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PROSPECTIVE DESIGN - A CASE FOR EDUCATION TRANSITION

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ABSTRACT

The COVID-19 pandemic, caused by the coronavirus SARS-CoV-2, has put into evidence multiple problems in education. This research frames some of these problems in order to investigate their nuances and impacts, in a systemic way, to propose interventions that prepare a transition from the current state of affairs into a desired future. Therefore, we chose the Prospective Design view in order to design the long term scenarios for university education that characterise the case study reported here.

INTRODUCTION

The pandemic of the COVID-19 disease, caused by the new coronavirus SARS-Cov-2, brought about multiple ruptures, created new problems and exacerbated existing ones, changing the ways in which we live, work, study, create knowledge, enjoy culture and the arts. Most local and global Socio-Technical Systems (STS) came close to a collapse, leaving behind a destruction track of dire consequences for society in general. STS are those systems with which we interact and use for work, leisure, health, education, among others. This article presents the use of Prospective Design to inform the understanding of the problems in Education within the pandemic context, and to create a vision of a desired future in this realm. Given that solutions to complex problems, such as STS, are not a one time thing, the case study presented in this article illustrates a way to design interventions today in order to achieve changes in the future. STS are complex; they are created and used by multiple groups of stakeholders from diverse backgrounds, each with their own interests, perceptions, values, preferences, strategies, resources, goals. For the daily user, STS seem inescapable, and inexorable, insurmountable. STS thrive on the notion created around them that conveys the wrong message that there are no alternatives to them - that is, they are the only alternative, regardless of how bad the consequences they bring. STS are not linear.

On one hand, they help us in our tasks; but on the other hand, they are the source of multiple problems in multiple dimensions. STS are also usually interconnected in ways that, very often, the resulting consequence of a seemingly unrelated system output may cause problems in other systems. Due to the belief that STS are immutable realities, it is hard to foresee the mostly harmful consequences of interventions in such systems (Irwin, 2015). For interventions we imply the results of human activities, such as the design of solutions, to address perceived problems. Dorst (2019) tells us about the need to develop a set of broad strategies to address the complexities of STS in the design space - a new paradigm that is emerging and that goes beyond the limited task of problem solving. Rather, it is a paradigm that re-signifies Design as a field aimed at transforming systems. Thus, the Design that anticipates envisioned futures plan interventions that are performed today in order to achieve them. It is a process in which not only interventions are designed but the desired future is envisioned, prospected, in order to inform decision making and alternatives (Engeler, 2017; van Amstel, Guimarães and Botter, 2021). On July 2020, professors of the Design Prospectivo study group, at the Departamento Acadêmico de Desenho Industrial at Universidade Tecnológica Federal do Paraná (UTFPR), proposed an event called *Prospectina - UTFPR em 2050*. Its aim was to instigate the academic and general community to design future visions to Brazilian university education, considering the impacts of COVID-19 sanitary crisis.

This pilot project stimulated the debate around present and future tensions and technological tendencies for university education in teams that included actors from multiple academic levels and specialities. The *Prospectina* design dynamics, called *repentina* or *charrette*, designated a three-day intensive workshop in which participant teams were asked to propose visualisations of the UTFPR by the year 2050, and articulate their interventions, choosing between predefined scenarios and questions sprouted from them. The resulting proposals were to act as a catalyst for ideas so that UTFPR could begin to plan a transition to a more humane, fair, egalitarian institution, which celebrates diversity, aims at sustainability and cherishes students' autonomy. The current article documents the experience of a research group that participated in the proposed event. The team considered the Transition Design methodology, developed by Terry Irwin (2015), adequate to investigate and generate systemic interventions. This design approach allowed mapping the challenges to overcome, within a chosen scenario, and informing the design of an academic model that considers education by scripts: one in which people - connected to a formal education program or otherwise involved in their own education - would have access to classes and instructional online platforms so that they could create, individually, their own learning script. This Design Research example demonstrated the importance of valuing the relational qualities that were highlighted during the pandemic: sustainability, resilience, social justice, participation, solidarity, equity and many others. The use of technologies such as Scenarios, Transition and Prospective Design provided means to value such relations, in order to anticipate, inspire and structure our design project (Geels, 2005). Therefore, the next section brings to light the theoretical background that justifies not only the need but also the urgency of considering Design as a unique research activity. Therefore, we will see the main concepts of Design and its Orders (Buchanan, 2019; 2001), Transition (IRWIN, 2015) and Prospective Design theories (Engeler, 2017; van Amstel, Guimarães and Botter, 2021), Scenarios, vision of the future and their connection with current Educational STS.

METHODS

Design: The role of design in solving systemic problems, as well as design of long term interventions, has recently entered the academic agenda and praxis. This means the academy is valuing approaches that are realistic, while stepping away from an idealistic, mechanistic view of the world, adopting a more holistic view (Geels, 2005). According to Rittel and Weber (1973; 1984), traditional methods of design are not sufficient to address the complex STS, which require a multidisciplinary and systemic approach. One can think of Design as the act of planning a series of actions, being them sequential or not. According to Simon, the act of design is devising *"courses of action aimed at changing existing situations into preferred ones"* (Simon, 1996), using intellect, tools, methodologies, among other activities. Any person who projects ways to transform an existing situation that contains a problem into a better future situation is acting as a designer. Therefore, regardless of specificities and differences in the object of study and practice of multiple diverse areas that run the gamut - from architecture, engineering, medicine, informatics to business, - by proposing new objects, new artefacts, physical or otherwise, have a point in common: the final goal of re-shaping the environment that surrounds us, building or re-shaping artefacts, creating artifices. This construction of a world that doesn't exist yet, according to Simon, is the praxis of designers; a definition that includes, therefore, multiple areas and professions. This plays right into the call for a multidisciplinary approach in solving complex systems' problems.

Scenarios: In order to be able to design for the unknown, the unexpected, aiming at sewing together social, technological, human and cultural ruptures, designers need to have tools to understand the actions and interventions that affect the future. Such tools are intimately related to the design praxis.

They give designers the certainty necessary to anticipate, and even to plan the future. Being sure that the tools as well as the framework we chose are the right ones enables creativity and liberates time for problem solving: new possibilities are explored to inform the development of such a future, and the actions that must be taken in the present in order to plan and materialize it. Legitimating the design praxis as a research discipline (Cross, 1999), endowed with specific and unique traits, is crucial for designers to recognise the importance of their role in planning futures, which is deeply connected with building scenarios. In STS transitions, the use of scenarios provide the ideation and exploration of alternative, desired futures, upon which stakeholders may agree and partake in creating the conditions for the materialisation of the desired state. Scenarios are narratives that take into account the stakeholders, people and their relations, risks, consequences, interactions, the manner in which people think and act, their beliefs, habits, values, attitudes, needs and many more. Scenarios are a tool to develop and explore alternative situations; they tell us about the starting point, premises, needs and point the way of a destination (Engeler, 2017).

The four orders of Design: In order to cope with the crisis of Western society, and its consequences in STS, there is a need for design interventions that value transdisciplinarity in its plurality, its holistic and contextualised knowledge (Findelli, 2001). A collaborative approach aiming at the development of systems and social thoughts that propose interventions efficient for social, economical, political and environmental issues (Irwin, 2015). Irwin (2015) tells us that design is broad and it is linked to multiple areas of knowledge (education, health, production etc.) and runs the gamut of themes (lifestyle, consumerism, behaviour etc.). That is why the social construction of design and its objects of praxis and research ought to be broad enough to include systemic relations. Looking at the social relations in a systemic approach is a way to consider a social production of design - its objects, problems, solutions, processes and methods (van Amstel et. al, 2016) - which is a good starting point to understand, think about and propose solutions to STS ever changing demands. We resort to the Four Orders of Design, proposed by Buchanan (2019), to localize such relations in the design space, the realm where designers feel legitimacy to act. Buchanan categorizes the four orders in: signs (visual and information communication symbols, in the form of text and/or images); things (products and the different interpretations of cultural, physical, psychological and social relations between products and human beings); actions (interactions in which signs and things acquire value when they are used in experiences); and thoughts (a systemic view for the design of interventions in complex systems). The case study we will present here materialises one possible way to apply the Prospective Design approach to deal with the wicked problems proposed by *Prospectina - UTFPR 2050's* theme.

Prospective Design and Transitions to a desirable future: The biggest - or wicked - problems currently encountered in STS derive from the limitations of the current mechanistic worldview, spread and sustained by Western Culture, in recognising and therefore dealing with complex systems. In the wake of this matter, Irwin, Tonkinwise and Kossof (2002) introduce Transition Design (TD) theory: a design approach in which transitions are central in the manifestations regarding the manner in which changes occur in complex systems. In TD, those changes come as a result of interventions that take society from one determinante state to a preferable one. As examples we can put the transition from an exploratory economy to a sustainable one, which values solidarity; or the restructuring of an inadequate food system to a healthier and ecologically sustainable one; from a curative medicine to a preventive health system paradigm; from an elitist education to an inclusive education. TD, thus, refers to the design of changes in socio-technical systems, the planning of interventions that protect, restore and encourage interpersonal relations while valuing the investigation of lifestyles. A desired vision of the future upon which people agree, accompanied by interventions in the present, create a path for such transitions to occur. A complementary approach to TD is Prospective Design. It combines theory and practice as it aims at consolidating the prospecting, anticipating,

facilitating, articulating, integrating and transforming competences that designers have developed in their role within society in the last decades. It represents a new way of understanding design, recognizing it as a unique research tool, that enables us to inform the gradual transformation of society, focusing on STS problems. Prospective Design shows us that, rather than be limited to the production of signs and objects, design space should integrate multiple processes and certain relations among stakeholders. Such transitions require intention to change lifestyles, costumes, concepts and ideas. They require changes in norms, systems, policies. To promote them, we must start by understanding and re-framing the present, keeping a glance to the future. Then, we design interventions and plan their continuous improvement. Many of the noteworthy skills required to lead this adaptation process are historically developed and mastered by designers with the design practice (Donald School, 2009), such as problem identification, adaptability, empathy, formal conceptualisation, visual communication, reasoning, collaborative work, human-centered methodologies, etc. Transitions require paradigm shifting. On the matter, Meadows (2008, p.28) says: *"You could say paradigms are harder to change than anything else about a system [...] but there's nothing physical or expensive or even slow in the process of paradigm change. In a single individual it can happen"*. And it will determine the full exercise of citizenship.

Prospective Design and Citizenship: We are social beings. Our societies are organised by several rights - social (education, healthcare, safety, housing), economic (jobs, wages, purchasing power), and political (to have an active, organised, free and conscientious say in the deeds of societies). These rights were historically conquered in their dimensions and aspects of what may be called citizenship. The sense of belonging is the subjective purpose of those civil rights. It pervades our daily lives, is exercised through participation, and fulfils the need of a worthy life. The right to exercise full citizenship is at the center of discussion when we think about most problems in current STS: the lack of access to health care, housing, food, education, information, community participation. We witness the lack of citizenship when dealing with poor collective transportation systems, inadequate education systems, repression, abuse, disrespect and disregard for the human side of the socio-technical systems, many of them directly connected to the unequal access to monetary resources. All these dimensions, when denied to parts of the population, create all sorts of exclusions and inequalities. Inadequate socio-technical systems affect the interactions among people themselves, interactions with the public goods and sphere and with the private sector. A lack of transparency, for instance, regarding public and political decisions and accountability; the poorly designedenrolment system of an education institution; an object that fails to perform its functions as expected; a digital platform that allows for the dissemination of prejudices, among others.

In all, the social, economic, cultural, political and other dimensions of society have been negatively impacted by decontextualised interventions in STS. These interventions are the main culprit of a series of problems because they don't contemplate our real needs, restrictions, conditions, social practices and cultural norms. Their lack to contemplate those needs reside in the fact that they are projected to an idealisation of a compartmented world, based on a mechanistic paradigm that does not admit complexity, subjectivity, relational qualities. If industrialisation, on one hand, gave us incredible advantages in multiple areas (technical, scientific, medical etc.), on the other, it imposed on us a narrow and only view of social organisation and relationship with the natural world, a consequence of a dualistic thinking model. Industrialisation's unwanted consequences represent a clear call for an understanding of the world in its complexity in order to produce alternative worldviews, together.

Mechanistic versus Holistic views of the world: The Scientific Revolution allowed the Industrial Revolution to use science to optimize production - value is put on productivity at any cost - the administration is based on times and measurements, production lines are created, supply chains are put in place, there is a greater control of the means of production.

This view, denominated mechanistic, valued efficiency and efficacy of the methods, single and precise solutions and the ineffability of the technology; it simplified and controlled the world by prescribing objective, accurate, measurable criteria, thus relegating the human dimensions to a lesser degree of regard. The focus on production and profit concentrated power in the hands of industrialists and capitalists, augmenting the inequalities, depriving the worker of her dignity and tools, and justified all sorts of environmental, social and human abuses. The fragmentation alienated; the production of consumer goods is considered the only important function; the hierarchies are oppressing; the linearity of the production lines are excludent; the knowledge is scientific (with no room for error); the world is a precise mechanism which can be know, defined; the world enters the era of control, control, control. We live the crisis created by this view. These ways of thinking were adopted and imposed, and go unchecked: most people gladly accept their role, and become part of these gears. Design originated in this era, with a priority of creating short term solutions, isolated, out of context, independent of other disciplines.

Recently, Boaventura de Sousa Santos (2020) tells us, regarding the pandemic, that, since the 1980's, as neoliberalism was increasingly imposing as the dominant version of capitalism, and that capitalism was being subjected more and more to the logic of the financial sector, the world has been living in a permanent state of crisis. In this context, a new, holistic worldview emerges (FONTE) to contradict and present alternatives in many ways. From a fragmented mechanistic epistemology, based on quantity and on scientificism, sustained by a dualistic worldview, a systemic one that values relationships, seeking the notion of wholeness, is at the center of this paradigm shift. Among the divergence points we can enlist the understanding that the world is complex, for simplification hides the inter-relations of phenomena. That the world is also unstable, not rigid nor controllable. And that it is also subjective, which means it recognises that scientific knowledge is a social construct in consensual spaces, made by different people in different time periods. We can now view the STS for what they are: complex, uncertain, volatile, ambiguous, interconnected for which problems there is no single, right solution. The systemic thinking we propose allows us to grasp some neglected parts of the realities we are to deal with as a whole, emphasises relationships, values the networks and the processes, worries about quality and acts based on cooperation. Community, individuals and nature are central in the holistic view. We can exemplify this view with changes in medicine; the green economy; collaborative and cooperative work. New values of union, empathy and respect are emerging.

Wicked Problems: According to Rittel and Webber (1973; 1984) the problems we usually find in STS are "wicked problems", for no definition is good enough for them. Their insidiosity resides in their multi-causal, multi-scaled and interconnected nature, but also in their great multiplicity of stakeholders with conflicting agendas. This is not only a cause but a consequence of their gloatingly straddling organisational and disciplinary boundaries. Every wicked problem is unique at the same time it is connected to others, meanwhile every solution ramifies throughout the system(s) in which they are bound. Wicked problems solutions transcend the delightful status of being right or wrong, so you can settle for the better or worse one. It only gets more dramatic to mechanistic consecrated when we realise it can take a long time to evaluate wicked problems solutions, a detrimental temporal gap which certainly contributes to the fact that such problems are - actually - never completely solved. That is why the grand expectations for the solutions to wicked problems generate a design process distinguished by a lot of confusion: many ideas, incomplete knowledge, open problem definitions - if there is one at all. There is no formula or single-bullet solution. Any intervention has the potential to change the problem, so a constant monitoring of the efforts is necessary. Our values, beliefs and habits are part of the problem, which requires designers to change premises more often than not. For their flexible, open, adaptation nature, Transition Design and Prospective Design are approaches adequate to address many aspects of a wicked problem - the future vision or the open

scenarios, for example, may be tools to get the multiple stakeholders to agree on a desired state of things, which may offer a good starting point (Irwin, 2015; Engeler, 2017). Once started, the research for the possible solutions, through design tools and methods, opens the way to lubricate the STS gears and change history direction, only for better.

METHODOLOGY

This article presents a case study aimed at illustrating the use of some techniques developed by Carnegie Mellon University Professor Terry Irwin (2015) and her colleagues to address wicked problems in a systemic and holistic way. Restricted by the pandemic, the research was conducted on line via discussion panels, questionnaires, literature review and the mappings of certain aspects of its object: educational STS. The research questions were: a) how did the educational STS come to be in the federal universities system in Brazil; and b) how to envision a transition to a better educational system.

Research paths and development

Mapping of the causes of the problems: One of the inherent features of complex STS is that they seem ethereal, bigger than real life but, in fact, we experience its actions and consequences in our daily lives. It is, therefore, important to take a good look around the problems we face, investigate their causes and ramifications, in order to find niches with new ideas and opportunities to inform the design of appropriate interventions to solve them (Irwin, 2015). For example, the problem 'poor performance in standardised tests' may have its roots in the lack of knowledge of how the test is related to a certain university course and its application in real life.　　　Figure 1 shows the mapping obtained regarding some of the many causes that resulted in the current educational STS. The starting point of the mapping was the empirical observation that the federal university system in Brazil promotes exclusion and disaggregation, for it follows the banking model of education denounced by Paulo Freire (2020). It is hegemonic, dominated by some social beliefs and does not represent the society that sustains it.
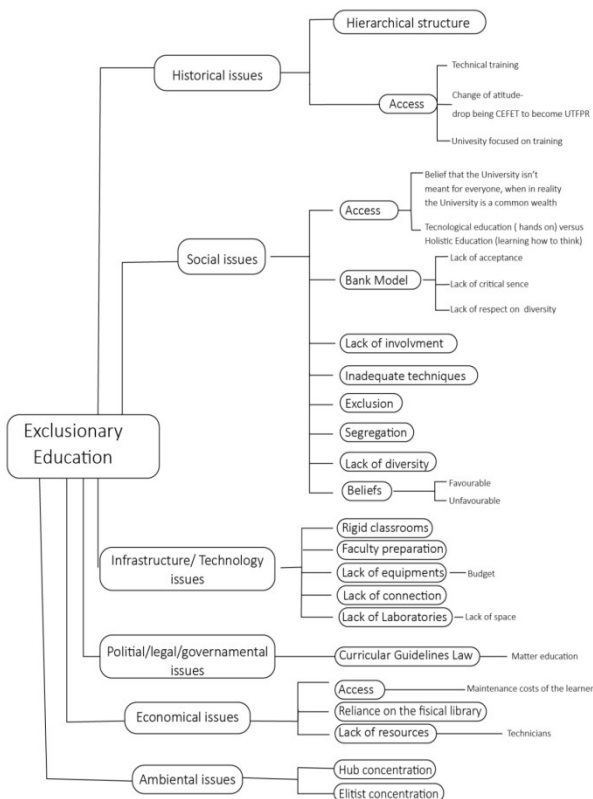

Figure 1. The causes of the problems

Mapping the Landscape, the Regime and the Niches: In order to understand how the Regime got to be ingrained in our daily tasks, given the broader Landscape of events and the Niche in which ideas were nurtured or destroyed, this research presents a summarised timeline (Geels, 2005), shown on Figure 2.
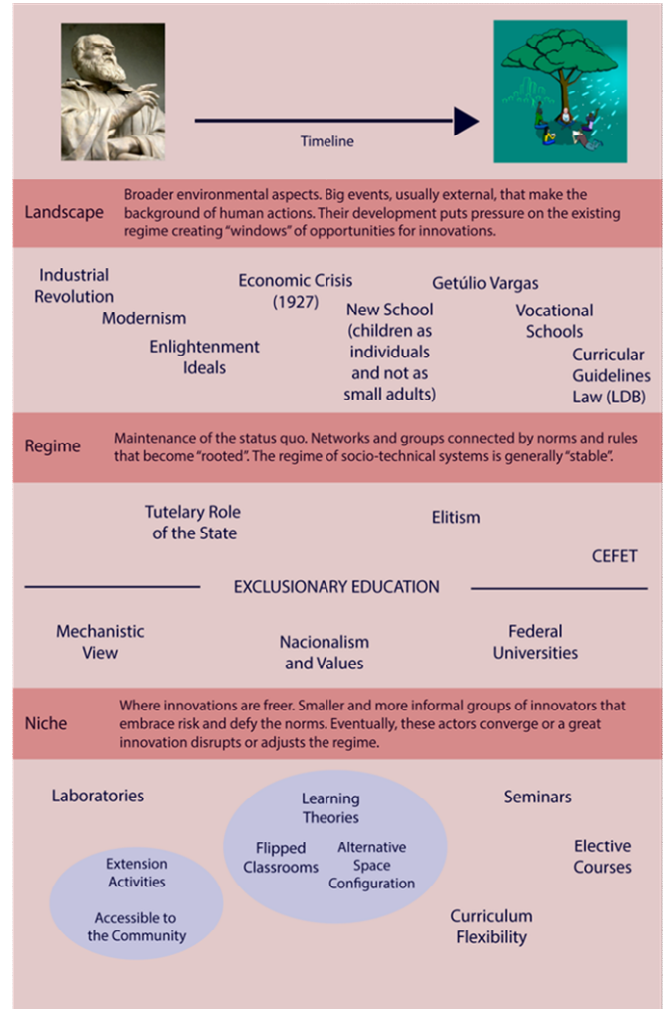

Figure 2. Landscape, Regime and Niches

Transitions Mapping: Figure 3 shows a word cloud of the many aspects that the researchers found to be of concern regarding education.

Figure 3. Characteristics of education

Currently, university education is inaccessible for many people. For admission, applicants have to take a test that is highly competitive, and structurally skewed towards the privileged students.

It is based on standardized tests which do not value critical thinking. It replicates the structural, endemic racism, and thus contributes to an education that is oppressive, alienating. The test model is at the same time a consequence and a cause of an education that follows the banking, oppressive, authoritarian model denounced by world famous pedagogue Paulo Freire. It is elitist, hegemonic. It is an education that limits the critical thinking and autonomy of the learners. It is an education that requires the students to be present at the time when the teacher imparts chosen content, in a top-down, one-way direction model that reproduces the social classist hierarchy of Colonial Brazil. Considering those aspects, multiple transitions were elaborated, and are listed here to inform further interventions:

- A transition from an education based on the banking model - in which the teacher detains the knowledge - towards an education that is socially constructed - in which learning occurs with the participation of all;
- A transition from an elitist education towards a social education in which all have access to the same knowledge creation opportunities;
- A transition from an education that is excludent and that doesn't represent the society towards an education that is inclusive to represent the society;
- A transition from an education dominated by ingrained beliefs towards an education that is more conducive of diversity acceptance and individual needs;
- A transition from an education that uses tests as the only form of evaluation of learning progress to an education that values the learning process;
- A transition from an education built on rigid systems, roles and premises to an education that is flexible, organic;
- A transition from an education whose structure and hierarchy are oppressive to an education geared towards the collective;
- A transition from an education that is isolated, focused on inadequate existing knowledge to an education that values social needs;
- A transition from an education that is alienated and alienating towards a liberating education;
- A transition from an education that is conditioned to a highly excluding admission process to an education that is more universal;
- A transition from a mechanistic education to a more holistic education.

This list illustrates some of the possible transitions we created. We chose to present here, as the case study, the transition from an education that is compartmented to a multidisciplinary education, in which the choices of knowledge and courses meet individual and collective needs.

Creating a vision for the future: In a Transition design it is important to seek a clear, instigating vision oriented towards the future; a vision that will inspire and inform the projects designed and implemented in the present in order for the interventions to take place and effect the transitions needed to achieve the envisioned future. When there is a consensus of such a vision, then designers can work from there to the present and determine the best plans of actions that will take us, from the undesired current state, closer to the planned future. Irwin, Tonkinwise and Kossof (2002) indicate the development of a future vision that is dynamic, grounded on current knowledge of the situation, that emerges from the local conditions instead of generic solutions, and that remains open for changes; a vision that is bold, creative, feasible. For the authors this vision is circular, iterative, and susceptible to errors and alterations. It guides the creation and implementation of intervention projects from the simplest to the more complex ones. It offers a new perspective, a new way to evaluate and question lifestyles, beliefs, actual and current needs and inform the interventions.

The research first listed the beliefs and premises regarding our view of an educational system that would be in place in the year 2050; then the ruptures and interventions that would have to happen; finally, scenarios of daily lives were created. Considering that the federal universities in Brazil are public, and respected as a democratic and a vanguard place, the research team opted to value a subjacent technology that will support most of the activities; such platform will provide access to data, videos, information, texts, articles, classes both synchronous and asynchronous and other complex interactions among the agents, for knowledge creation. It would be an amplified educational system that would have multiple modes for autonomous or guided learning. It would allow for tutoring, content creation and free access, including the working market needs, and transdisciplinarity. The evaluation would be free, tailored to the learning path chosen and taken by the apprentice, valuing that knowledge and its application. This proposed system would act as an Expanded Educational System. Figure 4 shows a word cloud of the premises and desired characteristics:

Figure 4. Premises.

The chosen Vision of the future

Working with multiple ideas and premises, the research team came up with the following Vision of the Future:

"Keila is a young Communications professional who graduated from another university. She is creative, communicative and pursues multiple interests: she likes to cook, to teach, she goes camping often and loves movies. Keila is the mother of Hugo, a 12 year old boy who is on the autistic spectrum. She is a constant presence on social media, and has a great number of followers in her channels. She produces media content that cover her life interests, and focus on the daily life of people in the autistic spectrum. For example, she discusses the many activities that help her son integrate, such as cooking recipes tailored to his abilities, and places where they can go to relax and enjoy a beautiful day that offers support and infrastructures that are adequate for them. In order for these contents to be of value for her and her followers, she is constantly renewing and broadening her knowledge. Feeling the need to expand her knowledge to gain new perspectives on her lifestyle, she contacted the university regarding her participation in the Expanded Educational System. She was able, with the help of a tutor, to plan a curriculum specific for her needs. The collaborative nature of the system allowed her to take classes, participate in workshops, seminars and events that were aligned with her interests. Keila developed a workshop on how to cook with children in the autistic spectrum, and made it available to the community via the collaborative platform. This workshop was later the basis of an extension project, with a multidisciplinary team, professors and students as well as members of the community. At the end of the project, Keila had created the content she would then share."

Declaration of the Vision of the Future: The research team envisions a future education that is built by scripts (the institution and all their collaborators provide content; and each learning project is designed to cater individual and collective needs).

In an education via scripts, the university is more than a bank of knowledge from which an apprentice passively acquires knowledge that is offered by a teacher in a classroom environment; a distant, cold, inaccessible institution. Rather, the university is organic, collaborative, a knowledge creation fomenting agent, a participative idea in which knowledge is created by meeting the actual needs of individuals or communities. Education by scripts uses collaborative and participatory concepts to create and share knowledge and experiences. These ideas contemplate the plurality and social diversity, scientific and academic as well as community needs, in a conceptual and embracing space for discussion.By using education by script, a network of creation and dissemination of knowledge is created that allows for the participation of multiple stakeholders, both consumers and creators, who participate in real life projects, interacting so that, in the relations, each is a change actor of the various realities.

Designing interventions - scripts, scripts, scripts: Based on the knowledge mapped and presented on previous sections, there begins the design of short, medium and long term interventions - that are outside the scope of this article - that are in the process of development, and will be presented elsewhere.

The design of interventions are guided by multiple concerns:

- What are the current problems the intervention aims at solving?
- What are the future aspirations that will be contemplated?
- What are the barriers to the implementation of the intervention?
- What new resources, technologies, skills and policies will be needed?
- Which current projects can be used to scaffold the proposed interventions?
- How will the interventions change the beliefs and lifestyles that are associated with the problem?
- How will the interventions pave the way for new social norms and conducts?

Validation: As part of the Prospectina, the proposal was evaluated by the jurors of the event. The jurors graded the evaluating variables (from 1 to 5) and then made some comments:Regarding the complexity level of the proposal, the committee valued the research as 5.As for the scope of the research, the committee also found (grade 5) that the case study was broad in its reach and discussions. With a grade of 4.3, the committee thought that the case study is a prime for further reflections, debates and future developments. During the qualitative evaluation, the jurors pointed to a positive review, with special emphasis on the rigorous application of the chosen methodology. Our proposal was complimented for the consistency of the proposed scenarios and the good reflections on technology and virtual reality use applied to cooperative learning, but also for the educational paths as an alternative to a collective construction of knowledge consequent of personal and societal demands.

Considerations: Using the opportunity provided by *Prospectina - UTFPR 2050*, the research team initiated an immersion and focused on the development of the research. This case study is the basis from which further studies will be conducted by the agents that took part in the research and others who are willing to advance the discussion of how we want a new education to be.

All of the research was conducted virtually (by the use of digital platforms for meetings, sharing of information, questionnaires and other activities) both synchronously and asynchronously. The chosen methodology of design transition, proposed by Irwin (2015) and colleagues, proved pivotal for the development of the research.The research group understands that the case study is important as a reference for other agents who wish to incorporate Transition Design and Prospective Design into their tool box for creating another, desired future.

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