly fulfilled once the respective training process is completed.

Essential in the pedagogical consolidation of a University, such as UNAD, has been to strengthen training, mentoring, coaching and qualification spaces for the university community to understand the why and how of this educational modality, based on their own experience and great conviction achieved.

The management of the educational principles and purposes of distance learning, the meaning and sense of learning assessment, the didactic role played by educational media and resources as a support for knowledge, as well as its planning stages and instruments (such as virtual content repositories, for example), which allow teachers and students to dynamize, from meaningful learning, the latest generation of applied knowledge management), represent a substantial difference between virtual education and conventional models, where usability is generally obsolete and contents end up being of little relevance to the student and his or her learning.

All this constitutes the basis, but also the teleology, of the pedagogical model that every distance learning institution should have, where teachers and students assume very different roles from those historically used in the face-to-face model.

Image 14. Teleological Referents of a Pedagogical Model for educational transformation. Source: Own elaboration.

As a result of the conceptual evolution and the practical confirmation of distance education that the National Open and Distance University UNAD has worked on, the following components have been identified as determinants of the consistency, assurance and quality of the academic management model of learning to learn in virtual education.

The virtual pedagogical action, which as its name indicates, is the process that dynamizes the integral formation in the different virtual learning environments and their diverse multi-contexts. This action integrates the forms, types and scenarios of accompaniment that the teacher develops to guide and assist learning, and to carry out individual and collaborative academic work with other students in a reciprocal manner, preparing them for what will be their interdisciplinary work situation.

This also underlies the interrelationships with the virtual and real environment to enable meaningful student learning through curricular planning, reflection and qualification of the teaching action and solidarity interaction between internal and external actors -community and/or sectoral leaders-. From there, a proactive and significant evaluation is projected in the management of knowledge and the pertinent techno-pedagogical innovation, in search of the co-construction of viable undertakings.

Thus, the UNAD Pedagogical Model (UPM) becomes the frame of reference that guides the meaning of UNAD institutional pedagogical action, for the promotion of autonomous, collaborative and meaningful learning. All this, in a context of different educational levels (from school to postgraduate, continuing and permanent education), various programs and services, with intensive use of digital technologies, to contribute to the formation, qualification and training of ethical, enterprising and committed to equitable and supportive social transformation.

The Pedagogical Model focuses its action on the student as the key reference in the formative process. The student must be an active subject, a person trained in leadership and social awareness, critical and constructive, with the capacity for self-determination, self-control and self-management in his or her learning process, and willing to contribute to the building of a supportive, fair and free society.

The Pedagogical Action includes the Self-Training Process, which is supported by the intensive use of exponential technologies and is energized from the so-called e-curriculum, defined as the dialogic process and permanent interaction between knowledge, wisdom, actors and social, historical and cultural contexts, which articulates the substantive responsibilities, around the integral formation and social transformation of the student and his family and community.

Another key component of UNAD's pedagogical model is the e-mediator, a name given to the academic actors (teachers, counselors, researchers and monitors) who lead the pedagogical action for comprehensive training, and who promote solidarity, critical thinking and meaningful, collaborative and autonomous learning, through accompaniment, counseling and guidance to students in various contexts and learning environments.

Also, a key part of the model are the so-called e-media, which are nothing more than didactic resources and tools in multiple formats, designed to support the student's learning process.

Equally important are the e-media, or pedagogical and didactic constructions that stimulate the student's learning to learn, based on in-

teractions, methods, strategies and resources that are oriented with the clear purpose of contributing to the transformation of critical, constructive, affective subjects, co-responsible with the contexts in which they live and empowered in their role as transforming leaders of social, scientific, technological, cultural, political and historical realities.

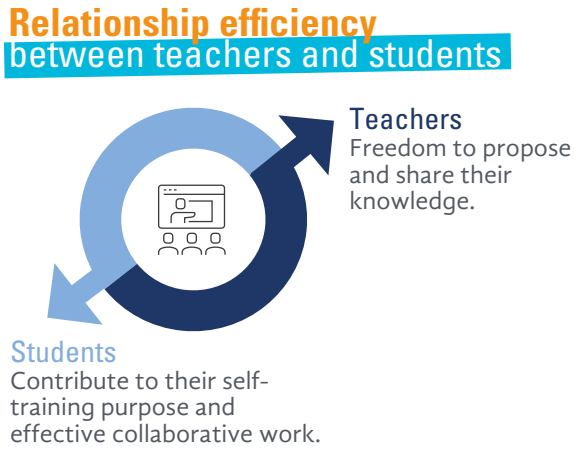


Image 15. Relationship of key actors.
Source: Own elaboration.

Finally, the e-evaluation component appears, which is conceived as a dynamic, permanent, multidimensional and systematic process, oriented to the assessment and feedback of the results generated by the students' learning processes in relation to their integral formation, and which also contribute to curricular reflection and continuous improvement of the pedagogical and didactic processes.

One of the strengths of the pedagogical model is its clear linkage to the so-called e-communities, which are the result of the social, cultural, historical and political relationships, interactions and links that occur in physical and virtual contexts, where social inclusion for regional development and community outreach are energized based on the student's experience of the role he/she plays in the substantive institutional responsibilities. The pedagogical model also influences in a decisive way the e-Research model, which aims to promote the development of the scientific, innovative and entrepreneurial spirit, through the collective management of knowledge, by means of interaction in networks of

teachers and students with the intensive use of ICT, in order to recognize structural problems or opportunities that benefit regional development and sustainable community action.

The pedagogical model also incorporates the so-called e-wellness, defined as a set of strategies, projects, programs and services that are promoted in physical and creatively virtual spaces to contribute to the integral formation of students and thus contribute to the construction of their personal, professional and social life project, favoring the development of competencies for their solidary social leadership.

Finally, and in a holistic manner, the UNAD pedagogical model is responsible for e-quality, which reflects the responsibility of guaranteeing the fulfillment of commitments and training obligations that ensure student satisfaction in learning to learn. E-quality constitutes a permanent source of continuous improvement in the provision of its educational services, through the distance and virtual training modality.

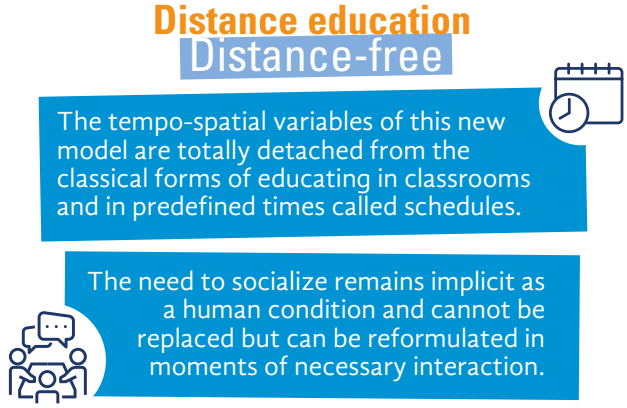


Image 16. Keys to the UNAD Pedagogical Model. Source: Own elaboration.

Scenarios and strategies for teacher assistance

UNAD's experience has allowed it to create and strengthen an innovative concept of academic life in distance learning. That is, academic and research interaction with scientific and social communities, around objects of knowledge, subjects, disciplines, fields and professions, aimed at self-learning and strengthening competencies, in relation to the

training purposes of programs, levels and cycles, to strengthen the social solidarity spirit, in this context UNAD.

We have also learned to strengthen the concept of university life, expressed as interaction in multiple social, artistic, sports and cultural contexts, to encourage the meaningful experience of the spirit of solidarity, and promote the integral development, talents and wellbeing of those who participate there. In the case of UNAD this is confirmed by the existence of Regional Centers and International Sectional Centers, where our students go on a planned basis.

For these experiences to be meaningful, it is necessary to deploy a specialized teaching support, understood as a set of pedagogical and didactic strategies implemented by the e-mediator to enhance the interaction, the learning process and the student's integral formation, through synchronous and asynchronous means arranged in the virtual campus environment, but also in the daily life of the network of centers and zonal hubs.

In these contexts, the following scenarios and strategies for teacher assistance must be developed in order for the pedagogical action of learning to learn to take place:

a. ***Virtual Campus and Multicampus.*** These are spaces built on a digital platform where academic courses, digital educational resources, training activities, access to educational resources, interaction spaces for the various institutional units, resources to establish communication processes among the various members of the academic circuit and the different applications, which include simulated and remote laboratories, the institutional repository, inclusion and evaluation technologies, among others.

b. ***In Situ.*** It is the coincidence of space and time in which the activities of teaching accompaniment are grouped, which are developed in different physical spaces that are constituted as learning environments, and therefore imply the presence and synchronous participation of the e-student and the e-moderator.

c. ***CIPAS.*** In the context of the UNAD, the name corresponds to the name of Academic and Social Interaction and Participation Circles, which function as learning communities, formed among students, and guided by a teacher. In these circles, student-student and student-teacher interactions take place to resolve concerns among peers about learning, the development of courses and academic programs, as well as to create and strengthen social ties and, in turn, develop institutional identity and belonging.

And, in this order, two forms of the academic work of / with students are conceived:

- ***Independent work.*** Or the autonomous -personal- management of one's own learning, through the development of training activities and the use of educational resources that contribute to the achievement of the expected learning results, and to the development of competences and professional profile. The management of independent work is the basis of learning in the distance and virtual modality.
- ***Collaborative group work.*** These are formative interactions in which a group of students socialize the results of personal work and team activities, in order to foster collaborative networks and peer learning. These can be carried out synchronously or asynchronously, depending on the nature of the activities and formative purposes of the different courses.

In the case of UNAD, these principles of its Pedagogical Model are contained in the legacy called UNAD *Academic Pedagogical Solidarity Project*, which has been and should continue to be the lighthouse of the Organization. It reflects the axiological, epistemological and teleological positions of the educational approach.

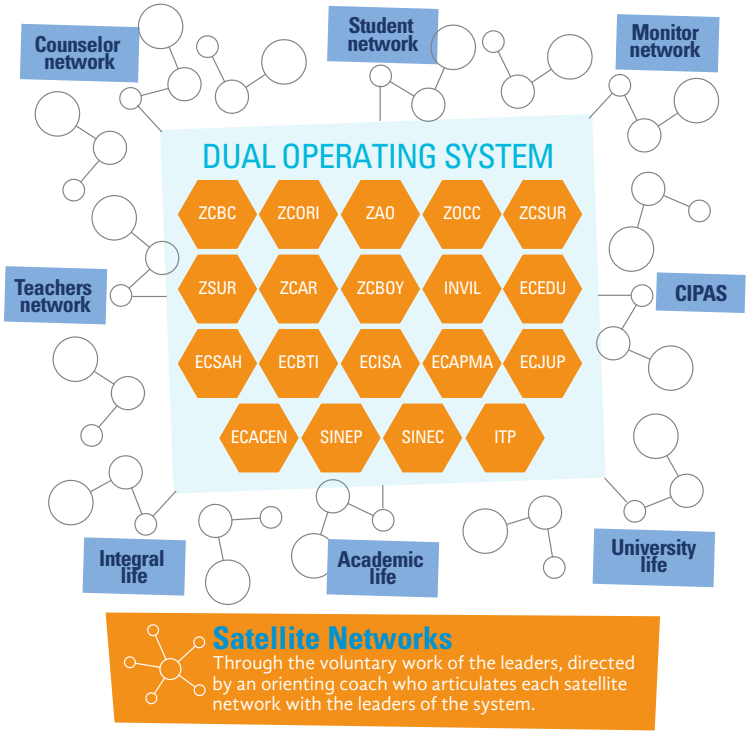


Image 17. Support networks for the UNAD Pedagogical Model. Source: Own elaboration.

The decisions of the Higher University Council, inspired by the spirit of the *Academic Pedagogical Solidarity Project*, have allowed the generation and periodic evolution of the normative path that has been endorsed in its mission, vision, principles, decalogue of axiological values, decalogue of teleological values and the criteria for action (explained below) of UNAD.

If we ask ourselves why education today should contribute to the pursuit of happiness in life, the answer is that education, should be seen from the path of innovation, as one of the great opportunities that we should not miss in the university institutional framework of the 21st century.

Image 18. Solidarity Academic Project 4.0. Source: Own elaboration.

UNAD's pedagogical model: A key beacon for innovative educational action

Satisfaction with learning summarizes one of the central ideas of this section, which I will develop here below.

As Paulo Freire, the pedagogue, expressed it well, *"I wish education would give us a motivation to make life a path to happiness"*; therefore, here I intend to invite you to reflect on the evolutionary results of our UNAD Pedagogical Model, from which I rescue the value of the pleasure of learning, the pleasure of creating hope, and the pleasure of reinforcing in the memory the desire to seek happiness.

For many of us who have collectively thought and built this UNAD project, the real participation, the realization of the mission and vision in a palpable way, constitute an invitation to continue learning day by day. In these postulates, which synthesize the Unadista Academic Solidarity Project, we are motivated and enthusiastic towards the experience of the principles and values of an educational work that transfers thought to praxis, in a tireless spiral of coherence, tolerance and, of course, of extended solidarity.

Perhaps the testimony of hundreds of academic leaders who have forged UNAD at different times as well as thousands of students who, in my opinion, have learned to reinvent themselves to assume a role

that cries out for the freedom of their own existence, are the best indicator of a university that is coherent between what it conceives, what it does and, of course, what it dreams of every day with regard to its role in the country and, perhaps, in a continent that can also be seen under the logic of extended hope.

UNAD's pedagogical model is no longer utopia. It is the coherent symbol of hope, of the educational opportunity that previously those Colombians without greater resources than their intelligence and located in the provinces or in popular sectors of medium and large cities especially, did not perceive in the educational scenario provided by the State as an opportunity for access and permanence. Today, the multiple programs and services offered by this institution are seen as a viable option and an example of transformation in the Colombian educational environment, because UNAD is an expression of democratic, open, accurate and flexible education.

In a country like Colombia and in a continent like Latin America, hope for transforming needy and ambivalent realities has been scarce. Although it has been a historical constraint, an education without roots and without ontological clarity has gone hand in hand with the poverty, both material and intellectual, accumulated for decades. UNAD wants and must always be synonymous with hope to transform life projects; the UNAD of today and the UNAD of the future must be referenced as a social and educational cause, as a spring for the thirsty for knowledge to drink from and thus transform their pessimism into optimism and their generational despair into hope for a dignified and productive life.

Therefore, this pedagogical model, built in a participatory manner as I have mentioned above, must be anchored in practice in order to transform the history of inequities and inequalities, but also to address in an organized manner a new future of the individual and collective existence of the majority of the population, that nurture the purpose of a new role that both teachers and students must address in order to make the training process a pragmatic exercise with an ethical and historical foundation and, of course, to stop thinking that good education is a privilege of the few and that, as is generally the case in Third World countries, it is necessary to rescue its dignity and the dignity of each

person in defense of a dynamic active pedagogy, without any kind of oppression of those who educate and those who are educated. This freedom will bear good results with the reencounter of pedagogy with the reality that surrounds it.

Seen in this way, the new pedagogy that sustains the UNAD Pedagogical Model -UPM-, is based on ethics, and is managed in human warmth and in its seriousness and accuracy. This gives a renewed sense of respect for the student and admiration for those who strive in the "I want", in the "I wish", in the "I will achieve", in the "we all can" and in the "we all will achieve".

A good part of the UNAD student body has not had the best educational experiences in their childhood and adolescence. Many have been the children of illiterate, rural and urban workers and, of course, have lived in neglect and with few possibilities of transforming their existence, as happened with their parents and the generations that preceded them. When a project such as UNAD appears in the educational context, the opportunity to overcome the ties and barriers inherited from their parents is viable and visible, which gives reason to the cause that for 40 years and today, but also in the future, summons those of us who have the opportunity to belong to this valuable educational project.

It is in this context that the efficiency of the relationship between teachers and students undergoes a fundamental transformation that emphasizes the freedom of both, the one to propose and share knowledge and the other to add, to his or her self-training purpose, collaborative and effective work. The current Knowledge Society, accompanied by disruptive technologies, becomes hope, but it also calls us to recognize the risks to which we are exposed if the commitment that inspires the design of technological tools does not comply with the conceptions of interactive pedagogy and didactics, as well as a usability that is oriented to provide a permanent and relevant education.

Here it is necessary to understand how the correlation between the teacher's authority and the student's freedom becomes a key right for both actors. It would be hoped that both would always be seduced by work and mutual learning; by real and effective understanding; and by

learning to learn with foundation, convinced of the importance of knowledge management to procure an intelligent and rooted social mobility as the nourishment of a new education for the new generations.

This implies learning by unlearning, practicing freedom from creativity and approaching hope from the new authority granted by acquiring and applying new knowledge. That is, from the intrinsic motivation of the teacher as a motivating actor and extrinsic motivation with respect to the student, who during the process must also make this motivation intrinsic for him/herself.

Guided didactic conversations will be the ones to foster this new purpose of learning to learn so that the new generations of students will be the ones to come in search of knowledge to make it explicit in practice. This will be the basis for the construction of new codes that mentally represent educational law and the dialogic relationship between students and teachers using multiple mediations and media that technology and techno-pedagogy will develop at an incessant pace.

Consequences? Several. The time-space variables of this new model are totally detached from the classical forms of educating in classrooms and in predefined times (timetables). Although the need to socialize remains implicit as a human condition and cannot be replaced, it is reformulated in the moments of necessary face-to-face encounters between two or multiple actors. This leads to the experience of a real paradox: the constitution of a distance education without distances.

The role of the teacher must be understood as a challenge that must uncover the pedagogical, didactic, communicational and human interaction shortcomings in order to strengthen, at the same time, those advantages that explain why they are interested in participating and growing within this type of educational experiences that require a critical understanding of what this new teaching role is and what it is supposed to be and the new role of the student to determine, at present and in the future, a clear conception of an innovative and relevant education.

No one will get anywhere if he/she does not know where he/she is going, if he/she does not know the way, if he/she does not interpret the

map. In the case of teachers, it is necessary the conviction to remake the world of their pre-existing practices as teachers of the conventional model to recharge their new route in the construction of a new educational history and a new culture that requires them to go beyond their disciplinary conceptual domains, to make visible their human warmth and their eagerness to contribute to transform this utopian dream into realities of hope for their students.

In the end, each teacher, counselor or monitor in transition, must get rid of their accumulated experiences in the face-to-face educational world and fill themselves with desires, reasons and new knowledge to successfully address the demands of trying to live and coexist in a different but understandable daily life, to strengthen this virtual and distance education that leaves behind, without nostalgia, the limitations of an uprooted education, backward and with little social impact..

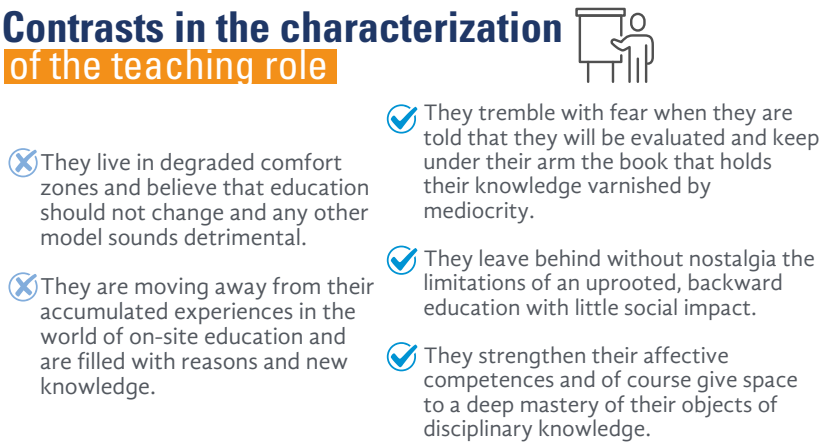


Image 19. Unlearning and learning in the new teaching role.
Source: Own elaboration.

Unfortunately, for many of those who today live in comfort zones in degraded institutions, education should not change and any other model -they believe- sounds harmful. They act like that old educator who trembles because he/she is warned that he/she will be evaluated, or like those intellectuals who, in an absurd and unthinkable way, keep under their arm the book that holds their knowledge varnished by the

mediocrity of their actions. The educator of today and of the future must strengthen his affective competencies and, of course, give space to a deep mastery of his objects of disciplinary knowledge, so that he understands the value of serving those in need of clear and forceful signals about the fundamental value of education as a tool for individual and collective transformation.

To nurture the new pedagogical and didactic conversations by making intensive use of communication and information technologies will critically strengthen a transformation of the current educational context, knowing that there will continue to be discrepancies with those who maintain an ecumenical and orthodox perspective and who deny that education can serve to fight the endemic marginalization that has been present in our country and, in a large part, in the Latin American continent.

Image 20. Conversing and training through technologies.
Source: Own elaboration.

In short, it is time. The time has come and we must not miss the opportunity to generate new transforming experiences in education, based on human relations and good will, coherently oriented towards equity, quality and relevance of educators and learners.

Learning without borders

Education as a human creation has also shaped its own myths around harmful ideas, generally false, that limit the confidence of many students in their own learning abilities. Unfortunately, these ideas are born from childhood and accompany or pursue each individual until

adulthood, conditioning abilities and talents that are not always recognized due to the low confidence that the educational system generates in the student.

It has been proven that our brain is capable of understanding and learning all kinds of knowledge and that although there are greater abilities for some knowledge than for others, those expressions that state that the brain only learns certain things are false. Therefore, it is time to destroy many prejudices in education, especially when rigorous research has shown that all individuals, except those with physiological cognitive problems, are capable of growing in knowledge, adapting it and permanently creating new connections between new learning and experiences with our previous knowledge.

Reality confirms that not only at any age, but also that anyone can learn anything and by themselves. In other words, the act of learning is linked to our own self-conception of who we are and what we intend to achieve.

Open and distance education, supported by self-learning, recognizes that previous experiences can be strengthened by new knowledge and that old knowledge can be strengthened by new experiences. This gives reason to the fact that we build our own possibilities of learning if they become habitual and if we feel enough motivation for what we like, starting from the fact that there are multiple intelligences and, of course, that not all of us have the same route to learn in a unique way the knowledge of the different disciplines.

A clear example of why many students may be deterred by their teachers from feeling capable of learning mathematics is directly related to the attitude of those who teach. On the contrary, such a misguided attitude can limit students' performance capabilities, especially if they are children or adolescents.

One of the serious errors of our education has been to label children and young people according to their way of successfully approaching knowledge, ignoring the fact that our brain has a high capacity for adaptability, and that its potential for growth and change is maintained until maturity.

Mathematics, for example, has traditionally been the preferred field of knowledge to denote the intelligence or not of boys and girls, generally based on erroneous diagnoses from evaluations determined by rigid schemes regarding the interest or lack of interest with which teachers pedagogically and didactically guide their classes.

Several studies show that, in general terms, brain development is not limited to the understanding of knowledge, but rather to the motivation, whether it is a majority or not, that the teacher achieves in the student with respect to that knowledge. It is, then, about the positive attitude of a teacher who leaves aside the stereotypes that have always influenced the classic education, often discriminatory not only in relation to intelligence but also to gender and race.

In a country like Colombia and surely in a good part of the Latin American continent, the subjective differentiation of children and young people's intelligences in scales from lower to higher determine a disturbing inequity that limits the future possibilities of the greatest number of students who, driven by a low academic self-concept, produce low performance and generally opt for the path of desertion given the little interest in knowledge that, in fact, is not inoculated by the educational institutions.

At some point, many of us have received from teachers or even from parents the message that we are not "good" at mathematics or languages, or art, among other skills, in a distorted idea. And, we must admit it, we have done it too, and at some point we have delivered negative messages that make invisible the true potential of our children or young people, giving for certain ideas culturally rooted in false concepts about intelligence and its supposed absence.

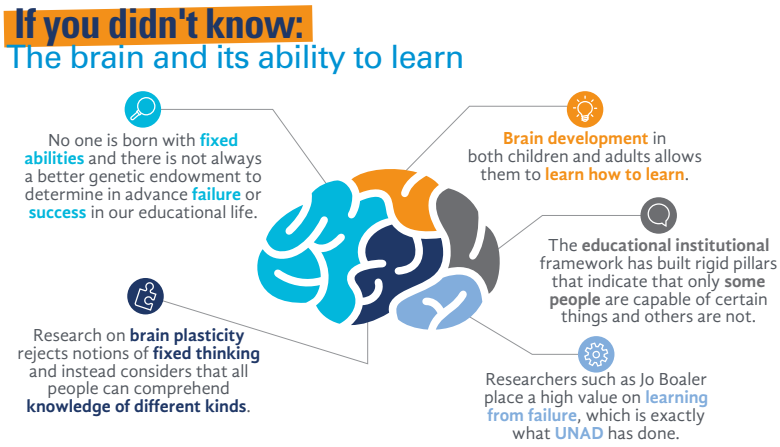


Image 21. Neuroscience in the UNAD Pedagogical Model.
Source: Own elaboration.

This issue is continuously replicated in conventional educational institutions and affects the perception and beliefs about limitations and restrictions to access and understanding of knowledge. According to various researchers, no one is born with fixed abilities and there is not always a better genetic endowment to determine in advance the failure or success of our educational life. Research on brain plasticity, or neuroplasticity, rejects notions of fixed thinking and instead affirms that all people are capable of understanding knowledge of various kinds, so that there are no people more intelligent than others unless there is a real physiological impediment. Throughout life, neuroplasticity refers to brain evolution in both children and adults, allowing us to learn how to learn and of course from memorization and understanding, to open the doors to the fantastic world of knowledge in multiple sciences, arts, crafts and disciplines.

Because physiologically, every time we activate our ability to learn, neurons connect in different pathways with various other neural networks, which strengthens them to increase the capacity for understanding and analysis, and this sequentially increases our intellectual capacity. On the contrary, in the social environment and for centuries, our educational institutions have built rigid pillars based on a hypothesis, which seems more like a theory, indicating that only some people are capable of certain things and others are not. That is why trying to distribute young

people and children according to an erroneously read intellectual capacity frequently causes the failure of traditional teaching methods with the accumulation of limitations installed in the beliefs of an institutionality that restricts the capacities of the individual as a harmful and at the same time perverse myth about individual learning and its valuable potential.

The above arises from rigorous research that Michael Merzenich and other great neurologists started in London in the 70s, and that the researcher describes in a masterful way in his book "Soft-Wired: How the new science of brain plasticity can change your life", published in 2013 by Parnassus publishers. There are hundreds of these works that illuminate this new pedagogical path and that the UPM of UNAD refers to in the support of autonomous and meaningful learning. In addition, it is worth noting research such as that of Jo Boaler that places a high value on learning from failures. Recognizing failures? That would be a failure in the traditional model, but not in UNAD model. This has changed the perspective and has allowed us to transform a continuum of collective organizational learning into opportunities.

Learning to learn for life

Although from the beginning it has focused on student learning, UNAD's educational commitment has also wanted to influence all the other members of this educational community, and this is visible in its UPM.

Learning to learn for life should not be a slogan. The nature of learning is implicit, and goes through the dynamics of neural equipment, which must be exploited by pedagogical, didactic and instructional strategies. Just as the human mind is capable of learning from the environment without the intention of doing so, in an abstract unconscious knowledge that is generally difficult to communicate, organizations and individuals also approach intentional learning by constructing instructional methods and mechanisms that serve to codify the resulting knowledge and favor its understanding.

Since 2004, in a Symposium held in Copenhagen called "Emotions, Learning and Education", reference was made to studies that speak of the educational implications that emotion and motivation generate in learning and how they affect learning performance. These studies

evidenced the importance of the conditions of physical order, social interaction and external emotions, to make the brain develop interaction functions in order that knowledge through cognitive representations allows to have a wide influence not only in its understanding, but also in the guarantees of deepening it with other constituent elements, which in the end are transformed into behaviors that recreate a positive or negative effect for learning.

Depending on the environments and contexts that families and schooling have been able to create in a planned way, this explains the vital importance of the brain being prepared to initiate and activate effective learning processes (This topic can be further explored in the CERI-OECD 2007 publications: "The brain's ability to initiate and activate effective learning processes").

As pointed out by neuroscience, there is a correlation of brain activity related to effective and pleasurable learning, concluding that learning is a process that strengthens the physical renewal of the brain itself through frequent practices, such as reading and writing, and that the teaching-learning processes must be challenging for teachers in the actions of unlearning and learning in a continuous educational and didactic decrease.

Each subject, both teacher and student, requires a prudent time to assimilate what corresponds, in a process that becomes fast and without major difficulties, and this must be considered so that pedagogy and didactics recognize that each learning process follows its own rhythm.

Surely, some of the readers will wonder what to do when the basic knowledge of the student does not have sufficient basis to exercise the mastery of entry competencies that make this model really efficient. This million-dollar question has multiple answers. The first of many is to understand the necessary coherence to guarantee greater cognitive efforts by students to understand their own weaknesses not only in prior knowledge, but also in learning skills: to this end, conditions must be created that strengthen the pleasure of writing and reading and, of course, for those who have little vocabulary, conditions must be created for the appropriation of the metalanguages immersed in the disciplines

themselves, as well as pedagogically agreed codes so that they learn to understand and represent reality.

Other types of answers to this question should provide students with alternatives to relate knowledge to their contexts, allowing for meaningful learning. From a reflective vision on the elements that constitute the insufficiencies that each one must overcome, students must strengthen their own self-critical reflection; And this self-criticism should invite them to build their own path of learning, which oriented in a concerted manner with the teacher will allow them to advance in the right direction for the acquisition of missing knowledge, but above all, for the creation of conditions that strengthen their learning to learn, thus contributing to the development of autonomous thinking, meaningful learning and collaborative work among students and between them and their teachers.

Changing the role of the teacher to strengthen learning with transforming pedagogies and didactics

In its academic development, perhaps one of the most difficult aspects that UNAD has had to face has been to change the mindset of those teachers accustomed, like most of us, to a conventional pedagogy, generally unilateral with the students. This has meant an unprecedented evolution, to address a true transforming pedagogy that, from the outset, challenges teachers to assume not only their own change but also to be the architects of an education propitiated by the interest of strengthening learning to learn and from this the opportunity for social mobility.

To support this change, UNAD created and manages the "training of trainers" program in order to make clear a qualification-action path on the importance of the new teaching role in this educational model. Here, the change of the teachers begins in their own self-conception and challenges on new responsibilities to favor the self-formation process of the students and to exercise a new role as orientators and managers of significant learning.

This has not been easy, admittedly, and has been very complex, especially when it comes to understanding how a teacher in a virtual and distance education model must transform the domain of their disci-

plinary knowledge to become a counselor, advisor, communicator and, especially, pedagogue and teacher of this object of knowledge to motivate each student in differential pathways that allow them to acquire the necessary skills and be promoted in the curricular chaining of their curriculum.

In UNAD these questions have been raised throughout its almost 40 years, and we have been filled with reasons to promote unprecedented transformations around the curricular conception itself and its management. Our challenge has been for pedagogical practice to influence in a dialogical manner in the interest of a practice that influences the pace and satisfaction students find in their learning process. The worrisome shortcomings of the basic and middle school system create limitations that have to be balanced in this process of training trainers.

These processes have been developed, with rigor, as an organizational desire to respond to the critical method of learning that involves at the same time various forms of communication in order to provoke in others the desire to participate actively, so that students do not self-destruct in the search for new knowledge and, of course, that they remain in a continuum of motivation that guarantees them throughout their training process the understanding of what and why to be educated and, especially, to understand what will be their transforming exercise in the performance of their disciplines.

This is where UNAD determines the Intersystemic value of its substantive responsibilities so that they influence the academic students and create for them a hallmark of the axiological value that accompanies our educational project of solidarity.

Although in the classical - traditional educational model, motivation is not considered a transcendent element, in virtual and distance education it is, since it builds habits that strengthen self-training discipline, and creates rewards and incentives for academic work, considered the driving force for student retention, permanence and promotion.

Lack of motivation in education generates desertion and mediocrity. This problem poses an enormous challenge to all educational institu-

tions, in such a way that they must consciously transform their own disinterest in students and their stale and scholastic ways of assuming the formative responsibility of "every man for himself", making their own transformation substantial, for a model of dynamics articulated to the development of their own environments of research and innovation to transfer these results to the dynamics and social mobility of students in the environments from which they come from.

In their new role, teachers must show in their practice that transformative education is viable, dialogical and liberating, which is why the transmission of rigor in their actions must serve as an example for the actions of students who must assume a dynamic attitude and critical discussion in order to leave behind the generally silent and marginal roles of their actions in the educational history of Colombia and the Latin American continent. We have become accustomed to this silence being broken only in student strikes and marches as an expression of rejection of the educational status quo and the limited policies and resources allocated for its management, but we are far from having a vibrant student body, stimulated by knowledge and its application in the resolution of structural problems in our nations that are evident day by day, but that hardly under the mere and sometimes violent protest, never really be solved.

This new role of the teachers is extremely valuable and should be exercised under the trust that the institution lavishes on this type of academic leadership. These will be the seed of the restructuring of an education that claims to be a social vanguard and not a needy rearguard as it is expressed today by its scarce social action and its low reputation in the context of institutionality. If this is understood in this way, the axiologically undeniable value of education as a sector and of the educator as a transcendent actor in society would be recovered for society. We are not talking about teachers of the political left or right, but teachers who assume dialogic ethics as the starting point of a proactive attitude for the benefit of students, their institutions and society as a whole.

In synthesis, the new role of teachers must be given, with creative rigor, as a new form of articulation with the realities of our nations and peoples submerged in the caves of a dependent future due to our own

incapacity to dare to dream of a better future and extended well-being for our populations and societies in Latin America. We are facing a great opportunity to vindicate the role and action of our education, not through recurrent and ineffective protest movements over time, but through reengineering actions and conscious transformation, based on the participation of multiple actors, including parents, to leave behind teachers and students who are passive in the face of knowledge and aggressive in social protest.

Let us protest, but against our own educational reality, asking ourselves if the social differences should only be addressed by the ruler and the politician in office or if the alarming condition of our societies should be addressed by a thorough redirection of the educational institutions, which is the one called, in the first instance, to strengthen more than from its discourse, from its pragmatic action, the fundamental transformations required for regional development, national development and, in particular, the sustainable and sustainable human development of the peoples of Latin America.

What is formulated here is neither new nor a fashionable formula in the midst of a pandemic. It is a serious and rigorous analysis that the National Open and Distance University UNAD has been consolidating with moral sufficiency and effective results on the role of a new educational institutionality and a new role of the teaching exercise, and that should be known by those who do not know the value of the transformation initiated nearly 40 years ago by this educational community.

About the art of asking questions

In order to contribute to the reflection on those added values or competitive advantages of the UNAD - UPM Pedagogical Model, I now refer to the art of asking questions as one of the fundamental competencies of teachers who join the world of virtual and distance education, since the dialogic relationship that they have with their students should be strengthened in the correlation between concerns and curiosities related to objects of knowledge that can be perfectly understood in their usability thanks to the practice of the art of asking questions.

Questions are nothing more than concerns or certainties that can be expressed in a dialogue with the other through a free and, hopefully, creative exercise where words emerge to put us in play of our mental abilities and, of course, how we transmit what we read and write in the word made into verbs.

The best way to ask questions implies the game of inquiry around the knowledge that is known, from the teacher to the learner and in processes that involve achieving a pragmatic transformation in the awareness of certain knowledge.

Teachers must test their ability to create and recreate situations in which learners can reveal, in different ways, their capacity to understand the concept and strengthen it. The experience of the balance between what is said and what is done arises then, by virtue of the thought that generates the question to guarantee the understanding of a reality from a permanent dialogue between one and the other. In the end, we will find an expression of ethical and political training seen from the point of view of being a citizen and being a person.

Incorporating the art of questioning on the part of each teacher requires a daily practice that demands to be situated in a specific time and place, as well as in a relationship with others and in an intensification of pedagogy and didactics. This will allow to deepen knowledge from an accurate reflection, always in search of interaction, desire and interest in learning as a need that gives value to the word, but in particular to the word turned into questioning.

These questions will strengthen the reading of realities in order to ignite the spark that promotes reflection on what one wants to learn and on what one intends, in the future, to deepen. When we talk about the reading of reality and it is transferred from questioning to a dialogic vector, the ethical-political genesis of education will have changed and the subject of knowledge, which is ultimately the student, will have acquired sufficient freedom to generate a commitment to his/her own intellectual growth, but in particular with his/her feeling for the value of knowledge transferred to daily life as a response to problems and opportunities.

The education installed for decades will thus be challenged from a pedagogy of questioning, which is none other than a pedagogy of freedom and autonomy of each person, according to Paulo Freire. The art of asking questions is associated with the combination of hypotheses where the spontaneity of thought can recreate the development of good ideas so that the texts speak and invite to think kindly and deeply. Freire invites to combine written texts to validate with the word a new way of conversing from the communion of joint purposes.

A student trained under the premise of critical verification of reality will always be invited to academic excellence, but also to non-academic excellence. He or she will be able to approach understanding as a starting point for each topic of interest that he or she wants to analyze in order to create facts in the attempt to apply such knowledge. What it is about, I reiterate, is to understand how ideas become concrete in the mind and in the action that is deployed on them in a rigorous, methodological and, of course in all cases, ideological way.

In its four decades of experience in the application of theories, first of Behaviorism and then of Constructivism, UNAD has made an unparalleled exercise in the complexity of this type of pedagogical model. Multiple investigations on the performance of its students and the emotional, emotional and intellectual insertion around diverse learning experiences both in the virtual world and in the real world have led it to create face-to-face scenarios of academic life and university life as fundamental complements to strengthen not only the socialization of students with knowledge, but also their socialization with their student peers, their teachers and the researchers who advise and guide them.

In synthesis, the new role of teachers in everyday education must open the doors of the student as a learner or student, understanding that we all think and understand differently, but we have in common that if learning is motivated and permanent, it will achieve the competencies and skills that qualify a full and sufficient performance in the path of training and that helps us to develop autonomous thinking from meaningful learning and the necessary collaborative action among equals.

Those who master the micro curriculum can be passionate about understanding and managing it

In a critical analysis of the problem of desertion and poor student follow-up, it is worth reflecting on the role and effectiveness of both the responsible actors and the pedagogical, didactic and technological tools, which today are of pandemic concern to conventional institutions due to their low productivity or their non-application of pertinent strategies. In this regard, I invite you to read the developments we have had on our UNAD Retention and Permanence policy in the last ten years.

The reflection I intend to make now is framed in the title of this last section, and to which a simple and definitive answer could not be expected from us.

The world of micro curricula is, by all accounts, varied and rigorous, and it is up to the teacher to show the great differences that exist when managing conventional face-to-face education versus virtual distance education.

The UNAD UPM model, on which the entire national community of leaders reflected in the first colloquium on outstanding pedagogical experiences, led by the Vice President's Office for Academic and Research Affairs in 2020, left a high spectrum that marks the great differences between those actors. teachers who have fully understood the significant value of each of the components of said model and its comparison with a minority number of teachers who have not yet opened their minds to incorporate in their pedagogical and didactic action those strategies that facilitate the motivation and guidance and, especially, the advice that a student who wishes to train under this educational modality always and at any time requires.

UNAD continues to be a world of uneven things, and to a large extent these reflections, documents and tools that have been built both in this and other types of collective participation spaces, still do not show sufficient development to positively impact the permanence and retention of a significant number of our students, particularly after their first enrollment.

Let's remember that the power of knowledge in a world like the current one should tend more towards understanding as a starting point for each student. This difficult task is what each institution must initially address through teachers so that motivation is generated in each student for the application of said knowledge, no matter how abstract it may be.

In this sense, the power of knowledge today, and in the future, must be used to provide significant responses to the interest in learning and the interest in applying its value in the added effect that it should always have. If it is done as it is still perceived by several teachers today, we will continue to contribute to generating apathy in the student body and poor results of academic continuity in Colombia and Latin America.

Chapter 4

From UNISUR to UNAD

If in 2004 the National Open and Distance University (UNAD) had not taken a turn in its direction, very surely today it would have disappeared as a university and, if it were, it would be a stagnant state white elephant, with serious problems of quality, governance and financing.

Today, in 2021, UNAD is the only Colombian mega-university, since it not only exceeds 100,000 students but, at the date of writing this book, it has 165,000; it offers quality education at all levels; it has students from all regions of the country; it has an effective presence in the educational institutions for nationals in the United States and has students on several continents; it is sustainable and recognized as an organization with a very good environment to work intelligently and productively, and its reputation and image as a prestigious educational brand has steadily climbed in the world educational context.

This has been, in short, the path traveled by, perhaps, the Colombian university that in a short time has managed to qualify and grow as much as a result of the rigorous exercise of planning and the metasystemic gear that strengthens its management, as a tool of public education. with coverage, quality, relevance and equity for all.

The origins

The National Open and Distance University (UNAD) was legally born on July 7, 1981, under the name of Unidad Universitaria del Sur de Bogotá UNISUR, as an educational alternative for the neighborhoods of southern Bogota, in light of the extraordinary Decree 80 of 1980, which at that time regulated higher education.

By means of Law 52 of 1981, then President Julio César Turbay Ayala confirmed the creation of the institution "as a public establishment of the national order, attached to the Ministry of National Education and domiciled in the city of Bogotá". For this purpose, an initial capital of 50 million pesos (equivalent to 8,772 legal minimum wages in force) was allocated, and it was defined that the Colombian Institute for the Promotion of Higher Education (formerly known as ICFES) would provide advisory services to the institution, at least during the first five years of operation.

A year later, in August 1982, the recently elected President Belisario Betancur Cuartas gave the real boost to launch the institution, redefining it as the pilot entity of his flagship program called "Distance University", which was inspired, according to his own account, by the models already existing in the Open University in England and the recently created - at that time - National University of Distance Education UNED in Spain, institutions he had visited before his presidential election and which showed him the great educational opportunity that could be projected for Colombia. With UNISUR, the government aspired to contribute to increase higher education coverage, which at that time did not reach 8% (compared to more than 50% today).

As defined in the Law, the first president of UNISUR and later director of ICFES, the renowned academic Hernando Bernal Alarcón (now advisor to the Colombian Association of Universities ASCUN), acted as such between December 6, 1982 and August 15, 1985.

It was not until 1984 when UNISUR began to formally offer academic programs, with the technological programs of the first two faculties Business Administration and Food Technology and Engineering, in the modality of programs by cycles.

The first CREADs, or Regional Higher Education Centers, were those of 20 de Julio and José Acevedo y Gómez, in Bogotá, and those of Soacha and Zipaquirá, in Cundinamarca.

The second president was **Jaime Ospina Ortiz**, former dean of Education at the Universidad Externado de Colombia University, who served until September 1986.

Between 1987 and 1994, two other schools were created: the School of Agricultural Sciences and the School of Social, Human and Educational Sciences.

Ospina was succeeded by **María Teresa Arias de Barrera**, who served as principal until May 1991.

Gabriel Jaime Cardona Orozco, who was president of the Technological University of Pereira for 12 years, **assumed the presidency of UNISUR from September 1991 to May 1994**.

The economist and former administrative vice-president of UNISUR, **Jesús Emilio Martínez Henao, was the next president, from September 1994 to October 1997**. He was the first appointed by the President of the Republic after a consultation in which the university community participated. During his administration, the construction of the current José Celestino Mutis national headquarters was managed in the Restrepo sector, in Bogotá.

The change of name

On August 5, 1997, when Ernesto Samper Pizano was President of the Republic, Congress approved Law 396 of that year, which changed the name of UNISUR to the National Open and Distance University (UNAD).

Despite being renamed a University, the Law maintained UNAD as a university institution, as a national public establishment attached to the Ministry of National Education, which could establish branches throughout the country and, curiously, the law stated that it could "offer its programs in the on-site and distance learning modalities".

That institution, dedicated in its initial conception to provide higher education to the communities of the south of the capital, began to expand to all regions of Colombia, through various strategies that were directed at each stage by the different presidents of the University, with success and determination in the daily work of the UNAD faculty and staff of all times and phases of organizational evolution.

The second president elected after a statutory consultation under Law 30 of 1992 and appointed by President Samper was Betty Góngora Pedraza, who headed the Institution between October 1997 and February 2004, the equivalent of two presidential periods. Góngora, who was also the administrative vice-chancellor of the Institution, surpassed former president Cardona Orozco, and initiated the steps in Congress for the recognition of full autonomy. At that time, as Vice Chancellor of Community Education and Regional Development, I had the opportunity to respond to the request of the Colombian Ministry of Foreign Affairs and initiate proceedings for the creation of a branch in Florida, United States, and before the Ministry of National Education to design the distance learning high school program.

The achievement of full autonomy

In January 2004, when Alvaro Uribe Vélez was president, Decree 217 was issued, which modified the structure of the organization, defined the organizational structure, the role of the Board of Directors and the main dependencies.

After the end of Góngora's presidential period, the person who is currently writing these lines arrived, by election of the Board of Directors, in March 2004. Since then, I have strived to achieve recognition as a university, with full autonomy (i.e., not being attached or dependent on the Ministry of Education to make management decisions, academic, administrative and budgetary organization), as guaranteed by the Constitution in Article 69.

"University autonomy recognizes the right of universities to appoint and modify their academic and administrative authorities, create, organize and develop their academic programs, define and organize their educational, academic, teaching, scientific and cultural activities, grant the corresponding degrees, select their professors, admit their students and establish, arbitrate and apply their resources for the fulfillment of their social mission and institutional function".

Image 22. Concept of University Autonomy, according to Law 30 of 1992.

This recognition took place on August 16, 2006, when the President of the Nation Alvaro Uribe signed Decree 2770, which transformed UNAD into an autonomous university entity, once the Ministry of National Education had recognized in 2005 that the requirements defined in Law 30 to be recognized as a university (Resolution 6215) had been met. That is, the UNAD went from being a public establishment to an autonomous university entity, which meant going from being attached to the Ministry of Education to being linked to it and having full academic, administrative and financial autonomy, as well as independent patrimony and the capacity to govern itself. The former Board of Directors, transformed into the Higher Council, took the first steps to design the organization according to the dynamics of a non-traditional educational model in the higher education system.

My first governing term ended in 2007, and from then on, in 2007, in 2011, in 2015 and in 2019, I have been reelected by the generosity of the Higher Council, as a way of validating the results of my administration and, above all, of the consolidation of UNAD as a national project, the heritage of an entire academic community.

I cannot move forward without making a special mention in the history of UNAD of Professor Miguel Antonio Ramón Martínez, both for his exemplary and righteous personal life and for his inspirational vision for the definition of the academic ideological framework of the nascent University.

He was the first vice president for academic affairs and the guiding light of the UNAD solidary academic project.

Image 23. UNAD's first structure and policy document. Source: Open and Distance Higher Education.

Since the beginning of activities in December 1982, with Hernando Bernal, and until today, both UNISUR and UNAD have had seven people at the head of their governing bodies, as can be seen in the following chart:

President	Start	End
Hernando Bernal Alarcón	6/12/1982	15/08/1985
Jaime Ospina Ortiz	11/05/1985	22/09/1986
María Teresa Arias de Barrera	3/10/1986	21/05/1991
Gabriel Jaime Cardona Orozco	16/09/1991	17/05/1994
Jesús Emilio Martínez Henao	21/09/1994	1/10/1997
Betty Góngora Pedraza	2/10/1997	1/03/2004
Jaime Alberto Leal Afanador	2/03/2004	1/03/2007
	2/03/2007	1/03/2011
	2/03/2011	1/03/2015
	4/03/2015	1/03/2019
	2/03/2019	-

Image 24. University presidents in the history of UNAD. Source: Own elaboration.

The redirection that consolidated the University

To say that during these almost two decades we learned from failure is not fanciful. There are cases and documents that support this statement: governments with policies and educational regulations against, limited resources as a contribution of the Nation in permanent decline (lower per capita value of State contribution per distance student compared to a face-to-face student - reduced by up to 60%), the erroneous idea that distance education, besides being of poor quality, is cheap, which limited institutional progress but helped internally. For the recurrent NO from the State, the response of our educational community and our leaders to the various academic, pedagogical, administrative and financial threats was "Yes we believe in it, yes we can do it and yes we will achieve it".

We have advanced, much more than some promoters of UNAD themselves ever imagined and much more than some enemies predicted we would ever be.

Las cifras hablan por sí solas

1981	1997	2004	2006	2018	2023
Higher Education Institution	Higher Education Institution	Higher Education Institution	University - Full autonomy	University - Full autonomy	University - Full autonomy
Programs 3	Programs 21	Programs 28	Programs 47	Programs 70	Programs 85
Students 328	Students 16.071	Students 25.268	Students 37.224	Students 107.929	Students 200.000
Teachers 12	Teachers 862	Teachers 1.518	Teachers 1.419 19% increase in Full Time	Teachers 2.694	Teachers 3.194
Centers 4	Centers 39	Centers 30	Centers 56	Centers 65	Centers 82
Technology Printed Material	Technology Printed Material	Technology Semi-attendance	Technology CORE	Technology AVA	Technology B-Learning M-Learning U-Learning

Image 25. Institutional evolution of UNAD and prospective to the year 2023. Source: Own elaboration.

Today, UNAD is not the product of random chance, but of a coherent, continuous, collective and committed exercise of a team of leaders who, in a well-argued manner and also with great faith and heart in a country project from the academy, understood the need to dare to design a University outside the standards customary at that time, because it is the innovative road to respond to the new educational model that would begin to make its way.

Structural foresight and participatory situational planning (conceptually developed in the following chapter) became the navigational charts to guide the university organization that today is UNAD on the right course and to a good outcome.

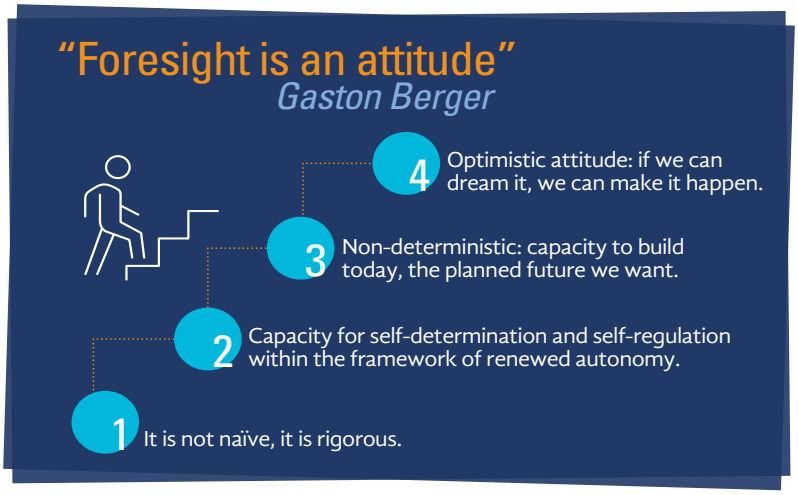


Image 26. Foresight is an attitude of spirit. Source: Gaston Berger, 2003.

We started with the conviction that it was possible to make a public, massive, open, inclusive, distance and quality institution a reality, and around these purposes we projected the organization's goals.

Therefore, we thought of a university in the " global" sense of the term, and began to design an educational offer for all levels:

- Youth and adult literacy.
- Basic elementary education cycles.

- Cycles of secondary and middle education.
- Online High School.
- Articulation with technical training.
- Associate Degree training.
- Undergraduate training.
- Graduate training, and
- Continuing Education.

Under the current university presidency, UNAD has evolved from the concept of 1.0 (or that of the newly created University thought according to traditional canons), through UNAD 2.0 (which in the exercise of its "new" university autonomy defined a metalanguage and criteria for action - which I will explain below - typical of an institution of higher education that permanently self-critical), then reaching 3. 0 (which constituted the academic and pedagogical modernization supported by the Internet and new technologies), until arriving -to date- at UNAD 4.0, as a modern, proactive, innovative institution with a novel management scheme, unlike most higher education institutions, which I explain below.

In order to respond to these new organizational dimensions, throughout this evolution, the University has been updating its regulatory framework, statutes and governance scheme, and with the support of the various members who have occupied the respective representations in the University Higher Council, UNAD's own unique units have been consolidated in response to the demands of its ambitious Solidarity Pedagogical Project.

In the last years of the current century and millennium, UNAD has responded to all the demands of the Colombian higher education system and its quality assurance system (all programs have the proper qualified registration, others have advanced in the voluntary process of high quality accreditation and, at the time of writing this book, the University faces the process of institutional accreditation, after receiving the approval of the National Accreditation Council, in a reality in which few universities in the country have been able to advance).

This University, which completed its first 20 years with worrying growth figures in terms of programs and students, reached its third decade with

an optimistic scenario in terms of enrollment, positioning itself as a macro-university (due to its capacity to respond, from the public sector, to the demands of coverage), and will reach its fourth decade in an even greater dimension, as a mega-university, due to its capacity to respond to the challenges of the new times with the integration of technology, quality and coverage, optimizing its financial resources.

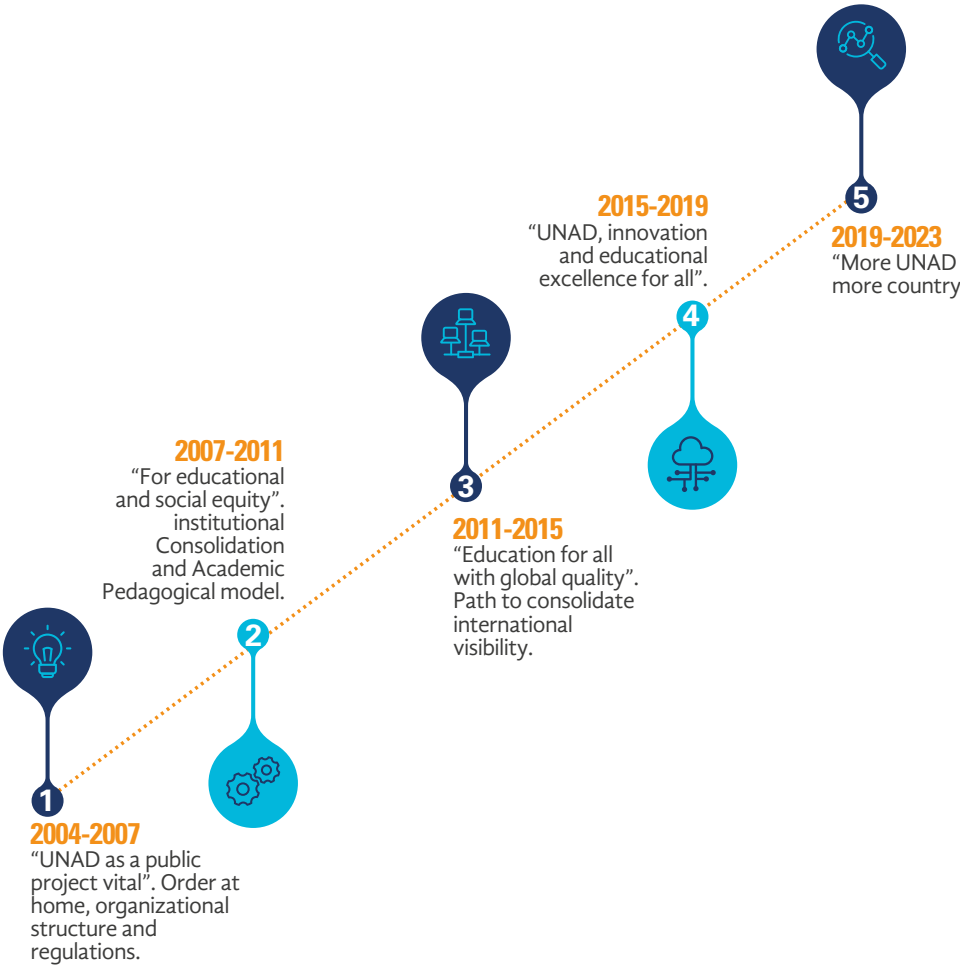


Image 27. UNAD Management Plans 2004-2023.
Source: Own elaboration.

Traceability of institutional events **aimed at University leaders** 2004-2019

2004-2005

August 12 / 2004	**Development Plan 2004 - 2007:** "UNAD as a vital public project"
October 5 / 2004	**Strategic deployment - National Headquarters and Zones:** "University management guidelines"
October 25 / 2004	**First National Decentralized Steering Committee - Nacional headquarters:**"Academic, administrative and operational policies"
November 23 / 2004	**Meeting with university community - Nacional headquarters:** "Organizational innovation, breaking paradigms"
March 2 / 2005	**First year of management National Headquarters:** "UNAD's 2005 - 2006 balance and outlook"
March 11 / 2005	**Paipa National Meeting of Director:** "UNAD education for all"
November / 2005	**National Meeting of UNAD Directors Chinauta:** "UNAD challenges in the knowledge society"
December 19 / 2005	**Meeting with the University community National Headquarter:** "Zonal delocalization"
March 11 / 2005	**Paipa National Meeting of Directors:** "UNAD education for all"

2008-2011

September 8 / 2008 — **National Steering Committee Extended National Headquarters:** "From the idea of a university to a university with ideas"

November 5 / 2008 — **National Meeting of Directors and Leaders UNAD Ráquira:** "The UNAD director as a manager of institutional consolidation"

August 17 / 2008 — **VIII National Meeting of Directors UNAD Ráquira:** "Strengthening the future of our organization"

March 11 / 2008 — **National Meeting of Directors Paipa:** "UNAD education for all"

November 22 / 2009 — **V National Institutional Planning Meeting Ráquira:** "Consolidating the experience pathway at UNAD"

March 2 / 2010 — **Public accountability event**

March 10 / 2010 — **Guidelines for the management of UNAD in the context of foresight 2010 - 2020 Paipa:** "The challenges of organizational consolidation: Prospective for an action framework 2010-2020"

March 11 / 2010 — **National Meeting of Directors Paipa:** "UNAD education for all"

November 30 / 2010 — **IX Meeting of Leaders and Directors Paipa:** "Institutional planning, we continue to build the future of UNAD"

March 2 / 2011 — **Public accountability event**

October 27 / 2011 — **I World e-Learning Congress Cartagena:** "UNAD pedagogical model referents within the framework of the e-learning training ecology"

November 30 / 2011 — **X UNAD National Leaders Meeting Paipa:** "Reflections on leadership and action UNAD"

October 27 / 2011 — **XII Meeting of UNAD leaders for the planning of management and operation for the current fiscal year 2013 Girardot:**" Strengthening UNAD's strategic thinking within the framework of its institutional vision"

March 2 / 2012	Public accountability event
October 15 / 2012	XI Meeting of Directors Ráquira: "Reflections on leadership and UNAD action"
March 19 / 2013	Public accountability event
November 14 / 2013	National Meeting of Directors Paipa: "UNAD education for all"
December 2 to 6 / 2013	Education for all with global quality, Girardot
March 20 / 2014	Public accountability event
March 2 / 2015	Public accountability event
April 19 to 23 / 2015	UNAD 3.0 Scenarios of peace from innovation and educational excellence for all, Paipa
December 9, 10 and 11 / 2015	Academic quality, social relevance and sustainability: UNAD 2016, Paipa
March 9 / 2016	Public accountability event
November 1 to 6 / 2016	Strengthening managerial competencies for endemic and administrative innovation UNAD 2017
January 24 and 25 / 2017	Extended Mission Board
March 15 / 2017	Public accountability event
December 27 / 2017	18º National Meeting of UNAD Leaders, Paipa
March 1 / 2018	Public accountability event
Sep, oct and nov / 2018	8 Zonal Deployments 2018
February 19 to 23 / 2019	19º National Meeting of Leaders UNAD, Paipa
March 4 / 2019	Public accountability event
December de 2019	20º National Meeting of Leaders UNAD, Paipa Event
March 3 / 2020	Public accountability event
September 1 to 3 de 2020	1 National e-Camp of the OIR
March 2 / 2021	Public accountability event

Image 28. Institutional planning 2004-2021.
Source: Own elaboration

This sequence of actions, commitments, plans and meetings of UNAD Leaders has allowed UNAD to have consolidated today, among others, the following fundamental institutional developments (the details of which are explained later in this book):

- Organizational Center for Higher Studies and Qualification of Human Talent - COACH
- Metasystemic Global Staff
- Campo UNAD
- Regional Intersystemic Observatory- OIR
- Open University System - SUA
- Professional Technical Institute - ITP
- Internationalization Policy
- Integral Attention System- SAI
- UNAD Virtual TV
- Integrated Institutional Intelligence System - SIIUNAD 4.0
- Retention and Permanence Policy -RP-
- Global UNAD

And, in the speed and creative and proactive dynamics in the face of the challenging issues that the Knowledge Society poses to education, in 2023 UNAD will have more developments to respond to the country that has placed its trust in it.

Chapter 5

Strategic axes of the organizational evolution of UNAD

As I mentioned in the previous chapter, at the beginning of the millennium, the National Open and Distance University (UNAD) was on the verge of disappearing, due to the limited impact it had achieved socially, threatened by economic bankruptcy and the negative slant with which it was valued by some figures from the educational community and in government settings and official legislation, as well as by institutional peers.

When I arrived for the first time at the University Presidency in March 2004, I found that these were only symptoms and that the real illness was found in the absence of a deep reflection on its real contribution, as an educational organization, to the construction of a social project that, from distance education, could be disruptive and radical, and deliver to the country graduates with solid foundations to build a Nation. We would need to clearly understand that our actions and results of quality and efficiency would be the conclusive answer to the challenges of improving our reputation, first the academic and then the organizational one, derived from the quality and relevance before the Colombian society, as an organization ready to assume the challenges of the emerging Knowledge Society. To this end, we had a clear commitment

to overcome our own structural problems based on visible results that would provide answers to the organic needs of Colombian education.

In this environment, transformation was urgent, based on a reengineering without hesitation, and the path chosen was organizational cybernetics.

Then, with a team of managers that today I call courageous, several of whom still work with me as directors, we decided to face the situation and collectively address the organizational redesign of UNAD, which today leads us to an even better projection than what we initially envisioned. What led us to this and how we intervened the organization with situational strategic planning and structural prospective is what I present below.

* * *

In their book "*Why Nations Fail*", American economists James A. Robinson and Daron Acemoglu determine the keys to understanding the reasons for the prosperity of some societies and the reasons for the social immobility of most nations. Their hypothesis is clear: nations fail and will continue to fail because their leaders insist on developing extractive economic policies, and do not do enough to create State policies with sufficient relevance and permanence so that various sectors, but especially education, have sufficient potential for people to be integrally trained, and from this education, to exercise their motivations and knowledge in the world of work, research and entrepreneurship. This would allow them to innovate to create competitiveness and productivity in any of the fields of disciplinary, social and economic development, regardless of their social status, but rather their merits and talents to evolve worthy life projects that contribute to extend the collective welfare of their fellow citizens.

The book also argues that these impoverished nations generate extractive policies and institutions, as a result of which those who benefit from such extraction are minorities installed in strategic points of power. These types of nations, which include a large number of Latin American nations, do not encourage strategic sectors such as education, since education could threaten the interests of certain elites who

have been capturing material wealth for decades, and which do not want their inhabitants to be in a position to undermine the "power of the cradle" which, as pointed out in the 2015 study by the Los Andes University, defines the scarce social mobility of these majorities in Latin American countries.

Seen in this light, we could ask ourselves, or rather answer ourselves, why no government in Colombia, and I consider that of a good part of Latin America, has not asked its inhabitants, in a technical and systematic way, What future is desirable in the next twenty, thirty and fifty years? Nor has it been clarified whether, as a society, we are walking together towards where we would like to be. It is clear, then, that as a collective we do not know what we want for our nations in this part of the planet, except for media slogans and sound bites that demarcate short-term motivations stated by those who hold the government of the day.

In short, if we do not know what we want as a country over a moderately long period of time, we will not know what to do with key sectors such as education, in order to put the future on track as a collective action and stop wearing ourselves out in banal polarizations, which for years have characterized the evolution of our Latin American countries. Efforts are wasted and we do not know if we are dragged by the rhythm of global and interconnected events, or if, on the contrary, as a Nation, our leaders and institutions allow us to build that dream of outlining a path or multiple paths that allow us to prospect where and how to get to, and if we are really contributing, each one from his or her work to the collective vision through the achievement of goals that contribute to the extended social wellbeing as a strategic direction of each Nation State.

It is in this sense that UNAD, right in the first years of the 21st century, asked itself and now invites all types of organizations, but particularly educational organizations, to ask themselves if we have understood the social value of the role we play in leading, in the first instance and in all levels and cycles of education, the formation of upright, ethical and transparent leaders who will build, in the generational relays, the strategic actions to approach a dream of nation, since they will be the graduates of all this educational institutionality, those who will lead

governmental and non-governmental organizations in all the territorial areas that make up our Latin American states. Abraham Lincoln said that "the philosophy by which one generation is educated will be the philosophy of government in the next".

If we make a brief and serious review of our recent Latin American history, we will objectively see that what we experienced yesterday is now in the past. It could have been a step forward to the future, if we had planned our present better and had agreed on the structure of our vision of the future. All the problems, frustrations, despairs that today jump out at us and are part of the daily headlines of our media and information networks, could have been avoided, overcome and even solved by our past generations. "Education is the passport to the future because tomorrow belongs to the people who are prepared to lead it today" said Malcolm Knowles.

Some few of those leaders surely had the vision of the future that we demand today and they tried, but they could not lead, because the circumstances of each situation and especially the resistance to change that the installed minorities produced on the forms of power did not allow them to do so. Others, perhaps the majority, allowed themselves to be dragged along by what is commonly known as "destiny" and spent their days and years with sorrows and needs, but also without glory.

It is exactly at this juncture of the new era of the knowledge society, and in the interest of resolving this type of questions, when in 2004 we began the process of reengineering UNAD, fully aware of its historical role in the social transformation that education produces, and in which situational strategic planning and structural foresight became key tools that left behind the traditional deterministic and normative planning methods.

We then began the careful construction of a university with a social character that would allow us to identify, through situational calculations and based on strategic and territorial reflection with the fundamental actors of the university itself and those of the context that have wanted to design effective responses to mobilize intelligence, the ways to grow, believing and acting in accordance with social demands and

the growing evolution of knowledge, to mark a generational turning point in the face of the challenges that Colombia and the rest of our Latin America must face in the course of the 21st century.

It is about having planned, consciously and technically, the course of the University from creative processes that daily energize the thinking of its leaders, through strategic actions that, as a result, have allowed us to reactivate all the segments, levels and cycles of education that it incorporates, through a metasystemic organizational model and a pedagogical model based on learning to learn, fundamental keys to expand new frontiers that should demarcate for our continent the educational institutionality of the XXI century.

It is clear that the educational sectors and systems of our continent are faced with the need to respond to the disruption of continuing to do more of the same, or if, on the contrary, we accept the challenge of rethinking ourselves in order to build relevance and formative quality in the education of current and new generations of Latin Americans.

Next, and by way of synthesis, we will understand how the change of paradigms in times of transformation such as the ones we are living now will allow us to understand how UNAD has managed to strategically model its effective social action of education with an intensive use of tools such as planning, foresight and exponential technologies. Let see then.

Participatory situational planning

This method, created by the renowned Chilean economist Carlos Matus Romo, is an exceptional combination of the capacity for interdisciplinary analysis based on objectives on diverse environments that give meaning and significance to the construction of appropriate strategies to solve structural problems and take advantage of opportunities of a conjunctural order from a rational perspective that recognizes the evolution of these environments and, of course, the existence of diverse actors, such as those who oppose change.

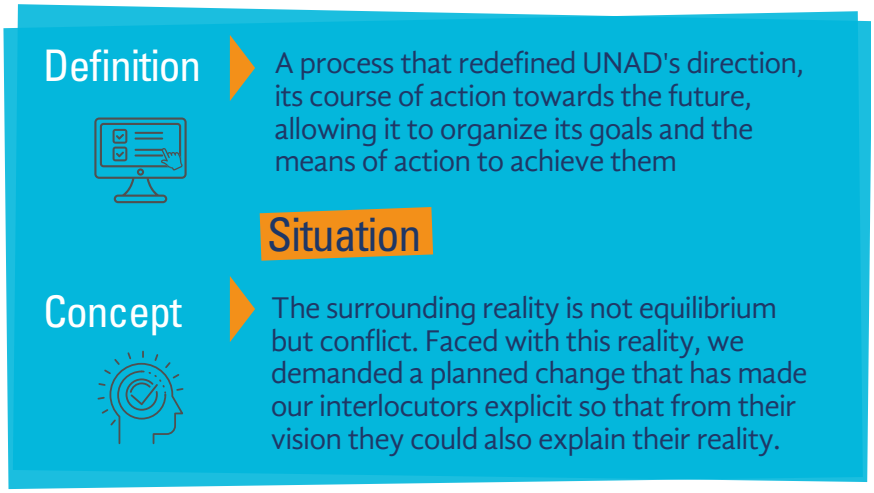


Image 29. Situational planning.
Source: Own elaboration.

In addition, it is intertwined with the participation of various non-specialist planning actors, who live and coexist in such an environment with others who can read the prospective and evolutionary dynamics of the organization that is the subject-object of such planning. This is not only important for strategic assertiveness, but also valuable for giving a sense of action to the execution of short, medium and long term projects that result as an expression of a chain that expands the frontiers of reality management, in this case that of the National Open and Distance University. Such planning was carried out at UNAD as of 2004, as reflected in the important results shown in Chapter 4.

Unlike Classic Strategic Planning, Situational Strategic Planning considers the complexity and uncertainty of economic, political and social systems, as well as the multiplicity of resources (cognitive, political, economic and organizational) required to achieve objectives.

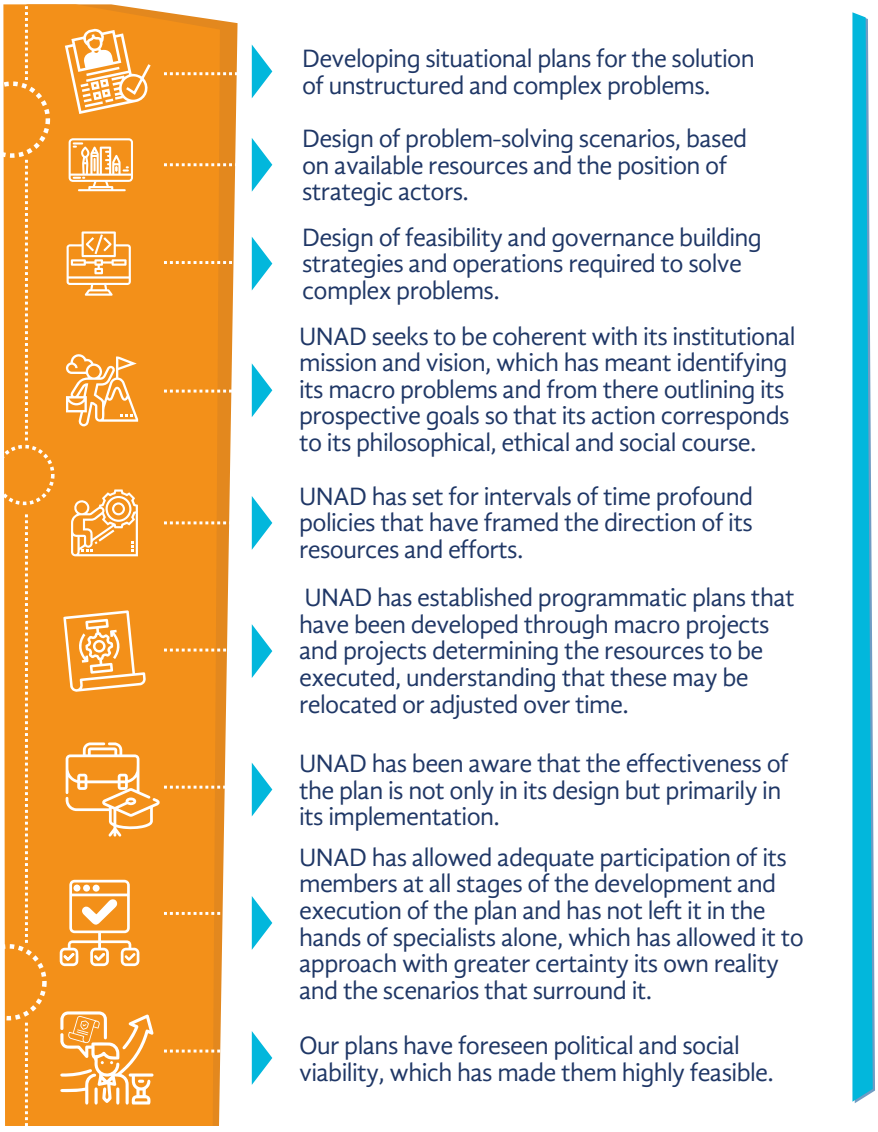


Image 30. Basic postulates for institutional planning.
Source: Own elaboration.

It is clear that an organizational plan is not a book or a theoretical document written by specialists for specialists and generally resting on the shelves of top management offices. A true plan is built with all types of key actors in an organization, seeking to identify the root cause of the structural problems to be solved and generating viable strategies that,

converted into macro-projects and projects, determine goals, resources and those responsible for their execution in the short, medium and long term, with management indicators that allow the reorganization of the course when necessary.

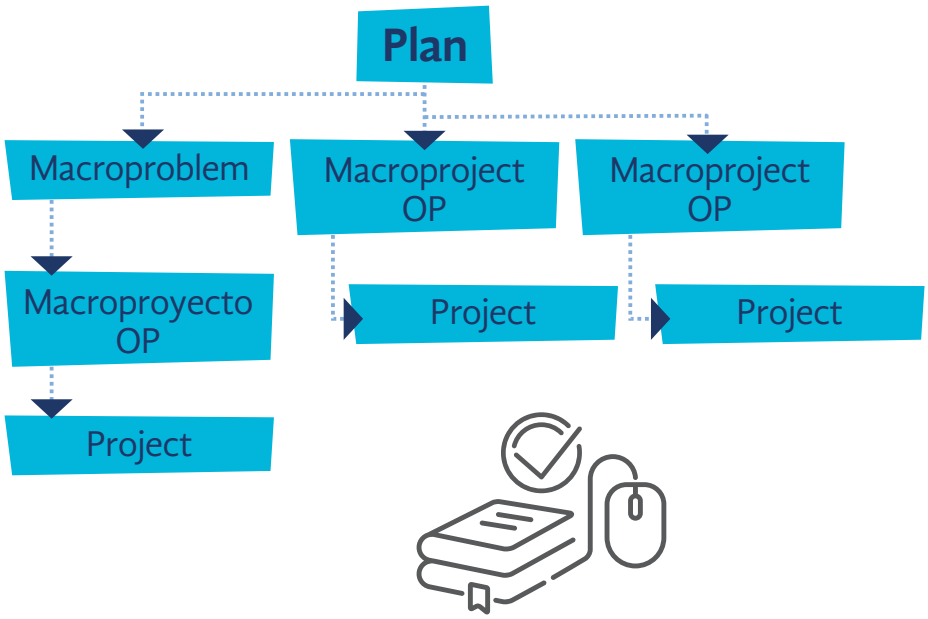


Image 31. Coherence of institutional planning.
Source: Own elaboration.

This demonstrates a historical traceability of the strategic linkage that UNAD has achieved and that has led to an unprecedented evolution of this Colombian public university throughout this century. The following graphs show in a generic way the routes that guarantee the coherence of the strategic action addressed and some of the results obtained:

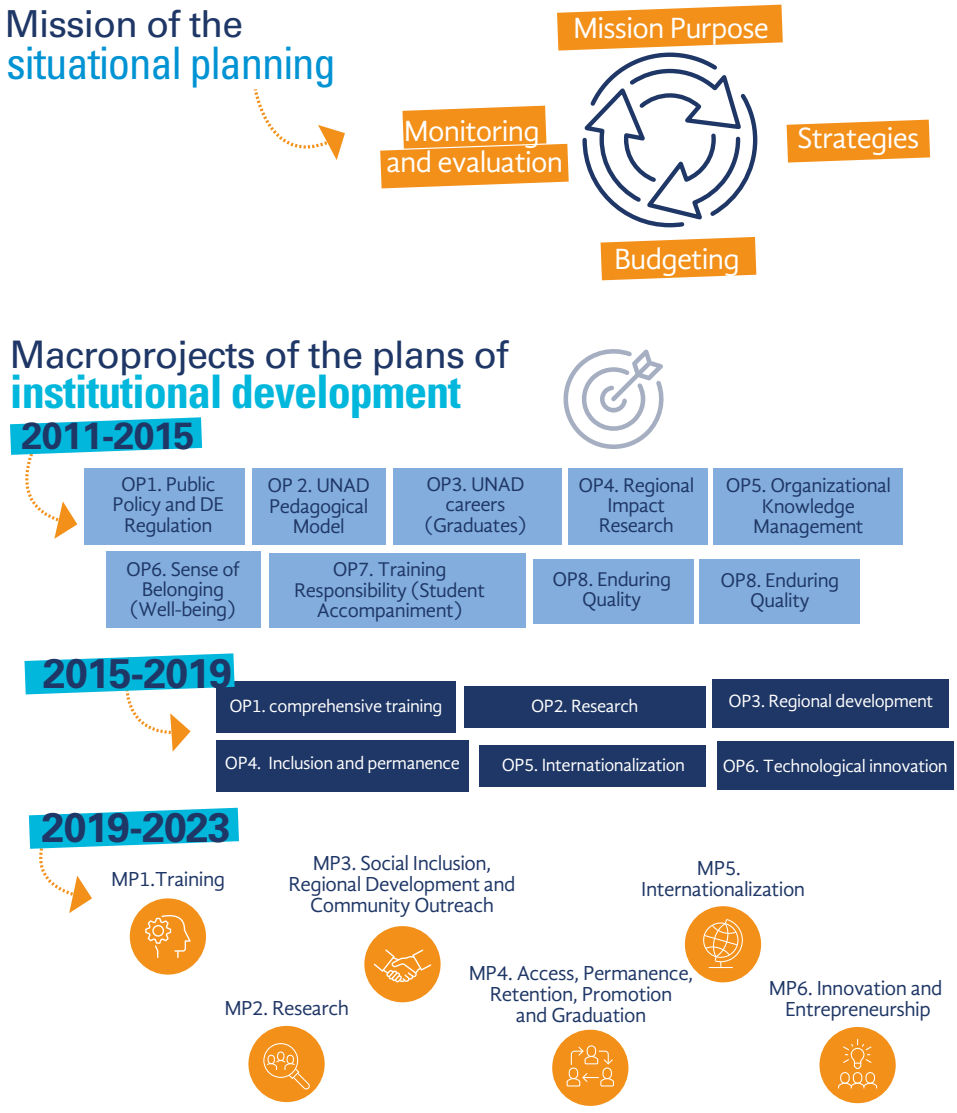


Image 32. Situational planning cycle. Source: own elaboration.

Structural foresight

Prospective techniques have also been great allies of UNAD in the interest of focusing its educational social action to guarantee quality training and relevance in its programs and services in populations historically excluded for multiple reasons from the opportunity of access and permanence. Here it is worth reiterating that since 2004 the University

has included within its metasystemic action all levels and cycles of the Colombian educational system, since one of the major concerns of our University, derived from its mission essence, has been to ensure its ability to evolve over time and, therefore, to respond to the expectations of previous and new generations.

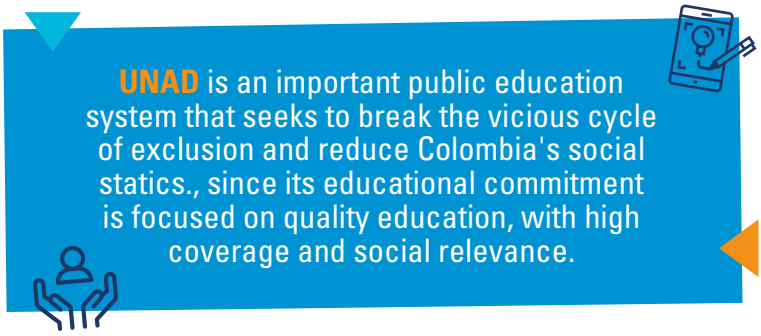


Image 33. A concrete statement of UNAD's Mission.

It is clear that the young people known as centennials or Generation Z (born in the 21st century) and millennials or Generation Y (born in the last twenty years of the previous century) have very different life expectations from the generations that preceded them (Baby Boomers and Generation X). In fact, especially communication and information technologies have been with them since the cradle and they have experienced their unprecedented evolution within their own daily lives. For them, the ability to manage technologies and the competence of their usability is neither mysterious nor alien. This is a clear warning for educational institutions that are stuck in models that already seem archaic.

This and other factors must be taken into account in educational foresight exercises.

UNAD's organizational foresight

1st side: Dreams turned into achievements. Failures transformed into learning

Macrouniversity, first in coverage and internationalization (UNAD Florida)

2009-2020: La UNAD Megauniversity with a prospective and strategic vision

Evolution of a dream.
2004: University Institution
2006: University
2009: Macrouniversity
2018: Megauniversity

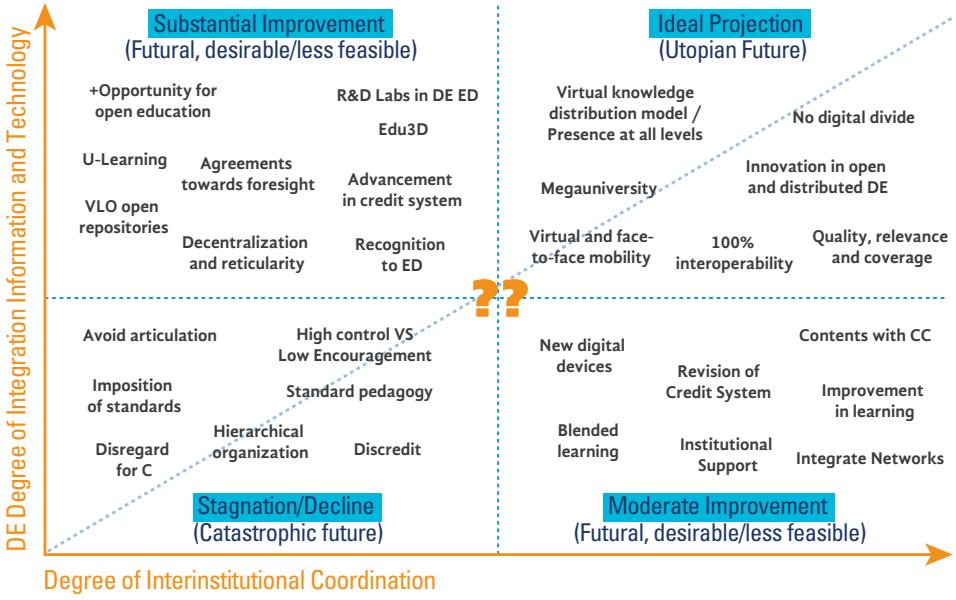


Image 34. Strategic Foresight 2009-2030. Source: Own elaboration.

Below, and by way of example, I present some images detailing the definition of six lines of Strategic Foresight addressed by UNAD as a primary exercise in the last decade of its strategic management:

1 Organizational prospective line

1. National and global solidarity extended.
2. Dynamic sources of self-financing.
3. Self-sustainable CCAVs and UDRs.
4. Intelligent Organization.
5. Benchmarking for competitive intelligence.
6. Mega-university ranked among the 500 best in the world.
7. Coherent mental models.
8. Inspirational leadership.

2 Academic prospective line

1. Accreditation Internationalization of curricula.
2. Permanent and asynchronous academic programming.
3. Domestic and international mobility.
4. Academic community with national and international recognition.
5. R&D centers for innovation and regional competitiveness.
6. Leadership in the development of e-learning programs.
7. Development of knowledge applicable to multi-contexts.
8. Solidarity as a dynamic axis of UNAD training.

3 Technology prospective line

1. Intensive use of digital media.
2. E-Learning 3.0
3. Technology and connectivity for all.
4. Technological culture in organizational management.
5. International certification of the virtual campus.
6. Institutional repository of didactic content, with social sense.
7. UNAD's technological platform for the world.

4 Pedagogical prospective line

1. Consolidated research networks in mediated pedagogies.
2. Leadership in research on competencies for ESAD.
3. Students in harmonious learning environments.
4. International certification of the pedagogical model.
5. Adaptive networks for didactic pedagogical innovation.
6. Learning management based on new knowledge pedagogies.
7. Knowledge subjects acting in learning communities.

5 Community social prospective line

1. Human development in regional post-conflict scenarios.
2. Strengthening of popular and community education and permanent education in Latin America.
3. Self-construction of autonomous and solidary moral subjects.
4. Strengthening of the social sense of solidarity of the university.

6 Regional development prospective line

1. Visible R&D products for regional development.
2. Promoting the dynamics of the social solidarity economy.
3. Socialization and dissemination of models of care for vulnerable populations.
4. Observatories for sustainable human development in Latin America.
5. Guarantee the inclusion of vulnerable population groups and sectors.
6. Social networks to guarantee inclusion and social equity in education.
7. Reflection dynamics to increase economic production and peaceful coexistence.

Image 35. Strategic foresight. Mapping 2030. Source: Own elaboration.

In line with this development, Participative Situational Planning has had the opportunity to sequentially intertwine five Development Plans and their respective annual Operational Plans.

The prospective of its duty to be and the rigorous planning of its what has allowed UNAD to assertively evaluate and route the internal and external variables that ensure the quality and relevance of its services and educational programs and their holistic sustainability, as will be detailed below:

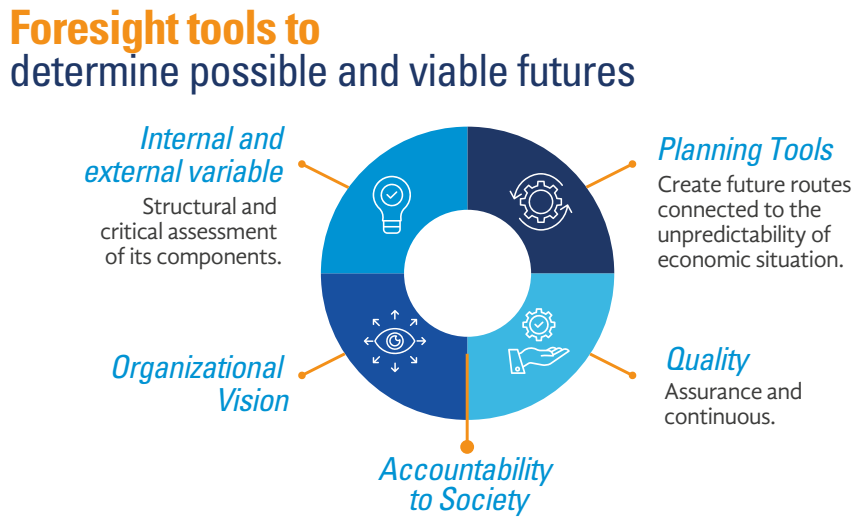


Image 36. Components of strategic foresight.
Source: Own elaboration.

As it is also a matter of extrapolating these tools to identify possibilities and potentialities to be developed in the future, in the 2019 Meeting, UNAD leaders carried out a Foresight exercise to the year 2050, which is illustrated in the following image.

UNAD's Organizational Foresight 2019-2050

2nd side: New opportunities and threats

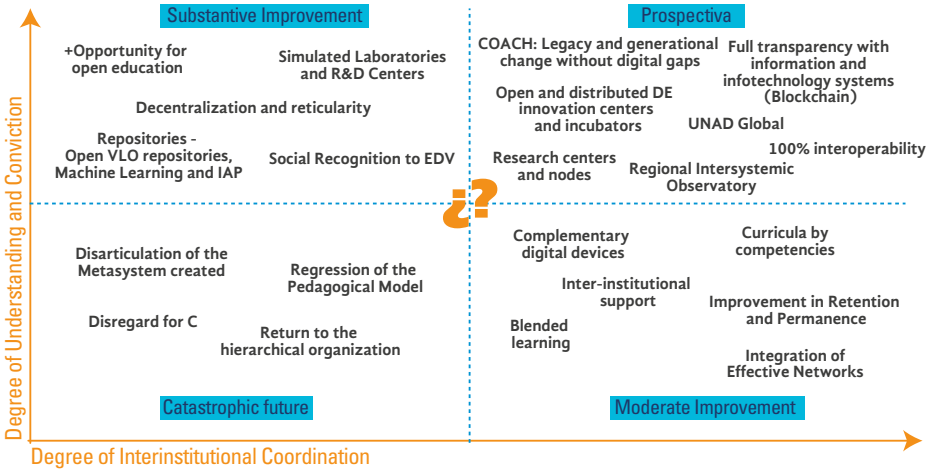


Image 37. Structural analysis. Mapping 2019-2050.
Source: Own elaboration.

The analysis carried out with structural foresight techniques has been very useful in determining the somewhat ambitious course of UNAD and its national, zonal and regional leaders; it has allowed their plans not to be conformist with moderate improvements, but on the contrary, given the magnitude of the social problems derived from the scarce opportunities for a good education in Colombia, it has strengthened the search for vanguard thinking as expressed in the institutional vision.

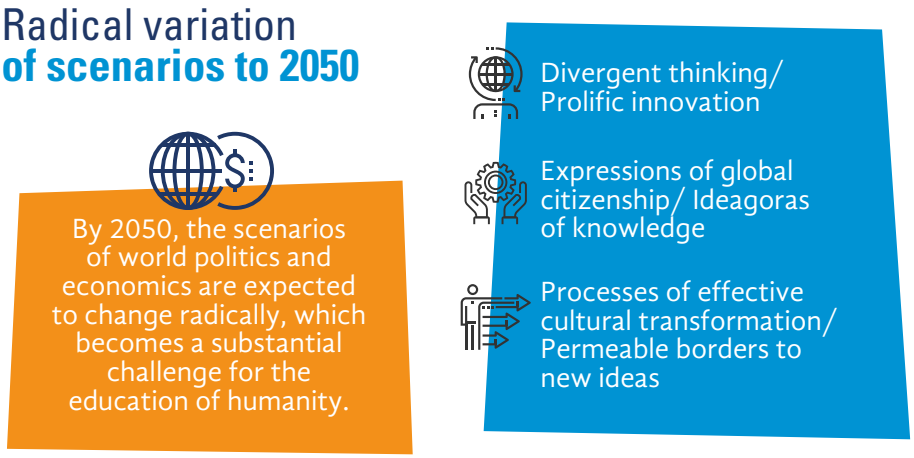


Image 38. Radical variation of scenarios to 2050.
Source: Own elaboration.

With facts and institutional participative work, it has been possible to demonstrate that it is technically possible to lead organizations towards a purpose and a desired future, as long as the collective dream is shared from a necessary understanding of the factors that define the axiological and teleological sustainability of the same, guaranteeing the emergence and coherent evolution, in each member of the organization, of deep convictions about the duty to be in order to walk in the daily work towards such a vision.

Chapter 6

UNAD's metasystem and governance and management structures

The Political Constitution of Colombia and Law 30 of 1992, which organizes the public service of higher education in this country, consecrate and recognize, respectively, the right of universities to create and modify their statutes, designate their academic and administrative authorities and adopt their corresponding regimes, among other rights for their government and management. However, it is striking that the vast majority of higher education institutions replicate almost identical models of organization and governance, so that diversity and the possibility of having a differentiation proper to each institutional educational project and structure fall into a vacuous unanimism, typical of educational orthodoxy, either because of a certain comfort with the status quo, that has historically characterized supply and demand, or because they are satisfied with their limited procedure as universities in a country with serious problems of educational coverage, exclusion of young people from marginalized regions, and the absence of argumentative confrontation between what the university can offer and what society needs.

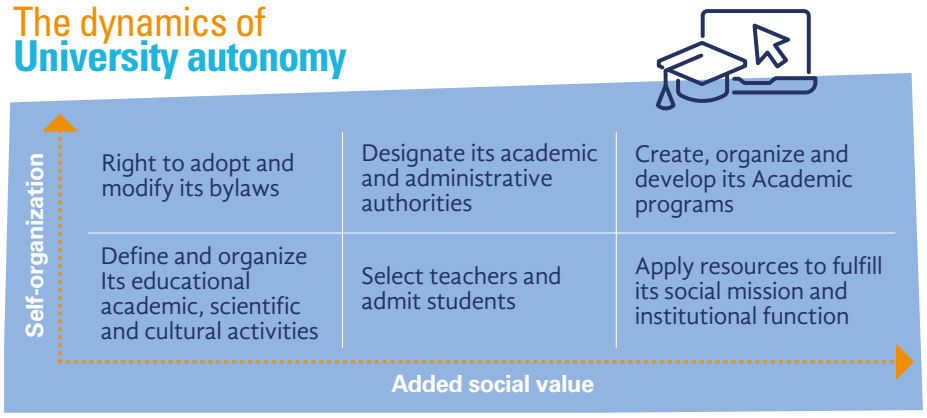


Image 39. The dynamics of university autonomy.
Source: Own elaboration.

Therefore, if you, kind reader, are looking for viable alternatives for the evolution of your educational organization, I believe that the leaders of this sector today could well increase their social impact by accepting this invitation to discern about the deepening of a profound transformation in our Latin American educational history, taking advantage of the great opportunity that arises from the challenges of the so-called Knowledge Society.

The metasystem designs

The traditional systems of educational organization have little capacity to respond to the evolution of challenging environments such as those posed by the Knowledge Society, the Learning Society and the Information Society. That is why, in the exercise of its autonomy, UNAD has been conceived as a metasystem with duly confirmed and public criteria for action among the entire university community.

When, in 2004, UNAD leaders took on what we called the First Great Opportunity, by installing a radical change from its conception to its design and development of the so-called Systemic Viability, we did so from the perspective of organizational cybernetics for a public higher education institution.

For the public outside the Institution or for newcomers, the language describing the University may be somewhat complex, but when they understand its logic, they understand its benefits and, above all, its effectiveness in ensuring the results of growth in students, programs, regions, sites and projects, in accordance with the institutional commitment.

The term metasystem has several meanings, and in the case of UNAD it refers to the integration and replication of all the components of the university system in a uniform, universal and technical way among actors, units, concepts and projections. It is an implementation of the basic concepts of the British theorist Stafford Beer, based on a modeling of viable integrated systems, through giving strategic value to the construction of a metasystemic organization, strengthening the clarity of concepts such as:

a. Organizational cybernetics:

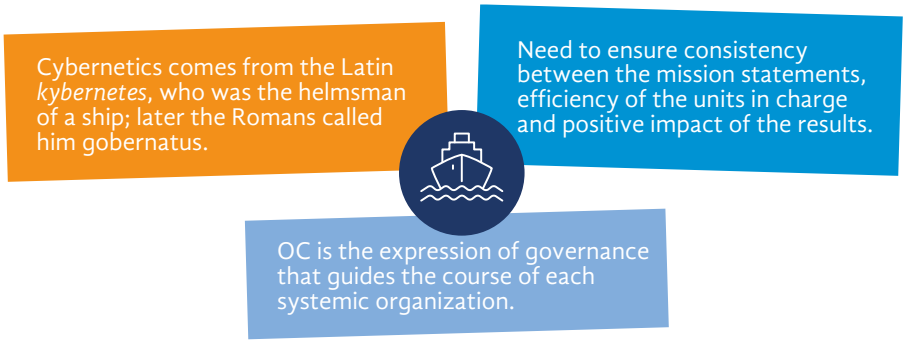


Image 40. Organizational cybernetics.
Source: Own elaboration.

Cybernetics in organizations is not well known for its effectiveness in the short term, since it requires radical transformations within the organizations and, of course, a strong and committed will to change their environments in a disruptive way, it does not admit going "a little at a time" or the experience of piloting in this or that unit; when this happens, generally the tradition of "doing as it has always been done" (it has always been done this way) triumphs over small efforts in a small environment of experimentation.

b. Variability as an indicator of complexity:

Image 41. Variability as an indicator of complexity. Source: Own elaboration.

An organization in constant evolution and growth needs to permanently establish its response capacity so as not to overwhelm its attention and the quality assurance of its products and services. This is the purpose of calculating variability in a metasystemic organization that, like UNAD, acts simultaneously in different areas and with a portfolio of programs and projects that arise from its management in each of the systems that comprise it.

c. Ashby's theorem and its implications:

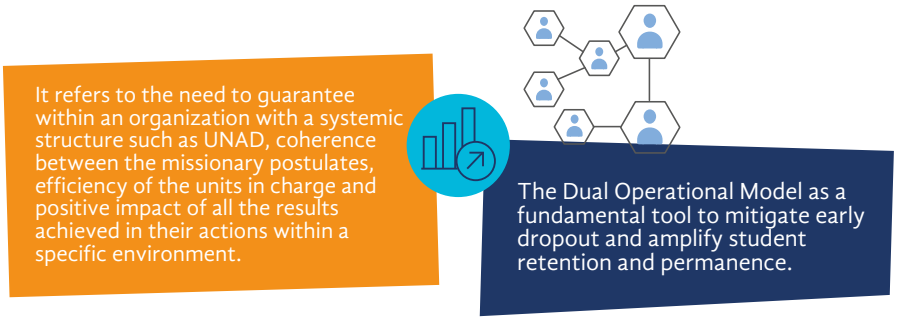


Image 42. Ashby's theorem and its implications. Source: Own elaboration

An organization such as UNAD requires the guarantee of its teleological actions without distorting its principles and responsibilities, in coherence with its institutional mission. Ashby's Law facilitates the formulation of strategic actions without distorting the role that the university should play without departing from its course, but in harmonic consonance with the environment where it is present.

d. Systems thinking for business and organizational leaders

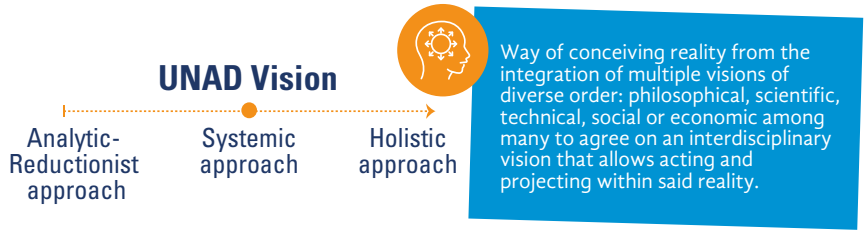


Image 43. Systemic vision at UNAD.
Source: Own elaboration.

Learning to think and manage an organization in a systemic way is not an easy task; it requires discipline and individual rigor to push our linear thinking towards an integral and holistic thinking of the human collectives that make up the organization. This way of thinking and acting requires a reasonable amount of time, a demanding qualification and an institutional culture that facilitates coherence in thinking, speaking and acting without hesitation.

e. Mathematical modeling of viable systems

Addressing the development of a complex organization implies not only describing a mathematical formula but, in particular, understanding the main difference between a reticular and fractal management and administration in which, I am convinced, lies a good part of the results achieved versus those vertical forms that prevail in most of our educational institutions in Latin America.

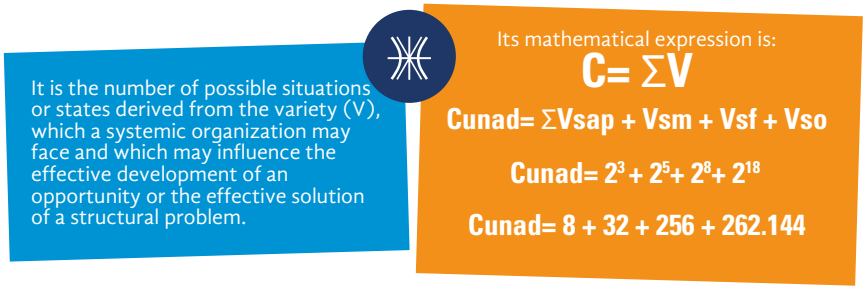


Image 44. Mathematical modeling of viable systems.
Source: Own elaboration.

This modeling contemplates variables that determined radical changes from various macro-projects that motivated decisions of the UNAD Higher Council since 2004 and up to the present. These have been the seed of radical and coherent innovations that were able to differentiate themselves from the traditional short-term actions to mitigate conjunctural and structural problems, as generally happens, and that, on the contrary, generated policies that today strengthen the disruptive transformation route prospected.

f. El The role of information and information systems design (ISD) in enabling organizations to function effectively (to fulfill the purpose for which they are created).

A set of devices and tools of various types that have the purpose of circulating information for decision making or to provide continuity to key strategic processes.

The SID must clearly determine the conditions under which the sender defines and transmits the information and the receiver receives it for effective decision-making or process continuity; in this sense, information selected and classified algorithmically must be provided so that the information flows that are determined allow optimal organizational functioning.

In the case of UNAD, each system of the metasystem needs information selected and classified differentially.

Image 45. The role of information and information systems design. Source: Own elaboration.

It is also important to point out that the metasystem implies an inter-systemic mission, functional and operational coherence, and that it is articulated with organizational management systems supported by big data, which manage a diversity of leaders in different areas of institutional action. This has generated a high level of administrative efficiency within an organization that assumes classified information as one of the most important assets of its missional action..

All this rationale has inspired us to manage the institutional strategic course, which, since March 2, 2004 until today, has been guiding us in

the consolidation of UNAD as a Mega-University at the service of the postulate of "education for all"".

Therefore, and according to the General Statute of UNAD, the University defines itself, acts and dynamizes as a system of systems, supported by the different platforms of human talent, curricular, pedagogical and didactic, technological and financial, in order to ensure the achievement of effective results of high quality and relevance, in each of its substantive responsibilities and systems.

UNAD's metasystemic model is a Competitive Strategy modeled to make us a more effective organization compared to our peers of the same nature as a public university in Colombia.

UNAD is conceived as an integrated organizational system that coherently articulates systemic levels, units and devices, as an intelligent organization for the fulfillment of objectives and management in the various areas and contexts of innovative and self-regulated action, with the capacity to learn, unlearn and improve itself on a permanent basis.

This action is based on fundamental concepts such as organizational viability, variety as an indicator of complexity and the key role played within it by the various information systems for sound decision making. In this way, we work to consolidate a viable system.

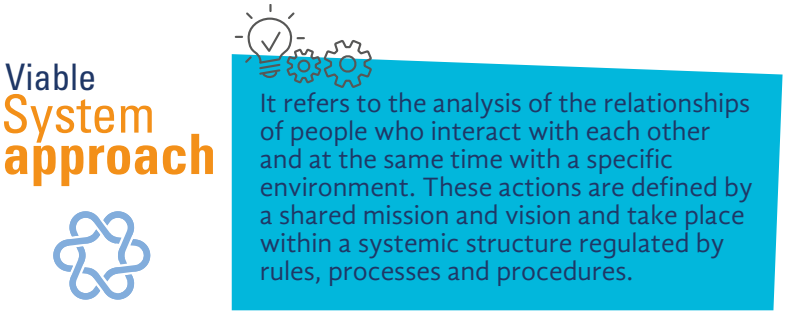


Image 46. Viable system approach. Source: Own elaboration.

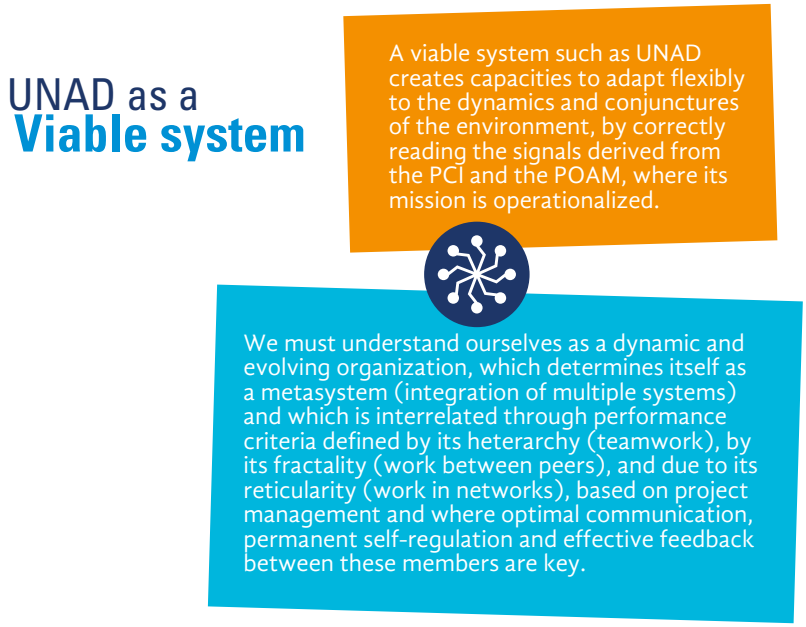


Image 47. UNAD as a viable system.
Source: Own elaboration.

For some scholars of the systemic approach, the routes disaggregated into subsystems are easier to understand in linear sequences and create taxonomies that, when chained together "infinitely", create distortions in the understanding of their practical effect. Hence, one of the advances in Stanford Beer's conception is the guarantee of understanding the metasystem and its various systems in a balanced chaining that differentiates them conceptually but avoids being a differentiating factor in their praxis, so that the various actors can mobilize flexibly among them. This is, in itself, one of the major obstacles that arise at the beginning but that, with time and continuous training, clarifies its strategic action for the institution's staff and outsiders.

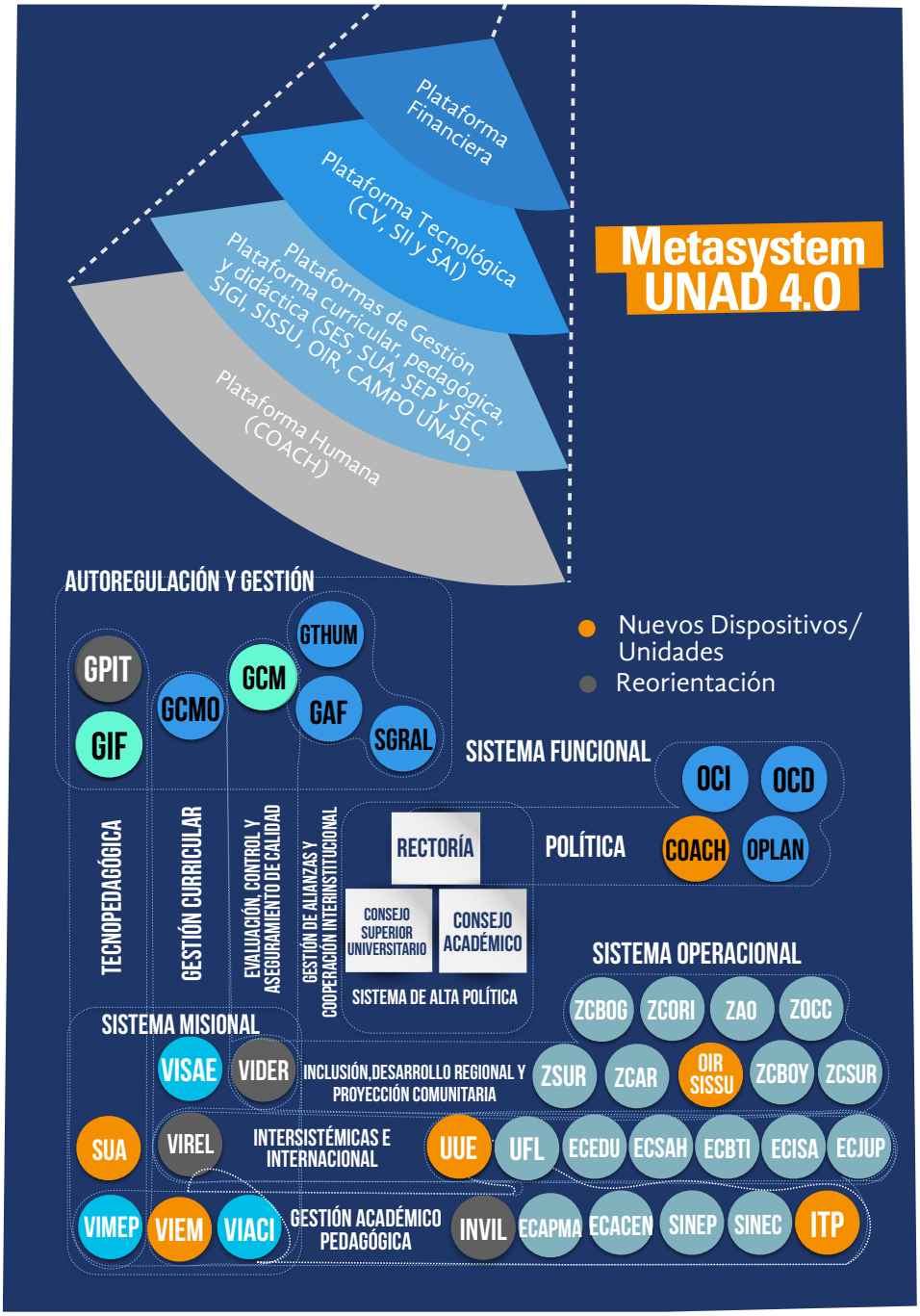


Image 48. UNAD's organizational structure. Source: Own elaboration.

The performance criteria of the metasystem

The UNAD Metasystem is based on ten (10) performance criteria that, by the way, no one understood when we first exposed them in 2004, and that today have assorted in the vast majority of the members of our educational community an unimaginable commitment, which was one of the determining reasons why UNAD, in 2019, obtained the recognition as the first public university to obtain the Great Place To Work certification, ratified for the year 2020.

Systematicity

A UNAD leader promotes interaction and unity of purpose from the different management fronts, understanding the comprehensiveness of their responsibilities and the impact that decisions and actions have on the overall achievements and results of the University.

Productivity

The work plan of the UNAD Leader is aimed at achieving high levels of development and delivering high-impact results, accompanied by indicators of quality, efficiency, efficacy and effectiveness, whatever the role or position held at the University.

Reticularity

A UNAD leader facilitates the work of the networked team, strengthening the recognition of shared achievements and addressing failures and errors, through the articulation of efforts of the different academic and administrative actors, ensuring the strengthening of communication channels and managing information responsibly, ethically and effectively.

Competitiveness

A UNAD leader recognizes and identifies the opportunities and threats of the environment, develops strategies to take advantage of and energize institutional resources and competencies to master the key factors of educational success and the generation of competitive advantages.

Accountability

A UNAD leader presents openly and transparently the results of its management, the use of resources and the social impact of its actions. Likewise, he/she provides feedback on the fulfillment of the work plans of his/her collaborators and peers and jointly develops action plans for continuous improvement.

Fractality

A UNAD leader recognizes the diverse forms of institutional presence and development. Likewise, their actions, thoughts and words maintain the same authenticity and identity that promotes the University in all its contexts.

Heterarchy

The role of a UNAD Leader is exercised and earned through example, his/her decisions transcend his/her position and position in the University and legitimizes his/her activities under a transversal character, fulfilling the objectives, maintaining consensus and respect for the roles and competencies of his/her collaborators or peers.

Self-management

The management plan of a UNAD Leader is based on its own criteria for the definition of high impact objectives, on the empowerment of activities towards its work team and is regulated from the self-critical analysis of the results obtained and the recognition of failures and opportunities for improvement.

Project management

The management of a UNAD Leader is based on a structured planning exercise, where effective strategies with high academic, social, administrative, financial, cultural, political and scientific impact are sought, through programming and efficient use of scarce resources.

Image 49. Performance criteria: from organizational functionality to structure. Source: Own elaboration.

In a previous chapter I presented the key concepts and definitions to understand the organizational framework of our University, which derives from the academic orientation of the UNAD Solidarity Pedagogical Model based on learning to learn, as well as the important role of the tools of Participatory Planning and Structural Foresight. Now, let me explain the four structural systems that today make up the UNAD Metasystem and its various management and information systems that seek to strengthen a harmonious and coherent integrated management.

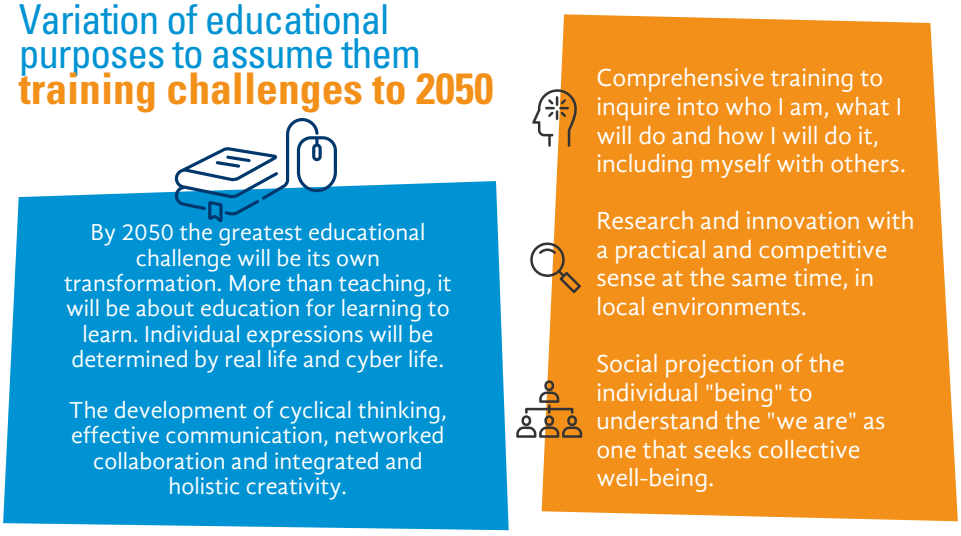


Image 50. Variation of educational purposes to take on formative challenges to 2050. Source: Own elaboration.

In the presidential periods of UNAD initiated in the years 2007, 2011, 2015 and 2019, the internal statutes have consigned the evolution of this transformative process and its update leaves a clear traceability of the evolution of this educational Metasystem that is UNAD.

I hereby transcribe the latest conceptual definitions that, in a critical and constructive manner, we proposed and that were unanimously approved, in December 2019, by the Higher Council. Here it is worth reiterating that currently the structure of the Metasystem is supported by algorithms and platforms that allow it to flexibly and efficiently scale multiple and diverse demands for educational services with a high structural responsiveness.

The aim is to guarantee that the programs and services offered at the multiple levels and educational cycles that we offer have the conditions of quality training and efficiency in the operation of the different platforms.

For its strategic, substantive, tactical and operational development, the Unadista metasystem has four (4) organizational systems:

- High Policy System,
- Missional System,
- Functional System and
- Operational System.

Thanks to an articulated and robust, technologically speaking, Integrated System of Institutional Intelligence, the actions of the various systems are linked in common purposes, with due monitoring and evaluation.

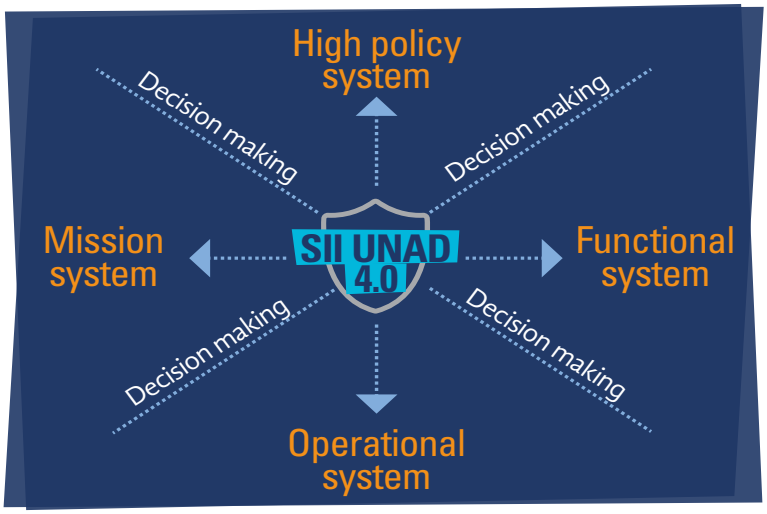


Image 51. Integration between UNAD systems. Source: Own elaboration.

The following is an authorized transcription of the definitions set forth in the Organizational Bylaws, in effect for each of them:

High-policy structural system

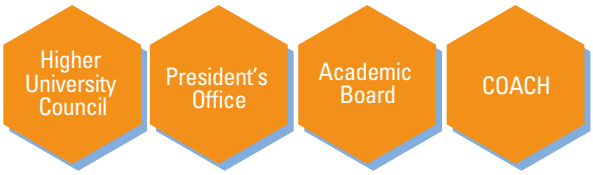


Image 52. Sistema de alta política del metasistema UNAD.
Source: Own elaboration.

The bodies and the unit associated with the High University Policy System of the UNAD Metasystem are the Higher University Council, the University President's Office, the Academic Council and the COACH, or Organizational Center for Higher Studies for the Qualification of Human Talent. These guide the strategic development of the University, through the formulation and definition of policies for the fulfillment of the substantive responsibilities and the holistic sustainability of the institution, in the curricular and academic, technological and innovation and financial sustainability orders.

Missional structural System

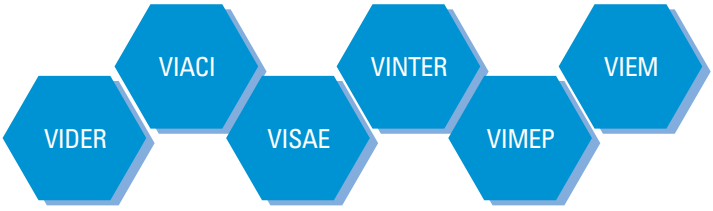


Image 53. Sistema misional del metasistema UNAD.
Fuente: Elaboración propia.

Made up of those units whose responsibilities and strategies are managed in compliance with the institutional mission. They act in coordination with institutional policies through programs, projects and services, aimed at satisfying the needs and expectations of the various users of the institution. Integrated by:

- Vice President´s Office for Social Inclusion for Regional Development and Community Outreach - VIDER

- Vice President's Office for Academic and Research Affairs - VIACI
- Vice President's Office for Services to Applicants, Students and Graduates -VISAE
- Vice President's Office for Intersystemic and International Relations - VINTER
- Vice President's Office of Media and Pedagogical Mediations - VIMEP
- Vice President's Office for Innovation and Entrepreneurship - VIEM

These are the units in charge of energizing UNAD's raison d'être, expressed in each of the substantive responsibilities, which for UNAD go beyond the traditional ones of teaching (comprehensive training), research and extension (regional development), and make viable -additionally- those of inclusion and permanence, internationalization, and technological innovation. These offices manage the policies that correspond to them, as well as the design, direction and evaluation of macro-projects, programs and projects, which guide the strategic action of the functional and operational systems, in coherence with the guidelines of the High Policy System, the Institutional Development Plan and the president's guidelines.

Sistema estructural funcional

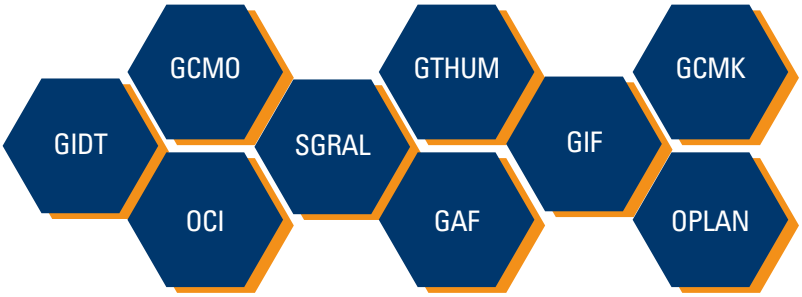


Image 54. Sistema funcional del metasistema UNAD. Fuente: Elaboración propia.

The functional system responds to the actions aimed at ensuring the management of resources that facilitate the fulfillment of the purposes and mission policies. It is aimed at generating the support required to strengthen the mission, the assurance of sustainability, modernization and quality

in the institutional metasystemic model, through technical management, control, procurement, optimization and maximization of resources, as well as monitoring the holistic management of the University.

This system is made up of the General Secretariat -SGRAL, the Internal Control Advisory Office -OCI- and the Planning Advisory Office -OPLAN-, and the following Management Offices:

- Technological Platforms and Infrastructure Management - GIDT
- Quality and Organizational Improvement Management - GCMO
- Human Talent Management - GTHUM
- Administrative and Financial Management - GAF
- Physical Infrastructure Management - GIF
- Communications and Marketing Management - GCMK

Sistema estructural operacional

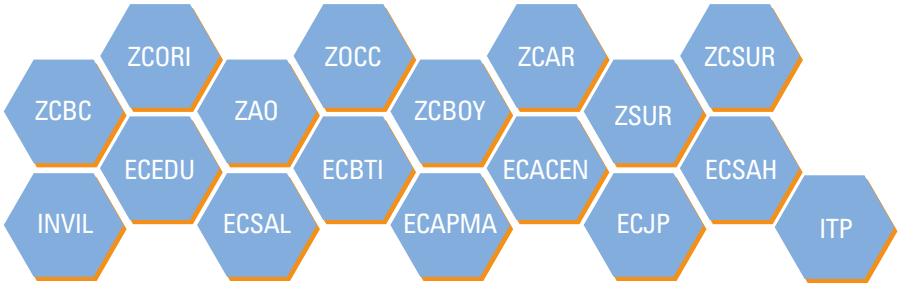


Image 55. Sistema operacional del metasistema UNAD. Fuente: Elaboración propia.

It is composed of those units whose responsibilities are aimed at the coordination and execution of strategic actions to ensure the quality and relevance of the educational service, to ensure the continuous improvement of training and research processes, as well as to contribute to the projects and programs of social projection, inclusion, internationalization and innovation of the university community.

The operational units include schools (which bring together programs by area of knowledge), school councils, special academic units, zonal directorates and their respective committees and work teams, as well as international sections.

The Schools and Special Academic Units of the University are as follows:

- School of Administrative, Accounting, Economic and Business Sciences -ECACEN.
- School of Agricultural, Animal Husbandry and Environmental Sciences -ECAPMA.
- School of Basic Sciences, Technologies and Engineering -ECBTI.
- School of Education Sciences -ECEDU.
- School of Social Sciences, Arts and Humanities -ECSAH.
- School of Health Sciences -ECSAL.
- School of Law and Political Science -ECJP.
- Virtual Institute of Languages -INVIL.
- Professional Technical Institute -ITP.

At the regional level, UNAD has been distributed in zones. The zones integrate the centers that operate in an organizationally delimited departmental and interdepartmental context, a zone that guarantees coherence in the institutional identity and promotes interculturality, productivity and competitiveness of territories and micro-territories. UNAD has eight zones:

- Amazonía Orinoquía Zone -ZAO, which includes the departments of Meta, Casanare, Guaviare, Vaupés, Vichada and Amazonas.
- Bogotá Cundinamarca Zone, which includes the Capital District and the department of Cundinamarca.
- Boyacá Zone - ZCBOY, which includes several municipalities of the department.
- Caribbean Zone - ZCAR, which includes the departments of Atlántico, Bolívar, Cesar, Córdoba, Magdalena, Sucre and San Andrés.
- Western Zone - ZOCC, which includes the departments of Antioquia, Chocó, Caldas, Quindío and Risaralda.
- Central East Zone - ZCORI, which includes the departments of Arauca, Santander and Norte de Santander.
- South Zone - ZSUR, which includes the departments of Tolima, Huila and Caquetá.

- South Central Zone -ZCSUR, which includes the departments of Nariño, Valle del Cauca and Cauca.

Zonal Nodes. These are structural components of the UNAD Metasystem, of an operational nature, responsible for managing the fulfillment of the institutional mission at the regional level, through the directorates of nodes and centers, in order to achieve educational expansion at different levels, towards the consolidation and regional roots of the University.

Centers. They are structural components of the UNAD Metasystem, of an operational nature, responsible for academic management and attention to users and the local and regional community. They are classified as: Open and Distance Education Centers (CEAD), Community Centers for Virtual Care (CCAV) and Regional Development Units (UDR), among other student and community care units.

Institutional networks. They are organizational devices of a participatory nature, which stimulate interrelationships with their members, who work as a team to achieve common objectives and goals, which result in the integration of academic and administrative communities that produce and disseminate information and knowledge, with a sense of institutional belonging. UNAD promotes the following networks:

- Statutory networks, made up of the Student Network, Alumni Network, and Teachers Network.
- Academic networks, made up of the course network.
- Curricular networks.
- Research networks, and
- Support networks made up of advisors and monitors.

Mirror organizations. These are mechanisms whose fundamental objective is to strengthen UNAD's identity as a single organization and to influence the various forms of institutional presence and development in the multiple spheres and contexts of action, effectively replicating on a smaller scale the governance structure of the university, together with its responsibilities and scope, related to its context of action. From these structures, national and zonal leaderships are constituted.

Institutional Boards, Chambers and Committees. These are advisory and consultative mechanisms that operate at the local, regional, national and international levels, in which the representation of various units or levels is combined, with programs or projects in common, and which allow the reticular development and execution of institutional policies.

Interaction for knowledge management with an inclusive social sense

Curriculum management is developed at UNAD from four key components, as can be seen in the following illustration:

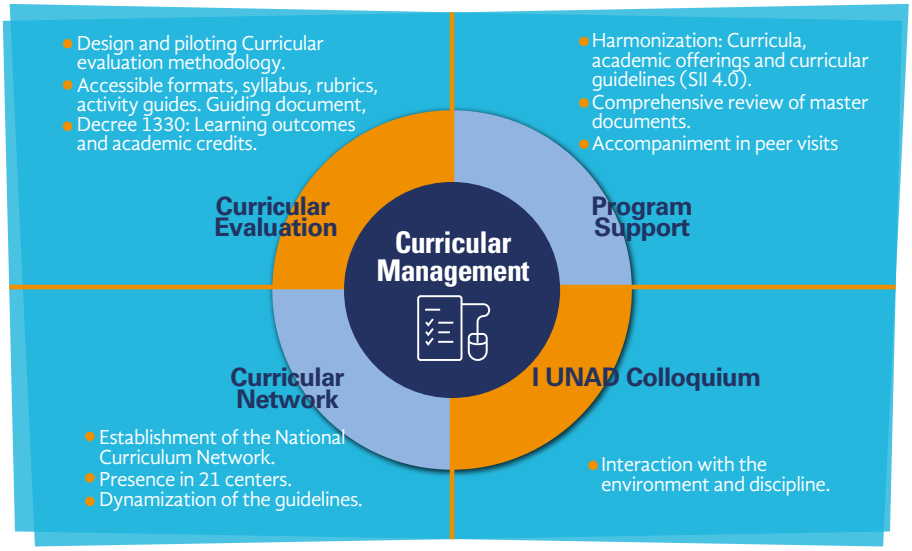


Image 56. Gestión curricular. Fuente: Elaboración propia.

The units attached to the Mission System manage, together with the different Schools and Zones that make up the Operational System, the academic, research, social projection and innovation guidelines, processes and strategies for the development of the educational and practical components that are incorporated at the mesocurricular and microcurricular level in each graduate and postgraduate program.

Likewise, within the concept of holistic sustainability, the Academic Leaders Networks and their fractals enhance the development of research

seedlings and innovation and entrepreneurship seedlings, as well as with the teachers in charge of the practical component, who guarantee the articulation of the metasystem systems.

In turn, the students in the development of their formative process, which is the center of action of the UNAD Pedagogical Model, is strengthened in various scenarios of collaborative work, promoting the social construction of knowledge from independent study to teamwork and the development of products, according to the thematic areas proposed in the Circles of Interaction and Participation, Academic and Social (CIPAS).

Dynamic systems to meet today's challenges

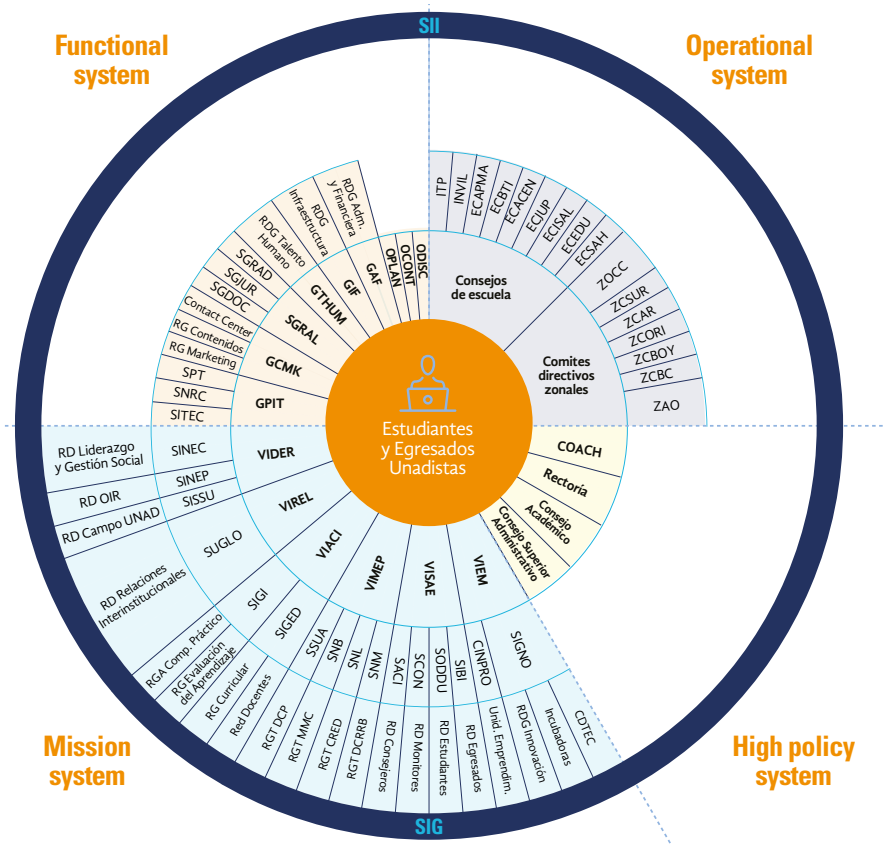


Image 57. UNAD Metasystem.
Source: Own elaboration.

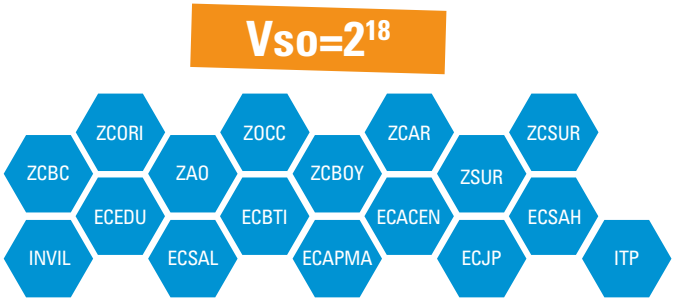


Image 58. Variedad: Sistema Operacional. Fuente: Elaboración propia.

The articulation of all these components of the UNAD metasystem greatly enhances the dynamics, relationships and results expected from the University as an organizational system.

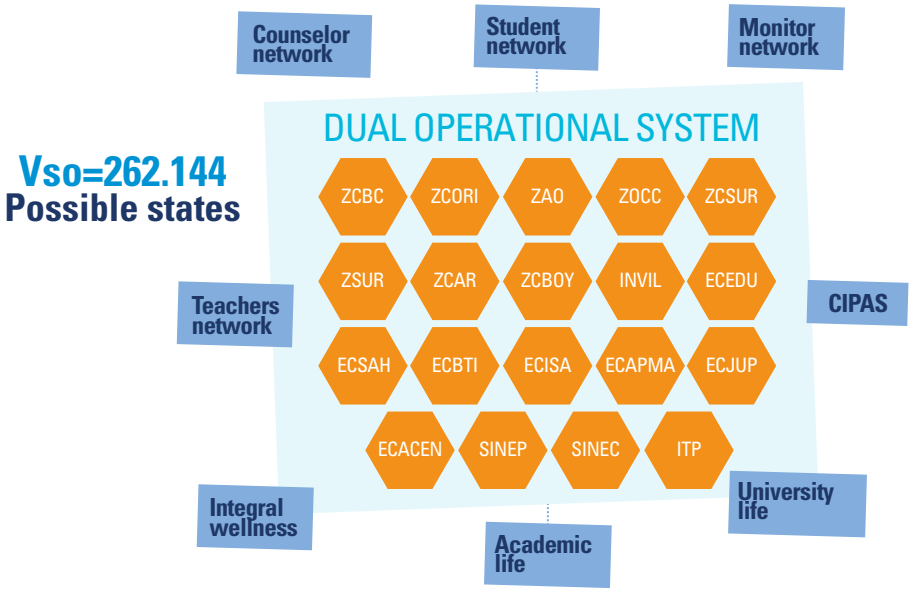


Image 59. Possible states of the Dual System. Source: Own elaboration.

The metasystemic organization has led UNAD to obtain increasingly significant results. What has been formulated here, dear reader, is not a recipe. It is only an imperfect description of reflective analysis based on some unsuccessful practices, but, fortunately, in most cases successful.

It is our desire to share with you what has been learned by our hundreds of leaders in Colombia and abroad, and who have committed themselves, day by day, to deliver more significant and innovative results and greater efficiency and impact in the public educational institutions of Colombia.

What UNAD represents in this case is a good example of the meaning of planned and coherent change in public management. It is not the author's intention for this to sound pretentious, but after participating in various spaces of analysis and reflection with fellow university presidents from Latin America and with various academic directors of Colombian education, I have no hesitation in saying that there is a majority consensus on the urgent need to comprehensive educational renewal in policies and structures of all kinds.

Rigorous virtual education is not about "blowing bubbles", it requires tracing an evolutionary course of policies, understanding with a strong will an educational model based on learning and assuming a high commitment to disruptive innovation in education; that is to say, it is to secure a radical transformation of the policies, structures, norms and practices in all its actors, spheres, cycles and levels, based on an unprecedented collective acceptance and construction of the challenges imposed by the Knowledge Society for, from the pertinent education, to put our continent in tune with the global conversation about where comprehensive training should move forward.

If someone unsuspecting analyzes the results achieved to date by the daily work of the thousands of UNAD members throughout the country, in each region, zone, node or center, without hesitation they would say that their achievements speak for themselves. However, for the university administration, these results are not complete or entirely satisfactory as long as only one of those who come to UNAD to study decides to leave due to shortcomings in the service, because the difficulties will continue to appear every day and will only be mitigated if we learn to listen to our students and applicants, and if we choose to address new challenges by involving our graduates, who will make the educational change an experience as the constant of the Colombian educational dream, and, therefore, Latin American.

If this awareness of continuous improvement is consolidated, we will be an important mirror to strengthen a better Latin American University within the set of all its educational institutions. For this reason, this text has no other intention than to challenge you to embrace the idea of disruptive transformation so that new generations of Latin American leaders come together to work so that we never stop dreaming of a highly qualified and relevant education for our children and young people. Consistent with our realities and socioeconomic contexts and whose graduates are a reference to follow for their dignified moral and solidarity skills, for their frontier knowledge, and for the use and appropriate development of exponential technologies in favor of the well-being of our fellow citizens.

At UNAD we continue to take steps to evolve the model created and thus serve the transformation of hundreds of institutions and thousands of life projects embodied by Colombians and Latin Americans, today hopeless and immersed in endless cycles of violence, poverty and absence of the educational opportunity for the dignity of their lives.

In each of the meetings that I permanently hold with members of the UNAD community, I appeal to reason, and much to the heart, mind, will and commitment of each UNAD leader, so that we are aware of our challenge, of the historical footprint that we must leave, based on the planned route of organizational evolution, and in the coherent articulation between the UNAD mission and vision, through five development plans that have been strategically linked since 2004.

For the leaders of the University, it has been clear that both innovation, entrepreneurship and creativity are learned, and that we all have the potential capacity to develop critical, analytical and powerfully imaginative thinking.

For many years in the scenarios of scientific reflection, creativity and innovation were analyzed, their possible genetic origin, or if our creativity and innovative spirit were the result of a social good derived

from the form of education obtained or a mixture of our evolved intelligence and our potential. Today I firmly believe that at UNAD the commitment of its leaders has expanded in such a way that, regardless of their origin, they contribute their creativity to consolidate this educational project that also seeks to be inclusive and equitable for all those who aspire to transform their existence.

In this sense, there is a majority consensus in understanding that we are all potentially creative and innovative, and it is precisely for this reason that I reiterate the value of human solidarity, to invite the representative leaders of Colombian and Latin American education, from their attitude positive, help to demonstrate that we accept, in the role that corresponds to each one, assume the challenge of manifesting said creativity in the formulation of demanding educational innovations, consistent with our organizational and pedagogical models, to strengthen in our continent a qualified, relevant education and competitive, that is fully commited to inclusion and equity in the pursuit of educational excellence for all.

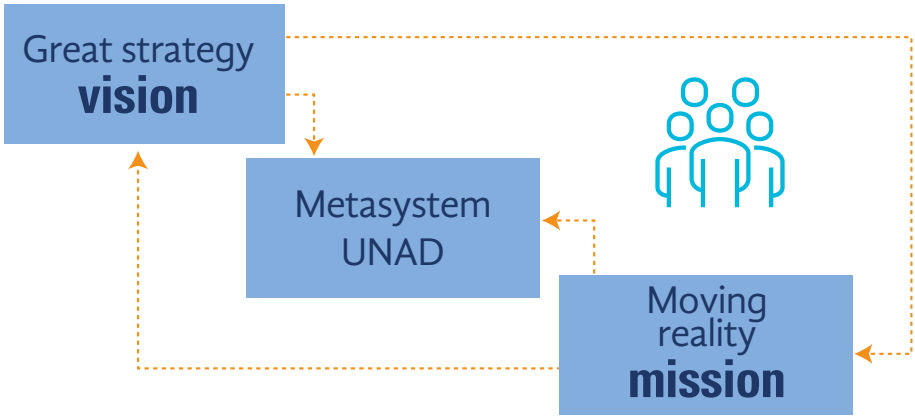


Image 60. Coherence between mission and vision, in UNAD Metasystem. Source: Own elaboration.

UNAD Mission	UNAD Vision
The mission of the National Open and Distance University (UNAD) is to contribute to education for all through the open modality, distance and virtual learning environments, through pedagogical action, social projection, regional development and community action, inclusion, solidarity, research, internationalization and innovation in all its expressions. With the intensive use of technologies, particularly information and communications, to promote and accompany autonomous, meaningful and collaborative learning, generating culture and entrepreneurship that within the framework of the global and knowledge society promotes sustainable economic, social and human development for local, regional and global communities with quality, efficiency and social equity.	The National Open and Distance University (UNAD) projects itself as a leading organization in open and distance education and virtual learning environments. It is recognized nationally and internationally for its innovative quality, the relevance of its educational offerings and services, and for the commitment of its academic community to integral human development and the Eco sustainable management of local, regional and global communities, as well as for its contribution to this purpose.

Image 61. Source: Agreement 014 of 2018, of the Higher University Council.

Chapter 7

UNAD 4.0 and the revitalization of today's university

The university, in general, as an institution - a social instrument to promote the development of communities, is not going through a good historical moment in Latin America.

And I am not referring to the scarce and nowadays generalized drop in the worldwide demand of students due to the pandemic, although in the case of UNAD, unlike most of the Colombian higher education institutions, the confinement and restrictions derived from Covid 19 consolidated the confidence in the virtuality and quality of this University, being the institution that most increased its enrollment rates in the middle of the pandemic, according to a study by the Colombian Association of Universities (ASCUN), among the few that managed to increase. All indicators confirm that even before the pandemic, worldwide university demand had been falling, especially in the orthodox face-to-face training scheme.

This does not mean that the interest of young people and adults in education has declined; on the contrary, it is increasingly confirmed as one of the options -or perhaps the only one- that allows them to move up the social and labor ladder in a dignified and progressive manner. If

the demand for higher education institutions falls, but the interest in education remains and increases.

The conclusion is very simple: other virtual training alternatives are appearing, business, various educational providers, for all audiences, with staggered costs, less bureaucratic and more efficient, which are responding to the expectations of society and that the University, as a whole has not been able to decipher or respond sufficiently.

An objective reading of the Colombian educational history determines, unfortunately, that the impacts on the equitable transformation of our society are scarce and its lack of vanguard generates a lag in the generation of knowledge and appropriate technologies to positively impact the regional problems that grow day by day. Unresolved structural problems, wasted opportunities to make Colombian regions competitive, degradation of the exercise of public affairs with a clear distortion of ethics and morals, hopelessness learned from one generation to another and multiplied during two centuries of history, and, in short, a diffuse side of the coin, especially for the youngest, and polarized more often than not for the older ones.

The University, as a social institution and an effective response to the expectations of the population, has been losing confidence in Latin American societies.

As I noted earlier, the education of today can contribute to the pursuit of happiness and therefore education, seen from the path of innovation, is one of the great opportunities that we should not miss in the university institutions of the 21st century.

A quick review of analyses by industry experts and major companies worldwide -before the pandemic- confirms this worrying reality: "If universities do not evolve, we are going to disappear," warns the dean of La Sorbonne Francois-Guy Trebulle; the same diagnosis is made by David Roberts, of Singularity University, the university of Silicon Valley; for Dan Levy, of Harvard, "many universities are going to close because they are not needed"; in his book Every man for himself! Andres Oppenheimer tells how the president of MIT speaks of the end of some

traditional careers because of the mismatch between what is learned and what is practiced.

For Microsoft, professionals are no longer hired for what they know but for what they are able to learn; and, to top it off, technology multinationals - such as Apple, IBM and Google - are undervaluing university training as "impractical" and out of touch with reality. The list can go on and on, and it is a warning bell.

A university that is alien to the complex problems of its population and context, far from dialogue with the State, closed to non-traditional audiences, located in geographic areas with a large population, with its back to technology and blinded because "it has always been done this way" (like the orthodox), is doomed to disappear, and the people have understood this, even if they are not experts in university studies.

A society that claims to be free needs a solid educational system that forms people with a critical conscience, with analytical thinking and with a clear path of their rights and duties. This requires a dynamic university that, acting as the conscience of that same society, can express itself freely and autonomously on the current and future development of that society, based on its necessary condition for the exercise of freedom of thought, creativity, research and innovation in the service of society.

The events of polarization and violence that are currently taking place in our Colombian society are the result of a citizenry that clamors to be heard and that requires, as mentioned in the Educational Project, "to intensify the sense of the public as a process of nation building and the exercise of deliberative politics and participatory democracy, as a public service, as a public good, as a public presence, from the actions, the tasks and, as a priority, the feelings of our educational community," and hopefully of all the governmental institutions and the actors of different sectors of the Colombian society.

The university that earns social respectability for its thoroughness, for its educational quality, for the relevance of its research and the impact of its innovation, will achieve a favorable result in the formation of men

and women full of values and capabilities in the renewed learning of valid and meaningful knowledge.

I emphasize once again that today's education must contribute to the search for happiness. Education, seen from the path of innovation, is one of the great opportunities that we should not miss in the university institutionalism of the 21st century.

In 2003, researchers Liisa Valikangas and Gary Hamel, in Harvard Business Review, speaking about organizational resilience, issued a dramatic and prophetic statement, which almost two decades later applies perfectly to the vast majority of universities today: "Organizations, they said, fail when they deserve to fail, that is, when they have shown themselves to be consistently unable to meet the expectations of their stakeholders. A noble past does not grant the right to an illustrious future. Institutions only deserve to endure if they are able to withstand the onslaught of new institutions. A society's freedom to create new institutions is its insurance policy against the inability to recreate old institutions".

By 2003, the National Open and Distance University (UNAD) was at a crossroads, since it had already fallen into the traditional model of a pachydermic public university and found it difficult to survive by breaking away from this model. It took 20 years (1983-2003) of accumulated frustrations that both distance higher education and UNAD, as a public pilot of the same, to become fully aware of how far it was still far from its true impact of quality and inclusive and equitable relevance for Colombian society. The distance education of the time did little to show itself in its real formative and investigative dimension, and without embarrassment, before the recurrent scarcity of quality of its mediators, means and mediations, it gave permanent reasons of its also scarce pertinence to its detractors.

When we arrived at the presidency of the university we set out to redesign the path and, modestly but proudly, I consider that despite the difficulties, criticism from the establishment, rejection from the educational orthodoxy and many eyes on us, today we can "charge" positively, for the benefit of Colombian higher education, that we were able to make an institutional turnaround, and today we are much more than a teach-

ing and program offering university, which is the paradigm in which the collective of higher education institutions has been embedded.

We started in UNAD 1.0 and we are now in UNAD 4.0

By essence, the University is reflexive, changing, collective - systemic, and has the responsibility to overcome its environment, anticipate complexity, seek alternatives and take risks. Traditional universities with some success respond to the first descriptions, but almost none of them face their responsibilities, which is what we have done, as a team, thanks to the commitment of the leaders of the vice-rectorates, schools and zones, at UNAD.

Some public opinion leaders and "sacred cows" of the sector have tried to put us on the asphalt, and from the media, legal, social and academic pressure, we have recovered and, for the same reason, we have discovered that continuing to do more of the same would only respond to the expectations of a few, but not of a Nation thirsty for educational opportunities.

Therefore, with creativity, research, courage and risk, in legitimate use of university autonomy, we have discovered that effective management is possible, and that it can also be oriented towards the problems of the country and the students, rather than the scarce economic resources that have been provided to UNAD by the Colombian State, but that have not stopped our academic, rigorous and flexible responsibility, in addition to the promotion of teamwork, intelligent and productive, and the integration with other key social actors in the disruptive commitment that revitalizes today's UNAD.

Being the Colombian mega-university is just one of the impacts of an innovative and efficient organization. Although enrollment figures have increased exponentially in the last three years, serving this population, increasing programs with accreditation, expanding educational offerings in programs and territories, expanding internationally, gaining recognition for our work environment and financial management, and leading national and international forums on virtual education, is not luck or a mere one-day event.

It is the result of the quiet, silent and committed teamwork of more than 17 years at the head of the University.

As I mentioned in chapter four, we have identified the current UNAD metasystem management model as UNAD 4.0, not because of the novelty of the name, but because it means that to get there we have gone through UNAD 1.0, UNAD 2.0 and UNAD 3.0.

We have dated UNAD 1.0 to 2004, when the University's structure was modified and reduced by presidential decree. This allowed us to project ourselves as a structure in accordance with the expectations of the pedagogical model that was beginning to consolidate.

Between 2006 and 2007, when we achieved full university autonomy and went from being a university establishment to an autonomous university entity and began to implement the performance criteria of Systematicity, Reticularity, Innovation, Heterarchy, Accountability, Fractality, among others, we began to dimension a real university with a national character, homogeneous in its actions and with a national impact. This consolidated UNAD 2.0.

As the Internet evolved and developed applications, software, programs, repositories, and various tools to accompany and qualify the learning process mediated by technologies and with the help of tutors, UNAD 3.0 was structured. It is in the network, all digital, how the University manages its day-to-day academic, administrative, financial, database, welfare services, interaction and control, among other aspects.

And once the University was consolidated in its processes, and as a way to respond not only to the high demand of students but, above all, to the need to be proactive and provide timely responses to the new twists and turns of higher education and what society expects from it, for the 2019-2023 rectoral plan, UNAD 4.0 was structured, and has been gradually consolidated.

This UNAD 4.0. is conceived as a result of the integral metasystemic evolution of the Academic Solidarity Project, which registers as a

guiding principle of the management actions the peremptory need to address, from the university vision, the change, with anticipatory exercises against the duties and responsibilities as an organization, which is legitimized in the prospective as a rigorous tool for the construction of the future.

Thus, UNAD 4.0 is the result of the integral metasystemic evolution of the Academic Pedagogical Solidarity Project-PAPS, which defines the guidelines that seek articulation to serve as a guide to our mission, facing the challenges of the Knowledge Society, and the role that as an intelligent organization we must fulfill to strengthen our educational leadership.

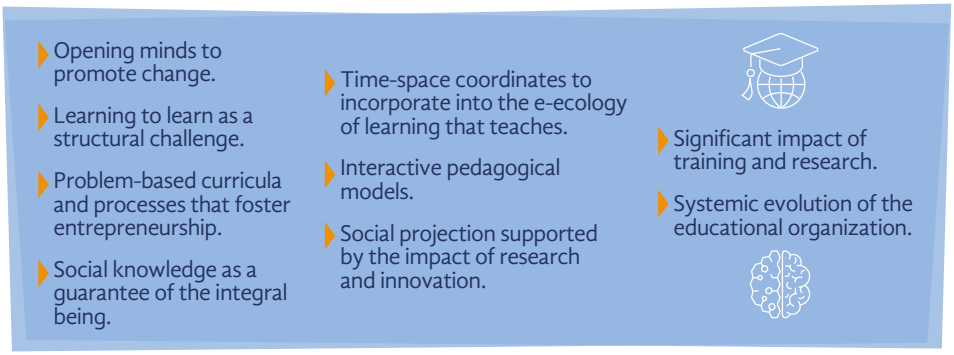


Image 62. UNAD 4.0: Organizational learning.
Source: Own elaboration.

This is a permanent exercise of democratization for the access, permanence and promotion of diverse population groups, guaranteeing them an education with quality and relevance.

In this sense, the integral formation implies, as already mentioned, developing the competencies that carry a new social leadership rooted in all of us who are part of the UNAD community, with the purpose of empowering managers of transformation of individual and collective life projects, given the high community potentiality demonstrated for four decades in favor of the development of the regions with positive effects on micro-territories and populations that require the programs and services developed by the different systems of the metasystem.

This is why UNAD 4.0 is an evolution that demands more from its leaders every day:

Image 63. Leadership and its impact on organizational environments. Source: Own elaboration.

As mentioned above, the evolution of the Academic Pedagogical Solidarity Project, PAPS, in its versions 1.0, 2.0 and 3.0, and now 4.0, shows the will of our University Higher Council to strengthen the value of the educational transformation path and contribute to the social transformation of Colombia.

Today, at the head of this collegiate body, UNAD as an educational community challenge itself once again to become a reference in the context of global society, and to continue its strategic educational action towards a purpose of social impact, from its innovative pedagogical action and with multifactorial schemes in which population coverage, inequality, educational quality, participation of the young population, social mobility and effective entrepreneurship, dignify our fellow citizens.

UNAD 4.0 will continue working to consolidate the key human values for a prosperous Colombia, supported by its educational model and the

development of multiple innovative strategies and the generation of exponential technologies, to procure sustainable development in the communities of this diverse and multicultural nation.

UNAD 4.0 will strengthen its innovative and inclusive action towards the potentiation of its human, academic and research platforms, in its different systems, in order to consolidate its impact on multiple sustainable ecosystems with creative developments from innovation, efficiency and integral productivity in territories and micro-territories.

UNAD 4.0 will also contribute to its purposes with a human talent of the highest disciplinary and pedagogically qualified level, so that they can contribute in a conscious and committed manner to the different sectors that impact the integral wellbeing of people, communities and regions of Colombia.

In summary, UNAD 4.0. is a real contribution to the constitution of an innovative and relevant educational model based on the realities of Colombia and Latin America. We must consolidate it at all costs as our great competitive advantage, demanding from us forceful efforts with more effective results and in less time than the contributions and strategies that we have achieved so far.

Differentiating institutional commitments

In addition to the University's original and modern governance structure (discussed in the previous chapter), the UNAD 4.0. concept has already, halfway through the current president's term, boosted the following macro-projects (presented in no particular order):

- Organizational Center for Higher Studies and Qualification of Human Talent (COACH)
- Metasystemic Global Staff
- Campo UNAD
- Regional Intersystemic Observatory (OIR)
- Open University System (SUA)
- Professional Technical Institute (ITP)
- Comprehensive Care System (SAI)
- TV UNAD Virtual

- Integrated Institutional Intelligence System (SIIUNAD) 4.0
- Retention and Permanence Policy (RP)
- Internationalization and UNAD Global

Below is a brief summary of each of these strategic scenarios.

Organizational center for advanced studies and qualification of human talent (COACH)

UNAD 4.0 has decided, by majority consensus of its educational community, and by agreement of the University Higher Council, to create the Organizational Center for Advanced Studies and Qualification of Human Talent (COACH), as a scenario to forge the legacy that, devoid of particular interests, is delivered to the Colombian society as a model of inclusive and high quality university in its programs and services for the entire population.

This COACH, referred to in the previous chapter as part of the High Policy System of the UNAD Metasystem, will consolidate the policies aimed at strengthening the human platforms of UNAD, for its different systems and structural networks, and will house the strategies, programs and projects for the selection, qualification and promotion of UNAD leaders of today and the future. This is not an expression of endogamy, but a way to influence the understanding of a university model forged from its mission essences and its prospective vision in the expansion of qualified and relevant opportunities of educational programs and services, using as key tools the so-called mentoring and coaching processes to strengthen coherent relays in the exercise of the mission legacy.

Metasystemic Global Staff

To consolidate its vision, UNAD needs to provide the best working conditions for its hundreds of employees in Colombia and abroad. What has been achieved is mainly the result of the collective and solidary effort of our leaders, who, in a committed and coherent manner, share and make possible on a daily basis the postulates, principles and criteria of action of our PAPS 4.0, in the exercise of our institutional foresight.

The Global Metasystemic Staff is also a UNAD creation, as has been the inventiveness of the metasystemic organization itself, in coherence with its fields of action and the different systems, networks and units where its leaders manage on a daily basis.

This form of organization, distribution, allocations, recognition, career and merit, among other aspects, is unique in the Colombian higher education system, as well as in the State University System, and is the product of a concerted and participatory work of its community, outside of rigid, costly, politicized schemes that are not very dynamic for personal and social development.

The Metasystemic Global Staff will promote:

- The consolidation of the Mega-University in the context of megatrends, with a prospective vision and research and innovative, intelligent, dialogic, open and flexible capacity, that proactively responds in a suitable, ethical, pedagogical and socially responsible manner to the problems of quality coverage and promotes equity, social inclusion and lifelong learning.
- The creation of conditions that promote the rooting and permanence of its students and graduates in their places of origin. In this way, UNAD contributes to reduce the phenomenon of migration of qualified human talent to promote regional development in the search for relevant solutions to the needs of the communities in which it seeks and will seek educational social impact.
- Innovation for organizational development and its social impact, and co-responsible action that contributes to closing the digital divide by endorsing the implementation of Big Data, Maching Learning, Blockchain and artificial intelligence with the strategies and projects formulated from the Institutional Development Plan towards the route that recognizes the permanent irruption of new technologies, interconnected with the organizational metasystemic architecture.

The aim is to have a Metasystemic Global Staff that promotes the consolidation of the institutional mission.

In this ideology of UNAD commitments, I emphasize, it is necessary to enable better conditions for the dignity of work, the valuation of social interaction and the cultivation of symbolic language and those values that constitute non-conventional resources, such as creativity, innovation, participation, solidarity, cooperation, mutual aid and understanding of the metasystemic processes that occur in our educational community.

On the other hand, our leaders make it possible to understand the globalized world, emphasizing in the regions the necessary dynamism of the transformation processes required by new times, spaces and intercultural relations. Thus, they respond to the challenge of globalization, competitiveness, and decentralization of the different territories, as protagonists of their own development and the development of the various communities involved.

The changes described above reaffirm the need to develop new competencies in the exercise of leadership, which must also, at the same time, evolve at the same time as the constant prospective exercises in the face of the duties and responsibilities required by our organizational evolution.

This legitimizes the interest in having and providing job stability, consistent with the desire to provide wellbeing and with the Unadista organizational model. This Metasystemic Global Staff will guarantee that, in the near future, the following intentions will be strengthened:

- Consolidate a university community based on an axiological framework of educational social service.
- To strengthen the academic community so that it is, in effect, participatory, deliberative, creative and capable of guiding the changes that are required internally and externally.
- Promote the innovative organization derived from the Organizational Statute for a creative and harmonious institutional development.
- To foster environments conducive to meaningful and autonomous learning for all members of UNAD; in environments brimming with solidarity and respect for all forms of expression and lifestyles.

- To understand and contribute to the necessary transformation of educational relationships and pedagogical practices, in order to develop the capacity to act in new learning environments that enhance human virtues and spirituality, as a condition for the success of an ethical professional and work performance, above any technological determinism.
- Strengthen a culture of knowledge, innovation and research in the context of inclusion, regional development and community outreach.
- Strengthen pedagogical, technological, social and humanistic competencies in the context of the open and distance modality and its digital and virtual expressions, to consolidate UNAD members as community, ethical and supportive leaders, trained under national and international quality standards, committed to the development of their region and with the highest cognitive, socio-affective, intercultural, scientific, technological and research competencies.
- Contribute to the improvement of conditions for a post-conflict society, through pedagogical practices and experiences for peaceful coexistence.
- Emphasize identity and leadership in the field of open and distance education and in virtual environments, giving meaning to daily actions and recognition to the UNAD brand.
- Interact with the communities, harmonizing UNAD's progress in its Solidarity Academic Pedagogical Project 4.0, frontier knowledge and state-of-the-art technologies, and respect for traditions, culture and ancestral knowledge that must be strengthened by a permanent dialogue of knowledge.
- To have an effective national and international presence, ensuring that wherever there is a fellow citizen who needs and wants to be educated, he/she will find the opportunity to do so with UNAD, given its trans-territorial and cross-border nature.

In summary, the Metasystemic Global Staff will strengthen the 2019-2023 Development Plan (More UNAD, More Country), which is the necessary route to renew the commitment to the institutional mission, vision, principles, values, goals and objectives.

Campo UNAD, sowing a networked country for peace

In the prologue I wrote for the presentation of this project in 2015, I highlighted that "the hypothesis that guides Campo UNAD is that public higher education should change its axis of needy relationship with the State, for a priority relationship with civil society, so that the latter, strengthened by education, redefines its relations in general with the State, a State that has generally been absent from the basic priorities of the collective welfare of Colombian men and women".

UNAD's educational project emphasizes that the public is the means that gives meaning to the common good. The environment of the public is constituted by pluralism and the recognition of the other. Rethinking the public not only from the State but also from civil society, is an interesting twist of the concept, for its realization from the practices of higher education in the service of lasting peace among Colombians.

In our case, as a public university, the regional, community and solidarity-based essence of UNAD has allowed us for almost 40 years to focus on this priority relationship with civil society, reinforcing the public dimension of the educational service.

This implies, among other things, considering that in the public dimension of education, it does not matter whether the provider is public or private in nature, that it contributes to:

- Strengthen democracy, that is, the social fabric in the interaction between civil society and the State, as a meeting place for common interests.
- To establish principles of coexistence and respect for differences.
- To train to cooperate for the common good.
- To train in solidarity as a public-ethical value.
- To apply knowledge for individual and collective well-being, for sustainable human development and social inclusion.
- To exercise intellectual and moral leadership.
- To strengthen the constitution of citizenship in multiculturalism and in active and ethical participation.

To contribute to the post-conflict evolutionary process, UNAD offers the country all its installed capacity in human talent, geographic coverage, physical and technological resources represented in software, hardware, networks, connectivity, innovative platforms for web radio, streaming television, immersive platforms, mobile devices and web conference platform.

And it is there where Campo UNAD is formed, whose objective is to qualify the educational and productive condition of the rural inhabitants, through the multiple formative levels offered by the Institution (literacy, primary, secondary, tertiary, formal and non-formal education) attending each of the needs in education, training and qualification of the farmer and his family, at the same time improving their productive processes. All this with the support of public and private organizations in the agricultural and mining sectors, leaving visible the effect of a new Colombia in the post-conflict era: more social, more equitable, more inclusive and, of course, more respectful in the conservation of its environment.

Campo UNAD is therefore an alternative oriented to rural populations and their families, characterized by a pedagogical, methodological, didactic and productive proposal that is highly coherent with each other and with the needs of the communities to which it is directed.

Campo UNAD has defined management, administration, training and follow-up processes, in addition to the development of teaching materials and didactic strategies that respond to the theoretical positions of the inherent training and research processes.

Campo UNAD reaches rural populations thanks to a robust institutional technological platform, through media such as: Radio Campo, TV Campo, Campo Red, Bibliocampo, Mi Finca and Agro-services, among others. In addition, Campo UNAD's interactive application will be aimed at Colombia's rural population (children, young people and adults who work and live in the countryside), as well as all those interested in agricultural and livestock issues in sectors such as production, marketing, marketing, arts, crafts, trades and customs, and other aspects of interest to rural dwellers.

UNAD intends to be an efficient mechanism for Colombia in Peace, and to this end it has significant strengths for the design, adaptation and interoperability between different mobile platforms, via the web, videoconferencing, augmented reality, physical and technological infrastructure. These institutional potentialities, as well as its presence in 1,116 municipalities through 65 regional centers distributed throughout the country, allow it to reach and benefit all Colombians, but especially the most vulnerable populations.

Campo UNAD allows the entire rural population to access knowledge, but also to generate it, making use of different technological platforms and supports, such as tablets, computers and cell phones. These media mobilize information in a pedagogical and didactic way in a simple and clear language, favored by the interconnectivity provided by the government to Colombians and the technological infrastructure available in the country, according to the diagnoses of the Colombian digital ecosystem.

In summary, Campo UNAD, attached to the System of Inclusion, Community Outreach and Regional Development, will address the common needs of certain social groups (workers, families and rural dwellers) related to: agricultural production, agro-industry, access to land tenure, credit, markets, technical assistance, technology and information to support the agricultural sector and other alternative activities such as handicrafts, agro-tourism, entrepreneurship, associativity and leadership, in order to provide a series of benefits that result in improving the quality of life of the different actors participating in this process, contributing to one of the millennium goals related to the reduction of poverty and, consequently, contributing to lasting peace in Colombia.

Regional Intersystemic Observatory (OIR) and the future Territorial Thought Centers

At the launching ceremony of these macro-strategy initiatives, in 2019, I stated: "One of the most important new challenges facing UNAD action and leadership in the face of the challenges of the 2019-2023 Development Plan (More UNAD More Country), is embodied in the so-called Regional Intersystemic Observatory-OIR- which seeks to ensure the

understanding of our regional realities and, from there, deploy strategies and construction actions with other actors and social leaders in the search for structural responses to problems and the use of opportunities to jointly forge sustainable comprehensive welfare to population collectives in all territories and micro-territories of the country"

Of course, the OIR will also contribute to the training of social leaders to be the basis for the development and strengthening of Territorial Thought Centers, the result of an effective social conscience that we hope, from now on, will begin to build reflections and concrete actions in the path of the leaders of the University and of the leaders of the various communities and regional sectors.

As we have always reiterated, and as stated in the UNAD manifesto, "the character of service and public good of higher education, understanding public service also as a public dimension of excellence, autonomy and social responsibility, is not in doubt and this document reaffirms this historical vocation of UNAD with full moral and ethical sense, without going into further preambles, since the discussions on the subject are no longer focused on whether it is so, but rather on how it should be transformed from education to promote an extended integral wellbeing", which ultimately is nothing more than making PEACE a living letter and not just a polarizing discourse in the national context.

Both Campo UNAD and the Regional Intersystemic Observatory (OIR) are legitimate outcomes of UNAD's mission.

These developments make visible the new relationships that must be established between the University, the State and civil society, and which require a profound and pragmatic redirection with the participation of all the living forces that want to incorporate their knowledge and expertise to this transforming scenario.

Thus, UNAD has called on members of the State and members of all governmental and non-governmental organizations in each region and territory to recognize the importance of an integrated action for transformation, based on collective, non-partisan interest, and fully aware that if public and private institutions continue to weaken due to the

scarcity of their social impact, there will be no way to build a truly sustainable and competitive society over time. Let us not continue leaving our difficulties of always and today for the governments of the day to solve them, we are aware of their necessary support, but also of the vital role of the living forces of the communities and sectors that must be revitalized in the construction of an active and participatory State.

This is a task that must be assumed reflexively and critically, because the diagnosis in this regard is made periodically, but the planned action is still of little impact, especially in marginal Colombia, which is the majority. Sadly, and up to now, we have not found for this Colombia, rigorous proposals that beyond the media, support the true meaning and sense of education and its institutions to consolidate peace and the true welfare of our country.

Only the intelligence and dynamism of the key actors in each region and territory will serve as the nucleus of new networks that will lead to the transformation and social, economic and educational mobility of Colombia.

Open University System (SUA)

In the founding document written, among others, by the engineer Leonardo Yunda, current Vice President of Media and Pedagogical Mediations of UNAD, it is stated that "the Open University System -SUA is characterized by an offer of training courses that favor the certification of competencies in specific fields of knowledge, 100% online, developed in a short time through flexible, dynamic and self-directed learning strategies with the support of interactive multimedia applications".

Another aspect that justifies the creation of this System is centered on the concept of education for life, and for all. It is understandable to think that to supply this premise, UNAD has the Continuing Education System and the Continuing Education System, to respond to this education, as indicated by UNESCO, plus the Open University System (SUA), becomes an adjuvant for this healthy purpose that thinks of those excluded in some way from the Higher Education System, for whom assuming the high costs of the certification of competencies has become a barrier for their professional achievements, and the

SUA, from Another pedagogical approach, totally different from those that prevail in these systems, is perfectly coherent to maintain that training continuity called Education for Life.

One of the components of UNAD's Academic Pedagogical Project, the Academic-Contextual aspect, makes an essential call to UNAD as Universitas, which obliges and commits it to fulfill three wills, which give total sense to the SUA proposal. Let's see:

The first goal corresponds to the "integral formation of the human person, through communicative action, hopeful dialogue and formative research" (PAPS 3.0, 2011, p. 145). Thus, the SUA undeniably responds to the integral formation that has been conferred to the UNAD as Alma Mater generator of knowledge, which does not discriminate the person to access an educational opportunity, but keeps open the four assumptions of that undeniable communicative action, according to Jürgen Habermas: intelligibility, truth, rectitude and veracity.

The second goal, related to "the management, production and socialization of scientific knowledge, through research, systematization, conceptualization and critical appropriation of life and intellectual experiences" (PAPS 3.0, 2011, p. 145), supports the creation and philosophy of the SUA, since this management, production and socialization, as well as life experiences, constitute the elements that provided valuable information to determine the necessary creation of the System.

This is the result of UNAD's experience as an open system, as well as the accumulation of projects it has carried out throughout its history with disadvantaged communities, developed through its students in the eight zones where it has a presence. The result of this aim is today the starting point for the SUA.

The third and last goal is associated with the "qualified service to the community, appealing to the validation and enrichment of the knowledge produced by the university and the critical appropriation of the knowledge incorporated in the communities, to enrich it and energize its productive and cultural potential" (PAPS 3.0, 2011, p. 146). Consequently, the SUA through its proposal of qualification to certify

competencies, favors the process in different areas, of selected courses of the Schools, to contribute to society, and that allow to qualify in a specific knowledge so that their labor options increase and the productive potential of their knowledge is effective in the context where the students apply it.

In addition to these efforts, it is imperative for UNAD to stimulate the technological and scientific competencies of its students, and to a lesser extent, without underestimating their importance, the basic competencies of the professionals trained by the university, common to different trades, so that our professionals can perform adequately in their discipline.

In short, the Open University System - SUA, complies with the raison d'être of UNAD to meet its substantive functions, as it potentiates the development of the person "...through comprehensive training... so that the demands of Social Projection, as a relevant element of the Academic - Contextual Component, which makes visible the Mission and Vision of the University, are a reality today".

The SUA will also "organize learning paths focused on strengthening not only technical and theoretical competencies, but also transversal competencies to meet the training needs of a target population that is currently entering a changing labor market that is constantly evolving and demands integral professionals who, in short, are capable of performing the tasks assigned to them, because they meet the conditions for success.

These routes will also contribute to persevere in lifelong learning and, at the same time, to obtain a certificate that will support the participant to have better job and professional opportunities at national and international level".

Professional Technical Institute (ITP)

EIn UNAD 4.0, the creation of new academic units enhances the mission of seeking a greater impact in the qualification of a highly relevant human talent for the productive sector and that allows companies and industries to be more competitive and productive.

This will enable their effective participation in global markets for the commercialization of products and services. This is where the Professional Technical Institute (ITP) appears as a device managed from dynamic and flexible curricula with the capacity to respond to the knowledge revolution, and that under the dual training model determines an approach based on skills and competencies that are formulated as a product of applied practice in conjunction with industrialists and entrepreneurs, in the scenario of disruptive and exponential technologies.

The action of the ITP will favor training strategies and its objective will be to respond to policies of modernization of production and competitiveness that demand a highly qualified human resource in the current scenario of the revolution of technological knowledge. Thus, the training of technicians and technologists in Colombia will substantially change its current training model and will contribute to the articulation between the university - productive sector - social sector through virtual on-site practical training.

This approach will ensure the flexible and adaptive curricular changes and transformations necessary to bring the training of technicians and technologists out of their backward position. Unfortunately, with few exceptions, today society recognizes them with a professional handicap translated into low salaries and little reputation for their work.

The ITP, created in 2019, within the Metasystem and in particular in the operational area, advances in specific curricular designs in two disruptive technologies: Software and Multimedia Development, so necessary for the labor market, as confirmed by the market analysis made by the SENA Labor Observatory, which measures the behavior of occupations at national and departmental level, based on the information of enrollees (people seeking employment), vacancies (human resources requirements by companies) and placed (successful job placements) (SENA, 2017). According to the latter, among the occupations most requested by companies and with the least response are those related to ICT and computer systems.

These technologies include those related to information systems, programming, graphic design, info-technology, big data and gamification.

Thus, dual training, such as that planned by the ITP, can simultaneously generate potential institutional performance scenarios for graduates of the two programs.

In Latin America there are many job opportunities in the field of information systems (application design, programming and functional analysis of systems), as well as in the area of design that accompanies multimedia productions, making this specific labor demand necessary to meet the challenges of globalization and to make our societies more productive and equitable.

The ITP will also provide the training required by multiple companies from all sectors in areas such as: Development of mobile Apps and games for IOS and Android, frameworks and databases; management of specialized software and all kinds of computer tools necessary for the development of content and multimedia projects such as Illustrator, Photoshop, Corel, Autodesk, Unity 3D, among others; digital marketing (SEO and SEM management, digital marketing strategies, implementation of AdWords campaigns, Community Manager and specialized knowledge about social networks), among others.

Regarding work experience, companies require a minimum of one year of ITP-certified experience. This experience is acquired during the training process, since the company will be the core learning place.

In the near future, the ITP will strengthen dual training in areas such as:

- Systems Programmer Analyst - Multimedia.
- Professional Graphic Designer - Multimedia.
- Graphic Design and Multimedia.
- Technical Masters in Multimedia or Systems.
- Video Game Developer.
- 3D Designer.
- Digital Marketing Specialist.
- Commercial Specialist in Digital Marketing.
- Master's Degree in Digital Marketing Analyst.
- Digital Technologists experts in/Community Manager/Web Development.

Integral Care System (SAI)

As a result of the Covid 19 epidemic, many institutions turned to virtuality to safeguard students, and slightly transformed their on-site structures and tried to optimize technological platforms that do not always meet the quality required by virtuality and that demand the articulation of pedagogical, didactic and technological resources.

This lack of rigorousness has caused that instead of counteracting desertion, this performance has dramatically increased it. Due to situations such as these, many have been quick to describe virtuality as a disaster, instead of self-criticizing the way in which erroneous decisions were made, which have undermined the social reading of the valuable educational impact of virtuality.

Organizations such as UNAD know that one of the most significant requirements of the model is based on the timely ability to respond to the concerns of its students and other users of its services and programs. Therein lies one of the greatest difficulties faced by a complex organization: to guarantee the absolute satisfaction, in terms of quality and response time, of each of the thousands of queries and the necessary effective response to which each user is entitled by the Institution.

The evolution and growth of the University has brought with it new challenges in terms of the necessary interaction with our stakeholders. This has led to the strengthening of internal and external communication systems through mechanisms and strategies that strengthen the institutional image, identity and reputation, as set out in the agenda of the university's presidency 2019-2023.

In this context, and in order to respond to the purpose of improving services, since 2010 the strategy USER ATTENTION SYSTEM (SAU) was designed, which was adopted by the University in 2013. Said System adequately fulfilled its objective, but due to the continuous increase in the demand for new services and the increase in the student population, it was seen that it showed signs of lag and dissatisfaction, so in 2018 it was necessary to redesign it and turn it into a new comprehensive attention system for UNAD.

This exercise was based on the analysis of the information obtained from the four service channels available to the SAU:

- A module for filing Petitions, Complaints and Claims,
- An Information System of the Vice President's Office for Applicant, Student and Alumni Services - SIVISAE,
- The Contact Center databases, and
- The Academic Registration and Control databases.

We found that, as demand increased and multiple care variables emerged, the process became limited in its capacity to deliver effective and timely results in response to requests.

This is how, in 2019, the SAI Integrated Care System was projected, based on a substantial premise: the consolidation of a UNAD Service Culture, supported by disruptive technologies of artificial intelligence, big data analysis, automation and Machine learning self-management.

With the SAI, since February 2021, it has been possible to meet 80% of the requests in a self-managed manner and the remaining 20% with the support of the Metasystem's actors.

The SAI was materialized in a very robust technological tool, with a single entry of requests that are automatically classified and routed. There, the user is notified that his request has been received and is being processed, and the response time is announced, in case it is not automatic; and didactic tools and resources are added for the induction, training and permanent qualification of the various internal and external users.

The new system was accompanied by an intensive and qualified permanent induction of the organizational members of the various Systems, Networks and Units of the University, so that they would recognize the importance of the activities and the results of the productive work they carry out, in relation to the needs of users.

However, the SAI also seeks to guarantee the timely and efficient flow of communication between the organization's systems, units and networks, in coherence with the criteria of metasystemic action, according

to which each and every one of the Organization's actors is called upon to participate in the user service cycle: applicant, student, graduate.

The SAI has the challenge of providing an optimal service of timely attention that promotes immediacy, quality and timeliness, and at the same time, reduces, with zero tendency, the levels of repeat requests.

Thus, the attention to user requests is prioritized in the first instance to the access of self-managed channels, so that the user can autonomously resolve his or her request. These service channels will provide immediate responses to requests fed by a knowledge base, supported by artificial intelligence. Examples of this are virtual assistants or chatbot, WhatsApp Bot and automated FAQ forms, among others.

Likewise, the service channels in which information is provided by an actor or an academic or administrative network are configured in a synchronous and asynchronous manner. Synchronous channels are those in which there is real-time interaction between the actors, and asynchronous channels are those in which communication is timeless. Priority has been given to channels such as a national telephone hotline, virtual chat with 7x24 advisors, personalized attention in centers, social networks and the automatic response management module, among others.

In addition, an added value of the SAI lies in its purpose of identifying the trajectory of each user and their experience with the University, so that, together, we can establish the most effective way (in time, means and responses) to improve and maintain a positive experience that improves their perception of the services delivered by UNAD.

UNAD Virtual TV and UNAD Virtual Radio

I have always had a special liking for radio and television. In fact, in my youth I was a radio broadcaster in the 70's and at the beginning of my role as dean of engineering at UNISUR we had a TV program called "Mention of Honor", to recognize Colombian men and women of science, which was broadcast through the Hispasat signal, the Spanish ATEI satellite. Then, as university president, since 2004 we managed the open television slot to make two programs on the institutional public channel: "Educación y Desarrollo" and "Con Olor a Región",

which are still broadcast today on the Institutional Signal and the Zoom University channel.

Also, fifteen years ago we initiated the transformation of the university's mass media, deploying an analysis of possible scenarios for the mass media. Thanks to the enthusiasm of Miguel Ramón Martínez and Carlos Lineros, the option of virtuality was created for radio and then, years later, for television. This is when the virtual channel appeared. RUV or Radio Universidad Virtual was born with the support of leaders such as Andrea Franco and Briceida Valderrama and hundreds of others throughout the country, who turned the spirit of a constantly growing grid into a scenario of support for the integral formation processes of the student body.

Several awards and recognitions to our RUV confirm the value of this educational media opportunity.

On the other hand, on a certain occasion, regarding the pandemic, and while UNAD management leaders masterfully intervened in an open conversation with our students through our TV channel on YouTube, I realized that we were facing a competitive advantage like someone who sees a new blue ocean.

For UNAD, its YouTube TV channel: UNAD VIRTUAL TV was created about 10 years ago after the UNAD Virtual Radio which, as I noted, today enjoys great success and recognition. With the TV channel it has not been like that, until now: we see a great opportunity and, of course, it should be part of that great competitive advantage. Today we have everything we need to make this mass media a window for dissemination and meeting with the communities to strengthen institutional performance, and be a media scenario of Higher quality and innovation. With a decade of existence, it will be one of our best opportunities to get in touch not only with the student body, but also with Colombian and Latin American society.

This example of competitive advantage, until today not sufficiently efficient, is a great area where we can take advantage in a metasystemic way of increasing our value chain for the beneficial educational impact of student populations of all cycles and levels.

UNAD VIRTUAL TV will be able to strengthen each of our systems with its own scope for each population segment, for each macro-project of the Development Plan, expanding our geographic reach in regions and countries, and enabling the great diversity of actors and related strategies that are part of our vision of also contributing to the Ibero-American educational institutionality.

This valuable tool also helps us to strengthen our Intersystemic relationships, which must continue to be built in order to make viable an institutional portfolio of highly relevant educational social products and services for society.

UNAD's portfolio, in turn, serves to strengthen the Higher Education System with its different schools and graduate and postgraduate academic offerings: the Continuing Education System and its inclusion areas such as the Regional Intersystemic Observatory; the Continuing Education System and its different short-term qualification offerings; as well as the new Open University System with competence certification scenarios with intensive use of the technological platform that we use today for the variety of products, users, regions and social and productive sectors that UNAD has been serving for four decades.

It is clear that this decision on the future of UNAD 4.0 will expand not only the field of programming of our YouTube channel, which until now has been more of a repository of institutional television programs such as "Education and Development" and "With the Smell of the Region", along with multiple, albeit scattered initiatives of our teachers and schools and areas to contribute to the training of students.

From now on, TV UNAD VIRTUAL has a strategic value to strengthen the value chain of the university and will become, in the short term, a basic tool to manage our competitive advantage, showing a functional organization in its programming grid, optimizing existing resources in the different units and systems, and giving a leading value to the Vice President's Office of Media and Pedagogical Mediations in conjunction with the Communications and Marketing Management. To this end, systems and strategies are grouped so that these leading units, in the exercise of metasystemic integration, promote the creation of a 7×24

hour grid that strengthens the slots of current and new institutional programs and increases our organizational visibility. It is, at the same time, the alternative to anachronistic forms of making educational television and, even, of making commercial television with heavy human platforms and technical and technological resources, quite costly by the way, that have returned in the urgency of the pandemic without major impact; it is now about managing a new way to dynamize the channel with horizontal strategies that take advantage of our diversity of talents in teachers, students and graduates as well as our wide regional presence and our important technological advances.

Integrated Institutional Intelligence System

This is another strategic area that will consolidate another competitive advantage for UNAD. Its development base, since 2015, is the hybrid Blockchain model applied to the metasystem and whose basic description I show in the following graphics:

The hybrid blockchain of UNAD

from the Internet of information to the Internet of value

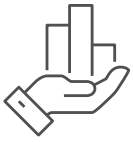
UNAD Blockchain is the organized way to give meaning and significance to our growing data so that it can be managed ethically, analytically and transparently by the participants of the different systems and networks.

Blocks of interrelated systemic transactions are created from a mathematical modeling that cannot be altered in the future and that is supplied with data from projects and shared goals to achieve impact in the various fields of action of the university.

Blockchain Components of UNAD Metasystem

1. **Components of each system of the Metasystem:** High Policy System + Mission System + Functional System + Operational System, in such a way that each one acts with each other and with other systems.

2. **Blockchain Protocols as a guarantee of transparency extended to the integral management:** it becomes a new criterion for transversal action, mobilized from the ethics of the actions of each member of the Metasystem, so that each decision and act issued is fully known by other internal and external actors, strengthening the institutional reputation.



3 **Info-technology for systems, fractals and networks:** It will be articulated through different levels of access to the SII UNAD 4.0 platform, and decision making from data analysis will be immersed in this platform and its computer networks; available and visible to internal and external users.

4 **VINN, GIDT y SGRAL (Data Mining):** The triad will guarantee, by means of electronic certificate, each transaction in the Metasystem. The respective authentication will be automated.

As the consolidation of the UNAD Blockchain evolves, a decentralization of the system towards the public will be guaranteed and the heterarchy in the UNAD management of the system will be enhanced.

UNAD Blockchain Internal Context

Smart Contract

Agreement by which each UNAD leader agrees to comply, under voluntary consent, to make use of the Blockchain platform SII UNAD 4.0, in a transparent, true and lawful manner, assuming the legal implications derived and the referred compliance modes.

They base their development on software derived from virtual codes.

It does not require intermediaries other than transparency and trust, which ensures compliance with the stipulated conditions, validated by a certifying entity.

Record of Authentication Transactions

Miners

- General Secretary.
- Vice President's Office for Innovation.
- Platforms and Technological Infrastructures Management.

Image 64. Blockchain as an articulator of big data and the Institutional Intelligence System SII UNAD 4.0. Source: Own elaboration.

The above infographics show, in a brief way, one of the most valuable components that will distinguish UNAD 4.0 in the future.

For nearly five years we have been advancing in the development of an Integrated Institutional Intelligence System, which provides its leaders with key performance guidelines for the analysis of institutional data and guarantees direct responsibility in decision making, so that each of the organizational, academic, administrative, technological and financial processes are fulfilled and, in addition, serves to outline permanent strategies for effectiveness and transparency.

Retention and Permanence Policy (RP)

Dropout is one of the most worrying structural problems for a university. In Latin America, it is a problem that reflects the limited impact of educational policies, anachronistic pedagogical models and minimal progress in the management and application of relevant knowledge.

Virtual and distance education does not escape this phenomenon, which is made more complex by the reduced understanding of their roles, methodological value, pedagogical schemes and the relationship between teachers and students.

Therefore, in 2016, the UNAD Higher Council, with Agreement 02, enhanced the Retention and Permanence Policy (RP) which was based on:

- The contribution to education for all through the open and distance modality and in virtual environments.
- The fostering of methodologies and didactics, so that those who aspire to education strengthen habits of discipline and commitment.
- The development of institutional responsibility with student inclusion and permanence, and therefore the reduction of the dropout rate, the increase in the graduation rate and the increase in coverage and university welfare services.
- Commitment to high quality standards.
- The promotion of face-to-face meetings complementary to virtuality as part of the Academic Life and to strengthen the UNAD social-solidarity spirit.

- The promotion, within the University Life, of the UNAD spirit through social, artistic, sports and cultural interaction.

The central actors in this process are the students, who make autonomous, meaningful and collaborative learning the essential condition for the development of their integral formation.

At UNAD, PR is also a responsibility of the different actors of the educational community: directors, academics and administrators.

The 2017 Meeting of UNAD Leaders declared that: *"All UNAD leaders are convinced that we can act to significantly increase retention and permanence in the next two years, because we will assume an integrated work on this purpose collectively where fractals and members of the different networks will not cease in the effort to provide excellent service to students and our actions will be aimed at adding to this great purpose even all those who we know do not provide a good service to the institution and to the student body. These sticks in the wheel will be made visible and invited to join this UNAD cause in the interest of consolidating our second great opportunity"*.

That statement endorsed the PR policy, which states:

"*significantly increase student retention and permanence, through a collective and integrated work of actors and systems, towards an excellent service to students, which enhances their satisfaction and loyalty to UNAD*".

The purpose of the Student Retention and Permanence Policy is to focus efforts towards continuous improvement in academic, pedagogical, technological, administrative and financial management to ensure excellent service delivery, through multiple strategies and incentives, seeking to generate better conditions of wellbeing, loyalty and continuity of its applicants, students and graduates, linking all academic and administrative staff and members of the different institutional systems and networks.

The Commitments of the Student Retention and Permanence Policy. UNAD, consistent with its criteria for action, with its metasystemic or-

ganizational structure, with its strategic direction and especially with the Solidarity Academic Pedagogical Model, is committed to:

a. The continuous improvement of its academic management, through the strengthening of student support, the permanent revision of the micro curricular management, the academic offer and the operationalization of the instruments that contribute to satisfy the needs of the students in each of the University's programs.

b. The continuous improvement of pedagogical management, through the articulated work of the academic networks and different actors that participate in the formative process of the students, materialized in the roles that they have been exercising and in the implementation of the different strategies of accompaniment generated and managed by the University, which should allow the counseling, sensitization, understanding and development of competencies that will strengthen each student in their motivation and conviction for the complete fulfillment of their formative goals.

c. The continuous improvement of technological management, through the optimization and evolution of the virtual campus and registration and control, as well as the services derived from it (allocation of spaces for practical component, generation of certificates and applications, forums, among others), so that students have sufficient tools to develop their training process.

d. The continuous improvement of financial management, starting with the search for financing options with external organizations and alliances with actors in the productive and educational sector of the country (ICETEX, National Savings Fund, among others), through the formalization of enrollment agreements for students, as well as the implementation of incentive strategies and discounts for special populations, making available to students, the necessary mechanisms to facilitate their linkage and permanence with the University.

e. The improvement of administrative management, evidenced in the work of the different actors of the organization that have contact with the students, headed by the Center Directors, the Academic Registration and Control officers, the Program Leaders and the Teachers.

Retention and Permanence Policy Objectives

a. Strengthen scenarios for counseling and development of students' academic activities, so that they have the necessary and permanent support in their educational process.

b. Strengthen coaching competencies in the different departments to strengthen leadership and continuous improvement ofthe strategies and processes derived from the retention and permanence policy.

c. Enhance the role of support and guidance of counselors, teachers, monitors and other actors who assist students beginning their studies.

d. Improve the instruments, devices and channels of information and communication so that students can develop their formative process through the Virtual Campus and the activities of academic life and university life in the Network of Regional Centers of the UNAD.

e. Strengthen the PR policy through the institutional media in order to inform in a timely and effective manner about the Institution's activities and the organizational dynamics referred to in the strategies defined herein.

f. Identify and optimize processes and procedures for efficient service to students, reducing steps and improving timelines.

g. Identify weaknesses and problems of access, navigation and academic management of virtual courses, to ensure the development of student activities.

h. Ensure the proper provision of services to students, based on a culture where good and assertive attention to their requests from students prevails, with clear, timely and consistent responses.

Internationalization and Global UNAD

The Knowledge Society brings challenges to educational institutions and calls for an understanding of the value of open education, as envisioned by the designer of the future of the planetary society, the Frenchman Edgar Morin. In this context, UNAD undertook its first internationalization project in 1998, which evolved with its branch office in Florida, United States.

Below, I describe the main components of the substantive responsibility of internationalization, which corresponds to the educational and organizational interactions carried out outside the Colombian territory, and which are based on the constitutional precept of "education for all" as well as the guarantees of relevance, quality and UNAD educational coverage.

It is managed through the different organizational systems under the guidance of the Office of the Vice President for Intersystemic and International Relations (VIREL), which is responsible for promoting transnational academic communities and managing alliances and agreements for academic mobility and talent and resource management.

It is worth reiterating the trans-territorial, cross-border and simultaneously local character of the open, virtual and distance education modality, in order to promote the projection and insertion of UNAD in the dynamics of the international knowledge and innovation system and to contribute to the development of the country and the Latin American continent.

At UNAD, internationalization is a function inseparable from the identity and culture of the University, and has a Policy with precepts, strategies, actors and devices, approved by the Honorable Higher Council, and from which I extract some of its concepts.

Meaning and sense of Internationalization. UNAD legitimizes the trans-territorial and cross-border nature of open, virtual and distance

education, to generate contributions to the visibility and positioning of its mission, through the analysis of global contexts and the strengthening of international cooperation, which favor the curricular internationalization of its programs, knowledge management, the appropriation of new technologies and the interculturality of its university community, based on the institutional precept of "education for all", thus guaranteeing relevance, quality and educational coverage in global scenarios, consistent with its e-learning pedagogical model.

Principles of internationalization at UNAD:

a. *Integral human development,* or the contribution of the constituent elements of the global curriculum to the integral formation of students.

b. *Integrality,* or the capacity to articulate in a transversal manner with the elements of distance learning, research management, social projection, inclusion and techno-pedagogical innovation.

c. *Virtuality,* or the use and appropriation of e-learning tools and virtual learning environments.

d. *Glocality,* or the impact and added value in terms of social projection that internationalization generates in the development of local communities and the way in which these communities are incorporated into the global environment.

e. *Co-responsibility,* or the shared responsibility of each of the University's mission, functional and operational units for the development of internationalization.

f. *Legality,* or the guarantee of compliance with national and international norms and regulations in the exercise of its substantive functions.

g. *Inclusion,* or the generation of educational opportunities for Colombians living abroad and whose access to national education has been restricted by geographical barriers.

h. *Transterritoriality,* or the strengthening of relations, interaction and intercultural academic dialogue between the University and the world.

i. *Interculturality,* or the dialogue that recognizes the diversities and interrelationships among the different international cultures for the achievement of the academic objectives of the University.

j. *Transferability,* or the export and import of mediated technologies,knowledge and good practices of the UNAD pedagogical model, seeking the strengthening of UNAD as an international certifying entity in distance learning.

k. *Cooperation,* or the development of articulated activities with international organizations through formalized alliances for the achievement of the University's mission objectives.

l. *Self-sustainability,* or obtaining and transferring external resources to the development of each of the projects managed within the framework of internationalization.

UNAD's internationalization goals:

a. To increase the presence, visibility and international recognition of the University's undergraduate and graduate academic programs, continuing education, continuing education, academic services, and the development of its substantive functions in a global environment.

b. Strengthen the internationalization of the curriculum, under standards of comparability and equivalence of credits that facilitate academic mobility and the offer of joint or multiple degrees with foreign universities.

c. Appropriate "internationalization at home" and glocality as integrative strategies of different global university experiences and practices to generate impact and academic promotion in communities at the local level.

d. Strengthen relationships and agreements that promote and facilitate scenarios and dynamics of exchange and cross-border, physical and virtual participation of its academic actors, the incorporation of resources from international cooperation projects and funds.

e. Facilitate the creation and strengthening of cooperative networks for research and curricular management that will make the University's e-learning pedagogical model more visible.

f. Develop pedagogical strategies for specific training in foreign languages, incorporated into the curricular structure of undergraduate and graduate academic programs, permanent and continuing education.

g. To innovate and permanently adapt the University to the new global educational context.

By virtue of the above, the UNAD Global System was created in 2015 as a set of strategic, operational and procedural elements, which interact in an articulated manner for the implementation, evaluation and fulfillment of its internationalization policy and objectives, and integrated by the following strategic areas:

a. *Curricular Internationalization Area:* Aimed at adapting the curricular structure of undergraduate, graduate, permanent and continuing education courses and programs, under standards of comparability and international compatibility of credits, allowing the creation of multiple and joint degree programs, as well as international degree recognition and certification. To this end, curricular proposals from international organizations, international training initiatives, international competency frameworks, inclusion of foreign professors in international chairs, bibliography and academic activities in other languages, and management of international memberships for international scientific networks and associations are contemplated.

b. *International Academic Interaction Area:* To promote the participation of the University's stakeholders in physical and virtual cross-border academic scenarios, as well as the development of knowledge exchange activities, the growth and recognition of the University's academic networks and research communities.

c. *Foreign Language Training Area:* Aimed at developing language skills to ensure international proficiency and competitiveness of the UNAD community through courses and programs designed by levels under the Common European Framework of Reference - CEFR and offered by the Virtual Institute of Languages - INVIL, which are implemented transversally to the different academic programs of the University as a formal offer and, in a complementary manner, to teachers, administrative officials, graduates and external groups of interest as a continuing education offer. It also contemplates second language immersion scenarios that are operationally articulated with UNAD Florida.

d. *International Cooperation Area:* Focused on the management of diplomatic relations with universities and international organizations, participation in projects, consultancies, training in the development of international competencies and academic consultancies, as well as the procurement of resources and the development of intercultural competencies.

e. *International Visibility Area:* To promote the University in global scenarios, the growth of international enrollment and the positioning of the UNAD project, making its programs visible and the feasibility of establishing frontier study centers, as well as the promotion of UNAD Florida and the creation of UNAD Latin America and UNAD European Union.

UNAD Global System Managers:

a. **The Office of the Vice President for Intersystemic and International Relations (VIREL).** Responsible for the direction of the UNAD Global System, for compliance with the policy, for following

up on the actions of the other areas involved in it, and for formulating and assigning the goals and improvement plans to be met by the units responsible within the framework of the System.

b. **The Virtual Institute of Languages.** Attached to VIREL, and responsible for the formulation, direction and fulfillment of goals, programs and projects for second language training, in the development of the Foreign Language Training Policy, which promotes the training and development of competencies in the mastery and proficiency in a second language, facilitating the access of the academic and student body, guaranteeing the excellence of the academic programs and the global impact of its graduates. This Institute also promotes the UNAD Multilingual program, or the strategy for the development of the foreign language training policy according to the needs of each academic unit and program.

c. **The Vice President's Office for Academic affairs and Research, the Schools, and the Research Management System.** Responsible for the development of curricular internationalization as a strategy for the adaptation and modernization of the University's academic offerings to the global environment, and the consolidation of international academic cooperation scenarios.

d. **National Zones and international sectionals.** Responsible for the development of international visibility in the promotion and growth of international enrollment and ensure the participation of the community in their area or country, or as will surely be the case of UNAD European Union, as a challenge of the Development Plan 2019-2023.

Likewise, the system strengthens the internationalization of the curriculum by incorporating elements of internationalization such as:

a. Disciplinary courses in foreign languages offered by INVIL,
b. Disciplinary courses in the curricula of foreign universities,
c. Contents, bibliography and academic resources in foreign languages,

d. Temporary assignment of foreign professors to UNAD professorships as visiting professors,
e. Permanent attachment of foreign teachers to UNAD professorships with the respective compliance of the requirements to work in Colombia.
f. Elective courses or formative research projects with foreign universities.

Another aspect to highlight is the offer of multiple degree programs (two or more academic degrees, awarded separately by UNAD and two or more institutions participating in an inter-institutional academic cooperation agreement) and joint degrees (obtaining the same degree issued by two or more national or foreign higher education institutions.

Chapter 8

Things right

On July 7, 2021 UNAD celebrated exactly 40 years since it was legally born as Unidad Universitaria del Sur de Bogotá.

In a surprising and sometimes inexplicable coincidence (as has happened on other occasions at UNAD, probably due to the volume of activities, programs and actors involved in it, without ceasing), on this date the Ministry of National Education gave legal life, by the Ministry of National Education, to the Undergraduate Degree in Virtual Law at UNAD, through resolution number 012182 of July 7, 2021.

The fact, which would seem to be a simple anecdote, goes beyond a chronological coincidence, and becomes a historical milestone not only for this University but also for the Colombian higher education system. UNAD's virtual law undergraduate program is the first to be offered in this modality in Colombia, after 191 undergraduate programs, all of which are face-to-face.

As has been said here in previous chapters, this University has had to confront educational orthodoxy, embodied in a vision of education that is alien to the new social, labor, technological and knowledge realities. In its short institutional history, UNAD has managed to break down myths, imaginary walls and prejudices and, with technical and argumentative foundations, has demonstrated that various levels and

programs (such as engineering, music and sports, among others) can not only be studied with the support of virtual technology, but also that this technology, instead of limiting them, enhances them.

But in the case of university law studies, the technical and argumentative foundation was not sufficient. Prejudice, belief, classism and the refusal to admit technology as a means not only for training, had built a wall that, at some point, many other institutions of higher education believed insurmountable, because for years the official entity responsible for approving such applications, the so-called National Intersectoral Commission for Quality Assurance CONACES, from the Ministry of Education, repeatedly and with very diverse and dissimilar arguments, denied the applications, in a way incomprehensible to the sector. This University also had to suffer such a biased view from the "system", but repeatedly, convinced of its purpose and the benefits that a virtual law program would bring, each time its arguments were refuted, it responded to the Commission, until finally the proper approval was obtained.

For it was not understandable how, while other areas of knowledge were advancing towards a new reality, thanks to technology (social networks, interdisciplinary teams, real-time research, academics from other continents, flexibility in training, relevance of content to the student's reality, and contrast of realities at the right time, among many other positive dimensions of virtuality), those who had previously expressed fear of enriching this attendance with technology, had overcome the myth of the cave and had found the light of applied knowledge.

But in the case of law training, things were the other way around.

As if knowledge were frozen, abducted or finalized in the enormous encyclopedias of the physical libraries to which, initially, only the children of rulers, magistrates and businessmen, in turn close to the courts, tribunals and tribunals, had access, and in recent decades to the children of the city who could reach the classrooms of universities with buildings for face-to-face activity.

As if the understanding and mastery of the rules were a privilege of a caste and not a bridge to justice, which is a requirement and a universal right.

As if the legal profession were still the medieval expression of the trivium (grammar, dialectics and rhetoric) for the exercise, now analogous, of a few.

As if justice were a matter of exclusive understanding of big families, businessmen, rulers and powerful people.

As if the application of the law were something purely local or of unique interpretation, regardless of the social and cultural reality of the communities.

As if the pandemic had not demonstrated that life goes on beyond the offices and classrooms.

As if the popular wisdom, the agreement of communities far from the judicial offices and the mechanisms of intra-family, intercultural and generational conciliation had no legal value.

As if the only way of acquiring a lawyer's professional skills were in the courtroom, libraries, courts and paper documents, when all this, and much more, takes place in the new society: the interconnected one, without borders, with permanent revaluation of paradigms and with universal access to knowledge.

And as if artificial intelligence, Blockchain, databases and systems were not beginning to displace some of the operational tasks of lawyers and to demonstrate, with informational analysis, that there are human legal decisions that adversely affect fairness, as they go against the normative foundations and are seduced by passion, affection and other elements.

And despite this accumulation of opinions, as well as market and even political interests, UNAD succeeded. The academics of the Universi-

ty's School of Legal Sciences were able to demonstrate that the understanding and application of the law, the analysis and collection of evidence, and legal practice, among other areas of legal study, can also be done virtually.

Image 65. Approval of the first virtual law program in Colombia.
Source: Own elaboration

Thanks to UNAD's efforts, it was possible to open the door and the minds of academics at the service of the Ministry, and a positive response was found to the need to train lawyers for a country with multiple regions, where justice has not arrived or has arrived very late, where the services of a legal professional are unaffordable, or where the volume of cases that demand legal intervention are not enough for those who, trained in the big capitals, decided to go to remote places.

The ghost, the walls and the shadows of the cavern disappeared, and made UNAD, once again, a pioneer and beacon of the sector. And behind it will come virtual law programs from other higher education institutions, and there will be another enriching reality for this area of knowledge. But, above all, thanks to this advance, Colombia will have more opportunities for access to justice, so that thousands of compatriots

can more easily know the law, know how to interpret it, understand the procedures and approach the due and timely application of justice.

Studying law virtually will entail a new way of assuming professional training in this area of knowledge. What began as a philosophical exercise on the purposes and nature of the State, became the study of heirs of great families and of companies for which they had to take title in order to maintain the legacy. Later, civil conflicts led law to deal with the responsibilities and consequences of state acts and of groups defending certain causes; and with globalization, law became internationalized and entered extraterritorial spheres, intellectual production, copyright, natural resources and even digital environments, among others. Now, permanent social protests, diversity, state neglect, the appearance of fiefdoms, expropriations and the confirmation that in Colombia there are regions, towns and cities where the Constitution and the law do not apply, demand lawyers capable of going to the village, the hamlet or the reservations, and sensitize the citizens about their duties and rights, helping them to lead a dignified life in accordance with the law.

At a time of celebration of another anniversary of institutional creation, the achievements of UNAD members far surpass those of universities with more than a century of existence. In 40 years, not only has institutional life been achieved, but also educational models have been modified, the status of Colombian mega-university has been attained, and history has changed and will continue to change. Because the vision of the university management is not limited to go over, remember or recreate it, but to create a new one, because that is what a living, open and flexible university is like... like UNAD!

Chapter 9

The exercise of transformational leadership

In this chapter I record some lessons learned about the manner and style that have been most beneficial to me, as president of the university, in order to ensure coherence between what the National Open and Distance University (UNAD) seeks as a transcendent objective and the motivations, styles and character of its leaders.

This is based on my experiences with dozens of national and regional managers, with different profiles, who have accompanied me over the years. I have always been interested in learning from my bosses and leaders, from when I held incredibly visionary conversations with the first president of the university, Hernando Bernal Alarcón, and especially with Miguel Ramón Martínez, its first Vice President and ideologist, who invested much of their experience in laying the social and community foundations of the UNAD of today and the future.

To most of the directors I owe gratitude for their commitment, service and loyalty to the educational project, although I cannot fail to note, with regret, that some undermined the institutional trust for the benefit of particular interests, but fortunately the UNAD network, collaborative and committed, did not allow attempts at individual protagonism or actions that recall orthodoxy rather than modernity to permeate.

I am sure that situations like these have not happened only to me, because in all kinds of organizations we engage in a fair of serious and ethical commitments that move hand in hand with vanities and personal ambitions, which become invisible over time, but at the same time as huge obstacles.

To speak of leadership is to refer to multiple attributes, personalities, results, ways of interacting with teams and personal and institutional purposes. Clearly, helping to guide a mega-university requires many competencies and skills that, from my own experience, I will describe here, based on two premises that, as one would say in business terms, are non-negotiable: respect for all people as such, as beings with dignity, feelings and purposes in life; and commitment to a common cause: educational inclusion with quality. Getting all members of the university community to act in this way, rationally and even emotionally, is one of the challenges we have set ourselves in what we call "transformational leadership".

In order to achieve and exercise such leadership, I believe that these five values must be configured:

1. True and good will

Our teacher, Miguel Ramón Martínez, used to say that a good person, especially if he is supportive, is known when he influences without authoritarianism, but with the authority gained by the reflection of his actions and results.

From UNAD we have learned that hierarchy is not essential, and that teamwork is worthwhile when it is directed by a leader who motivates, who sows optimism and who recognizes the virtues of others, rather than their mistakes.

> *Solidarity emerges as a virtue and expresses itself spontaneously from the human heart, for it emanates from good will and awakens a good will, without generating violence, nor obstacles, nor stupid or senseless resistances, since authentic solidarity is directed to all and never against anyone*
>
> ***Miguel Antonio Ramón Martínez***

Image 66. Miguel Ramón, first vice-president for academic affairs - UNAD.

In organizations, and particularly in educational organizations, highly effective leaders are conspicuous by their absence and, on the contrary, reactive leaders abound. With the latter it is almost impossible to manage change and, on the contrary, with highly intelligent leaders, imagination is not in short supply and their interest in new learning and knowledge is generally high. This is where there is a great opportunity to develop the hard, systematic work required to reengineer any organization.

What binds people together is not the authoritarianism of the one who commands, but the authority forged day by day by the one who directs, fostering a clear dialogue to positively influence the search for effective results. A leader is not made by a position; but, on the contrary, a true leader does consolidate an outstanding position. Today, the authoritarian messianism of certain leaders of the past is no longer a reference point. Henry Ford, Mussolini, Adolf Hitler, Napoleon Bonaparte, Alexander the Great and so many others could not, in today's environment of the Knowledge Society, lead entire nations to manifest their great transformations, misfortunes or wars as did those who accompanied them in their times to be recognized, for better or worse, by the history of mankind.

In the Knowledge Society, a true leader must influence his collaborators, colleagues and peers along the path of creative and innovative thinking.

Sowing in others the key to learning how to learn in order to be better by choice and will is our challenge.

In the case of UNAD, the experience has been bittersweet: During these 40 years, I have met magnificent and integral beings, men and women from all Colombian regions, who have had a significant influence on the organizational transformation achieved, largely because they knew and have known how to multiply their capacity to make things understood and done well. I have also come across some who have misused authority, converting it into power - an unheard of practice in academic life - and excessive ambition, because they think they are bosses just for holding a position. Positions are necessary in an organization to delimit responsibilities and functions, but leadership goes beyond that, it requires the effort of the leader who exercises his or her good character to gain understanding of what to do and convictions about what should be.

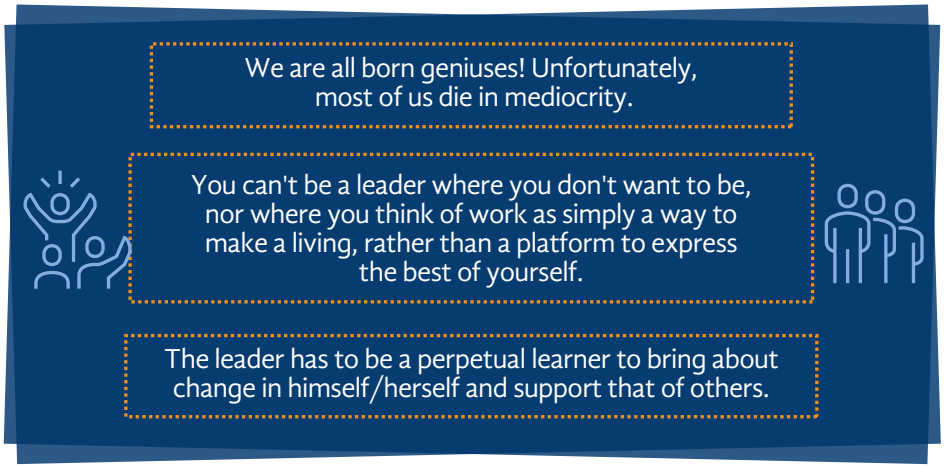


Image 67. UNAD leadership and action in times of change.
Source: Own elaboration.

A good leader expands his or her good will to guide, stimulate, correct in a good way and, especially, motivate so that others learn daily about the issues of their responsibility, and go further by knowing the role they play in the gear of the UNAD metasystem. This type of leader emphasizes self-evaluation and self-regulation.

A good leader has good will and places him/herself at the level of the other and highlights his/her achievements not only with words, but also with motivating actions and incentives of various kinds.

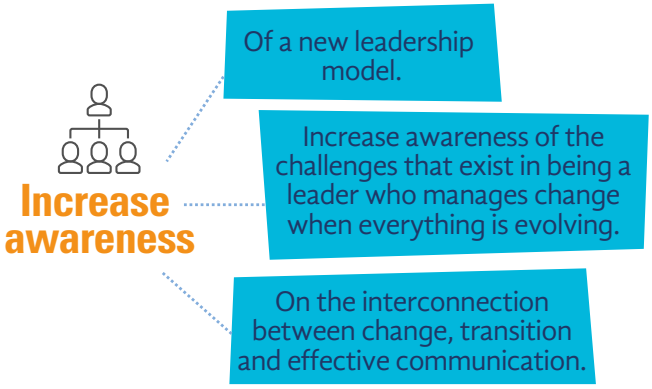


Image 68. The goal of raising awareness.
Source: Own elaboration

2. Trust, trust and trust

Trust is a gift that some people develop in direct relation to transparency. Therefore, it is one of the most difficult values for the organization in the construction of teams that need to evolve from their own ability to provide and generate trust in others and for others.

Confidence is linked to the faith, first of oneself in one's own talents, and then in the ability to transfer to others in collaborative and cooperative scenarios. Whenever a leader wants to strengthen the competence of having confidence when starting up a team, he must combine his observation of each and every one of the others, his emotional intelligence, and of course, his suspicion when assessing that each one carries within him particular attitudes and aptitudes.

A team that trusts each other and its leader represents a great comparative advantage for the organization and reflects the degree of reputation and external recognition that the organization gains socially.

Having confidence is key to ensure the evolution of one's own talent and to positively influence the evolution of the talent of others. It is about forging a cradle of extensive leadership based on trust in the

collaborative, supportive and cooperative talent that is created in the work environment of a team. Without that faith, little can be achieved, because, in the end, leaders are the seeds of new leadership that create incredible capabilities to achieve goals and objectives.

Trust is the key to the success of projects developed by an organization of any sector or level. Trust is fostered when the behavior of the leader and his team is equitable and fair, avoiding preferences. Trust is generated when people are not discriminated against, when there is full discernment of differences to guide others, gaining ground to seek consensus.

A leader and his team must not only consider what to do and when to do it, but also how to do it. Doing so creatively without resorting to linear thinking, which more often than not falls into the mode of facile, irresponsible and light work. This can only be counteracted by resorting to strategic thinking to strengthen the effectiveness of processes, procedures and results.

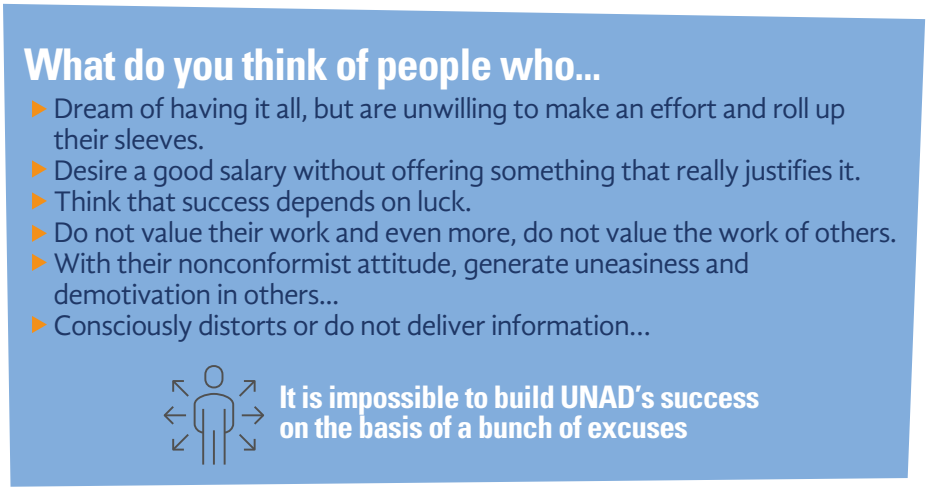


Image 69. Opportunities for improvement.
Source: Own elaboration.

A leader generates confidence when he is able to transform tensions into joy, and to awaken the team's faith by encouraging them to achieve everything they set out to do. A leader who generates trust is always alert, knows how to evaluate the environment and, in the face of difficult circumstances, creates calm and transforms actions into dynamics to make everything work. This is not taught only by academia, nor is it in all the books on leadership; a good part of it is generally obtained through experience, but it is also achieved when leadership cradles are woven as crops of good seeds to consolidate the culture within an organization.

A leader generates trust when he is able to turn urgency into new learning; when he is able to discern between what is urgent and what is important, and when he establishes priorities in the flow of his team's work.

All organizations seeking success must be demanding and rigorous in order to achieve the goals and objectives set, but they must also create conditions for their leaders to lighten their personal burdens and remain motivated and eager to continue learning for their own good, but especially to feel proud of the social impact generated by their organization.

3. Effective communication and communication skills

Like trust, communication is vital in the exercise of leadership. It could be said that communication is the spirit that connects the leaders of an organization to each other. It is important to understand that communication requires clearly designed strategies in order to have a beneficial effect within an institution. Otherwise, communication can turn against the leaders and, cumulatively, against the organization itself, hence the importance of multiple devices and strategies to prevent the failure of a project or an institution.

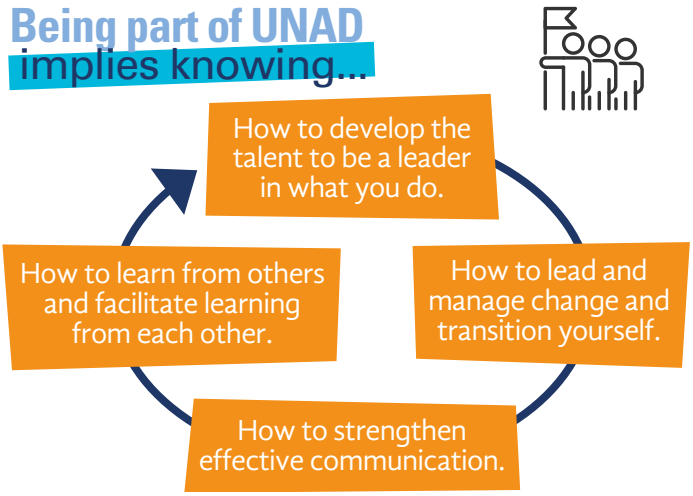


Image 70. Being a UNAD Leader implies knowing...
Source: Own elaboration.

The low achievements of a unit within an organization may come from poor communication or from the negative influence of the leader so that institutional actors assume preventive or preventive attitudes that diminish their motivation and, therefore, result in poor work performance.

Communication is not just sending a message. A good leader listens, learns from observation and is attentive to others. A good leader is a communicator par excellence and always goes to the bottom to recognize the root of the problems or opportunities that arise at various junctures.

A good leader connects with others in order to interpret, guide and assist them in understanding the purposes of communication. This leads him/her to know the opinions of others and to value them in their proper dimension in order to know which of them can serve to improve understanding.

This implies knowing how to interpret, evaluate the situation, recognize the reason of the other and, of course, incorporate it as an action for improvement. On this subject of communication, I would like to bring back some examples that become obstacles to communication derived from the leadership style of the communicating leader:

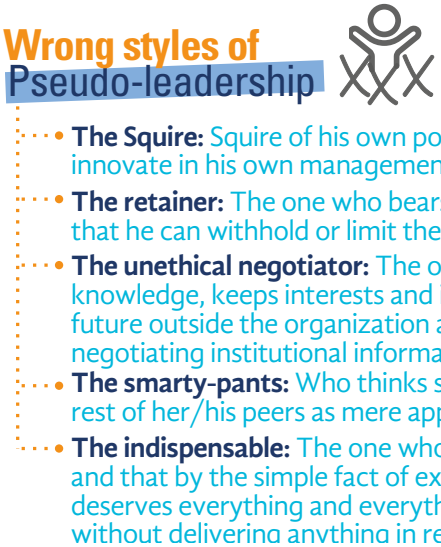


Image 71. Misguided styles of pseudo-leadership.
Source: Own elaboration.

4. The value of example

In the course of these four decades I have encountered cautious officials, custodians, guardians of their own wealth, and, of course, demigods and sacred cows, but I have also had the privilege of recognizing great colleagues who connect immediately thanks to their ability to interpret people, to recognize the depth of situations, to listen in order to go deeper into what is happening, and even capable of establishing synchrony with those opponents, enemies or contradictors of our organizational model, in the worst moments.

From their captivating personalities, these leaders have been able to connect with people with confused personalities, sometimes confused, and have put their chests, as they say colloquially, to the most extreme situations that have threatened the personal and institutional reputation of the UNAD project.

These leaders have been proactive in formulating and undertaking strategic actions to engage their spirit in a purpose of educational social service, and from there take the strength of the communities to turn it into determinations that have overcome the moments of crisis transforming them into opportunities.

5. La pasión por el cambio y la transformación innovadora

A leader, above all, must exert a harmonious and genuine influence to achieve resonance between the institutional thinking and that of the organization's members. He/she must be interested in postulating ideas and strategies that strengthen the levels of internal and external understanding of the supreme interests that guide the work of the institution.

At UNAD, such a leader must focus on understanding the different areas that make up the metasystem and, of course, ensure the greatest efficiency of its leaders. That is, to deliver the best services and products to all our students, alumni and the many communities served by the University. Forging this type of leadership will never be an easy task, so the will of the leader must be recognized in his or her passion for change and innovative transformation.

In this type of metasystemic organizations, hierarchy becomes a myth or something invalid. The passion for the permanent improvement of the educational project requires a deep knowledge of all the academic, administrative and financial areas and systems that make it up.

In this innovative organizational model, the substantive responsibilities of UNAD mark an important differential for the management of its leaders, since their work is generally under pressure, so they are not allowed to accumulate work and tasks on a day-to-day basis. This is one of the reasons why such a leader must learn to delegate.

Delegating is also an art, which must be learned and managed with competence, skill, thoroughness and effectiveness. To this end, the leader must communicate well to his delegates the rules, procedures and times to execute strategies, tasks and activities, which implies a rigorous capacity to follow up on what has been delegated and to objectively qualify and give feedback in order to transform delegation into an opportunity for continuous and permanent learning.

Speaking of passions that become habits, the management of information for decision making is fundamental in the exercise of leadership, since it is not a matter of asking for reports and more reports, or of per-

manently holding meetings and more meetings, but of guaranteeing the analysis of the data generated in order to fine-tune in the best way the specific strategic action that must be transformed into decisions on a daily basis.

When we refer to the passion of leadership, we are also referring to convictions, since these are the ones that invite the effort to achieve the agreed goals despite the obstacles and even the situations of risk and threat that the project or the organization itself may face. Hence the priority of learning to overcome obstacles, which is why one must begin by looking for ways or strategies to overcome difficulties. It is at these moments when the leader shows his/her serenity, his/her capacity to redirect, to support and to guide his/her people, demonstrating his/her capacity as a forger, with his/her team, of the so-called effective strategic action.

The leader's attitudes

We have seen the values that should inspire the leader, and these should be accompanied by concrete, permanent and in some cases generalized actions.

Generally, an outside observer of any organization might think that the best thing to do when faced with a threat or a challenge, or even an obstacle of unproductiveness, is to delegate to a person who knows what he or she is doing. In fact, this is how it works, but it must be added and guaranteed that this person knows not only the function of the position, but also the strategic context of the institution, so that he or she can coherently and easily interrelate the other systems, processes and procedures involved.

Here arises another reference of the leader's passion and it is the role that he/she plays on his/her team to be in tune with the principles and values of the institution, so the leader must be concerned that everyone is willing to know and share what they do with others.

For a transformational leader, time does not belong to him/her, because in the end anyone can interfere in his/her time and there is very little he/she can do to avoid it, which is why discipline becomes his/

her best ally. Nowadays, it is no longer possible to believe that every past time was better, because the best is always to be discovered and to be done, especially when the cause of productive work is to serve in the environment surrounding the organization, especially if it is an educational one.

When we speak of the passion of the leader and his team, it is because both are able to dream, to create and not only to improve what is being done. This implies a necessary competence to create new services and to give new values to what is done, in order to satisfy the users. In an organization that evolves, doing the little things well, thinking in filigree, implies defining a high level of demand on a daily basis, which requires that the leader and the organization are willing to promote an effective incentive policy that strengthens the well-being of the members. In the end, passion is also contagious and that is what is expected of any human conglomerate that works productively for a transcendent cause.

This is what has happened at UNAD, as I once explained to a Minister of Education, who asked me how a public university could generate the levels of budgetary reinvestment with its own resources in the improvement of its mission (it is good to note that UNAD operates with less than 20% of its budget from State resources). There are no prescriptions. I only replied that it is necessary for the organization's teams to have understood the value of the cause for which they devote themselves on a daily basis, transcending the mere labor or economic link. At that moment, the ideology of the motto of the current four-year term of office emerged: "More UNAD, More Country", which also identifies the current Development Plan.

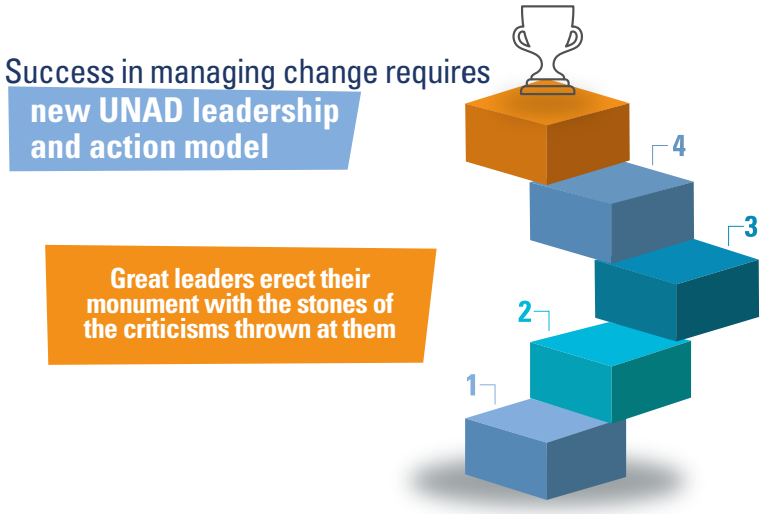


Image 72. The success of leading change. Source: Own elaboration.

Ideal organizations do not exist, but it is necessary to move towards excellence. On this path there will be difficult situations resulting from administrative inefficiency, the absence of academic quality (in the case of education), poor budget planning, and, in short, multiple factors that require constant observation of organizational events to avoid succumbing to mediocrity, incompetence, and of course, the ease of non-compliance with responsibilities and goals, translated into the philosophy of laissez-faire and letting things go by.

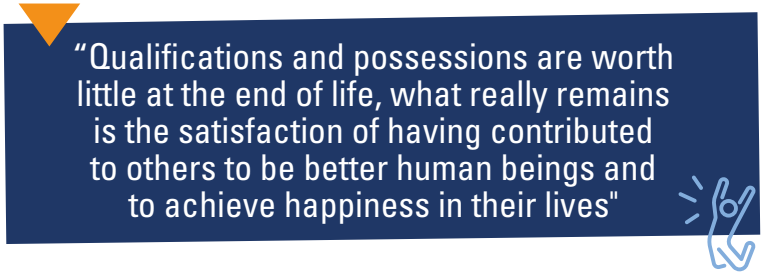


Image 73. President's Reflection.

In short, leading to transform requires a clear and true understanding of what, how, what for and where the organization should go. This requires a team of leaders with an open mind, a positive attitude and an entrepreneurial spirit, even beyond the competencies of the pioneering leader. Promoting innovation is not an easy task, as there are a variety of associated factors that stimulate or delay the achievement of goals, which is why leadership teams must periodically revitalize goals, try new feats, compete healthily and loyally within the framework of creativity, be accountable for the rigor of tasks and have the greatest clarity on how processes operate and standards are applied.

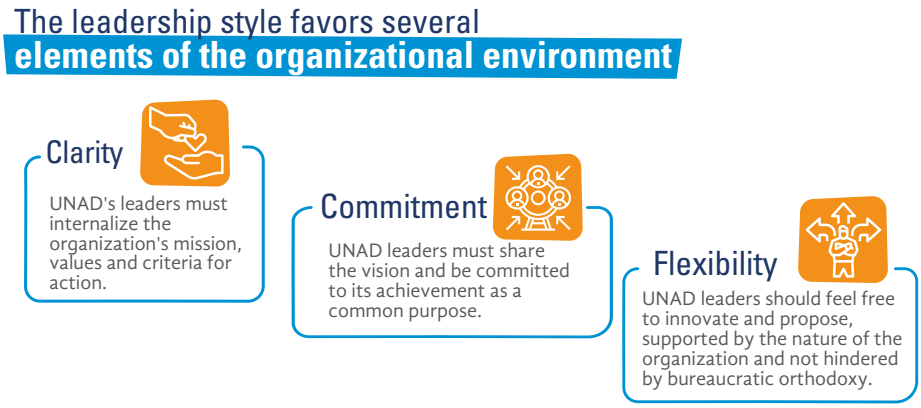


Image 74. Leadership style favors several elements of the organizational environment (I). Source: Own elaboration.

An innovative leader looks beyond the walls of his office or even the building where he works. An innovative leader is committed to external causes that enhance the social role of his company, and "injects" daily doses of optimism and new ideas so that the organization is oxygenated and the teams have additional motivation to strengthen their conviction for their causes. An innovative leader is, at the same time, inspiring through his/her word, his/her action, and the results he/she delivers are not individual but collective; he/she is an integral being who acts to be a living example for others.

Image 75. Leadership style favors several elements of the organizational environment (II). Source: Own elaboration.

A transformational leader is capable of getting up again and again in the face of obstacles, does not identify who is to blame in the face of failures and always assumes his or her responsibilities. For him/her, the word punishment does not exist, but the guiding action of second chances to build trust, knowing that some opportunities will be violated.

A transformational leader forgives, but does not forget, knows how to focus on what is fundamental, looks beyond performance alone, understands that he must promote the integral formation of those who work by his/her side, manages disagreement always in the spirit of seeking consensus in spite of discrepancies, and knows how to listen for the sake of the health of the organization itself.

A transformational leader knows how to select and will always seek to surround him/herself with the best. He avoids mediocrity, fascism, gossip, rumors, and knows how to channel criticism in order to transform it into opportunities for improvement.

	COACTIVO	AUTORITARIO	AFILIATIVO	DEMOCRÁTICO	TÉCNICO	INSPIRADOR
The way the leader operates	Motivates people towards a task.	Demands adequate compliance.	Creates harmony and builds emotional bonds.	Forges consensus through participation.	Establishes high level of performance on indicators.	Develops leaders in the present for the future.
Style in a sentence	"Let's do as I say"	"Do it."	"People come first"	"What do you think?"	"Do what I'm doing now"	"Working with you was a wonderful experience"
Emotional intelligence competencies	Impulse to achieve initiative and self-control.	Self-confidence	Empathy, relationship building, communication.	Collaboration and communication.	Conscientiousness, drive to achieve, initiative.	Development of others, empathy and self-awareness.
When style works best	In a crisis to promote change or with problem employees.	When changes require a new vision or when they need a new direction.	To resolve divisions in a team or to motivate people in stressful circumstances.	To build consensus or to get input from valued employees.	To get quick results from a motivated and competent team.	To empower others to translate the goal into results and to develop their talents for the long term.

Image 76. The leader's self-assessment according to his or her style. Source: Own elaboration.

A transformational leader learns to ask questions, but also to listen intelligently to good questions; he/she is a lover of dialogue, and of course, he/she is a headhunter inside and outside his/her organizational spaces.

Image 77. We can all exercise leadership.
Source: Own elaboration.

Today, in the development of the Knowledge Society, a true leader must influence his/her collaborators, colleagues and peers to strengthen a path of creative and innovative thinking. It is a matter of sowing in others the key of learning to learn in order to be better by choice and will.

It is indisputable that the experience accumulated by the National Open and Distance University as a cradle of leadership, writes an important page in the future of a public university that, by its own conviction, believes in collective leadership, in inspirational leadership, and of course, in transformational leadership. Both in the good times and in the not so good times, the leaders of UNAD have left a mark so that the work of public leadership is a positive example that generates very beneficial results for the whole of Colombian society.

This contrasts, in general, with the ideology on the management of public affairs that has been subsumed in beliefs, but -it must be recognized- also in realities of inefficiency per se, of inefficient bureaucracies, of little or no quality in what is delivered and of environments of previous failure, referenced in examples personified by non-transparent managers and leaders, and friends or close to environments of corruption, with no ethical or moral limits.

A moment for self-evaluation

To conclude, dear reader, I would like you to make your own assessment of the following illustrations regarding lifestyles and leadership:

Decálogo del arrepentido
en su último día de vida

EN SÍNTESIS, SU VIDA FUE UN DESPERDICIO

Image 78. The ten steps of regretful people on their last day of life.
Source: Own elaboration.

Decálogo del líder
en su último día de vida

EN SÍNTESIS, SU VIDA FUE UN POTENCIAL DE SERVICIO GENUINO PARA LOS DEMÁS

Image 79. Ten steps of leaders on their last day of life.
Source: Own elaboration..

I hope that you, dear reader, are placing yourself in this last decalogue, and if not, that you are approaching it quickly. In our Latin American countries, and in Colombia, we still need to continue harvesting women and men leaders in the transformation from the inspiration for the collective good. It is a goal that is well worth the effort.

Remember, our time is always running out. How much time do you have left?

Chapter 10

Final reflection around a cup of good Colombian coffee

Being president of the National Open and Distance University (UNAD) has been an honor and a privilege that God, Almighty Lord, the UNAD Community and its Higher Council, as well as the normative conditions, my health and my lucid and conscious mental condition have allowed me.

Although my heart speaks to me permanently and guides many of my decisions, the reality of the facts, the results, the commitments and, in short, the exercise of reason that should characterize academics invites me to reflect, constantly, about when it will be the time that, decorously and in an executive manner, UNAD should have another helmsman..

This does not mean, as some have erroneously suggested, that my intention is to cling to the supposed power that the president's office at UNAD endows. Nothing could be further from my true intentions: To forge a modern and inclusive model of education as a hopeful bet for the new generations of fellow citizens, for those young people who today are consumed in vice, in frustration, in a day to day life without clear purposes, without supreme examples that inspire and reflect the great value of effort and discipline to dream their lives, beyond the one

dreamed of by their parents and grandparents who had lives marked by misery, poverty, violence and apprehended hopelessness.

The enormous responsibility that comes with this full time public service is an intense exercise of full attention, permanent preparation and teamwork to always try to get institutional decisions right. My arrival and repeated confirmation as President of UNAD has not been the product of chance, much less of political machinations, vote buying or favoritism, but of the results that, presented in this book, are a brief synthesis of so many untold stories, as well as of the trust placed in me, at different times, by the honorable Higher Council and great colleagues.

Life has allowed me to accompany this beloved university almost since its birth. In it, almost parallel to my life, I have made a great part of my academic and administrative career, first as a complement to my professional studies as a food engineer, and then in various studies related to the exciting world of education: Master's and PhD in Education. In addition, I had the good fortune to provide several consultancies and key services, for me, in other institutions in the sector, which allowed me to achieve the motivation, experience and recurrent and necessary knowledge to lead the UNAD project that here, in a synthetic way, I have described to you.

I could say that if you, dear reader, have come this far, I hope it is because what has been presented has aroused your interest and you wish to better understand our commitment to public university management.

Now, I ask your permission and understanding to introduce myself a little more in depth, not with a presumptuous intention of vain pride and satisfaction, but to contribute to your knowledge and understanding of how the university president of what is today the largest institution of higher education in Colombia, started from his own will that became collective, to be the director who has been the longest serving of all those responsible for public universities at the head of their presidency, and who, despite facing and overcoming multiple legal trials, obstacles, accusations, slander and slander, is still there, firm, every day more convinced that education will transform in our country, and hopefully in our continent, years of exclusion and social backwardness.

Writing this book has led me to make public my conceptions of what transformational leadership means, derived from the challenges and risks of innovation. This leadership points to results that demonstrate that public service can be effective and committed to the construction and collective participation in a cause that, like UNAD, is shared by thousands of leaders whose intense and tireless work is committed to a better educated Colombia.

I consider myself a human being full of imperfections who pretends to be integral and coherent, who lives the values learned from the original home, who feels the family as a vital reference of a dignified and fair existence, who has clear the role and value of the extended family as the nucleus that gives strength to society, who recognizes quality and pertinent education as the vehicle without which peace and individual and collective freedom will not be achieved, and who has oriented the actions of his life within the principles of ethics, discipline, responsibility and passion for a job well done, intelligent and productive.

I come from that Colombia in need of opportunities

I was born into a large family, in a middle-class home in Bogota, in the Colombia that, like the black and white television of the time, paradigmatically and erroneously considered that it was only viable to live in a scenario of historical antagonisms over problems and interests that not even the majority of its citizens understood, but that got themselves killed for them: Either black or white, liberal or conservative, capitalist or communist, urban or rural, rich or poor... In the Colombia of guerrilla, paramilitary, criminal violence or that of the dark State; of minimal educational coverage and almost no university opportunities, of subsistence only through physical labor and poorly paid subordinate labor. It was a country that did not manage (and still does not manage, since it maintains many bad legacies) to get out of the formerly called "silly homeland", in which the State has not been present, that recirculates the problems and instead of solving them, makes them more complex; that believes in the short-term solution of the "these" and the "those", and, therefore, generationally fosters despair, indiscipline and social hopelessness.

It was in that national environment, violent, classist, sexist and prejudiced, and with great limitations and restrictions, that of the great majority of Colombians, in which I grew up. I was fortunate to have seven siblings. With them we did not have a material heritage, since we grew up in the midst of a lack of physical resources, but we did have a rich heritage of moral values, learned, starting with my great-grandparents, through the enormous value of education as an opportunity, almost unique, to surpass ourselves in our material and economic limitations derived from the cradle.

Today I thank God for what this environment of difficulties and shortages has meant, which over the years I have seen replicated in thousands of families in hundreds of municipalities. This has allowed me, today, to be able to joyfully demonstrate how education empowers thousands of students, teachers and UNAD graduates. I know of their efforts and restrictions to be formed in our institution, and therefore my commitment to the UNAD as an educational social cause, because this institution has been, for the vast majority of them, the only opportunity to get out of poverty not only materially but especially of the values that dignify their being. Education has become the means to overcome exclusion, despite the distance, costs or prejudices that defame its vital impact. The lessons of life teach us, paradoxically, that sometimes it is better to grow up sleeping without much clothing, having had to reduce the daily food for a troop of children and adolescents, because it is generally in the lack when any opportunity is better valued and its importance is understood to transit and transform life with dignity. This does not mean that a rich person, materially speaking, does not also achieve his or her integral formation, because, in fact, this is the case and there are several men and women who, born in a good cradle, have cultivated themselves as valuable persons and social examples.

Acknowledgment and eternal gratitude

At the beginning of this book, I made a special dedication to those who strengthened and still strengthen my spirit daily, especially my wife Doris and my daughters María Paula and Estefanía.

Now, I reflect on what the human spirit has in store for it, surprises that one's own conscience does not always identify. A single dream, an illu-

sion, a clearly defined north can be enough to move the will to unimaginable dimensions. And I say this, because surely in my childhood, and in the context in which I was formed, I could hardly project the destiny and the enormous responsibility that means to answer today for the future of UNAD, but Providence would allow me to find three valuable beacons of life, and examples of morality, passion, commitment to a cause and honesty in every step of their way until their death.

I am referring to two wonderful women and a unique man. They are my grandmother, Eva Carranza, and my mother, Inés Afanador de Leal. From these two remarkable women I learned the humbleness, simplicity and the value of true love. Both were teachers, and in the midst of the shortages and their enormous challenges, they showed me that more than having, what is important is being; that it is useless to talk and promise, if words are not accompanied by coherent actions; and that no matter how big or small a dream may be, it is always a bet on life that is worth making a reality, if it contributes to personal improvement and to that of those who, hopefully many, surround us every day.

After having been formed with unforgettable teachers, moments and learning in the cloister of the Colegio Mayor del Rosario, and recently graduated as a Food Engineer, I was fortunate to join the UNAD project where I had the invaluable opportunity to meet, work alongside, learn and become involved in the excitement and commitment to community education that Miguel Antonio Ramón Martínez inspired in the original distance university, whom I have recognized in this book for his charisma and vital ideological contribution to the UNAD pedagogical project. I met him in 1983, and from him I learned, when he was my advisor, that education is synonymous with hope and freedom, that the main characteristic of an educator is to serve others and to be supportive, and that the UNAD was called to be a space of intellectual welcome, of pragmatic knowledge for all those who accepted the challenge of self-education, and for the most unprotected people of this country.

The road to the Office of the University President

I am not one of those who can be called “political animals”, nor am I one of those who pretend to be one in an opportunistic manner. I respect and admire the integral, ethical, sincere, truthful and transparent

politician. And although UNISUR, and later UNAD, had in some of its times certain shades of politicking, because it was very tempting to attach a public higher education institution to a political movement, due to the budgetary resources (limited, but resources after all), the growing number of professors and administrative staff and its national impact, I never joined any party or clientelist movement to try to ascend or gain power within the University. I must say, however, that I was not lacking in offers.

My political party, if it can be called that way, is the "polytechnic"; that is, the bet for technical leadership, for education as a political project, with social sense and achievement indicators, and without clientelist and bureaucratic groups or movements. I have always considered irresponsible the university director who seeks to align education to a light policy without aspirations of collective transformation, of retrograde and orthodox actions to defend sectarian and petty interests disguised as a cause. This should not even be thought of in a university that recognizes itself as such, because this, by essence, is and must always be an institution defined to be the critical conscience of a society, and for this it must guarantee the academic, scientific, plural, rigorous and serious tone of argumentation, which allows it to evolve and grow in a planned and prospective manner.

My arrival at the university's presidency was not by chance. When I arrived there, in 2004, I had already lost an election for that position. As has always happened, trying to innovate and break paradigms is not easy. Compared to today's UNAD and its results, the management paradigm and educational model of the 2003 Institution would not have achieved this great transformation. My first major decision, as University President, was to route the Institution towards its own nature (open and at a distance and committed to the development of the regions), which meant openly confronting practices of poor academic quality and voracious clientelist and bureaucratic appetites.

The second major decision was to prepare the educational community to understand the meaning of moving from being an institution to a University, with full autonomy and all that this entails in terms of developing processes of self-determination, responsibility and personal and

institutional projection, with its own convictions and not copying the usual educational models, inappropriate -in my opinion- for a university that was born to be a pioneer, but that had been recast in the course of time, leaving aside the traceability that President Belisario Betancur always dreamed of for his Distance University program.

Today UNAD is a leader because it has dared to innovate with conviction and self-responsibility, even if this has meant - at times - fighting windmills, like Don Quixote, in order to inspire, convince and engage a community around a cause.

Although promises of positions and political announcements could be more striking or apparently quicker to reach a position, that has never been part of my life project and, I believe that the UNAD community has so recognized, at least in my case. In the 17 years of my administration and nearly 200 thousand people who have benefited from the UNAD project, no one will be able to link Jaime Leal with political practices.

The study, the preparation, the deep knowledge of the principles that guide the organization and the educational needs of the country constituted, on the other hand, the path adopted by the writer of these lines not only for himself, but especially for the leaders who have supported the construction of UNAD always in search of the best strategies that would strengthen a qualified educational service for more and more people.

Each of the very diverse areas and fields of knowledge and of university administration itself demand a very specific and deep knowledge. I am not an expert in many of them, but my time in various academic, administrative, logistical, budgeting and technology areas, among others, gave me the possibility of having a broad vision of university life and management. I arrived at UNAD with my undergraduate degree in food engineering – from INCCA University in Bogotá.

I was 24 years old, and at that time I had a seven-hour-a-week contract, which I was even told I could not be paid very soon, due to the deficit budget situation that accompanied the genesis of this University. That, instead of being a demotivation, became a challenge for me and was

the beginning of a career that led me to become the president of the university when I was 45 years old.

Parallel to my very diverse jobs in educational organizations, from being a monitor and teacher to being Vice President and Dean of Engineering Faculties, I had the opportunity to pursue my postgraduate studies oriented to academia and university management: Graduate Specialization Degree in Educational Planning -from Rennes, France-, a master's degree in University Teaching -from La Salle University-, and a PhD in Distance Instructional Technology - from Nova Southeastern University in the United States, and several honorary doctorates awarded to me by prestigious universities and academies of invaluable contribution.

I now mention the valuable opportunity I had to work in other institutions. This allowed me to have a benchmarking of the sector, very relevant to the realities of the educational market, and helped me see the enormous development possibilities of UNAD. I was a professor, for many years, of the Masters in Educational Administration and Supervision at the Universidad Externado de Colombia University, academic advisor at the Colombian Association of Engineering Faculties -ACOFI-, academic peer of the ICFES (then responsible for higher education) and the National Accreditation Council (CNA), Dean of Engineering at Universidad San Buenaventura University, director of Educational Corporation for Research, Training and Regional Development -CIDEP, and university president of the University Corporation for Science and Development UNICIENCIA, on behalf of the ICFES, among many other responsibilities.

In addition to these experiences and the studies carried out, I have been able to implement strategies in response to structural and circumstantial shortcomings, always with the contribution of excellent management teams that I have been able to integrate with invaluable leaders who are always more knowledgeable than I am in each area, and that in the midst of budgetary limitations and motivational challenges, they have shared the interest in providing a better education to more Colombians. Today, we have managed to enhance their interaction through teamwork and 24-7 commitment, regardless of their modest salary and work incentives. Because the leaders of the UNAD

Community do not work only for their salary, but for their convictions, for a country project, and for giving a hand to thousands of Colombians who, like many of them, have found in UNAD the only quality training solution to their expectations and needs.

In my role as President, I have always tried to ensure that the goals are collectively inspired both among the members of my direct work teams and among their work teams. Because in UNAD the myth of hierarchy is not valid. It is the passion for improvement that produces effective results, and the best friend is the one who delivers the best results, as opposed to erroneous cronyism, which only appears to form groups without foundation. In the organization we have bet that the conviction for the cause and for the human, above the position, is what overcomes the differences and strengthens the commitment, I believe that this has been understood by all to whom, once again, I thank, as university president, as a Colombian and as a father of a family, for all your dedication.

Leading implies making decisions, sometimes uncomfortable but necessary, but I have never intended to harm anyone, and if something similar has happened, it has been to defend, above all, UNAD and its viability. Every decision in which personal interests are involved challenges me to understand what is above what, to know how to correct, to give opportunities for growth and to understand that results do not come overnight, and that they only come when effort is made.

I have suffered with some decisions, especially when it has been necessary to remove good people from certain positions and functions, but with poor results in favor of the University. The challenge will be to have good people who are also good workers, with excellent results, the outcome of their intelligent and productive work.

Overcoming disappointments

I am very proud, as I know the team of leaders, teachers, alumni and students of UNAD are equally proud of the figures and the current positioning of the University: The Colombian mega-university (with the highest enrollment figures among public and private universities); with high quality accredited programs; that really advances in its institutional

accreditation process; pioneer in the development of virtual programs that for the orthodox sector seem impossible to develop (such as music, engineering and sports, among others); the first option chosen by the majority of good high school graduates in the country, among all public HEIs, to study in the development of the government program Generation E; with a unique and original model of global metasystemic staff and new organizational units and programs presented here; consolidated in structures of intelligent and productive work - long before the pandemic -; a leader in the distance and virtual education sector by being repeatedly elected to the presidency of ACESAD and AIESAD; and recognized -for two consecutive years now- as a wonderful place to work, certified by Great Place to Work; and other important academic and organizational developments that have been made and many others that are on the way.

I am pleased to list all these achievements, especially considering that our institutional history barely reaches four decades, when in the Colombian higher education sector, the main public universities are many years ahead of us, and in some cases have been created more than a century ago, in addition to an enviable budget and more support from the executive and legislative "establishment". In addition, with the sidelong glance of the "great traditional system", which resents the qualified growth and the highly rigorous virtuality that UNAD develops.

As UNAD is an educational social cause, the restrictions that some try to put on the institution lead to many frustrations. The lack of understanding on the part of some of those in power about the value of this tool to better manage public education, the fact that it receives the lowest income per capita compared to the conglomerate of public universities (despite being the one that reaches more students and regions), and to see that the norms created to promote education, instead of encouraging it, add to exclusion and low educational quality, because they do not adequately respond to the distance and virtual characteristics.

The achievements challenge us, and to a high degree, not to lower our guard; to maintain this permanent proposal of self-education and training, of analysis of the sector, of dialogue with the student body, of

study on the socioeconomic context, of permanent updating in mediations and of developments that enhance, even more, virtuality and, above all, to sustain social trust and regional integration with all our team of leaders and collaborators.

I personally hope that, in the short term, we will have hundreds of fellow Colombians completing their entire educational cycle, from elementary school to a doctoral program at UNAD. we are dreaming about it; we are building it and we will make it possible.

Getting to the current stage has not been easy and, on the contrary, has taken more time and effort than we initially intended. I must recognize that we have also made mistakes, fortunately all of which can be corrected and taken advantage of as opportunities for improvement, but above all, and sadly, we have been disappointed by the behavior of some people in the organization who, in the face of differences, have resorted to lies, discredit, slander, defamation in social networks and the concert to discredit both the present and historical image of UNAD, and me as a university president.

From the beginning, attempts were made to politicize UNAD. It was threatened by politics. The first threat I received was only eight days after taking office for my first administration period, when I was summoned to a debate in the Senate of the Republic. There I told the congressmen that I loved - and still love - academic debates, and that this was my scenario for interaction. This created a condition of respect for the new UNAD, and since then it became a matter of course that there would be no room for clientelism and politicking in the University.

I try to interpret many of these non-academic behaviors as a product of the initial incomprehension of our proposal of pedagogical and organizational innovation, due to the conceptual, labor and even affective closeness of some of these members of the UNAD Community with what I have identified here as the Orthodoxy, by the interest of others in reaching the university president's office and holding a power not seen as service and sacrifice but as an opportunity to organize expenses and appoint personnel, and as the intention of directing the organization

with the force of politicking, patronage, lobbying and cronyism, and not with the rigor of arguments, indicators, academic debate and support for an academic cause and social service, as is the current UNAD.

I must recognize that these situations, which are not worth detailing here, but which for several years, especially at the time of the election of the university president, have appeared in various media and social networks, and which have worn down our justice system, due to the investigative and jurisprudential actions of entities such as the Attorney General's Office, the Comptroller, the Prosecutor's Office, the Council of State, the Supreme Court of Justice, the Ministry of National Education, among others, did not stop the dynamics of the UNAD and its current president. On the contrary, each one of the accusations and interests to discredit us became our own and institutional motivation to examine each one of our conducts, to ensure that all our actions are impeccable and to qualify our processes.

These shameful actions, the history of UNAD will show, never prospered, because all public entities, investigations and authorities have always absolved Jaime Alberto Leal Afanador and the University. Paradoxically, history will also show that many of those who were behind these infamous accusations were the same ones who, in the past, claimed to defend the UNAD project and even the dignity and performance of its president.

Many of these persons (of whom I do not hold grudges, because, unwittingly, they taught me to respect and value difference and to understand how the lack of argument can make the academy a shambles) have an enveloping rhetoric, but without foundation. They affirm many things, but when it comes to concretizing ideas, developing arguments, setting indicators or committing themselves, their results are none.

UNAD is an excellent scenario to grow, but based on work, commitment, study and projects. Everything else has no place. With none of these people did I come out in conflict, at least not on my part.

The power to lead... to serve

Even though the experience of UNAD today presents us with greater advances and challenges than frustrations and losses, in the case of the

presidency office of the university, the concerns, tasks and challenges are more important than the vain pride derived from the position.

Contrary to what many people think, holding the office of the university president is not a demonstration of power, comfort, freedom, travel or high-level contacts. A public responsibility of this magnitude is not only to have a position and a salary, but to provide a service. When the objective is to grow, serve, improve and build a country, these are simply means that try or help to lighten the burdens. Managing the president's office of a university demands attention to multiple details, listening a lot, reading hundreds of documents, understanding the difficulties of the teams, leading dozens of meetings, reviewing projections, having a full agenda seven days a week, identifying the best development scenarios for each of the leaders of the organization, facing all external entities and, above all, or better yet, the most important thing, interacting with the team, trusting and communicating with leaders and bodies at all times.

This management team with whom I share challenges is, if you will allow me the inappropriate comparison, like the set of fingers on my hands. I can think and want something with my head and heart, but that is not enough if I cannot move my hands to reach for it and, like a goldsmith, I must articulate my idea to delicately build, with my hands, each desired project. Hence my permanent obsession to ensure that we speak the same language and understand the same purposes with each of the organization's directors, that they are in the right place for the performance of their personal and professional mission, that they have the proper training and that they understand their individual and collective role in the University. When that happens, power disappears, because it gives way to respectful collegiality, peer-to-peer dialogue and community understanding of what UNAD is and where it is headed.

The magnitude of the responsibilities, the educational impact achieved, the volume of leaders trained by and to enhance the mission statement of the University should, day by day, create countless possibilities to be better and better as an educational cause. Experience has shown that the sum of so many talents and intelligences constitute a scenario that goes beyond obtaining personal benefits, because its mission is to

serve more and more people, as summarized in the UNAD Solidarity Pedagogical Project.

Looking back and seeing what has been built

Forty years is very little in the institutional life of a University. With modesty, but also with pride, I can point out that the conviction in an educational project, supported by thousands of Colombians who backed this initiative, has brought UNAD to the place of privilege and recognition in which it finds itself today. Although this is only one of the first steps of a very long ascent that, I hope, will continue to take place with all responsibility in the time to come.

Jaime Alberto Leal Afanador is a historical casualty at UNAD. One more public servant, who has tried to read carefully and, as far as possible, objectively and properly the letters of a Nation that has been crying out for decades for a pertinent and quality education, and who, with the help of thousands of fellow Colombians, has understood that virtuality is a good tool to interpret the pedagogy that, like music, serves to sing a hopeful melody for the personal and educational growth of Colombians and of the country, from its various regions. The greatest interest is that, even with better chords, those who are meritoriously responsible for its conduction, continue to sing with vibrant rhythm the chords of inclusion, social sensitivity, commitment to the homeland and to contribute to a dignified life for thousands of students, thanks to the effectiveness of their hard and planned work.

The UNAD of today, and that of tomorrow, already has officialized institutional policies, not governing ones. My final action is aimed at ensuring that this already defined melody, which must be perfected day by day, is never lost.

I am grateful for my existence, of which I would not change anything. I am clear about the concept of finiteness in life, and I am aware that everything has its limits.

I am grateful for my existence, of which I would not change anything. I am clear about the concept of finiteness in life, and I am aware that everything has its limits. I like people to always study, to believe in them-

selves and to motivate themselves to encourage others to be better, to take on challenges and innovative projects that allow them self-growth and good ambition to take on new responsibilities. All this is not for free and has a key requirement: to be fully aware of the meaning and significance of the organization; and this is something that cannot be avoided by those who assume the duty of leading on the social and educational course set. I only hope, and pray to God, that the level of institutional maturity, the solidity of the Organization in all aspects and the commitment of the UNAD community with the forgotten Colombia, will always empower this metasystemic Institution as one of the best in Colombia and, why not, in Latin America and the world.

Infinite thanks!

Afterword

I met the President of the National Open and Distance University of Colombia (UNAD), Jaime Alberto Leal Afanador, at a meeting organized by the Organization of Ibero-American States (OEI) to discuss distance and online teaching in Ibero-America. We complete the list of speakers with the President of the National University of Distance Education UNED, Ricardo Mairal Usón, and the present writer. Under the extraordinary leadership of the Secretary General of the OEI, Mariano Jabonero Blanco, we had the opportunity to contrast and discuss experiences and draw a future for this important teaching modality in our countries. The meeting was held virtually in the midst of confinement as a result of measures taken to curb the spread of the SARS-CoV-2 coronavirus. A few months later, Mr. Leal contacted me to present his book "Education, virtuality and innovation" and invited me to write this epilogue. I gratefully accepted this offer, in the conviction that this work summarizes the many accomplishments achieved by UNAD in its forty years of existence.

I remember the first time I crossed the Atlantic, back in 1996, to give lectures on anaerobic bacteria at the Universidad Autónoma Gabriel René Moreno University, based in Santa Cruz de la Sierra, Bolivia. Since then, I have traveled to Latin America on many occasions, almost always for university purposes. During the fifteen years that I held positions in the government of the University of Extremadura, first as vice-president of Coordination and Institutional Relations, and later as university president, I tried to strengthen ties with universities in different countries of America. An exciting experience that resulted in a greater internationalization of my university. It is comforting to recall many of the achievements in regards of student and faculty mobility, agreements for joint degrees and increased contacts at the research level, among many other actions.

Throughout the two years that I held the presidency of CRUE Spanish Universities, I worked to improve relations and increase collaboration with similar institutions in different countries, among them the Colombian Association of Universities (ASCUN). Without a doubt, our universities and business schools are weaving an Ibero-American citizenship based on knowledge, study and research that will result in important social and personal benefits. Never in history has this possibility been extended to such a large number of students. This is an achievement that we must maintain and nurture if we want to help our countries progress and improve the welfare of their citizens.

In this context, the work written by Mr. Leal reminds us of the important role played by UNAD in the process of academic training, research and its social projection in Colombia, and in most of the rest of Latin America and the Caribbean. From its beginnings in the early 1980s until today, UNAD has gone through different stages and challenges. The arrival of Jaime Leal as president in 2004 marked an important turning point. These were sensitive times for this university, which was at risk of disappearing or being attached to another Colombian public university. The road covered from that date to the present is an example of institutional coherence. It is important to highlight that UNAD currently has more than 165,000 students belonging to 1,116 of the country's 1,204 municipalities.

UNAD's thinking is based on the commitment to knowledge management; to the radical change of the vertical, authoritarian and imposing pedagogical discourse; to the development of autonomous, meaningful and collaborative learning; with the qualitative transformation of the interaction between the university and the local community; with pedagogical and social innovations; with respect for the sustainability of the systems and with the change in the paradigm of university research. As Mr. Leal rightly points out, if UNAD manages to maintain a stable leadership in educational innovation while keeping costs below those of the Colombian public university sector, it will be able to translate such performance into greater coverage of populations excluded from high quality educational opportunities and, additionally, sustain continuous improvement of its educational services.

Being convinced that higher education is the main agent of social mobility, the greatest element of social justice and the best way to achieve the progress of peoples and to democratize and make their governments more transparent and fairer, I would like to emphasize the fundamental role of UNAD in this priority and strategic task. This book gathers its history, its problems and its many successful achievements. There is no more gratifying task than to promote the development of people on the basis of knowledge. To form educated, free and caring citizens is perhaps the most noble mission of the university. My warmest congratulations to the work done by UNAD and to Mr. Leal for collecting it in this book and for reflecting on the past, present and future of higher education in Latin America.

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Jaime Alberto Leal Afanador

He is recognized as one of the most important scholars in Latin America and one of the world's leading managers of distance and virtual education.

With more than three decades of experience in the education sector, he has made important contributions to Colombian Higher Education as a consultant, advisor and strategist in the areas of Business and Technological Development, Industrial Operations, Educational Planning, Prospective, Quality, Organizational Development, Accreditation, Self-Assessment, Curricular Redirection and Design of Self-Learning Materials, for several institutions and associations of which he has been a member and others that he has led.

Since March 2004, Dr. Jaime Alberto Leal assumed, as President of the UNAD, the challenge of transforming the Colombian Distance University into a mega-university for all, with a broad social sense and with a clear development and appropriation of information and communication technologies, an essential project that has endorsed him as President of the University until the year 2023, when his third term of office ends.

As a result, the National Open and Distance University has been recognized for the quality of its educational offerings, the relevance of its academic and pedagogical model, and its important social and community role in the construction of education for all. As University President, he has been recognized as one of the leaders who has contributed the most to open, distance and virtual education at national and international level, currently being a member and co-founder of important associations of Open and Distance Education in Colombia and Latin America such as the Network of Distance Education Universities of Latin America -RECLEAD, the Inter-American Consortium of Distance Education CREAD, and the Ibero-American Educational Television Association ATEI, besides being president of the Colombian Association of Higher Education Institutions -ACESAD and the Ibero-American Association of Higher Distance Education -AIESAD.