The challenges of socio-legal research in law schools in Colombia and the use of new information and communication technologies

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Abstract. A correlational statistical analysis was carried out in two university institutions of Cartagena of India’s, which allowed us to infer whether the educational entities envision the curricula of the Law program, the inquiry as a daily activity of students and professors and if they have socio-legal research center, with lines of research that place the development of investigative processes, with identity of managerial criteria, since it is the entity that designs and arranges the curriculum of this training program so that the lawyer who graduates, orients his daily legal practice in the investigative with the support of ICT. Surveys were applied to teachers of the law program, which allowed us to determine the strength of association or correlation between variables A and B through a population sample, to make inference to the formation of a lawyer, as well as a humanist, whose discipline be the socio-legal research so that, being a lawyer, you can devote yourself to observe, collect, select, describe, classify and analyze the elements that are in a social environment or space to frame it in the legal system with the support of legal computer systems. It was obtained as a result that (ICT) have evolved in a very fast way the daily life of teachers in the surveyed universities, since young teachers are not traumatized by the use of new technologies because they are daily familiar with computers, the internet and its communication tools, while teachers at the end of the century are considered digital illiterates.

1. Introduction

Today. Social Research according to Galindo [8] is part of the forms of information culture, since knowledge about the social is distributed among the population in a dissymmetric way, since some people get the information more than others on the other hand, some seek and need more information than others. This is a new starting point for the discussion about the use of new technologies in socio-legal research in Law.

As law researchers, teachers of the new century must have a comprehensive education: both humanistic, grounded in human rights; in the social, in the basic legal and in the scientific technical (in
their own field); This implies being able to count on a law program, with a body of solid researchers 
[25] that can generate an institutional identity among its members, for a better training of the lawyer of 
the future, that of the digital era, by The Center for Socio-Legal Research, attached to the Law program 
in Cartagena universities, must be a reflective space on aspects related to epistemological proposals for 
social research and Law, stimulating science and aesthetics in the academic community; and, likewise, 
it must promote and increase the research carried out by managers, teachers and students in socio-legal 
knowledge with the support of legal information systems provided by educational technology, essential 
in the decision-making process that day demands the complexity of contemporary societies, giving life 
to a curriculum with a research approach, this is the thesis that will be developed in this scientific article.

The problem under investigation shows the refusal of the professors of the end of the 20th century, 
of the Law program of the Faculty of Social Sciences of the Antonio de Arevalo University Foundation, 
UNITECNAR regarding the use of the Moodle platform to promote research practices in the socio-legal 
research center as a true investigative entity, so that it has a positive impact on the development of the 
social space [17] as is the case of Cartagena de India’s, in the Department of Bolivar in Colombia, as 
teachers assigned to these investigative units, in addition to lawyers, are the social actors who own the 
practices and ideologies whose description and analysis is the object of this investigation [19].

Likewise, the University - Research Center relationship must transcend the boundaries of everyday 
life in the teaching-learning processes, to reinvent other joints that under the theoretical and 
methodological parameters of social research - Participation Action Research - IAP. Ethnography, etc., 
allow to build an active and competitive model that allows the insertion of its results in the curriculum, 
therefore a quantitative correlational analysis was made to try to determine through the application of 
social surveys, if teachers of the Law Program of the Libre University in Cartagena are also reluctant to 
use the Moodle platform. Correlational research makes important contributions to scientific knowledge, 
since this research strategy helps scientists evaluate descriptive issues that may be the basis of 
subsequent socio-educational experiments.

2. Methodology
The situation of the culture of the use of ICTs in socio-legal research, particularly in the educational 
community of the Law program of the Faculty of Social Sciences of UNITECNAR, generated the 
question that teachers asked themselves: ¿Why use ICT when conducting a socio-legal research?, which 
leads us to establish as a general objective, to inquire through a correlational statistical survey, if the 
teachers of the Law programs of the Antonio de Arevalo University Foundation and the Libre University 
in Cartagena, are reluctant in the use of the Moodle platform for teaching - learning Law research; The 
hypothesis that was established was that the teachers of the subjects of the law program curriculum 
should generate research projects in the socio-legal classroom using new technologies because in this 
way they seek to create in the Law students, a profile of true researchers of this science, since, as 
Lawyers, they must not only know the theoretical and practical aspects of their discipline, but they must 
also have a vision of the social projection of the country, its reality and its historical, social processes, 
economic in association with the own legal science curriculum in its different manifestations: Criminal, 
Labor, Public, Private and Procedural.

For the Law, this is a quantitative Legal Partner investigation, that is, it has contributions from the 
quantitative research, which is one in which quantitative data on variables are collected and analysed.

3. Results
This was a correlational statistical investigation and a non-experimental research method was used in 
which the researchers measured two variables, that is, the purpose of our research was to detect which 
variables are connected to each other, when the teachers of the Law programs of the Antonio de Arevalo 
Tecnar University Foundation and the Libre University in Cartagena, use the Moodle platform for 
teaching - learning Law research, with which it was understood and evaluated, the statistical relationship 
between them, without influence of any strange variable.

The variable “A” was, the teachers of the Law programs of the Antonio de Arevalo Tecnar University 
Foundation use the Moodle platform for teaching - learning of the Law research and the variable “B” 
was, the teachers of the programs of Law at Libre University in Cartagena, and they also don’t use the
Moodle platform for teaching - learning Law research. We wanted to determine if there is a positive or negative correlation or if there isn’t correlation between the two variables, since teachers who teach socio-legal research in both law programs must use ICT to qualify the teaching-learning process.

The distinctive feature of this correlational investigation was that none of the variables involved were manipulated by the researchers, since a group of them applied a survey in the form of Google Doc, which in UNITECNAR was directed by the dean of the teachers who should use the SPLAVIA platform by institutional mail and at the UNILIBRE of Cartagena the same process was carried out by the dean.

The sampling was randomized, 8.3 teachers from professorship, 8.3 part-time teachers and 12.5 full-time teachers were surveyed. Teachers from UNITECNAR in Cartagena were surveyed in 16.7, from Barranquilla in 8.3% and from Sincelejo in 4.2%; 12.5% of full-time, part-time and full-time teachers were surveyed at UNILIBRE in Cartagena.

This section presents the results that were obtained after the statistical analysis performed, so we can say that correlational research allowed us to measure two variables and thus establish a statistical relationship between each of them:

Variable 1: Regarding the question about ¿whether you can connect a computer and its most common peripherals: printers, scanners, etc.? UNITECNAR teachers said yes in 95.8% and no in 4.2%. At UNILIBRE in Cartagena, 93.8 responded yes and 6.2% said no.

Variable 2: About if ¿do you have basic knowledge about the operation of a computer and its peripherals (mouse, scanner, etc.)? UNITECNAR teachers said yes in 100% and no in 0%. In UNILIBRE Cartagena teachers said yes in 93.8% and no in 6.2%

Variable 3: As to whether ¿do you know how to connect audio equipment, video cameras and cameras to your computer? UNITECNAR teachers said yes in 97, 1% and no in 8.3%. In UNILIBRE Cartagena, teachers said yes in 62.5% and no in 37.5%.
Variable 4: With reference to ¿if do you know how to install and uninstall computer programs on your computer? UNITECNAR teachers said yes in 62.5% and no in 37.5%. At UNILIBRE Cartagena they said yes at 50% and no at 50%.

Variable 5: If, ¿Do you know how to download programs, images, music, etc. from the internet? UNITECNAR teachers said yes in 91.7% and no in 8.3%. At UNILIBRE Cartagena they said yes at 75% and no at 25%.

Variable 6: With reference to ¿do you understand the difference between hardware and software? UNITECNAR teachers said yes in 87.5% and no in 12.5%. At UNILIBRE Cartagena teachers said yes is 93.8% and 6.2% is not.
Variable 7: Regarding whether  ¿Do you know how to make inquiries in specialized databases such as Legis, E-book, EBESCO, etc.? , UNITECNAR teachers said yes in 70.8% and no in 29.2%. At UNILIBRE Cartagena they said yes at 87.5% and no at 12.5%.

Variable 8: With reference to whether  ¿Do you know how to create and modify spreadsheets with a computer program (Excel, etc.) for specific purposes using functions such as formatting cells insert and hide rows, make dynamic tables ? , UNITECNAR teachers said that yes in 62.5% and no in 37.5%. In UNILIBRE Cartagena they said yes in 62.5% and no in 37.5%.

Variable 9: Regarding whether  ¿Do you know how to use different programs that include tools to draw graphics such as Paint, Photoshop, etc.? , UNITECNAR teachers said yes in 58.3% and no in 41.7%. In UNILIBRE Cartagena they said yes in 56.3% and no in 43.8%.
Figure 9. Do you know how to use different programs that include tools to draw graphics such as Paint, Photoshop, etc.

Variable 10: Regarding if ¿do you know how to create images and graphics through a computer problem?, UNITECNAR teachers said yes in 50% and no in 50%. At UNILIBRE Cartagena they said yes at 18.8% and no at 81.3%.

Figure 10. do you know how to create images and graphics through a computer problem

Variable 11: On if ¿you can create or edit audio with a computer program?, UNITECNAR teachers said yes in 33.3% and no in 66.7%. At UNILIBRE Cartagena they said yes at 18.8% and no at 81.3%.

Figure 11. you can create or edit audio with a computer program

Variable 12: Asking for ¿if you know how to create a multimedia presentation through a program including static images, texts, audio and video graphic tracks?, UNITECNAR teachers said yes in 50% and no in 50%. At UNILIBRE Cartagena they said yes at 12.5% and no at 87.5%.
Figure 12. If you know how to create a multimedia presentation through a program including static images, texts, audio and video graphic tracks

Variable 13: If, ¿Do you know how to surf the Internet with browsers such as: Explorer, Chrome, Mozilla, etc.?, UNITECNAR teachers said yes in 100% and no in 0%. At UNILIBRE Cartagena they said yes at 18.8% and no at 81.3%.

Figure 13. Do you know how to surf the Internet with browsers such as: Explorer, Chrome, Mozilla, etc.

Variable 14: In reference to if ¿Do you know how to use Internet search engines such as: Google, Yahoo!, etc.? UNITECNAR teachers said yes in 100% and no in 0%. In UNILIBRE Cartagena they said yes in 93.8% and no in 6.2%.

Figure 14. Do you know how to use Internet search engines such as: Google, Yahoo!, etc.

Variable 15: About if ¿Do you know how to make videoconferences over IP with Messenger, Skype, NetMeeting, RENATA, etc.? UNITECNAR teachers said yes in 83.3% and no in 16.7%. At UNILIBRE Cartagena they said yes at 31.3% and no at 68.8%.
Figure 15. Do you know how to make videoconferences over IP with Messenger, Skype, NetMeeting, RENATA, etc.

Variable 16: Asking for ¿if you use email, instant messaging chat, forums, distribution list, that is, through the usual Internet communication tools?, UNITECNAR teachers said yes in 95.8% and no in a 4.2% At UNILIBRE Cartagena they said yes at 18.8% and no at 81.3%.

Figure 16. you use email, instant messaging chat, forums, distribution list, that is, through the usual Internet communication tools

Variable 17: Regarding if ¿do you know how to organize, analyse and synthesize the information through graph tables or diagrams?, UNITECNAR teachers said yes in 54.2% and no in 45.8%. At UNILIBRE Cartagena they said yes at 31.3% and no at 68.8%.

Figure 17. Do you know how to organize, analyse and synthesize the information through graph tables or diagrams
Variable 18: On ¿if you know how to use graphic organizers such as concept maps, mind maps, diagrams or diagrams to represent the relationships between ideas or concepts?, UNITECNAR teachers said yes in 75% and no in 25%. In UNILIBRE Cartagena they said yes in 48.3% and no in 56.3%.

Figure 18. you know how to use graphic organizers such as concept maps, mind maps, diagrams or diagrams to represent the relationships between ideas or concepts

Variable 19: With reference to if, ¿Do you know significant methodological strategies supported by ICTs that are of valuable support in your face-to-face area using SPLAVIA - Moodle?, UNITECNAR teachers said yes in 70.8% and no in 29.2%. At UNILIBRE Cartagena, teachers do not work with the SPLAVIA platform, but they said that they know of significant methodological strategies supported by ICTs that are of valuable support in their face-to-face area using Platform-Moodle, blackboard, dokeos, yes in 31.3% and no in 68.8%

Figure 19. Do you know significant methodological strategies supported by ICTs that are of valuable support in your face-to-face area using SPLAVIA – Moodle.

Variable 20: If ¿you know the strengths and weaknesses of SPLAVIA - Moodle as an educational experience in TECNAR, obtained from various print and network sources?, UNITECNAR teachers said yes in 70.8% and no in 29.2% . At UNILIBRE Cartagena they said that they know the strengths and weaknesses of the platform - Moodle as an educational experience at the Libre University obtained from various print and network sources, yes in 18.8% and that no in 81.3.
Figure 20. you know the strengths and weaknesses of SPLAVIA - Moodle as an educational experience in TECNAR, obtained from various print and network sources

Variable 21: About if, ¿Do you select learning strategies with ICT use to design a virtual learning environment with your students in the SPLAVIA - Moodle Platform? UNITECNAR teachers said yes in 70.8% and no in 29.2%. At UNILIBRE Cartagena they said they select learning strategies with ICT use to design a virtual learning environment with their students in the Moodle Platform, yes in 25% and not in 75%.

Figure 21. Do you select learning strategies with ICT use to design a virtual learning environment with your students in the SPLAVIA - Moodle Platform

Variable 22: Regarding whether, ¿Do you create computerized educational materials on the SPLAVIA - Moodle Platform as collaborative work among your students? UNITECNAR teachers said yes in 83.3% and no in 16.7%. At UNILIBRE Cartagena they said, they create computerized educational materials on the Platform - Moodle as collaborative work among their students, yes in 12.5% and that no in 87.5%

Figure 22. Do you create computerized educational materials on the SPLAVIA - Moodle Platform as collaborative work among your students
Variable 23: With reference to if, ¿do you create presentations to support teaching and learning is using text, graphic and multimedia elements in the SPLAVIA - Moodle Platform that use digital educational resources? UNITECNAR teachers said yes in 70.8% and no in 29.2%. At UNILIBRE Cartagena they said that they create presentations to support teaching and learning using textual, graphic and multimedia elements in the Moodle Platform that use digital educational resources, yes in 25% and not in 75%.

![Figure 23.](image)

**Figure 23.** do you create presentations to support teaching and learning is using text, graphic and multimedia elements in the SPLAVIA - Moodle Platform that use digital educational resources

Variable 24: Asking for whether, if ¿it organizes groups of students, physical spaces, materials and tasks as pedagogical activities in the SPLAVIA - Moodle Platform?, UNITECNAR teachers said yes in 58.3% and no in 41.7%. At UNILIBRE Cartagena they said that they organize groups of students, physical spaces, materials and tasks as pedagogical activities in the Moodle Platform or another, yes in 12.5% and that no in 87.5%

![Figure 24.](image)

**Figure 24.** it organizes groups of students, physical spaces, materials and tasks as pedagogical activities in the SPLAVIA - Moodle Platform

Variable 25: About if, ¿Do you use technology to support pedagogical and didactic strategies that meet the diverse needs of your students in the SPLAVIA - Moodle Platform?, UNITECNAR teachers said yes in 79.2% and no in 20.8%. At UNILIBRE Cartagena they said that they use technology to support pedagogical and didactic strategies that meet the diverse needs of their students in the Moodle Platform or another, yes in 18.8% and that no in 81.3%.
Figure 25. Do you use technology to support pedagogical and didactic strategies that meet the diverse needs of your students in the SPLAVIA - Moodle Platform.

Variable 26: Regarding whether, ¿Do you implement pedagogical activities in the SPLAVIA - Moodle Platform in which you incorporate ICT resources as support elements for the learning sectors, using different proposals and methodological approaches such as: Webquest, collaborative work, micro projects, concept maps, etc.? UNITECNAR teachers said yes in 62.5% and no in 37.5%. In UNILIBRE Cartagena they said that they implement pedagogical activities in the Moodle Platform or another in which it incorporates ICT resources as support elements for the learning sectors, using different proposals and methodological approaches such as: Webquest, collaborative work, micro projects, concept maps, yes at 18.8% and that no 81.3%.

Figure 26. Do you implement pedagogical activities in the SPLAVIA - Moodle Platform in which you incorporate ICT resources as support elements for the learning sectors, using different proposals and methodological approaches

Variable 27: With reference to if ¿itself do you use pedagogical criteria to select computer applications and digital educational resources appropriate and possible to use in the SPLAVIA - Moodle Platform?. UNITECNAR teachers said yes in 75% and no in 25%. In UNILIBRE Cartagena they said that they use pedagogical criteria to select computer applications and digital educational resources suitable and possible to use in the Moodle Platform or another, yes in 12.5% and not in 87.5%.
do you use pedagogical criteria to select computer applications and digital educational resources appropriate and possible to use in the SPLAVIA - Moodle Platform

Variable 28: About if, ¿do you design evaluation procedures and instruments for learning in ICT work environments such as the SPLAVIA - Moodle Platform?, UNITECNAR teachers said yes in 58.3% and no in 41.7%. At UNILIBRE Cartagena they said that they design procedures and assessment instruments for learning in ICT work environments such as the Moodle Platform or another, yes in 18.8% and no in 81.3%.

Variable 29: Asking for if, ¿do you know on-line training platforms other than the SPLAVIA-Moodle Platform and its use in the academic context? UNITECNAR teachers said yes in 66.7% and no in 33.3%. At UNILIBRE Cartagena they said that they know the On Line training platforms different from the Moodle Platform and its use in the academic context in 37.5% and that No in 62.5%.
Variable 30: With reference to if, ¿do you know methodologies to support interaction and collaborative networking in the SPLAVIA - Moodle Platform?, UNITECNAR teachers said yes in 54.2% and no in 45.8%. At UNILIBRE Cartagena they said that they know the methodologies to support interaction and collaborative networking in the Moodle Platform, yes in 25% and that no in 75%.

![Figure 30.](image)

**Figure 30.** You know methodologies to support interaction and collaborative networking in the SPLAVIA - Moodle Platform

Variable 31: Regarding that if, ¿do you design online activities in the SPLAVIA - Moodle Platform that complement or support the face-to-face teaching-learning processes?, UNITECNAR teachers said yes in 66.7% and no in 33.3%. At UNILIBRE Cartagena they said that they design online activities in the Moodle Platform that complement or support the face-to-face teaching and learning processes, yes in 12.5% and not at 87.5%.

![Figure 31.](image)

**Figure 31.** You design online activities in the SPLAVIA - Moodle Platform that complement or support the face-to-face teaching-learning processes

Variable 32: About if, ¿do you evaluate the impact of the online work of the SPLAVIA - Moodle Platform on learning processes?, UNITECNAR teachers said yes in 54.2% and no in 45.8%. At UNILIBRE Cartagena they said that they evaluate the impact of online work of the Moodle Platform in the learning processes, yes in 18.8% and that not in 81.3%.
you evaluate the impact of the online work of the SPLAVIA - Moodle Platform on learning processes

Variable 33: Regarding that if, ¿do you recognize the ethical and legal aspects associated with digital information such as privacy, intellectual property, information security, etc.? UNITECNAR teachers said yes in 87.5% and no in a 12.5%. In UNILIBRE Cartagena they said yes in 75% and not in 25%.

you recognize the ethical and legal aspects associated with digital information such as privacy, intellectual property, information security, etc

Variable 34: With reference, in ¿to the fact that if you use the Internet to support the tasks of your teaching work?, UNITECNAR teachers said yes in 100% and no in 0%. In UNILIBRE Cartagena they said yes in 75% and not in 25%.

to the fact that if you use the Internet to support the tasks of your teaching work
Variable 35: On whether do you use the communication resources provided by the technologies to establish a permanent contact with the students? UNITECNAR teachers said yes in 97.1% and not in 8.3%. At UNILIBRE Cartagena headquarters they said yes at 62.5% and not at 37.5%.

![Figure 35](image_url) you use the communication resources provided by the technologies to establish a permanent contact with the students

Variable 36: Regarding whether, do you create and maintain a list of sites relevant to your teaching work? UNITECNAR teachers said yes in 79.2% and no in 20.8%. At UNILIBRE Cartagena they said yes at 62.5% and not at 37.5%.

![Figure 36](image_url) you create and maintain a list of sites relevant to your teaching work

Variable 37: As to whether do you access information sources for updating in educational technology, such as electronic journals, educational portals, edublogs, etc.? UNITECNAR teachers said yes in 97.1% and no in 8.3%. In UNILIBRE Cartagena they said, yes in 56.3% and not in 43.8%.
Variable 38: With reference to that if ¿do you use the communication tools provided by the Internet, for the exchange of educational experiences with other professors and institutions of higher education?, UNITECNAR teachers said yes in 43.8% and not in 56.3%. In UNILIBRE Cartagena they said, yes in 56.3% and not in 43.8%.

Variable 39: On if ¿do you use educational portals as a place of access to communication spaces with peers that can support your teaching work?, UNITECNAR teachers said yes in 66.7% and not in 33.3%. At UNILIBRE Cartagena they said, yes at 50% and not at 50%.
Variable 40: Asking if, ¿for whether do you participate in congresses, fairs, seminars, etc., related to the implementation of ICT in the classroom? UNITECNAR teachers said yes in 58.3% and not in 41.7%. At UNILIBRE Cartagena they said yes at 37.5% and no at 62.5%.

The questions of the following questionnaire were of multiple choices, the teachers of UNITECNAR and UNILIBRE Cartagena, answered marking on the item of their choice.

Variable 1: On whether you have used the platform technical support service?, UNITECNAR teachers said that: Personal attention dare has done 83.3%, through telephone service they do 12.5%, in an online chat they do 20.8%, and by email, 37.5%.
The teachers of UNILIBRE Cartagena said, Personal attention dare has done 62.5%, through telephone service they do 0%, In an online chat they do 0%, and By email, 43.8% does.

Variable 2: Asking for whether ¿the virtual classroom platform –SPLAVIA - Moodle- was available when needed? UNITECNAR teachers said that, Always, 54.2%, almost always 50%, rarely, 8.3%, and Never 0%.

About that, the teachers of UNILIBRE Cartagena said, Always, 31.3% Almost always 12.5% Rarely, 12.5%, and Never un 43.8%.
Variable 3: In relation to whether ¿the response time and performance of the virtual classrooms was adequate?, UNITECNAR teachers said that; Always, 54.2%, Almost always 41.7%, Rarely, 4.2%, and Never 0%.

The teachers of UNILIBRE Cartagena said, about that; Always, 25%, almost always 25%, Rarely, 12.5%, and Never 37.5%

Variable 4: With reference to whether ¿it was possible to access the platform from any place and device?, UNITECNAR teachers said that; Always, 54.2%, Almost always 50%, Rarely, 4.2%, and Never 0%.

The teachers of UNILIBRE Cartagena said, about that; Always, 18.5%, Almost always 31.3%, Rarely, 6.3%, and Never 43.8%.
Variable 5: On whether ¿Do you consider the virtual classroom service with respect to the previous semester?, UNITECNAR teachers said that; Improved, by 70.8%, It remained the same, by 25%, It got worse, by 0%, and Don't know, 4.2%.

The teachers of UNILIBRE Cartagena said; Improved, by 56.3%, It remained the same, at 31.3%, It got worse, by 0%, and Don't know, at 12.5%.

It can be inferred from the correlational analysis that the relationship between variable A and Variable B is negative since teachers of the Antonio de Arevalo University Foundation UNITECNAR, if they use the SPLAVIA platform for the training of investigating lawyers, only that teachers who trained as lawyers in the twentieth century are opposed to the use of new educational technologies, while
teachers at the Libre University in Cartagena do not use any Moodle platform, although they know the basic concepts of the computer and the Internet.

4 Discussion.
A review of the state of the art that supports the problem investigated and justifies the holistic model proposed by the researchers was made, so it was necessary to use academic-scientific literature that explains why current curricular methods are deficient in the program of law and at the same time make possible the method proposed by the authors.

The Legal Partner Research in the Law Faculties. It is an interdisciplinary construction in which the social dimension challenges the spaces of juridicity, specific legal knowledge and legal practice. Taking into account; the social effects of a specific legal framework, and its correspondence with the foundations of a rule of law. The relations between the Law and other aspects that characterize the broad world of the social: customs, imaginary, social uses, etc.: The configuration of social and cultural practices of different human groups that affect the compliance or not of a legal system. The comparative analysis of contexts and the answers to their specific problems from the legal field, the Law and the knowledge of human behaviour; The analysis of the legal logic and the theory of argumentation that challenges its normative statements, in the face of a concrete reality molded by processes - of identity construction, constructed through long-term processes or in transition to modern forms thereof.

This should lead to the understanding that normative regulation must be understood with a non-ontological axiological content since it is aimed at regulating social and cultural phenomena, therefore the socio-legal researcher [18] can ask questions or build his hypotheses and assumptions from a theoretical and methodological reference but within a sociological conception of law.

Socio-legal research is aimed at creating Law, from regulating the cultural phenomena that are relevant to a State, at a historical moment in a given social space; taking place only when trying to give a sociological conception of Law, which is the one that assumes that it is born in relation to a cultural phenomenon, whose nature and modalities of empirical realization are necessary to know, in order to be able to issue viable norms to the conditions of time, mode and place where they must be fulfilled and legitimized before the community to the extent that they embrace the purposes for which the community created the institution. Example: When creating a new statute on the gay family in Colombia, it is necessary to start from a study on the different types of family that exist in this country, with ranges as heterogeneous as patriarchal, matriarchal and even polygamous forms; there are families that have a very precarious duration in time creating complex problems in the patrimonial relations of couples and in obligations in relation to progeny and spouses with each other, so it is necessary to know the characteristics and modalities of the social institution which is going to be regulated legally.

Teaching, Research and Extension; an integrated curriculum for a high quality law school or program in Colombia. The purpose of this article is to highlight the curricular position of the current education in the Law programs and its alternative of change [16] since it is important, to draw a route that allows the administration of a Law School, to be articulated from the Teaching, Research and Extension that allows achieving the high quality of the program. To achieve this goal, it is proposed to the Universities of Colombia (and the world) the adoption in their programs of a curricular model based on research processes. The research administration model proposed is Holistic, and it is intended to integrate the substantive axes of Higher Education: Teaching, Research and Extension, from the social, human and scientific dimensions, to develop gradual processes of change (visible and applicable research results) in the educational institution to obtain efficient results from it.

Kemmis [12] says that the forms of relationship between the theory and practice of education vary and today the millennium natives ask that the curriculum of law programs change, because they have understood that with the use of mobile phones, laptops, tablets, the internet and Moodle platforms leave the routine they live in classrooms with teachers who have become accustomed to conducting master classes, that is, they are dictatorial because they still teach classes to their students.

It is from the definition of a map, that in the institutional research route, that a series of events must be carried out that allow generating a research culture from the Law program, having as a link, the research curricular model that we propose as a holistic model, allowing the activities of the research work necessarily have implications with the effect of complementarity or sequence in the other axes of
education such as research and extension, this is a systemic vision of the curriculum design process of the academic-pedagogical area of educational management [10].

Simply put, if the activity is teaching, its effects will replicate in research and extension, if the activity is research, it will replicate in teaching and extension and if the activity is extension, it will replicate in teaching and research. The integration of the substantive axes of education allows to have in an organized way all the events that are fulfilled both in one and another function of it and one or another academic and methodological - administrative unit; articulated with each other, so that all members of the academic community that belong to a training program produce tangible results of these substantive axes.

The operational phase of the Holistic Curricular Investigative Model (MOHID) proposed in this article is closely linked to the construction of curricular strategies that arise in the curriculum, such as a curricular design that consults the alternative nature of the process of building a new academic culture that allows the creation of new professional and pedagogical identities, such as the construction of a citizen culture for the care of the environment.

The interdisciplinary nature that the holistic research model (MOHID) pursues is not achieved with the current way in which knowledge is organized in the curricula in the faculties and law programs of Colombia, especially in the city of Cartagena. The subjects or subjects adapted as a curricular strategy have been subject to different analyses that call into question their insular, atomized, encyclopaedic and strongly rooted nature in their content mediating function, therefore, in this new curricular proposal, the students are considered thematic and problematic nuclei, as object of concretion of the proposed curricular model, from a holistic and integrative vision with the investigation.

The thematic and problematic core, as an interdisciplinary curricular strategy, is understood according to Nelson López, as: “The set of related knowledge, which makes it possible to define research practices and processes, around a problem object. This implies the construction of strategies that guarantee the theory - practice relationship and the construction of participatory actions, between individuals and groups in the strategy that allows integrating a field of problems; with a field of knowledge that becomes the training of a professional [13].

Working with the thematic and problematic core strategy, warns a direct correlation with the purpose of training the modern lawyer, which guides and determines the academic development of the training process in an academic program, to the extent that it becomes a device that facilitates the integration of training, research and social extension or projection, considered determining processes of the identity of institutions of higher education level, concatenated to the internationalization of the curriculum, to take it to the forefront of competitiveness and globalization.

The holistic research curricular model, based on the thematic and problematic core, is presented as a strategy that allows to overcome the split between research theory and practice, to the extent that it is the result of stressing a field of social reality problems [4] with a field of legal knowledge, in order to achieve a purpose of group-built and concerted training between the teacher and his students.

If there really is an intention to provide a comprehensive training of professionals (apprentices at the different levels of the curriculum, call semester or annuity), it is necessary to question the degrees of complementarity (or not) that are encouraged and encouraged to through the curricular structures in force when saying of Stenhouse [24], “To conceive the curricular process as an investigative process, it installs its development within the framework of critical rationality, which defines it as a custody and practice field that is interested in interaction of two large scenarios of meaning that have been given separately as differentiated concepts of conceiving the curricular process as an investigative process, installs its development within the framework of critical rationality, which defines it as a field of custody and practice that interested in the interaction of two large scenarios of meaning that have been given separately as concepts difference Two of Curriculum: the intentions for the school and the reality of the school; theory and ideas for practice and conditions of the reality of that practice”.

The thematic and problematic nuclei mentioned above, given their complexity and extension can be broken down into programmatic blocks, understood as the integration of the subjects as interdisciplinary strategies of less complexity in the thematic nuclei. The problematic blocks can be considered as organizational units of subjects that allow the management and concrete development of the different dimensions, problems, objects and principles that constitute the thematic and problematic core. In turn,
the subject blocks can lead to the construction and generation of specific research projects in the classroom, which refer to specific situations arising from the training, research and social projection from each of the subjects that make up the curriculum as Thematic axes, then these classroom projects end up in undergraduate work to complete the undergraduate law. As an example, we illustrate the experience of the Universidad del Quindío on the application of the PACA (Alternative Curriculum Action Program called PACA, which was proposed by NELSON LÓPEZ JIMÉNEZ at the Universidad del Quindío and with which we base our curriculum proposal), the following graphic illustrates the above:

![Figure 41. Alternative curricular structure, academic program of Accounting of the University of Quindío.](image)

The thematic and problematic core strategy directly returns the nature of permanent and collective elaboration, which acquires the curricular process from the research on the conceptual horizon, which configures the field of action of the Curricular Investigative Model, MOHID. The research model that is presented and argued, reinstates in the deliberate intention to promote a substantive and structural change of the current curricular culture, while trying to weaken the hegemony of the current curricular forms in the perspective of building integrated, investigative and Socially and academically relevant, hypothetically it is assumed with this model, that what it is about is to create a new identity of the professional of the teaching and research of Colombian law in the faculties of Law. To operationalize this research model in the Schools or Law Program, managers, teachers and students should know about socio-legal research and the use of new information and communication technologies, ICTs.

Promotion of ICTs in the Law Faculties of the Universities of Cartagena. Today teachers must make use of Information Technology and Communications (ITC) that are defined by Law 1341 of 2009 as resources, tools, equipment, software, applications, networks and media that allow compilation, processing, storage and transmission of information, such as voice, data, text, video and images and that can be used in the classroom.

The Colombian Ministry of Education insists that teachers enrich their pedagogical processes with the use of ICTs, since by involving students in their use, they improve class productivity, because they educate their students in the search for information, focusing on the appropriation of technological tools that allow collaborative work and the exploration of learning objects such as socio-legal research in law programs.

The teacher who teaches socio-legal research can create small learning communities [20] integrated by him and his students through Moodle platforms; Therefore, information and communication technologies (ICTs) are electronic means of capturing, processing, storing and disseminating data and information, which facilitate the design of educational strategies in the classroom [2].
ICT can generate successful experiences such as the one proposed in this article, that of building a curriculum for a Law program based on research and that allows the articulation of from the Teaching, Research and Extension that allows to achieve not only the internationalization of the program but its high quality, as stated by Fuentelsaz, Maicas and Polo, [6]. In this sense, MOHID can be an educational innovation since it is the result of a process of integrating the technology existing today in the world of life to create a curriculum that allows to improve the processes of the socio-legal research activity as a product, which integrates a process of the Colombian innovation system. According to Medina and Espinosa [15] Innovation consists in the consolidation of a new product, or the process or system of an existing product in an improved version.

5. Conclusion
On the improvement of socio-legal research with the use of new technologies, we can resume the words of Arbeláez [3] on this topic: “The use of new technologies has permeated the professional and educational fields to facilitate our performance in several areas, one of them has to do with access to information, another with data processing, and another, with immediate, synchronous and asynchronous communication, to disseminate information or to contact anyone anywhere in the world.”

Certainly it is no longer necessary to share the same physical space to develop a work meeting in the research area, because we have computer systems such as Skype, Zoom, RENATA virtual office, or to develop some type of writing or project, and even, it is such the impact of the ICTs that more and more students get to pursue their undergraduate or postgraduate studies, without having attended the physical space of a university because these educational institutions have virtual platforms that allow distance education, without having to use the space and time.

This situation has not been alien to the field of scientific research of Law, where more and more academics use ICTs to solve problems of the personal management of their work or the management of research itself from the center of socio-legal research, which without the use of these technological resources would be costly in economic and time terms. However, there is a risk of confusing the medium with the end, that is, of thinking that the tools offered by the ICTs to the researcher are an end in themselves and not a means to solve situations of the research process, without taking into account the potentialities and risks that the researcher may run when he focuses his expectations on the use of technological tools, such as with a click, the entire research project or its results are deleted, checked, copied, etc.

Regarding the use of ICT for personal management, computer equipment and its various computer applications, if they have become an indispensable tool for the preparation and processing of information; the internet a means for the search of information that facilitates access to specialized sources of information and knowledge, with access to virtual and remote libraries, electronic journals, digital books, databases, in which you can consult a variety of articles of research, thesis, conference proceedings, among others; the physical and now virtual (in the cloud) information storage devices that allow not only to detach from the physical devices, but also to have information in any place where the researcher is without having his own computer, and share files with members of the same team or other places and universities to perform collaborative work, with tools such as Eduroam, videoconferences, VC Espresso, Google Drive, iCloud, Dropbox, among others.

On the other hand, ICTs facilitate the communication of research results and their accessibility to the community in general and to scientific communities in particular, which can be done through the publication of research results in personal or collective blogs of research groups, publication on the web or in electronic journals or in indexed journals that are found in the databases of universities or in academic search engines such as GOOGLE SCHOLAR, SCIELO, SNAAC, etc., located on the network.

In the very development of socio-legal research, technology has been making important developments to solve problems regarding the collection and analysis of information, as happened with the statistical survey applied to teachers of the law program of the Faculty of Science Social of UNITECNAR that showed that teachers of oscillating ages between 40 and 60 years do not use the SPLAVIA platform, are considered digital illiterates because they were formed with the use of the typewriter and are “puyographs”, that is, they wrote with A single finger of each hand, at present they
have learned the basic use of the computer, but they do not know the processes of Hardware and other mobile applications and the improved use of the internet.

Young digital natives, on the other hand, play in classes with the various tools that have been developed for the advancement of a research class, such as online questionnaires, such as SurveyMonkey, which allow large population samples to be answered from anywhere in the world and download the results directly to quantitative analysis programs such as the SPSS (Statistical Package for the Social Sciences). Regarding the analysis of information, there is a fairly wide range of software for the analysis of quantitative and qualitative information; For the quantitative analysis, as already mentioned, there is the SPSS, R, Mintab, Stats and Excel, and for the analysis of qualitative information, not only of texts, but also of audios and videos, you can use Ethnograf, Atlas Ti, Nud. IST Vivo 2, Aquad 5, Winmax and Maxqda. When measuring the same variable in the teachers of the law program of the Free University Cartagena Headquarters, we found a negative correlation (Hernández Sampier: 2004) since they do not use the Moodle platform in their classes, nor any legal computer system.

These computer programs that bring new technologies generate great expectation in terms of their potential, one of them is the speed in the handling, management, search and exposure of data; another is the improvement in the quality of research. This implies being able to handle a greater amount of information with greater quality in the analysis, and finally to improve transparency in the analysis process, due to its potential for standardization. While research cannot be abstracted from technological advances and get the most out of them, it is the research group who should be clear about why and for what to use a technological tool, and whether it will be beneficial for your project in terms of academic, economic and time, therefore as a strategy of socialization of the knowledge of the results of the research “Use of ICTs in the teaching - learning processes in the educational community of the Antonio de Arevalo Tecnar University Foundation and the Free University Headquarters Cartagena ”and to motivate older teachers in the use of ICT, booklets, videos, podcast and posters were made that allowed them to understand the importance of using new technologies in the training processes of lawyers of the era of the new technologies.

Contextualizing this articulation of knowledge and technological mediations, it is considered that, in the field of Law, the great transformations, the social changes that are coming in Colombia, are allowing the development of legal sociology and its significant socio-legal research, especially in the Space of Human Rights, Armed Conflict, Forced Displacement, in the abuses of political power and abuses in the distribution of the economy in the environment, especially in terms of climate variations. It is worth noting that, as long as there is no organized, homogeneous and disciplined movement around socio-legal research in Colombia, much of the work that critically addresses the problems that keep Colombian society in crisis will fail, hence the concern about the lack of good guidance in research in Law Faculties and Programs, so from the curriculum, articulating: Teaching, Research and Extension or Social Projection as substantive axes of Higher Education and the management of legal informatics, we find a holistic curriculum, and according to Garcés-Pretel [9] ICTs play a very important role in the discourses on pedagogical transformation, since they can contribute to the development of learning processes where knowledge is exercised by seeking solve functional, complex and everyday situations [21]

In terms of techno-pedagogical transformation, another essential component that higher education institutions can develop with the support of ICTs is to create tactics and strategies that engage students as actors in their own learning, which leads to good human development and with the transformations of the logic of power within the educational practice that should tend for horizontal relationships and for a coexistence centered on service, respect, participation, dialogue, and recognition of diversity [21] and to the other, as legitimate other [14].

In this regard Escontrela et al [5] suggest that each stage of humanity has had its technological tools and has also developed different models of use, and that in the early sixties and seventies, the pedagogical model of application is based on the individualization of learning or individual internalization of knowledge, in the eighties began to talk about the need to promote learning by discovery and highlight the benefits of group use, in the nineties, the cooperative model is the one that received the most attention, among other reasons, to the development of communications. Today we work under the collaborative scheme mediated by technologies that leads the individual to work
assertively with the context, so it is expected that the new technologies will be incorporated into the socio-legal research of the law faculties in Colombian universities.

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