

**INSTITUTIONAL PROJECT FOR  
INTERNATIONALIZATION  
UNISINOS**

Digital Transformation and  
Humanities: education and  
communication in movement

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## 1. INTRODUCTION

The Institutional Internationalization Project (PII) of Unisinos, submitted to CAPES, within the scope of the International Institutional Program, Public Call 41-2017, was approved in August 2018. The PII seeks to consolidate the university's internationalization policy for the period between 2018-2021, which aims to concentrate efforts in three priority thematic areas, foreseen in its PDI: (a) Innovation and Entrepreneurship; (b) Microelectronics and; (c) Health and Technology.

These three areas were mobilized through the development of research, work missions and various interaction in the global scenario, for four themes: 1) IoT and Health, 2) Industry 4.0, 3) Ecosystems of innovation, and 4) Digital Transformation and Humanities. The integration between the three priority areas that will be mobilized by the themes gave rise to four research projects in international cooperation capable of promoting a wide and systemic synergy among the University's PPGs, connecting in an interdisciplinary and unprecedented way 70 teachers and more than 400 students of 5 graduate programs. As only Graduate Programs with a grade higher than 4 (by CAPES scale) could take advantage of the resources of this call, those that fit the proposal were the Graduate Programs in Business Administration, Applied Computing, Communication, Design, and Education. Unisinos internationalization project foresees that in the next four years the institution will become a national reference in the study of hospitals, intelligent factories, innovation ecosystems and impacts of digital transformation on social processes, as long as it does not neglect its vocation related to humanities and technology. This means that the Capes Print Notice presents an opportunity for Unisinos to strengthen its physical presence internationally in an interdisciplinary way by expanding the contact networks in partner universities on the strategic themes, also placing Unisinos among the global clusters of research and innovation so that it can consolidate its vision of becoming a world-class university.

The project also aims to provide society with qualified study results and technologies that are closely related to the interests of international policies, especially connecting the PRINT Unisinos actions with the UN sustainable development actions. Nationally, it intends to subsidize the decisions of public policies and governmental actions, such as industrial development policies, the national policy on Health Technology Management, the Brazilian Strategy for Digital -E-Digital Transformation, the Work Group for a National Strategy for Industry 4.0, among other strategic issues relating to the Ministries of Health, Education, Science, Technology, Innovation and Communication.

The approved grant includes resources for work assignments, scholarships and consumable materials in the total amount of up to R \$ 6,167,610.08 for the 4 (four) years of project. The activities of the

first phase start in 2019 and end on 04/11/2020, when there will be a partial evaluation for the renewal of the project. If it is renewed, the project will continue until 04/11/2022.

## **2. MANAGEMENT GROUP**

In order to manage the Institutional Project of Internationalization granted by Capes, Unisinos invited a group of researchers that met the demands of the edict. All should be active teachers and mentors in stricto sensu postgraduate programs, with permanent employment relationship in the institution, academic leadership and international experience in the areas defined as priority, including at least one (1) foreign member linked to an institution abroad. The group is led by the Provost for Academic and International Affairs:

Prof. Dr. Alsones Balestrin, Provost of Academic and International Affairs

Profa. Dra. Dorotea Kersch, Director of Graduate Studies Office

Profa. Dra. Claudia Bitencourt, Business Administration Graduate Program

Prof. Dra. Maura Lopes, Education Graduate Program

Prof. Dra. Carlo Franzato, Design Graduate Program

Prof. Dr. Sandro Rigo, Applied Computing Graduate Program

Profa. Dra. Adriana Amaral, Communication Graduate Program

Prof. Dr. Leonel Rocha, Law Graduate Program

Profa. Dra. Gelsa Knijinik, Education Graduate Program

Prof. Dr. Emmanuel Raufflet, HEC Montreal

Prof. Dr. Flaviano Celaschi, University of Bologna

## **3. THEME: DIGITAL TRANSFORMATION AND HUMANITIES**

Global society is undergoing the “fourth industrial revolution” (Klaus Schwab, 2016), based on the development of technologies: the Internet of Things; communication network technology; artificial intelligence; big data; connected intelligent production; advanced bioprocesses and biotechnologies; nanotechnology; advanced materials and energy storage. These technologies could impact all sectors of society, people's lives and the environment. It is believed that countries and regions that fully exploit these new technologies will be at the forefront of advanced and sustainable economies (EUROPEAN UNION, 2017, MCTI, 2017). And, therefore, there is a concern about the challenges and opportunities that these technologies pose to nations, especially with respect to the impacts caused

by the digital transformation on the future of the humanities from a philosophical, politico-sociological, historical and educational point of view and regarding social processes. Considering the challenges and opportunities related to digital transformations, Unisinos understands that choosing this topic is justified given its potential to mobilize transversally the three thematic areas established in its internationalization plan, as it supports the debate on social, managerial and educational impacts, and also regarding social processes, of adopting new technologies in the face of digital transformation. In addition, the debate between the humanities and technology is a tradition at Unisinos. Thus, choosing this theme should strengthen actions that already exist at the University, such as the humanities observatory (HUM). Focus on this theme is also justified by the importance and potential of contributions towards consolidating the Brazilian Strategy for Digital – E-Digital Transformation (MCTI, 2018) and other international agendas for development. Among them, the United Nations 2030 Agenda for Sustainable Development stand out, especially with regard to goals "Quality Education" and "Sustainable Cities and Communities". Also, the development of research that mobilizes the theme "Digital Transformation and Humanities" will allow Unisinos to secure a position in the international landscape by interacting with major institutions of the global innovation clusters that discuss and produce relevant knowledge on this subject.

### **3.1. POSTGRADUATE PROGRAMS LINKED TO THIS THEME**

#### **Communication**

The Unisinos Graduate Program in Communication Sciences has a number of researches already consolidated in the field of communication focusing on media processes, mediatization and culture. Its Lines of Research have research groups and networks of significant national and international relevance, such as PROCESSOCOM – Communication Processes: epistemology, mediatization, mediations and receptions, member of the AMLAT Network, and the Mediatization and Social Processes Research Group. The academic production of these groups has been developed by researchers who endeavor to build collaboration networks with other programs and universities. These relationships increase the possibilities of research and generation of knowledge about how media processes change and evolve in the face of mediatization, just as the cultures of different countries are impacted by the progress of mediatization processes. The potential for innovation of the research carried out contributes to broadening the understanding about the media landscape of different cultural contexts, by observing and analyzing media processes, communication means and devices, as well as the development of applied research.

## Education

This is a program of national and international renown for its academic excellence. Having received grade 7 twice and grade 6 three times by Capes, it has three Lines of Research that make it possible to keep the focus of research on educational policies, curriculum and teacher training, and technological development. It is one of the Graduate Programs participating in the Humanities Observatory (HUM) and, therefore, it is responsible for promoting the philosophical, sociological, historical and educational debate on the future of the humanities and human education in the face of relationship virtualization, blurred geographical and identity borders, economic and social inequalities and social and environmental injustices.

### 3.2. PARTNER COUNTRIES

Activities funded under this theme should be restricted to the following countries:

1. France
2. Germany
3. Italy
4. Portugal
5. Spain
6. Sweden
7. USA

### 3.3. GOALS

OBJECTIVE	ACTIONS	INDICATOR	GOAL
Consolidate interdisciplinary networks of research on digital transformation and the use of new technologies, both to generate innovations and to study their consequences	Double degree / joint supervision abroad	Number of joint supervisions/double degrees on the theme	Current: 0 2nd year: 0 Final: 1
	PhD internships abroad	Number of students that did their PhD exchange internship on the theme	Current: 3 2nd year: 8 Final: 12
	Develop joint articles of international relevance	Joint publications	Current: 0 2nd year: 2 Final: 4
		Impact Factor of Publications	Current: good 2nd year: great Final: great
	Increase the number of joint research projects	Joint Research Projects	Current: 0 2nd year: 1 Final: 2
	Conduct working missions in partners institutions	Number of missions accomplished	Current: 5 2nd year: 11 Final: 19
	Training of professors, students and staff of the University	Number of members of the academic community trained abroad	Current: 0 2nd year: 2 Final: 4

	Postdoctoral internships abroad	Number of faculty members that did their postdoctoral internship on the theme	Current: 19 2nd year: 22 Final: 31
Create and institutionalize an interdisciplinary network to discuss the impacts of digital transformations related to education and communication	Create RIPDAC	RIPDAC	Current: 0 2nd year: 0 Final: 1
		Interaction level RIPDAC	Current: none 2nd year: low Final: high
Generate knowledge able to support decisions on public policies, governmental and managerial actions, making the Unisinos reference in studies that involve digital transformation and humanities	E-book	E-book	Current: 0 2nd year: 0 Final: 1
Participate in the global process of discussion on social and economic impacts that can account for the challenges and possibilities brought about by the new technologies	Receive young talents with experience abroad to minister educational activities with professors and students	Evaluation of Activities Conducted in Unisinos	Current: - 2nd year: great Final: great
	Receive visiting professors / researchers from national institutions to carry out activities with faculty and students	Number of Visiting professors in Brazil received at Unisinos	Current: 0 2nd year: 4 Final: 10
	Seminars and Courses in English	Evaluation of classes and / or seminars given	Current: - 2nd year: great Final: great
		Number of class hours in English	Current: 0 2nd year: 20 Final: 40
	Receive visiting professors / researchers from international institutions to teach educational activities with teachers and students	Number of postdoctoral candidates received at Unisinos	Current: 0 2nd year: 1 Final: 5
	To build a platform of collaborative authorship that supports the development of inventive methodologies and interventionist, aggregative and gamified pedagogical practices	Collaborative Authoring Platform	Current: - 2nd year: implementation Final: validation and test
	Develop guidance material for faculty education	Guiding material produced	Current: 0 2nd year: 1 Final: 2

## **4. FUNDABLE ITEMS**

### **4.1. Work Missions**

Work missions include travel aid for flight tickets, 7 days accommodation and health and travel insurance. They may be carried out in the case of:

- Activities related to the execution of cooperation projects;
- Presentation of research results in congresses and international events of greater expression in the area of knowledge, with the possibility of technical visits in institutions to prospect for possible partnerships;
- Activities carried out by members of the Management Group or representatives indicated, aimed at enabling the internationalization actions of the Institutional Internationalization Project.

Average amount budgeted for mission is R\$ 17,100.00.

The Management Group will be responsible for selecting the beneficiaries of non-project assignments, while the Project Coordinator will be able to select beneficiaries among the members of the project team. The same faculty member or researcher, with the exception of his or her coordinator, may not undertake more than one work assignment per year or consecutive years of project validity.

### **4.2. Resources for project maintenance**

The resources for project maintenance will be managed by the project coordinator and may be used for: a) consumables, intended for the purchase of material necessary for the operation of the project; b) third party service (legal entity): regarding payment of suppliers of material or service, by means of a detailed invoice; c) third party service (individual): refers to payments by receipt to the person with no connection with the main or associated institution, the Public Administration or the Program, to perform a specific task that contributes to the achievement of the objectives of the project, provided that it is approved by Capes.

### **4.3. Scholarships abroad**

#### **4.3.1. Ph.D. Internship**

In the form of a sandwich doctorate abroad, students regularly enrolled in doctoral courses in Brazil undertake part of the course in an institution abroad, returning and remaining in Brazil for finishing mandatory credits and thesis defense. In order to apply for the scholarship, the candidate must be in line with one of the Unisinos priority themes (it is suggested reading Unisinos internationalization

plan, themes and research projects), be regularly enrolled in one of the participating Graduate Programs and wish to pursue his or her PhD internship in one of the countries that are part of the project.

The selection calls will be published on this page and will meet the CAPES criteria and also the internal regulations of each Graduate Program. It is important to pay attention to the foreign language proficiency requirements established by CAPES.

The scholarship payment will be made directly by CAPES to the scholarship holder and will not include full payment of tuition and fees or bench fees to foreign partner institutions.

It is necessary for Unisinos to have a cooperation agreement, memorandum of understanding, agreement or legal instrument with the university of destination.

If Unisinos does not have an agreement with the foreign institution, it is possible to ask the Program Coordination to evaluate the possibility of a new partnership.

#### **4.3.2. Junior Visiting Professor**

Professors or researchers employed by UNISINOS, who have a doctorate degree of up to 10 (ten) years, are eligible, with reference to the last day for enrollment in the selection process.

Candidates must submit a document from the host university stating that the candidate has sufficient language proficiency for the proposed activities or some of the proficiency certificates required by the host university.

It is necessary that Unisinos have a cooperation agreement, memorandum of understanding, agreement or legal instrument with the university of destination.

If there is no agreement with the foreign institution, it is possible to ask the Program Coordination to evaluate the possibility of a new partnership. It is the responsibility of the beneficiary to prepare the accountability and technical mission report.

#### **4.3.3. Senior Visiting Professor**

Professors or researchers employed by UNISINOS, who have a doctorate degree for more than 10 (ten) years, are eligible, with reference to the last day for enrollment in the selection process.

Candidates must submit a document from the host university stating that the candidate has sufficient language proficiency for the proposed activities or some of the proficiency certificates required by the host university.

It is necessary that Unisinos have a cooperation agreement, memorandum of understanding, agreement or legal instrument with the university of destination.

If there is no agreement with the foreign institution, it is possible to ask the Program Coordination to evaluate the possibility of a new partnership. It is the responsibility of the beneficiary to prepare the accountability and technical mission report.

#### **4.3.4. Short courses or "summer / winter schools"**

Scholarship for training in short courses or "summer / winter schools" abroad, valid for up to 1 month, or aid for participation in distance courses (MOOCs etc), aimed at postgraduate students linked to a research project in international cooperation or technical staff of the institution.

### **4.4. Scholarships in Brazil**

#### **4.4.1. Visiting Professor in Brazil**

This grant aims to attract renowned professors and residents abroad to teach courses, trainings, lectures or face-to-face seminars, with a minimum duration of 2 months and a maximum of 3 months, divided into up to 3 periods throughout the duration of the Institutional Project. Internationalization.

In the teaching activities carried out, a recording must be made for online transmission and subsequent availability, whenever possible.

Foreign candidates who are not native speakers of Portuguese or English must meet one of the following three requirements:

- Present a document issued by Unisinos stating that the interested party has sufficient linguistic proficiency for the proposed activities;
- Present, for Portuguese language, Celpe-Bras certificate; or
- Present, for the English language, TOELF, IELSTS or Cambridge Exams certificate.

It is necessary that Unisinos have a cooperation agreement, memorandum of understanding, agreement or legal instrument with the university of origin.

If there is no agreement with the foreign institution, it is possible to ask the Program Coordination to evaluate the possibility of a new partnership. It is the responsibility of the beneficiary to prepare the accountability and technical mission report.

## **5. PROJECT: DIGITAL TRANSFORMATION AND HUMANITIES: EDUCATION AND COMMUNICATION IN MOVEMENT**

For each theme, Unisinos created a research project in international cooperation to encourage transdisciplinarity and contemplate the Graduate Programs involved with resources and scholarships.

**Name of the project:** Digital Transformation and Humanities: education and communication in movement

**Programs:** PhD in Communication  
PhD in Education

**Coordinators:** Dr. Maura Corcini Lopes, Unisinos  
Dr. José António Marques Moreira, Open University of Portugal

**Start date:** 01/12/2018

**End date:** 31/07/2022

### **5.1. Description**

The entry of the twenty-first century brought with it profound changes that demand from the university the responsibility of training for a future in which entrepreneurship, innovation and technologies are focused on the humanities and the necessary sustainable social and environmental development. The knowledge and training of competencies to act professionally in the 21st century must be interrelated, in an international training environment of research, mobilized by digital, physical and biological technologies.

Therefore, this research project will focus on the following research problem: What are the impacts of digital transformation on education and communication? And, how is technology able to withstand the necessary transformations in the humanities, especially in education and communication? Considering the already felt and announced impacts of the industrial revolution 4.0, the research project is aimed at the development of intelligent cities, neural networks and social

companionship and technocultural appropriations, the teaching platforms in the hybrid model, ubiquitous and activated by methodologies of collaboration and inventiveness.

## **5.2. Context**

Global society is embedded in the "fourth industrial revolution" (Klaus Schwab, 2016), based on the development of digital technologies: artificial intelligence; robotics, internet of things, wearable technologies, big data, nanotechnology, among others. These technologies impact all sectors of society, people's lives and the environment.

It is believed that countries and regions that fully exploit these technologies will be at the forefront of advanced and sustainable economies (EUROPEAN UNION, 2017, MCTI, 2017). And so, they point to a concern about the challenges and opportunities that these technologies generate for nations, especially for the humanities, from the point of view of philosophical, political-sociological, historical, educational, and communicational debate. Considering the set of challenges and opportunities linked to digital transformations, Unisinos understands that the choice of this theme is justified given its potential to mobilize transversally the three thematic areas defined in the internationalization plan, as it supports the debate on the impacts social, managerial, educational and social processes related to the adoption of technologies in the face of digital transformation. In addition, the debate between the humanities and technologies is a central challenge assumed by the University in the coming years, as foreseen in the PDI.

In this sense, the present project counts, for its development, with the research and technological structure of Unisinos. With emphasis on the resources that are in the Humanities Observatory (HUM), as well as in the Advanced Laboratory of Communication and Information Technologies (LABTICS). Supporting the actions of the project are research groups constituted in the areas of education and communication, more specifically the research developed by the Digital Education Research Group - GPe-dU UNISINOS / CNPq. The focus for this theme is also justified by the importance and potential of contributions for the consolidation of the Brazilian Strategy for Digital-Digital Transformation (MCTI, 2018) and other international agendas for development. Among them, the Sustainable Development objectives of the United Nations Agenda 2030 stand out, especially with regard to the objectives of "Quality Education" and "Sustainable Cities and Communities". Also, the development of researches that mobilize the theme "Digital Transformation and Humanities" will allow Unisinos to position itself in the international scenario through the interaction with important institutions

belonging to the global innovation clusters that discuss and produce important knowledge on this subject.

### **5.3. Problem**

The current social context, marked by profound and accelerated changes by digital technologies, in the most diverse scientific fields and areas of human action, provokes the need to develop research related to "Digital Humanities" (Berry, 2012) and "Post- "(Di Felice, 2010), in which the hybrids (Latour, 2004) gain prominence. In this way, UNISINOS affirms its responsibility for training for a future in which entrepreneurship, innovation and technologies are focused on the humanities and the necessary sustainable social and environmental development. The knowledge and development of competencies to act professionally in the 21st century must be interrelated, in an international training environment of research, mobilized by digital, physical and biological technologies that make it possible to think in a divergent, creative and inventive way, allowing us to be and to be in a fully integrated world and in which we have the challenge of laying the foundations for tomorrow's innovations, where thinking and acting do not just mimic the place. From this understanding and with this responsibility comes the problem that will guide the research: What are the impacts of digital transformation on education and communication? And, how is technology able to withstand the necessary transformations in the humanities, especially in education and communication?

The main objective of this research is to understand digital transformation in the field of education and communication and how these two fields appropriate and potentiate cultural and educational practices, as well as processes of mediation and mediatic processes that involve the technologies as central axis, in order to to undergo the necessary transformations in the humanities.

It should be pointed out that the theme to which the problem and the objective are linked has already been worked on research carried out mainly by the Digital Education Research Group - GPe-dU UNISINOS / CNPq and, in research developed by the Graduate Program in Communication, through projects and joint publications with the partner universities that will be with us in this project. Thus, among the main results sought are: the consolidation of interdisciplinary research networks; creation and institutionalization of an international and interdisciplinary research and development network in Digital Transformation and Humanities; epistemological and methodological formulations concerning the mediatic processes in relation to the humanities; conceptual and bibliographic

development on the subject, besides inventive methodologies and pedagogical practices interventionist, aggregative and

gamified; construction of platform of collaborative authorship that supports the inventive methodologies and pedagogical interventionist, aggregative and gamified practices; preparation of guidance material for teacher education; scientific publications and popularization of science.

#### **5.4. Relevance**

Social and scientific relevance lies in the contribution it will bring to the understanding of how digital transformations reconfigure the forms of communication and production of knowledge and new forms of education, based on the popularization of technologies and their uses and appropriations, in a context technological convergence, hybridism and multimodality. It emphasizes the social and scientific relevance to think about the necessary transformations in the humanities and the theoretical and bibliographical production of it. Thus, the project contributes to society by developing methodologies, practices and technology platform to provide consistent education with the movement of the network society, to subject immersed in digital culture. It also contributes to instigating changes in the design of courses, curricula, learning spaces and how to organize them in time and space.

#### **5.5. Input**

For the development of the project, physical and physical resources already existing in UNISINOS and partner universities will be used, such as: computer and network infrastructure, mobile devices such as notebooks and tablets, as well as others necessary for the development of the research.

At UNISINOS, the research has the structure of the University, but specifically with the Humanities Observatory (HUM) and the Advanced Laboratory of Communication and Information Technologies (LABTICS), both created with FINEP resources.

The HUM, in addition to 6 seminar rooms and group meetings and research networks, 3 of them with web conferencing equipment, have 2 computer labs, 1 of cognition studies and 1 of retrieval of documents, all available for the development of research. In addition, it has equipment such as camcorders, recorders, cameras, high-definition scanners, magnifying glasses for working with documents and NVIVO program, available on public computers, for use by researchers and graduate students. In the HUM the researches developed in the Humanities are socialized with the whole University.

LABTICS - Advanced Laboratory of Communication and Information Technologies is a result of a project approved in 2010 by FINEPE and is characterized as a space for the production, articulation and experimentation of procedures aimed at the advanced research of information and communication technologies. In order to be feasible, the proposed environment was constituted by three spaces of technological research that are articulated around clear complementary objectives, pedagogical, production and experimentation.

The subsets are:

- a) A physical space (interactive auditorium) aimed at performing interactive activities;
- b) The second is a studio aimed at the experimental realization of communicational products;
- c) The third subset consists of editing islands for capture and research interventions.

The three subsets, as modules of a research production / experimentation system, are epistemologically consistent in the direction of the autopoietic of social and cultural systems in which communication acts and allows one to act according to certain articulating modes of production / experimentation.

Regarding human resources, the project involves the involvement of professors-researchers and doctoral candidates of the post-graduate programs of the Post-Graduate Program in Communication and the Post-Graduate Program in Education from UNISINOS, as well as teacher-researchers from partner institutions in the project.

### **5.6. Theoretical-methodological discussion**

Digital Technologies (TD) are transforming the world. The very idea of human as a natural rather than an artificial concept is being modified with the advancement of the sciences, becoming increasingly difficult to distinguish what is natural and what is artificial. Latour (1994) points out that insistence on this separation results from a Cartesian, dichotomous, binary and anthropocentric view that insists on the purification of hybrids. It is part of an epistemic assumption of the independence and supremacy of the human over the technique and the nature, which contributes little so that we can understand the complexity of the present world, that establishes itself in a hybrid context, constituted by multiple matrices, mixtures of nature and culture , therefore, the non-separation between culture / nature, human / non-human. Schlemmer (2017) states that beyond technologies, spaces, cultures, presences, our bodies have become hybrids, which leads us to think about the humanities also from a hybrid perspective.

The evolutionary trajectory of the means of communication is permanently accompanied by the improvement of tools and processes that are appropriated by the individuals, for the establishment of sets of practices, languages and mediatic aesthetics. Connectivity led to the formation of a new networked global social structure (CASTELLS, 2013), in which technocultural appropriations acquire a leading role previously limited by technological possibilities. This connectivity has meant that the delimitations between online and offline notions have lost their meaning (MANOVICH, 2013). The appropriations are increasingly frequent, and studied under different denominations: remixes, mashups, DIY, memes, among others. The variety of adaptations and new uses and appropriations generate possibilities that go beyond what was thought by the creators of the media and devices through which the media contents circulate. The production of meanings emanating from this diversity of technocultural appropriations demonstrates how social actors increasingly seek to participate in the mediatic processes through interactivity, participation, and sharing of contents, which may be of various natures. Thus, studies that explore, in digital environments, the contemporary interfaces; the production of events and the reverberation of meanings in digital environments; the dynamics of production, circulation and consumption of diverse formats in communication platforms; are examples of how technocultural appropriations demand research that, in addition to reflecting on the impacts of these deviant and adaptive behaviors, contributes to scientific and technological development through research that applies the knowledge gathered in the observations and analyzes.

For Valentini, Lopes and Schlemmer (2017), the emergence and development of the TDs definitively marks the need for dialogue between education and the field of communication. While in the period of the mass media the communication system is broadcasting from a source to several viewers, the post-massive and guided by the multiplicity of sources - authors and readers - whose real-time interaction creates communication channels in the form of a network , without an a priori determination of functions. In addition, the ability to communicate online by various means - text, photo, sound, video, graphics - has produced a profile of reader-authors that integrate communities. Thus, in the educational field, medias and pedagogical mediations, as a field of research, are condensed under the aspect of sociocultural transformations that emerge in this and that time of cyberculture (Lévy, 1993; Lemos, 2007; Lemos, 2009) , however, require their own conceptualization. Media are media, material media, physical channels through which different languages take shape and transit. They make us do things, subjectively, teach, however, communicative processes and their respective sociocultural expressions must presuppose that the

different languages and sign systems are potentially conditioned by the scope and boundaries of each vehicle, as well as assuming that the different forms of languages are hybrid vehicles (Santaella, 2003). Thus, for Valentini, Lopes and Schlemmer (2017) to understand the phenomenon of cyberculture and its different media and fundamental for a contemporary reading of the idea of pedagogical mediation, both as regards its emancipatory power - as a breach of the matrices of communicational power by liberation of the poles of the emission - and of its limits - as a movement that can serve the alienating globalization of local social demands and in favor of cultural homogenization.

We are part of a global community that requires global collaboration and cooperation between organizations of all kinds, because it is necessary to bring together nations and people to think about the complexity of the world today, how we are going to educate the new generations to real challenges such as global warming , terrorism, racism, trafficking, among others. Not only do we live on the planet, connectivity, rather than sovereignty, is becoming a new organizational principle of the human species, according to Parag Khanna (2016) who invented the term "connectography" to evidence a world where connectivity allows to overcome the physical limitations of geography. In this context, for Klaus Schwab (2016), we need social progress to minimize social inequalities. In this enters the concept of openness as a form of sovereignty, technology through expressions such as artificial intelligence, robotics, internet of things, among others and, finally, education as a fundamental instrument for inventiveness and the construction of innovation.

The research is of qualitat-quantitative approach, of exploratory and descriptive nature. With methodology for its development and data analysis, it is part of the use of:

- a) cartographic method of intervention research proposed by Kastrup (2007; 2008), Passos, Kastrup and Escóssia (2009) and Passos, Kastrup and Tedesco (2014), and
- b) the method of mapping of controversies proposed by Latour (2009, 2012 , 2016) and Venturini (2010, 2012). This methodological design will enable:
  - Based on the cartographic method of intervention research, to follow, through the movements of the cartographer's attention, the constructed routes, in search of clues that can help to describe the new regimes of action, participation and socialization of the experience, that constitute this pluralization of territories, in this atopic dwelling, comprising the planes of force that work in it.

- From the cartography of the controversies, follow the traces present in the process of co-creation, inscriptions left by the different human and non-human actors, in the movement of associations, in order to map and understand the controversies that are established in the process of innovation, providing us with elements to draw the cosmogram in order to understand the diagram of forces present in that network.

As instruments will be used: participant observation, semi-structured interview and records in text, audio, image and video. The data will be organized into subsystems of information, categorized and stored in a dynamic database. The interpretation and analysis will be carried out considering the theoretical framework that underlies the research.

The construction of methodology may also use other methodological articulations, starting with the emergence of the empirical field (Fragoso, Recuero & Amaral, 2011) as the question of the construction of the networked senses (Henn, 2014), archeology of the media and the technique of excavation (Parikka, 2012), the notions of ethnography for the internet (Hine, 2015) and monitoring and research in social media (Silva & Stabile, 2016) that can be problematized for the construction of a unique and original arrangement of the Brazilian needs and contexts thought from the specific trajectory elaborated. The research will be developed according to the following steps:

- Review of the literature related to the project themes;
- Theoretical and methodological approach;
- Data collection and analysis;
- Development of inventive methodologies and pedagogical aggregative practices;
- Theoretical-methodological construction guiding the design and design of the platform of collaborative authorship that supports the development of inventive methodologies and pedagogical practices interventionist, aggregative and gamified;
- Development of the prototype of the collaborative authoring platform;
- Experimentation and evaluation of the prototype of the platform of collaborative authorship;
- Development of guidance material for training;
- Analysis of the data and writing of the report.

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## 5.8. Results

### General Goal

Understand digital transformation in education and communication and how these two fields appropriate and empower cultural and educational practices, transforming the humanities.

### Specif Goals

- Consolidate interdisciplinary research networks on digital transformation and the appropriation of technologies, both to generate innovations and to study their consequences.
- Create and institutionalize an international and interdisciplinary network to discuss the impacts of digital transformations related to education and communication
- To foster teacher and student mobility in order to qualify the training
- Generate knowledge able to support decisions on public policies, governmental and managerial actions, making Unisinos a reference in studies on digital transformation and humanities
- Participate in the global process of discussion on social and economic impacts that can account for the challenges and possibilities brought about by technologies, especially digital
- To foster teacher and student mobility in order to qualify the training.

## 5.9. Impacts Expected

1. Theoretical-methodological constructions, linked to Digital Transformation and Humanities;
2. Development of the prototype of the platform of collaborative authorship that supports the development of inventive methodologies and pedagogical practices interventionist, aggregative and gamified;
3. Development of an open access database (images, audios, videos, texts, etc.);
4. Development of post-doctoral internships, linked to UNISINOS PhD Programs, through visiting professor scholarships;
5. Training of doctoral students linked to the UNISINOS PhD Programs, involved in the project, from PhD internship scholarships;
6. Mobility of teacher-researchers between UNISINOS and partner institutions;

7. Creation of the International Network of Research and Development in Digital Transformation and Humanities;
8. Scientific publications of international impact in periodicals, events and books;
9. Propose new research projects, from the established partnerships, to be submitted to an international development agency;
10. Contribute to the research developed at the Humanities Observatory;
11. Contribute to the expansion of research developed by the Digital Education Research Group - GPe-dU UNISINOS / CNPq;
12. Consolidate the internationalization of the programs involved in the project.

#### 5.10. Proposed Products

Co-creation of a platform of collaborative authorship that supports the development of inventive methodologies and interventionist, aggregative and gamified pedagogical practices	1
Joint construction of Inventive Methodologies and interventionist, aggregative and gamified pedagogical practices	1
Co-creation of an open access database (images, audios, videos, texts, etc.)	1
Joint production of guidance material for teacher education	2
Publications on events	8
Publications in qualified journals	8
Ebook	2
Development of joint research projects	2
Post-doctoral training	10+13
Doctoral students internship abroad	28 + 20

#### 5.11. Partner Universities

1. Universidade Aberta de Portugal
2. Universidade de Coimbra
3. Universität Duisburg-Essen
4. Universidade Autônoma de Barcelona
5. Université Paul-Valéry-Montpellier III
6. University of California, Irvine

## 6. OTHER INFORMATION

Information regarding the operation of the project can be clarified through the documents available at <http://www.capes.gov.br/cooperacaointernacional/multinacional/programa-institucional-de-internacionalizacao-capes-print>