



**POLITECNICO
MILANO 1863**

SCUOLA DEL DESIGN



Teach.

Tell. 

Transform.

A Transmedia Storytelling Approach within the Education in the Mexican Context



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ABSTRACT

/English

During the pandemic of Covid-19, education was highly affected by a digital shock that represented a big challenge for all the members of its system. In Mexico, the lack of preparation was clearly noticed as schools tried to migrate to a digital environment and as both, teachers, and students, encountered a lot of obstacles to continue with the courses. After almost two years of the phenomenon, the situation is still finding its place in the dark tunnel that could be far of seeing the light. During the lockdown, educators tried to use different tools to connect with their students; both creativity and technology were challenged to look for solutions and, the digital resources like social media, videos, television, and electronic platforms became the new medium of education.

Despite these media were new to education, they represented the main tools that are used in Transmedia Storytelling design, a paradigm that rely on storytelling and digital mediums to convey new messages and create new ways of entertainment. In order to enhance the new era of education after the pandemic, this kind of methods could be ideal to make a new proposal in educating, changing the recursive and obsolete resources that are currently used and renewing them with activities that will involve the students in an active way, making them feel like the main characters of their educational training and that can help them to regain their interest in their studies.

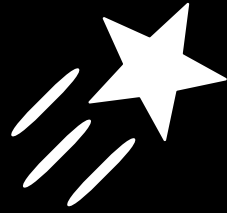
This thesis will take Mexico as the main study case of analysis and will develop an answer for the following research question: What is the methodology that could be developed and implemented to prepare Mexican teachers and academic authorities to apply a transmedia storytelling educational model for the planification of the courses in a high school level? The answer of this will be represented with the creation of a framework that offers the tools that could be use by teachers to continue their migration into the digital environment and that could be combined with Transmedia Education and Storytelling. This will prove that these concepts could become an effective mechanism that can cope with the main struggles in digital and online education.

/Italian

Durante la pandemia Covid-19, l'istruzione è stata fortemente colpita da uno shock digitale che ha rappresentato una grande sfida per tutti i membri del suo sistema. In Messico, la mancanza di preparazione è stata fortemente notata quando le scuole hanno cercato di migrare verso un ambiente digitale e quando, sia insegnanti sia studenti, hanno incontrato molti ostacoli per continuare le lezioni. Dopo quasi due anni dalla pandemia, la situazione sta tuttora cercando di trovare il suo posto all'interno di un tunnel che è ancora lontano dal vedere la luce. Durante il *lockdown*, gli insegnanti hanno cercato di utilizzare diversi strumenti per collegarsi con i loro studenti, unendo sia la creatività sia la tecnologia, sono stati spinti a cercare soluzioni innovative. Le risorse digitali come social media, video, televisione e piattaforme elettroniche sono diventate il nuovo mezzo principale di istruzione.

Nonostante questi media fossero nuovi nel mondo dell'insegnamento, rappresentavano i principali strumenti utilizzati nel design dello *Transmedia Storyelling*, un paradigma che si basa sullo *storytelling* e sui media digitali per trasmettere nuovi messaggi e creare modi di intrattenimento alternativi. Al fine di migliorare la nuova era dell'istruzione dopo la pandemia, questo tipo di metodi potrebbe essere l'ideale per fare una nuova proposta formativa, cambiando le risorse tradizionali e obsolete che vengono attualmente utilizzate, rinnovandole con attività che coinvolgano gli studenti in modo attivo. In questo modo gli studenti si sentiranno i protagonisti della loro formazione educativa e potranno ritrovare l'interesse nei loro studi.

Questa tesi prenderà il Messico come principale caso studio di analisi e svilupperà una risposta alla seguente domanda di ricerca: Qual è la metodologia che potrebbe essere sviluppata e implementata per preparare gli insegnanti messicani e le autorità accademiche ad applicare un modello educativo di *Transmedia Storyelling* per la pianificazione del piano di studi delle scuole superiori di secondo grado? La risposta sarà rappresentata dalla creazione di una metodologia che illustra gli strumenti che potrebbero essere utilizzati dagli insegnanti per continuare la loro migrazione verso l'ambiente digitale, combinandoli con l'educazione transmediale e lo *Storytelling*. Ciò dimostrerà che questi strumenti potrebbero diventare un meccanismo efficace in grado di affrontare le principali difficoltà nell'educazione digitale e online.



INTRO DUCTION

WHAT IS A TEACHER?

Though it could be defined through many perspectives, one can agree that a teacher is a guide, an auxiliary, a mentor that leads, encourages, and motivates students during their path through education. When the pandemic hit the global society, these mentors had to deal with an incredible number of changes that challenged them and asked for every bit of effort from them. They suddenly became heroes that had to quickly adapt for the wellbeing of their students and that did impossible tasks to preserve their educational flow. But were these heroes prepared for what was happening? In reality, **no one was**. It was and it continues to be a phenomenon that have changed the way things are done and that abruptly introduced the digital methods into an unprepared society, forcing everyone on their own field to grow and reborn like phoenixes from the ashes.

To be truly prepared for changes, one should train and learn ways to survive. In other words, and setting it up into the educational area, the teachers had to learn how to use digital tools and adapt government programs to continue with the lessons, with the aim that students could continue learning. But as any other crisis, it did not work as it was expected. Despite the effort, there was a clear setback for both teachers and students, a setback that nowadays continues to be a struggle to deal with. Nevertheless, the window to digital tools was open and even with the abruptness of the matter, it is a valuable element that could actually benefit the educational path when doing it in a trained way.

So, what can result from the combination of elements like teaching, frustration, the current situation, digital tools, and training?

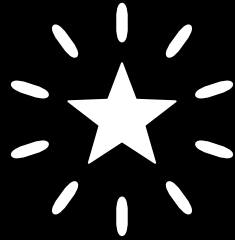
Well, during the development of this thesis, each of these elements will be analyzed to understand how to create a framework or methodology that is able to empower teachers by using digital resources while combining new concepts. In order to do so, a literature review was performed exploring first the worldwide situation but then focusing on the Mexican context, the main scenario of analysis for the purpose of the project.

There will be also several case studies analyses that will serve as major examples to understand where the main opportunities are, to evolve from the frustrations that the pandemic brought with it. Several interviews will also be presented, showing the opinion of Mexican teachers and their perspective of the situation. Furthermore, within the new concepts that will be defined, one will learn about Transmedia Storytelling and the great benefits that it represents for the educational environment by combining that ideology with digital tools. In the last section, the creation of the framework that combines all of these concepts will be introduced, answering the main research question, and presenting a possible aid to the current situation. The main research question that this thesis aim to answer is:

What is the methodology that could be developed and implemented to prepare Mexican teachers and academic authorities to apply a Transmedia Storytelling educational model for the planification of the courses in a high school level?

Following the design-based research approach, a prototype will be presented as the result of the research and analysis made on the previous sections. This prototype is shaped in form of a website due to the easy accessibility that this could represent for further implementations. In order to analyze its efficiency, several tests will also be conducted and the insights of them are going to be presented as part of the final conclusion. These tests will include the involvement of Mexican teachers through surveys and activities that help them to learn about the methodology proposed and to apply it in hypothetical situations. Overall, the information provided in this thesis aims to be a guide to teachers that are eager to learn from past mistakes and to evolve as prepared educators that are resilient enough to train themselves and to keep changing.

One will understand the power that Storytelling can have and how a Transmedia approach can exponentiate creativity and dynamism inside the classroom. Retaking the hero metaphor, the result of this project could be compared to that previous training that every hero should take in order to face the evil of the outside world. **Teachers are already heroes by the own, this project will only help them to feel powerful again.**

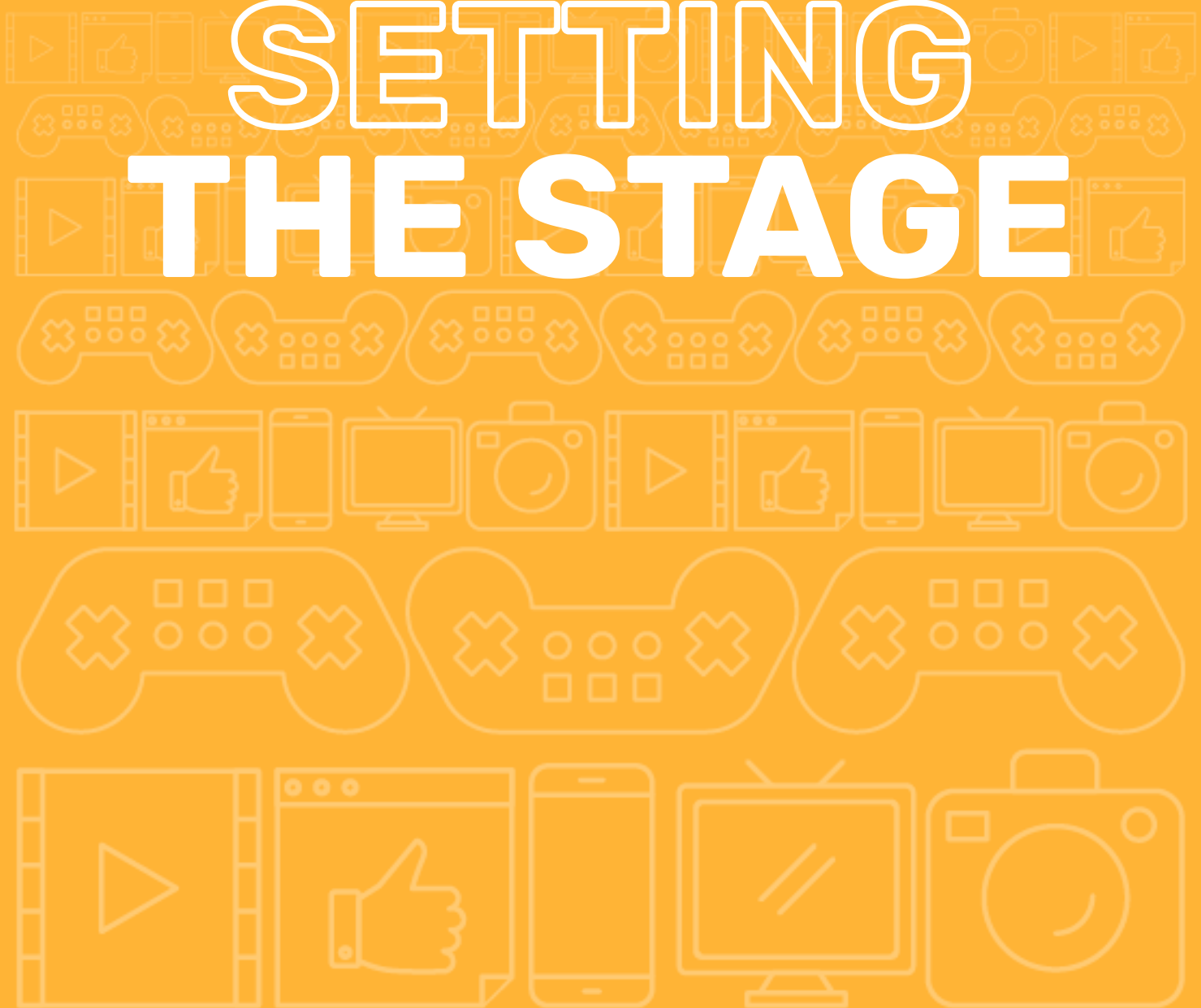


“I have done my best, and I begin to understand what is meant by the joy of strife. Next to trying and winning, the best thing is trying and failing.”

-L. M. Montgomery, Anne of the Green Gables



SETTING THE STAGE





MEDIA TRANSFORMATION AND DIGITAL TRANSITION

GENERAL SITUATION

A crisis is a situation where the agents involved are in front of an unknown problem that can derivate into a considerable number of obstacles and precarious situations. There is no anticipation when a crisis arrives, but one thing is certain, it requires a change. Changing also represents adaptation, creation and discovering of new ways of doing things. When the covid-19 virus hit the international population, it represented one of the major crises that humanity has had. The lack of anticipation on the matter, brought out the weaknesses of different areas important for the development of the society. "Covid-19 is a health crisis but also a social, political, and cultural one, and will, of course, have a major economic impact, not least on the world of work that has been seriously disrupted." (Munck, 2021, p. 253) There was a crack that break the stability of the areas required to keep the world functioning: industry, health, economy, society, culture, **education**, and peace were all affected and pushed to the limit while looking for unprepared solutions to keep moving in any way possible.

For instance, health systems and equipment were the most affected with this situation. The health personnel had no other choice but to put their lives in danger and to create new methods of helping patients and to protect themselves from the unknown obstacles that increased with every day that this pandemic has been affecting the universal society. According to an article of the Organization for Economic Co-operation and Development (OCDE) about the importance of strengthening the frontline of healthcare, "for health systems to be resilient against health crises of this magnitude, strong primary and community health care –the frontline of all health systems –is essential." (OECD, 20202, p.2) In the same article, it is stipulated that "health systems need to build resilience and the ability to recover from and adapt to health shocks such as COVID-19. Resilience is defined as the ability of a system to perform four functions with respect to

adverse events: anticipate; absorb; recover and adapt.” (OECD, 2020, p.3)

The urge of adaptation and resilience was important to cope with the crisis and to deal with the situation that this pandemic has represented. “By mid-October 2021, nearly 240 million cases had been reported and nearly 4.9 million people had died from the virus” (Johns Hopkins Coronavirus Resource Center, 2021, p.1).

After the healthcare area, there was a major impact on a greatest pillar of society: education, causing a rushed adaptation to change the way the experience at the schools has been so far. In 2020, due to the rapid spread of the virus and the decision of the governments to go to a general lockdown, schools were closed and both teachers and students encountered a big challenge to look for the best way to continue the classes from home. According to the United Nations Educational, Scientific and Cultural Organization, **in May of 2020, more than 1.200 million of students of every level, worldwide, had stopped to have on presence classes at school.** From this students, more than 160 million were students from Latin America and the Caribbean. (UNESCO, 2020, p. 1)

The main question of this period was: how would it be possible to go back to normal?

And the fact is that it became clear that *it was not possible*. In every field, it was evident that procedures needed to evolve and educators, parents, employees needed to upgrade their skills to be in line with new automatization processes. Those who had the technological and digital knowledge were able to easily adapt their daily routines that the challenges asked for. **The real struggle was for those who did not use technology as a mean to work, they were seen as the weakest link, with a great disadvantage that put in danger their households and personal economic situation.**

But even before the crisis, this could also be attributed to the phenomenon of globalization, another situation that ask people to change their ways and open their minds into an international environment where the one who uses the resources in the best way, is the one that is leading. Digital transformation has been around the corner for a while now, but the global society was not aware that it would become the most important thing from one day to another. And quoting the theorist Antonio Gramsci, **“the crisis consists precisely in the fact that the old is dying and the new cannot be born”** (Gramsci, 1971, p.276).



DIGITAL ERA OF EDUCATION

This whole situation also required a transition to a period that is needed more than ever, this period is the digital area. “Now, the digital era is emerging as the fourth industrial revolution, based on digital technologies, the internet of things (IoT), artificial intelligence (AI) and machine learning.” (Mello, et al, 2021, p. 66) Technologic resources are not new but the inclusion of them into areas like education represented a major challenge for both teachers and students that were not used to be online as the main mean of communication. This started a new area of remote education as the only method possible to actually continue with the educational programs.

But is the concept of non-presence lessons a new method? Actually, distance learning was introduced back in 1700 when the letter writing was an accessible technology and “a man called Caleb Phillips, offered to teach students anywhere in the country of Boston by exchanging letters.” (WorldWideLearn, n.d.). Moving forward to an updated example, “in 1976 the first “virtual college” with no physical campus was in operation. This virtual college, called Coastline Community College, offered a wide variety of telecourses.” (WorldWideLearn, n.d.) And just arriving to the 2000’s we can find examples of platforms that were involving themselves into new ways of education, like YouTube that launched YouTube EDU in 2005 and offered a lot of free online lectures. (WorldWideLearn, n.d.)

Even with this background, the worldwide society was not even far prepared to change complete programs into a full digital environment but the importance of preserving knowledge asked the educational community to be resilient as the healthcare personnel and to create fresh solutions and strategies that could actually help to continue with providing and receiving education. “Remote education (also known as tele-teaching, virtual education, or online learning) is an alternative or complement to the classic face-to-face or classroom education.” [...] “the recommendation for educators is to be creative and create strategies

and alternatives to allow students to develop their skills and to advance their competencies.” (Fernández, et al, p. 3). Reshaping the educational methods also involved the full commitment of teachers that needed to produce innovative ways to encourage students to continue with their studies.

One of the biggest changes was the abandonment of the physical space to transform it into a digital environment. This represented a challenge and an introduction to new concepts that were taken in diverse ways depending on the individual situation of the countries. According to a survey made by D2L (Desire to Learn) to participants from higher education during the first trimester of 2021 that belonged to countries like Australia, Brazil, Mexico, Colombia, United Kingdom, Philippines, New Zealand, South Africa, India and Benelux, the digital transformation was integrated by the use of a virtual area, a tool that has an average of 60% of efficiency among the participant countries of the survey. Nevertheless, accessibility becomes a problem when the lack of connectivity is an obstacle to different regions of the surveyed countries.

As far as countries of Latin America are concerned, in Mexico, for example, 35% of the participants stated that they were uneasy about the lack of resources and physical infrastructure, whereas 31% of the Colombian participants were worried about the difference of the digital skills that the alumni and the teachers might have and in Brazil, 35% of the participants believe that the costs are the main issue. On the other hand, 35% of the countries of the other parts of the world had an easy transition into the digital classroom. (D2L, 2021).

So, what was the appropriate way to ensure the development of education with the proper teaching/learning quality?

First, a redefinition of the concept of education and its value was needed. The face-to-face experience was supposed to provide the path to achieve the efficiency of the learning methods, but the virtual classroom transformed into a new terrain where possibilities could go good or wrong. The preparation of the current learning programs of the time was not enough to jump into the digital transition. New skills were required from both teachers and students to create a new mechanism with new materials and with the autonomous development of the parties involved. Aside from the cognitive skills, new tools were also incorporated into the curriculum but the preparation for using them was mostly depending on

the teachers and institution authorities. The choices made in this period have been crucial, they have determined the development of millions of students and the capability of professors to push their abilities to the limit.

From the positive point of view, since the transition required the use and specialization of information and communication technology, it represented a good opportunity to take advantage of all the possibilities that these methods can offer. In 2018 in Latin America, the majority of the students was already using this technology to communicate with their teachers, to do their homework or to made research about the topics seen in class. (CEPAL-UNESCO, 2020, p.7). Furthermore, the UNESCO developed a set of standards that would help those in charge of developing the curriculum to incorporate technological skills that educators required. The document named Framework of teacher competence in ICT (Marco de competencias de los docentes en materia de TIC) , “included 18 competencias organized around six aspects of the professional practice of teachers: understanding the role of ICT into education policy, curriculum and assessment, pedagogy, implementation of digital skills, organization and administration, professional learning of teachers and three levels of pedagogical use of ICT by the teachers: acquisition, exploration, and creation of knowledge (UNESCO, 2019a).” (CEPAL-UNESCO, 2020, p.8). The digital transition into remote education could have been a great path to actually put into practice these skills, but since there are few cases where these standards were considered, the transition could be seen as a forced transformation into a digital and yet unknown environment.

This brings up the negative view of the situation, the pandemic was not only affecting the health of millions of people worldwide, but it has also caused a major affectation in student’s preparation, their progress of learning, the lack of resources and the development of socioemotional skills (CEPAL-UNESCO,

2020, p.9). A relevant situation that developed during this period was that “teachers and educational staff have had to face the demands for socio-emotional and mental health support of students and their families.” (CEPAL-UNESCO, 2020, p.9) This means that the teachers had a huge responsibility of creating a safe environment for their students and that also needed to be there for their personal needs, all of these while trying to keep up with the technologic requirements that they still had to learn on the way.

In a survey conducted by UNESCO to the 33 countries of Latin America and the Caribbean with the data up to July 2020, to know their opinion on the educational measures during the crisis caused by the pandemic of COVID-19, the 59% of the respondents in Brazil, 64% in Colombia, 44% in Mexico, and 39% in the City of Buenos Aires declare that the digital technology available to its educational facilities is inadequate or insufficient (OECD, 2019). (CEPAL-UNESCO, 2020, p.10). The adaptation of these countries was and still is a complicated process that involves the “risk of loss of the face-to-face link and can generate tensions due to the overexposure of teachers and students, or due to the difficulties in maintaining the pedagogical relationship and mediation.” (CEPAL-UNESCO, 2020, p.11). When talking about Latin America in specific, there is also a major problem that concerns to the lack of access to educational resources that affects the poorest regions of the different countries. In this sense, a vast number of students lost their physical space to continue with their education and it was an enormous challenge for the teachers and the institutions to support the students to help them keep up with their academic paths.

Although this general overview presented both positive and negative effects, the change was still in need, so different actions were taken to deal with the situation. “The challenge is how fast the students, and the educators can adapt to the teaching, learning, and assessment methods.” (Mello, Sidney Luiz de Matos et al. 2020, p. 73)



“The challenge is how fast the students, and the educators can adapt to the teaching, learning, and assessment methods.”

(Mello, Sidney Luiz de Matos et al. 2020, p. 73)



DIGITALIZATION

Even when the field of education was not used to be developed in a digital environment, it is clear that technology is an essential part of everyday life. Society is shaping according to technologies that determine the way people relate to each other, the way they work, the way they buy and sell and now the way they study (Starikova, 2021, p. 234). With the pandemic and the worldwide lockdown, the importance of digital processes and communication became clear. In the best efforts to maintain a normal rhythm of life, internet and electronic devices represented an essential part of the life of millions of people. Fundamentally, the most affected and susceptible population is the youth: “today large parts of their social contacts and interaction with friends have moved to virtual space and (compared with the early 2000s) social relations are more independent from fixed places and times (Thulin et al. 2019)” (Starikova, 2021, p. 235). The constant use of smartphones, computers and digital devices is now part of their daily habits, and the covid-19 situation was a turning point to increase their digital behavior.

So, what does digitalization have to do with all of this? Well, digitalization precisely represents the integration of digital devices into human and labor actions of daily life. “In the digitalization process, the established connections between such fundamental concepts in human life as “activity,” “place” and “time” are changing completely (Couclelis 2009, Ellegard, 2018)” (Starikova, 2021, p. 234). In addition, one of the purposes of digitalization is to use digital objects in an innovative way to reduce the productivity efforts in labor, also reducing time, expenses and creating a better relationship between the users. During quarantine, the usage of this helped to make efficient the online processes needed to maintain a regular workflow. The pandemic also brought attention to the media and digital entertainment, “time spent in virtual space is growing, activities related to it are coming to the fore, replacing communication and entertainment outside the home.” (Starikova, 2021, p. 237). All of these changes represented an integration of the digital resources into millions of homes around the world and it has reshaped the way people is involving themselves into

society nowadays.

A relevant part of the process of digitalization is the will to adapt to the changes that this phenomenon involves.

Learning to communicate in the digital environment might not be a difficult task for the younger users, but new users might require extra guidance to adapt to the demands of the digital world.

In this case, it is important to pay attention to the teachers, a group of people of different ages that encountered many challenges when schools continued to operate online. “Pedagogical action and new demands find teaching staff with training and availability of resources that tend to be insufficient for the challenges of adapting the offer and pedagogical formats to students in disadvantaged environments.” (CEPAL-UNESCO, 2020, p.10) The adaptation required the use of new tools that were totally developed digitally and “the new conditions have required teachers to use virtual platforms and methodologies with which they were not necessarily familiar.” (CEPAL-UNESCO, 2020, p.10). The workload of the teachers increased so much that they have a minimum time to prepare for using the digital tools while trying to adapt their homes to continue with the online classes, to do their domestic labors, to have their personal life in order and to offer the pedagogic work. “It is essential to empower teachers and educational staff so that they can make contextualized and flexible pedagogical decisions, maintaining an adequate balance between autonomy and the granting of support. (CEPAL-UNESCO, 2020, p.11).

While teachers were struggling with the forced adaptation into digitalization, students have their own problems dealing with the lack of technologic accessibility in their homes. In the countries of Latin America there is a huge financial gap that represents an unbalanced distribution of goods of every kind. “On average, 61% of students in Latin America have a computer, although in Mexico this proportion reaches only 57% of the student body.” (Pasquali, 2020) The access to equipment is limited and even when the household counts with electronic devices, they might not be used for educational purposes.

To deal with the obstacles that both students and teachers faced in this situation, new programs and proposals were developed. According to the Economic Commission for Latin America and the Caribbean, or CEPAL for its acronym in Spanish, online courses, web resources, digital libraries and digital devices were provided for the majority of the countries in Latin America. Most of the programs

for online preparation are focused on the development and the improvement of digital skills in the context of the remote virtual education (CEPAL-UNESCO, 2020, p.12). In some countries like Uruguay, the courses provided also included the topics of health promotion and prevention. Some schools focused on providing preparation to the teachers on the realization of live sessions through videocalls to teach the classes and the design of content on digital platforms (George, 2020, p. 38). In Mexico, some universities created protocols and plans to virtually continue with the academic path of the students, providing the needs and the type of models that could be adapted to the situation. With these needs in mind, teachers also had to keep the interactions alive with the students, deciding which materials were useful to increase their participation and assure their learning.

EDUCATIONAL TOOLS USED DURING THE PANDEMIC

The methodologies adopted for the implementation of digital tools were different depending on the countries and the government measurements with regard to the pandemic. However, there are online tools dedicated to education, used before the quarantine started, that provided meaningful support during this period.

According to an article about how COVID-19 pandemic accelerated virtual transformation in dental education, these tools can be identified in four groups: educational platforms, videoconference platforms, web-based audience response systems and video recording. (Fernández, et al, p.3) The Educational platforms include examples like Canvas, “a web-based learning management system, or LMS, used by learning institutions, educators, and students to access and manage online course learning materials and communicate about skill development and learning achievement.” (Instructure Community, n.d.) And it also mentions platforms like Blackboard Learn, Moodle and Google Classroom. These tools are operated by the teachers and administrative entities to have a control over the courses managed online as well as the grades, the deliverables, and the progress of the students. Here is an extract of the tools presented on the article:

Platform	Type of Platform
Canvas	Educational
Blackboard Learn	
Moodle	
Google Classroom	

Platform	Type of Platform
Zoom	Videoconference
Webex	
Google Meet	
Microsoft Teams	

Platform	Type of Platform
Mentimeter	Web-based Audience Response Systems
Polleverywhere	
TopHat	
Kahoot	

Platform	Type of Platform
Camtasia	Video Recording
VideoStrips	
Panopto	

Figure #1: Most used platforms for digital education extracted from COVID-19 pandemic accelerated virtual transformation in dental education: a multicenter review of remote teaching and tele dentistry.

Due to the lack of face-to-face interaction, videoconference platforms became a central point of attention to provide a medium of communication. The quintessential example of this kind is Zoom; it was born in 2011 as a video-centered platform but it has been improving in an exponential way since the covid-19 pandemic started. According to App Figures, during 2020, Zoom was downloaded more than 485 million times in order to continue with an online communication in the fields of education, entertainment, and other personal purposes (Appfigures, 2020). Social interaction depended on platforms like this one and since that year, it has evolved and changed to adapt to the needs of educators worldwide, providing a platform for virtual classrooms and online learning. From March of 2020 until June of 2022, Zoom has been updating its features and it has proved to be a useful resource for online communication for academic entities (Zoom Blog, 2020). Other important platforms can also be found in this category: Webex, Google Meet, Microsoft Teams, Skype, and WhatsApp, to mention a few, were important collaboration platforms that were mainly free and that could be used in different languages.

Although the video conference features helped to ease the lack of social interaction, it was not enough to assure an effective learning and real feedback between teachers and students. “Teachers should follow up on student’s participation and ideally elaborate or provide tutorials or guides that should be given to solve doubts or difficulties [...] the recommendation for educators is to be creative and create strategies and alternatives to allow students to develop their skills and to advance their competencies” (Fernández, et al, p.3). The new challenge was to provide enough tools through new material that could help students to be autonomous learners and active participants of their own education. In this sense, new ways of teaching started to raise and new opportunities to expand creativity through digital tools were found.

With the transformation of education in need, governments around the world provided different programs that were implemented through media like television, radio, digital platforms, and printed materials. In Latin America, to mention a few examples, there were programs like “Digital Library” (Biblioteca Digital) in Argentina, “I learn online” (Aprendo en Línea) in Chile, “Learning digitally” (Aprender digital) in Colombia, “Learn at home” (Aprende en casa) in Mexico and “Every family, one school” (Cada Familia Una Escuela) in Venezuela. (Aslam, 2021, p. 14-15) Most of them were provided in Spanish but some of them also used English as another language to teach. These programs were developed according to the individual

situation of every country but there are characteristics in common that aimed to provide a proper distance learning as much as it was possible. In Argentina, for example, there was a wide variety of free books and texts available online in order to offer a pedagogical accompaniment and stimulate reading habits. (Ministerio de Cultura Argentina, n.d.) Venezuela developed a program with an online catalogue of activities and guidelines to follow the online classes aired through radio and tv. In general, all the programs represented an alternative to deal with the covid and isolation situation, providing books, written material, videos, podcasts, radio shows, tv programs and strategies that could help to adapt homes into educational environments.

How did the implementation of these projects was performed?

In Mexico for example, the program “Aprende en casa” (Learn at home) was planned in a limited time of a week; schools closed on March 16th of 2020 as a preventive measure to avoid the spread of the virus SARS-CoV2 and after only seven days, on March 23rd, the strategy known as “Aprende en Casa” (Learn at home) was implemented. This strategy provided television and radio broadcasts to benefit children and adolescents attending basic education (initial, preschool, primary and secondary level) (SEP, n.d., p.1). The main challenge was that neither teacher nor students were familiar with the Information, Communication, and Digital Knowledge Technologies, so more than one million of teachers and more than twenty-five millions of students started their complicated journey within the remote education.

Delfina Gómez Álvarez, former Secretary of Public Education informed to an article published in the journal “El Universal” that with this program, “9,480 educational shows were produced and broadcast on television for the end of the school year [...] Likewise, the transmission was diversified with 295 television programs in thirty-one Indigenous languages, in which ninety-one teachers from nineteen federal entities participated.” (Rodríguez, 2021). Despite the efforts, the resources provided through media proved to be unhelpful with the academic development of Mexican students and teachers were ideating diverse ways to communicate with them, using their own resources and initiative. Luz María Moreno, director of the Research Institute for the Development of Education, or INIDE for its acronym in Spanish, states that the main problem is that the Mexican educational system does not trust its teachers. There is a methodology that centralizes teaching above learning. In this case and from a pedagogical point of view, learning is supposed

to be built and that is not achieved with the “Aprende en Casa” Program. This means that, from a pedagogical point of view, the program “Aprende en Casa” did not help to develop actual knowledge and students were not learning (Ortega, 2021).

In addition to this, it is important to remember that the performance of this online educational program depended on a big measure on the involvement of the parents and without enough technological tools and devices per family, the task becomes much more problematic. School represents a mechanism that helps to develop the cognitive skills of students of all ages and without a proper physical space, or the tools or the motivation or the right support, the attention span decays considerably. Without precedent, parents had the responsibility to accompany their sons and daughters in their learning process, understanding how they actually learn better while continuing with their jobs or while suffering the loss of them.

The individual situation of each Mexican family is diverse and where there could be found families when each member owns technological assets, there could also be families where there is just one device for everyone, and the internet access is limited. According to the organization “Mexicanos Primero” (Mexicans First), students that have had an online education without proper technological tools have an educational lag that is equivalent to three educational cycles. Following the report submitted by the organization, Katia Carranza, researcher at “Mexicanos Primero” explains that there as a deplorable loss of knowledge since the situation got worse and students even felt unable to read material from their own current year (Wong, 2022).

Even when the situation in Mexico encountered plenty of obstacles during the development of the activities mentioned before, there are important cases where technology was used in innovative ways to counter the effects of the situation. An important study case to consider was the educational development within the Maloka Museum, an interactive science museum located in Bogota, Colombia. As well as schools, museums were living their own contingency meaning that they also had the need to close and to suffer a decay during this period. Nevertheless, this should not eclipse the fact that museums represent an educational opportunity since their creation and they are “a cultural infrastructure that enriches the teaching processes in a significant way, as long as the starting point is a dialogue and agreement with educational institutions about which is the foundation of the school reality” (Franco-Avellaneda, et al, 2021, p. 132).

In Bogota, the Maloka Museum look for a way to adapt to the needs of the situation and there was a great reconfiguration of the museum, going beyond the walls and increasing the digital interaction.

In May of 2020, the program called “Aprende en Casa con Maloka” (Learn at home with Maloka) was launched. It started with the development and distribution of printing educational resources that do not usually have access to digital tools.

The main basis of the program was the accompaniment and not only the teaching, implementing activities that help to understand which where the main needs of children and families during the pandemic. With an alliance with the Secretary of Education of Bogota, the Interactive Museum Maloka created a program that helped boys and girls from early educational ages to transform their homes into a learning environment where they could develop their scientific aptitudes and skills (Franco-Avellaneda, et al, 2021, p. 133). The main actors that are recognized on the program are: girls and boys, teachers, and families, where each one could receive material to learn, teach and interact in a collaborative equilibrium. The material included printed guides, videos, podcasts, online interaction through social media, a website, and a call center to provide extra aid for both teachers and students. There was also a complementary actor that was provided by a social media communication and a designated call center to clarify doubts. In this way, a remote presence was created, and the different actors could express and try to solve the struggles of the program with this support.



Figure #2: Graphical resources used for Maloka’s program.

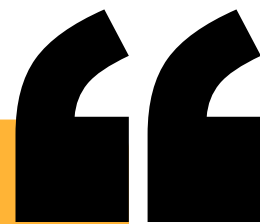
In order to understand the effectiveness of the program, an exercise evaluation was performed to look for the opinions and perspectives of the people involved. The evaluation focused on three key elements: the editorial resources (printed guides), the virtual resources (videos, podcasts, and online interaction) and the pedagogical accompaniment (website and call center). From May to November of 2020, during the development of the program, different discussion spaces were created to understand if the strategy was useful. This was evaluated through focus groups with families and students, surveys done to teachers and interviews with the principals of forty-three educational institutions. During this period, the museum found out that there was a lack of digital accessibility, so the printed material became a priority to be developed as the main educational resource that was given to students. This material became an important complement of the online classes to enhance the development of scientific skills. From the point of view of the students, the material represented a useful way to learn during their free time and to increase their curiosity while learning with their families.

In the teachers' point of view, it was important to review the material before implementing it during the lesson. On one hand, principals of several schools stated that the material was a good pedagogical support that had enough educational potential to be a useful complement. On the other hand, other principals thought that it was important to establish a collaborative space so that teachers and the museum's team can work together to build a proper strategy and prepare better activities.

Family also represents an important agent to develop the educational processes. Even when parents cannot perform a role of supervisors, they can accompany the students in their learning development. The guides provided by the museum had the goal to stimulate the interactions within the family context and in this way, the activities helped to increase the autonomy of the students. Although the relationship between families and teachers was not developed further than logistic terms, one of the findings of the program was that this point was an opportunity to improve and to ensure the students' learning.

Maloka's Program was a great opportunity to learn how to help students, teachers and families during the pandemic and its main goal was to transform homes into exploratory laboratories to create spaces to play and promote scientific skills and attitudes of boys and girls. It was welcomed in a positive way by many schools

and the resources were used in diverse ways by the teachers and students, which means that it was adaptable, and it followed, in great measure, the contents of the educational curriculum of the time. The points of improvement were found while thinking about how to create better logistic measures between the museum and the schools and how to implement an additional training for families so that they could be a better support for the students. From the pedagogical point of view, the creation of material is not enough if there is not an analysis of how important each role is to complete the educational equation. Finally, it is important to remember that the evaluation of the context could also help to create better programs. It might not be possible to adapt to the situation of every individual family but to the success will depend on the analysis of the needs in a general context.



“The conception of learning as a process of configuring knowledge, skills, perceptions and attitudes that happens throughout life and that involves various actors in formal, non-formal and informal spaces of education, requires constant efforts to read the environment, the design of strategies and the articulation and adaptation to contexts and realities”

(Franco-Avellaneda, et al, 2021, p. 141).

In another part of the world, there is the case of Italy that had a distinct experience with distance learning and the attempt to adapt to it. The problem with the schools in this country was that prior the pandemic, **Italian educational leaders were reluctant to incorporate digital technology into the classrooms and this represented an educational delay compared to other international universities. Digital transformation could only be assured if there was enough equipment and if the educational agents were prepared to use digital devices and techniques. (Appolloni, et al, 2021, p.4).** However, Italian system and the bureaucratic regulations created a difficult path to consider digitalization as a means of education.

In 2009, Italian universities started to consider the implementation of digital resources and it was perceived as a negative application and it was even thought to be a private schools' measurement that involved less effort and effortless ways through money. Even with this complicated background, "the weight of distance learning has grown from 2.3% to 4.2% in ten years" (Appolloni, et al, 2021, p.7), and online courses were a bit more familiar to Italian universities were the pandemic hit. In February of 2020, educational institutions were asked to suspend the activities and in May of the same year, economic resources were provided to facilitate distance learning.

In the higher education level, there was no extra program developed further than the utilization of digital platforms that each school decided to adapt to their programs. Most of them used Microsoft Teams and Zoom for oral exams, Moodle SEB was used for written exams, UNIMIA was for written exams on paper and Moodle represented a support to perform written exams (Appolloni, et al, 2021, p.8). It was a demanding situation where institutions doubt about the efficiency of digital resources but there was no other choice but to use them to actually continue with an already delayed educational program. "The results of the pandemic may be a stronger university, aware of digital potential and the relevance of distance instruments, but even a physical community; maybe it will be a new university, halfway between a traditional and an online one. In this sense, the pandemic has represented the beginning of a new era for Italian universities: it has demonstrated that technological devices and distance learning represent a way to do more and not less, fostering a new sustainable sensitivity, because if the knowledge is the key to success, universities must be the place to re-start from" (Appolloni, et al, 2021, p.11).

There were an infinite number of scenarios regarding the education during the pandemic worldwide. Each country tried to deal with the situation in the best way possible, either with the decisions taken by the government or the actions made by the educational entities that decided to continue online or to incorporate new methods and tools to avoid desertions and light the way for students. As it has been discussed, in countries like Mexico, there was a big setback in the field of education and in order to analyze it and look for new educational proposals, it will be considered a main study case from now on.



A LOOK INTO MEXICAN CONTEXT IN EDUCATION DURING THE PANDEMIC

Mexico is a country full of different realities. While a small part of the population has economic resources that could sustain the whole society, there is a big part of people that does not access the basic elements to have a proper life. Nevertheless, Mexicans are known to be resilient, and they are used to work with the resources that they can find and transform them into their way of surviving and thrive. During the pandemic, these realities became known while decisions were made in order to try to continue with the course of life. As it has been reviewed in the previous sections, the area of education was enormously affected by the situation and there were many changes that affected all the actors involved in the situation. To have a better picture of this reality, this section will be dedicated to the analysis of the Mexican Context in Education during the pandemic from different points of view. First, the highlights of an interview made to a high school teacher will be presented. Then the opinions of the teachers involved in the program “Aprende en Casa” (Learn at home), previously mentioned, and dedicated to remote education, will be discussed. And finally, the results presented by the government will be examined to understand the progress or the lack of it with the actions implemented.



INTERVIEW INSIGHTS

Verónica Rivera López is a middle and high school teacher with a degree in Organizational Communication, she has been the principal of different middle schools in the state of Aguascalientes, situated in the center of the country of Mexico and she currently works as a professor by teaching the class of Reading and Writing in a high school level. She has always worked in public schools hence the opinions provided by her will be analyzed from that context, considering that the public sector has a bigger impact from the government than the private one. She, as many Mexican teachers, experienced the uncertainty that the pandemic cause worldwide and jumped into the rollercoaster of teaching during this period.

For starters, while talking about the context where she participates in, she began by talking about the training of high school teachers, referring to the fact that most of them, including herself, do not have a pedagogical groundwork. In other words, teachers are not required to have a further preparation than a bachelor's degree and that is enough to participate in the calls to become a teacher. Nevertheless, high school teachers do not depend on this groundwork to be consider good or bad professors. This is an interesting fact to continue the analysis of the high school level, which in the words of the teacher López, it is period of transition where students start their path into an emotional maturity and have different educational needs. According to her, students require a proper support during this transition, and during the pandemic it was a complicated process for the teachers to generate strategies that could provide this assistance.

Talking about the implementation of technological resources during this period, she states that the lack of training in this area was felt during the digital transition. Prior to the pandemic, most of the teachers felt that technology was not a useful tool to enhance the interaction in the classroom but according to the teacher López, it should actually be considered like an interaction source that can be seen as a complementary tool and an interesting way to acquire new knowledge. However, in order for these resources to be used it is necessary to give a suitable training to

the teachers so that they can know which type of elements can be implemented and even considered them while doing the courses planification. According to the teacher López, high school professors have a great eager to learn in contrast with those of middle school that are used to follow pre-established standards that cannot be molded that easily. With this analysis, it could be assumed that high school teachers could improve their performance with a technological and digital training because they will be willing to learn and be become better educators along the way.

Going further and talking about the situation that public high schools were experiencing, the teacher López talked about a program called “Pasaporte en la Educación” (Passport in Education). This program was imposed by the government and was composed by a set of really bad videos that were a copy of other countries’ creations and that did not match with the Mexican context. According to her, the material provided was not useful neither for teachers nor for students to actually continue with the educational path. She, as many other teachers that worked with and around her, had to ideate ways to use their own educational resources to give the online classes and to ensure a better learning environment for their students. She and her colleagues were able to communicate with the students through videocalls, adapting their personal space and homes into teaching workplaces and using written electronical mediums to receive homework like email, WhatsApp, and social media. There was a lack of leadership from the authorities and teachers like the professor López felt the absence of support to continue with their job. In this sense, teachers were unprotected, forced to adapt to useless material and dealing with their own personal realities.

Currently, the sanitarian measures have changed and teachers like professor López were able to return to the physical space of the classrooms. **She states that after all the changes required for the digital adaptation during the pandemic, teachers keep using a digital system for the classes due to the fact that students are already adapted to use digital devices to follow the classes. But even with this digital incorporation, she thinks that it should be a mix of technology and personal interaction that leads to a contextualized and personalized teaching method.** For her, it is important to be able to distinguish the advantages of both digital devices and human interaction in order to achieve a complete cycle of education.

Should returning to the classrooms be considered like a step back? While analyzing this question with the teacher López, it was concluded that this change should be use like an opportunity to evolve, to analyze everything that went wrong and to transform the frustration into new creative solutions to improve. For example, she affirms that during the online classes, the lack of interaction was one of the elements that demotivated teachers and students. This situation could be considered like a field of improvement to avoid making the same mistakes prior and during the pandemic. “The teacher returns to the classroom with a mindset for evolving, if he/she is not prepared for this, there could not be neither changes nor dynamism. Students are now analytics agents, they observe and defy the authority, teachers could be now considered as simple enablers to guide the students.”

During the final discussion with the teacher, the role of the professor was analyzed considering it as a starting point to change when returning to the classrooms. López mentions that a teacher should be humble and should be able to learn from his/her students. If teachers have learned to implement any technological tool that they did not use before the pandemic, it is an evolutionary choice to use it while coming back to the classrooms. Simple actions also represent an enrichment of personal development whereas it is a digital tool or new ways of interaction.

The most important task for a teacher is to potentialize an autonomous learning where his/her students are eager to learn even when they are not in the teaching space. Talking about the development of the teaching staff, it was a pleasant surprise that neither her nor her colleagues have returned to old methods to continue teaching. However, the readaptation lays on the hands of the teachers and it is a challenging task that requires new rules, creativity, and openness to change.

It can be said that teacher Veronica López’s opinion summarizes a common feeling of Mexican teachers that have been dealing with constant changes, struggles, desertions, and implementation of programs. But it is also worth to understand what was happening from the point of view of those teachers that were creating new programs and that worked with the government resources during the digital adaptation. In an interview made by the professor Jaime Mendoza, an educator that directs the YouTube channel called “SoyDocente” (I’m a Teacher), three

professors shared their opinion and talk about the challenges of being part of “Aprende en Casa” (Learn from home), a program that was implemented nationally by the government and that has been previously mentioned in the past section of this thesis. The teachers that were interviewed were Gabriela Rivas, Verónica Hernández, and Tania Torres, and they have a background of working in basic and middle schools.

TEACHERS INVOLVED IN “APRENDE EN CASA”

“Aprende en casa” (Learn from home) is an educational program that was born as a response to continue with education of boys and girls from basic to high school due to the lockdown implementations. It was distributed through different media like television, radio, videos and websites and the content was primarily dedicated to students. The program required a huge effort from every agent of the situation and most of the teachers that were not collaborating on it, had to take the decision either to incorporate it or to even ignore it.



Figure #3: Screenshot of the main webpage of “Aprende en Casa” up to date 2022.

Nevertheless, there was a huge production behind the tv shows, radio spots and web resources and there was a group of teachers dedicated to the creation of scripts that lead the way of the content. In their experience, the teachers Gabriela Rivas, Verónica Hernández, and Tania Torres share that they started to work with the program with no economical compensation and after several times of applying for it. In their words, they mentioned that they did it “for the love to art,” which in other words means that they gave all their effort without expecting anything on return. They were asked to plan the scripts as they were giving an actual class, with the answers that the students might ask if it was a live lesson. In this way, they created a running order with the activities and resources that they would use during the recording of the lesson and then, after a lot of revisions, it was recorded by other teachers or themselves and edited by the production team.

Unfortunately, the content was perceived as boring and there were many complaints about the content, but teachers were told that they were not creating entertainment, so they had to limit themselves to the protocol. Script teachers were in a difficult position, they were creating content for a national audience that was not used to use media as a mean of education and they tried to be as creative as possible, but the expectations were high, and the time was limited.

The interviewed teachers said that they were trying their best to create recreational content and they felt that the resources that were available online were also an interesting tool to complement the online classes.

In Mexico, there is an educational model called telesecundaria, “an educational modality that establishes its schools in areas of high social marginalization, with a teacher who attends all the subjects [...] and that it has audiovisual, computer, and printed resources as support for the different subjects” (Jiménez Hidalgo et al, 2010, p.6). Teachers were asked to stick to the plans of telesecundaria so they could follow a known modality for the Secretary of Education and the programs could be adapted. Therefore, with all the requirements and measurements, the dynamism was a hard quality to reach while trying to make the educational shows interesting.

In order for a show to be aired, teachers prepared the content with three weeks of anticipation, then the editing team worked on the final details and finally the program was broadcasted. This represented a problem because, on many cases, schoolteachers were not able to follow the programs since the TV content was

not previously shared before the virtual lessons. Whether the teachers decided to follow the program or not, the goal of the it was that the material that was being generated could have been considered as an extra tool of remote education. One of the statements discussed during the interview was the fact that there should be a general and even national guide that could be followed by both Script teachers and schoolteachers, so they could collaboratively make the program work. Nevertheless, and in the words of the teacher Verónica, remote education requires to create autonomous teachers and students and it represents a long way to go for Mexican education.

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Figure #4: Example of one of the shows transmitted via YouTube.

Finally, when talking about the newest transition from online education to the coming back to face-to-face lessons, the teachers considered that it would be a challenge for both teachers and students. Even when there was a path established during the pandemic, another adaptation could represent a considerable struggle in terms of emotional situations. In August of 2021, when the interview was conducted, the teachers that worked on the Aprende en Casa program, felt uncertain about how the new model will work and how efficient would that be. Two of them, actually said that they would not let their own children return to classes because, during that period, the wave of contagion was still a dangerous situation that was evaluated by parents.

GOVERNMENT STATISTICS

In March of 2020, the National Institute of Statistics and Geography, or INEGI for its acronym in Spanish, presented the results of a survey conducted to understand the impact of the pandemic in education.

In general terms, 33.6 million of people were enrolled in the period of 2019 to 2020 and 2.2% of that sample did not finish their studies. In the section dedicated to the remote education, there is relevant data to understand how online classes were perceived. It is important to consider that 58.3% of the respondents think that there is a lack of learning in a remote modality, 27.1% think that there is also a lack of follow up in terms of the students' learning and finally 23.9% admit that parents and tutors do not count with neither the technological competences nor the pedagogical skills to help students to learn at home.

DISADVANTAGES OF REMOTE EDUCATION

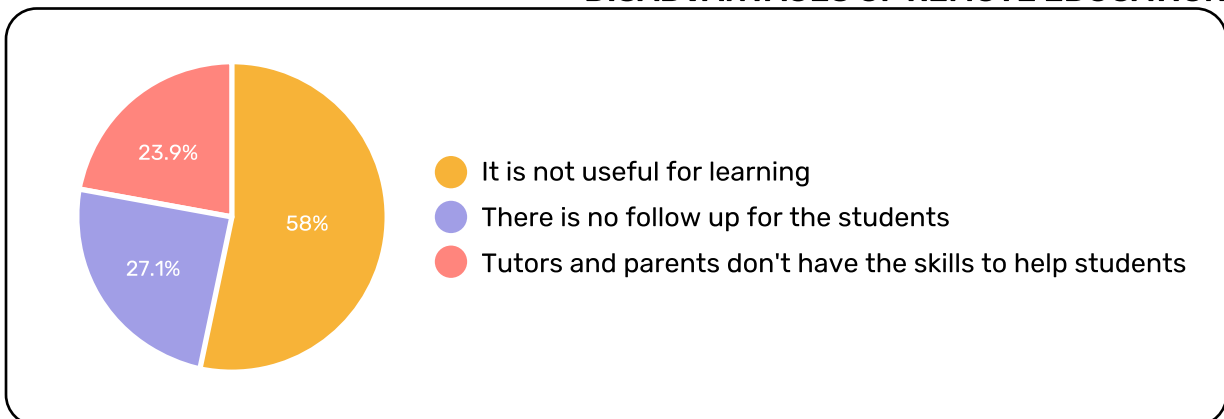


Figure # 5: Disadvantages of Remote Education

Moving forward, the report talks about the nature of the schools stating that 89% of the enrolled students belonged to a public institution while 11% identified themselves as part of a private school. In the high school level, 55.7% of the population of that area used a computer as the main medium to receive classes in contrast with the 70.2% of the basic school level that used the cellphone to follow the lessons. Going deeper into the high school population, 65.3% was able to use a personal computer to continue with the studies while 33.4% of them stated that

the cellphone was their principal tool for learning.

Talking about the desertions and the reasons why students dropped off, 58.9% of that sample stated that the covid-19 pandemic was the principal reason to abandon the lessons. Within the reasons, 28.8% lost touch with the teachers and were not able to do the homework, 22.4% suffered an economic loss in their households and there were no economic resources to support the education; for 20.2% schools closed and 17.7% did not have any connection to internet or digital devices; 16.6% suffered from a temporal closing of their schools; 15.4% considered that remote education is not useful for learning and 14.6% didn't have the support of their parents to participate in the online lessons.

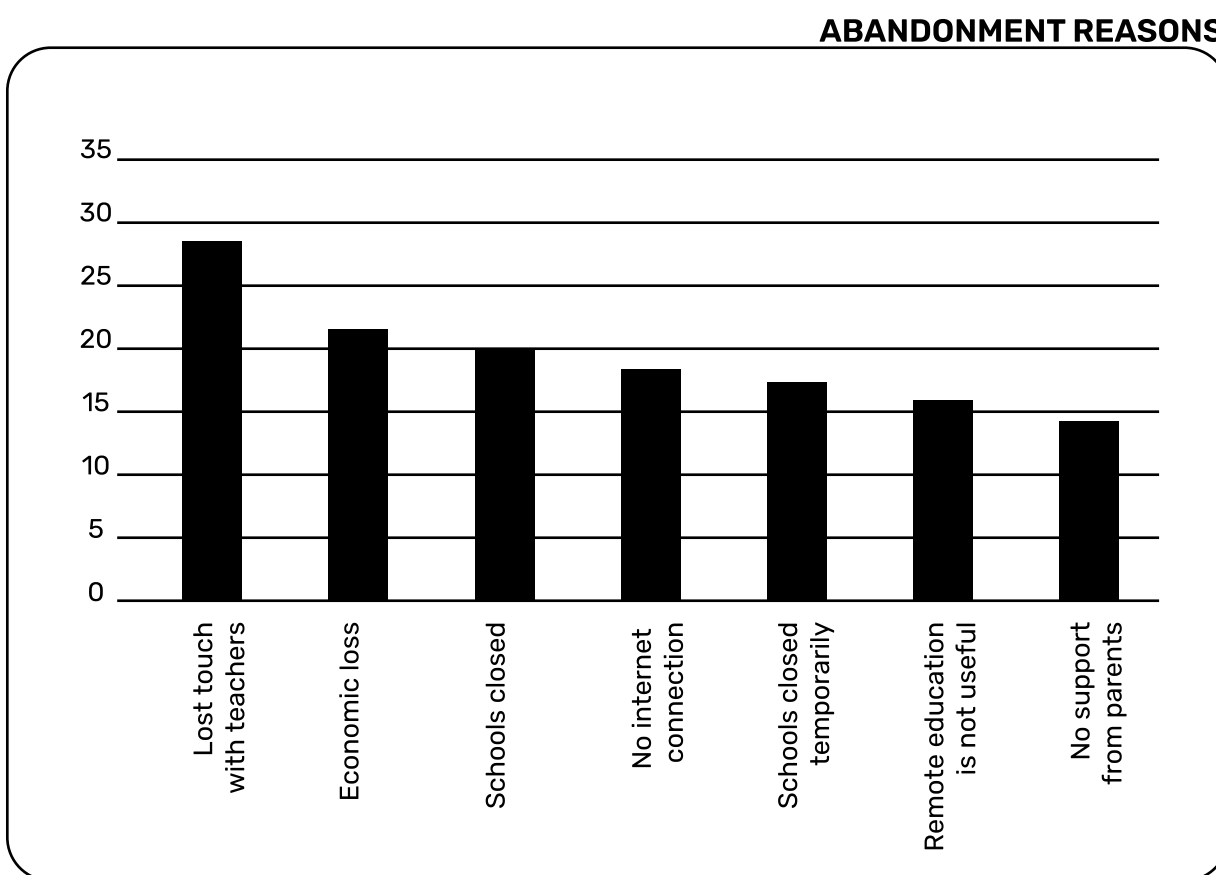


Figure # 6: Abandonment reasons

Finally, the report looked for answers to the availability that students might have to return to face-to-face lessons in the academic year of 2020-2021 and it was discovered that the group of people from 13 to 18 years old represented the 64.1% of the sample that were eager to come back to school. For the children of 3 to 5 years old, there were not much interest to continue their education in presence, represented by a 29.7% of the surveyed population.



CURRENT SITUATION OF EDUCATION IN MEXICO

As a response to the situation, multiple actions have been taken to reevaluate the educational programs provided by the government and the ways they can evolve to be implemented. **Within the High School system in Mexico, there is an Undersecretary dedicated to the Higher Secondary Education that is working on the update of the so-called Marco Curricular Común de la Educación Media Superior (MCCEMS) or Common Curricular Framework of Higher Secondary Education, in English.** Several round tables have been conducted since the beginning of the current year to talk about the reconsideration of curricular topics and the importance of modifying the curriculum, to give students new tools to be prepared for unpredictable situations. One of the proposals that is being discussed is the possibility of integrating the Arts as one area of knowledge that is suitable for the development of young scholars, helping them to cope with their personal situations and to integrate into their communities.

This scheme and perspective will be analyzed to understand how new methodologies could be developed and what are the elements that need to be adjusted within the Mexican context. The High School perspective is key for the development of the thesis, and it will be further discussed when talking about the prototype and the thesis proposal.

Even though there are several areas of knowledge that are meant to be integrated within the scheme that will be analyzed, this section will just focus on the Arts approach since it is the most suitable one for the perspective of the current project. The other areas of knowledge discussed across these round tables were Physical and Sport Activities, Integral Education in Sexuality and Gender, Health Education, Practice, and Citizen Collaboration.

The discussion starts off with the analysis of the high school students, presenting them as individuals that are eager to look for thrilling life experiences through learning and excitement. Then, the benefits of the art education are presented,

referring its importance to how this can help for the “development of mathematical skills, reading, cognitive ability, critical thinking, and verbal ability. It also helps to solve problems, improves motivation, academic performance, concentration, confidence, and teamwork” (Public Education Secretary, 2022).

The main basis of the proposal is that an extended curriculum is created with socio-emotional resources and training, complementing other areas of knowledge and other cognitive resources needed for the development of students who are at this point of their educational path. It is also stated that imagination is encouraged by creative work and that artistic activities can be implemented in different subject areas while young people find a new resource of expression.

When talking about the learning methodologies, on one hand, it was mentioned that individual work will be supported with activities that require autobiographical perspectives. On the other hand, collective work will be used when working in cultural projects that integrate the school community. The approach represent an unconscious development that allow students to work in an integral way and to learn from each other's points of view.

The discussants also mentioned the platform called ConstruyeT, developed to provide free educational resources to teachers that want to integrate new ways of teaching and that need extra support for the development of their lessons. At the end, several strategies and plans are presented to explain the actual integration of an artistic path inside the Higher Education trajectory. This scheme is still being discussed but it is a remarkable approach on how new topics can be adapted to cope with the pandemic situation, proving that the actors involved in the educational realm should be resilient and able to adapt into new perspectives that are beneficial to evolve. It is also a splendid example of how new frameworks could be presented and developed by High School Teachers and it will function as a reference of the proposal that will be further discussed.

Now, it is time to revise some highlights and opinions that were extracted from an interview made to several teachers and conducted by TV UNAM, the YouTube channel of the National Autonomous University of Mexico. The interview is called After the Pandemic, “Affectations to the Mexican educational system, and its goal is to recognize the effort made by the educational system that allowed

to sustain the communication with its students. The interview is conducted by Enrique Provencio, Researcher at the UNAM and the participants of the interview are Rodolfo Ramírez, Educational System Researcher, Patricia Vázquez from the Network of Women United by Education and, Berenice Ortiz, Professor of multigrade school and member of Research Network in Rural Education. To introduce the discussion, it is stated that, according to the PISA assessment, the achievement in fundamental competencies has not evolved since 2000 and that there is a great inequality at different social levels in regards of education.

From the point of view of the teacher Vázquez, there was a clear learning loss. Nevertheless, in the pandemic, the efforts of educational systems cannot be ignored and even when the results are not the greatest, there were many actions taken in order to deal with the situation.

According to her, one of the biggest lessons that the pandemic left is that the school is still a school without a building, the communication of teachers and families continues without the physical space, because the essence of learning should be maintain by any channel. In order for the situation to change, there are many gaps that need to be filled but a call for empathy has to be made. In accordance with that thought, the teacher Ortiz stated that the space was used to be known as a school has changed and has led to a rethinking of what teaching is and to reinvent themselves as teachers. She said that teachers had a choice to make during that period: either to be darkness for students or to be light for them.

When talking about the affectations in learning of future generations, it was discussed that there will be gaps in training, derived from the institutional requirements themselves. The common thought was that academics can be recovered, but if there is no human formation that creates empathy, it will represent a loss.

Another lesson of this period is that the school does not have to be standard, each child is a reality, and they all have unique needs to be taken care of. In terms of online classes, it was commonly agreed that there should be a proper training dedicated to teachers to prepare for digital interactions and that they can learn how to use their devices, like the cellphone, in favor of education.

To sum up, the efforts and points of view of many teachers is being considered to actually create a change within the educational situation in Mexico. The concern is alive, and teachers are interested in the evolution that can help them to adapt and to prepare their students for unexpected realities that can keep hitting the world.

Now is time to explore **new concepts** that, at first instance will sound far from related to education, but with the proper analysis there will be several elements that could be easily adapted into the learning path of both teachers and students.





EXPLORING
STORYTELLING
& TRANSMEDIA
PARADIGM
AS A **METHOD**
OF EDUCATION



WHY DO PEOPLE LIKE TO GO TO THE MOVIES?

Or why do they like to turn the TV on every time they are eating or having a shared time with other people? What are the ingredients that can keep an audience hooked to a story? Is it the excitement that a suspense film can cause? Or is it the laughs that can be felt while seeing a comedy piece? In any shape it has, entertainment is an element of everyday life. It opens the door to different realities and fantastic stories that can stimulate the minds of millions of people while feeding their imagination. The impact of entertainment is so great that it can intervene in the way people act, behave, relate to others and even in the way they learn. This could be compared to the institution that the school represents for people. Like the movie theater, the school is a place where a person goes to receive content and information. However, the way this is delivered is so different that it is interesting to understand that the excitement of watching a movie is bigger than attending a lecture.

So, what really are those elements that give audiences reasons to stay, to watch, to learn? What can be learned from entertainment so it can be applied to capture the attention of students in a classroom?

This chapter will be divided in two sections, the first section will be dedicated to understanding the concept of storytelling, the importance it has as a coping device, placed on the context of the pandemic for the means of this thesis, and its cognitive effects and benefits. In the second section, there will be an analysis of the relationship between storytelling and education, introducing the concept of transmedia storytelling and transmedia education and the study cases related to it. **The purpose is to understand the main strengths of these concepts in order to analyze how its implementation can have been and continue to be beneficial to educational systems.**



***“Who lives, who dies, who tells
your story?”***

Hamilton, An American Musical



BREAKING DOWN **THE CONCEPT OF STORYTELLING**

What is a story? A simple definition would be “a description of how something happened” (Britannica, 2022), the easiest way of transmitting events, a tool that is used every day to communicate. A story is something that can be heard in so many contexts, and that is commonly recognize as the main element of pieces of entertainment: without a story to be told, there is not movie to be made, book to be written or series to be imagined. It can also be said that stories serve as the most useful way to share legacy and to avoid falling into oblivion. “A story, a narrative, is a representation of connected events and characters that has an identifiable structure, bounded in space and time, and contains implicit or explicit messages about the topic being addressed [...] it is a way to share and receive information as well as a way for us to understand our own lives and those of others around us” (Jáuregui-Lobera et al, 2020, p. 865).

Storytelling itself is the act of creating and telling a story to go beyond the paper, following a path of creativity where characters, places, situations, and conflicts are involved. It goes way back to the primitive era of humanity; it has been the main way of communication manifested with the appearance of house cave paintings and the ability of humans to transform daily events into stories. Since ancient times, language has helped humans to “describe the intangible, to evoke those things that we are not able to experience, that we cannot even see, hear, touch or taste” (Lamarre, 2019). Language emerged as the main cognitive tool to tell stories and exchange knowledge, it is the path for humans to learn from each other and to give a sense to reality.

Every human is a world, a different reality, every human is his own main character with treats and flaws, wins and losses. This is why it is easy to relate with stories that are told in books, movies or tv shows, because the feeling of belonging becomes tangible when one can identify oneself with other people realities. The acknowledge of this gives room to imagination, encouraging people to

picture themselves in different or even fantastic situations, making storytelling a fundamental piece of how people's minds can be shaped.

There are many ways to tell a story. There have been several writers, songwriters and film studios that have created their own rules but according to Guillaume Lamarre, regarding his book of "Storytelling like a communication strategy," the interesting part is when the rules are broken. However, there are some steps and examples that can help to define the adventurous path for telling a story. Within the recognizable examples, one can find Pixar, a cinematographic studio of animation that created its own rules to tell stories, "One of the greatest techniques of storytelling of Pixar consists of combining the ordinary with the extraordinary, creating a whole universe of its own" (Lamarre, 2019, The example of the Pixar Studies section). In the North American Educational system, for example, students are asked to talk about themselves in front of the class, in this way they can practice their speech, acknowledge their existence, and obtain authority (Lamarre, 2019, National Cohesion).

So, what is the best path to start? A storyteller has one important goal: **to create a memorable story, to develop with greatness a topic by showing the adequate elements.** In order to start, there should be a conflict, a problem to solve, a journey to begin; then, it is important to have a target audience, having in mind the impact that the story will cause to a certain group of people. Then, the plot will follow, and it will be developed and transformed in every step of the process, but it will represent the glue that sticks together all the pieces of the story. "It will function as a compass" (Lamarre, 2019, A living organism) for the storyteller, to set a direction even when the events are from different nature.

According to Lamarre, in his analysis about storytelling related to communication, the plot can be developed in five different ways: the destruction of a threat, the renaissance, the hero that is driven by an external source, wakes up from the charm and gets lost, the quest, the travel story, and the story where the protagonist goes from zero to hero. Consequently, in order for the plot to be developed there are several stages that the protagonist(s) need to experience. Kenn Adams (Improv Games, 2019), professor and dramaturge, established seven stages that are divided into three acts.

The Kenn Adams formula follows this path:

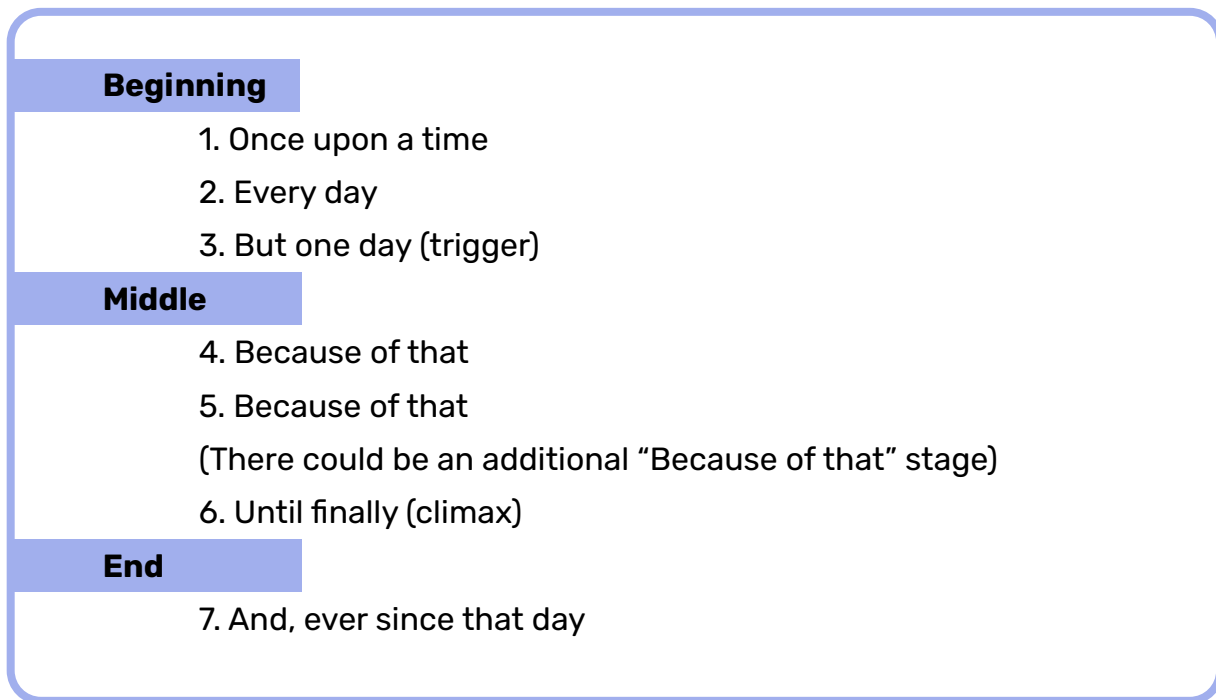


Figure # 7: Kenn Adams Formula

The three acts will correspond to the beginning, middle and end and there could be divided in seven or eight stages, depending on the development of the character. The useful thing about his formula is that it could be adapted for almost every kind of story and that focuses mainly on developing the conflict.

There are two elements that are important to be considered while going through all the stages. First, the trigger. It is part of the first act (Beginning) and is the fundamental action that will change the course of the story and that will lead the protagonists to act. Then during the Middle, the characters will live different experiences that will determine their narrative arc until they reach the climax point. This is critical moment for the characters, here is time to face the biggest obstacle and if that is achieved, then there will be a transformation (Lamarre, 2019, Seven stages section). A story is fulfilled if the main character is able to overcome all the problems on his way by changing and learning different lessons throughout his path, arriving to The End of the story.

So, what is the missing element needed for the story? The conflict could only exist if there is a protagonist to live the experience. Therefore, the characters are an indispensable part of stories. The audience gets engaged with the characters and root for them to achieve their goals. "A character is the incarnation of a desire" (Lamarre, 2019, From desire to necessity). The motivation will always rely on a

faraway ambition that will keep the audience interested until it is achieved or not. To develop a character, a storyteller can think about the physical, social, and psychological characteristics of him. These characteristics could land on certain types of archetypes (a useful tool to create identifiable characters and that can create the relationships within them), but it will be a work in progress as the story finds its way.

On this wise, storytelling is characterized by certain elements and formulas that are used when creating a story. Following a structure is a useful mechanism that can set up the basis for storytellers, but one should always remember that an audience will look to identify with the main characters and will be waiting for the conflict to be solved, even if the path looks like a rollercoaster. As Lamarre states, "storytelling is a form of design, but it is also a matter of empathy." One could only tell a good story if one is able to make mistakes, ripe off the paper and start again until that memorable element is achieved, until the story comforts the audience and until it is so imperfect that it becomes a perfect piece of art.



“Understanding is the first step to acceptance, and only with acceptance can there be recovery.”

Albus Dumbledore in Harry Potter and the Goblet of Fire
J.K. Rowling



STORYTELLING LIKE A COPING DEVICE

Now that it has been established the main elements of storytelling, what would be the benefits of using this tool in another context? There is no need to be an expert storyteller to actually become one. People is always following a path similar to what Adams has proposed, while telling everyday stories or talking about their own life experiences. By learning the simplest rules, storytelling could represent a useful tool for contexts like the clinical and medical area where several human and communication values can help both patients and doctors. To understand the positive effects of this topic, an analysis on “Storytelling as instrument of communication in health contexts” by Ignacio Jáuregui-Lobera and other Spanish authors will be presented. According to their research, the use of storytelling represents a device to cope with traumatic events as well as a tool that helps to establish trust and equality.

As it has been analyzed before, **storytelling involves the art of creating and telling stories, or in other words, to live and share experiences. This could represent a way of establishing a better communication; a shared language where the teller is able to express their emotional experience and there would be people acting like listeners and learning from his or her words.** This is part of the benefits that storytelling represents on the medical context. In this sense, patients find a “way of expression that would eliminate the stigmatization of suffering from a disease” and this could create a support atmosphere of empathy where challenges would be faced with a common point of view.

On regards to the fields that derive from the medical area, clinical education is an interesting example that helps to understand the coping elements of storytelling. According to Jáuregui-Lobera, students of clinical education should “acquire several skills such as synthesis, analysis and reflection” (Jáureugi-Lobera et al, 2020, p. 869) in order to understand their patients’ journeys and to be able to reflect on the experiences they hear to improve their attitude while treating them.

Those skills are part of learning storytelling as a tool for communication and could improve the situation of the patient while receiving a treatment or by overcoming a painful illness.

Self-care and care is another area where storytelling could be incorporated in order to address personal patients' needs. According to the study, it has been used as a method to "support nurses and other health providers" (Jáureugi-Lobera et al, 2020, p. 870) as well as a way to "achieve better healthy lifestyles" and other valuable functions.

When it comes to specific pathologies that require a specific care, the stories of both patients and doctors are used to create specific diagnosis and managements plans. This include ideas, feelings, signs, and thoughts of the actors involved in the cases. This way, future patients with the same illness can learn from previous experiences and doctors can provide a better clinical analysis.

One last example is one related to prevention topics. There could always be a miscommunication problem when scientific topics are shared with the general public. If the narrative is accurate, people will believe what is presented in the media. During the pandemic, for example, there were a lot of fake news regarding the status of the covid-19. There were many beliefs that resulted from strategies of communication that made people act with fear or even take the wrong choices. Storytelling, in this regard, is also a method to create awareness and combat the misinformation related to any scientific subject.

Since one of the purpose of stories is to be memorable, the same principle could be applied while talking about a patient's experience. At the end of every treatment, patients' satisfaction will depend on the quality of the communication that was held between them and the medical staff.

A "proper communication would help to regulate patient's emotions, facilitate the understanding of medical information and allow a better identification of their needs, perceptions and expectations" (Jáureugi-Lobera et al, 2020, p. 874).

The relationship doctor-patient could be improved with the use of storytelling. According to the study, there are some cases where storytelling has been used during training programs to humanize doctors while treating a patient: to prepare for the first encounter, to educate the patient, to avoid overestimating the patient,

to talk with a comprehensible language for the patient and to practice empathy. By learning from each other, the agents involved in the medical sector could have an improvement in their experience. As discussed before, there is no need to be an expert to tell a story and the value of human experiences increase when other people can relate and learn from that. In this matter, storytelling represents a tool of adaptation, knowledge, healing, and learning, creating a bridge between patients and doctors or health providers. There is a recognizable power of this tool to cope with difficult situations and it is important to understand that it is a versatile tool that could be modified and applied in different contexts.



“When you are a Bear of Very Little brain, and you Think Things, you find sometimes that a Thing which seemed very Thingish inside you is quite different when it gets out into the open and has other people looking at it.”

-Winnie The Pooh





COGNITIVE EFFECTS OF STORYTELLING

What is cognition? It represents the mental processes when one practice the act of learning and understanding; these processes include “thinking, knowing, remembering, judging and problem-solving” (Very Well Mind, 2022). Cognition helps humans to transform information into knowledge while using the senses and perceiving experiences. Stories are also a source used by humans to capture events, real or imaginary, and that work with the cognitive abilities of the brain to transform ideas into tales or even just memories.

The cognitive effect of storytelling appears when it becomes a stimulating experience to remember details from a story rather than from a set of arbitrary facts. Once again, the memorable aspect of stories is a benefit characteristic that helps to activate the mind. According to an article written by The City Tree Christian School about The Cognitive Magic of Storytelling, stories help to identify patterns that prepare the reader to connect points and arrange elements into known structures. According to the article, there is greater impact when gaining knowledge if a difficult topic is presented as a story, and it could maintain the engagement and interest of readers or students awake. Oxytocin is a bonding hormone that is released when a delightful story is presented to an audience, helping them to identify with the characters and to keep the excitement alive.

So, what if it is necessary to learn again in order to activate cognitive effects? What if all these concepts could only be understood if there is a new significance on the gathering of knowledge? Now, the concept of metacognition will be discussed.

METACOGNITION (RESIGNIFICATION OF KNOWLEDGE)

If cognition is related to the way humans learn and transform information into knowledge, then by adding the prefix **meta**, the definition will evolve. Metacognition will refer then to the process of learning how to learn, since this prefix (meta) recognizes each subject as an object of reflection by itself. For example, metadata is “the data that helps to analyze further data and metatheory is the theory about theory,” and so on. (Merriam-Webster, 2019).

The process of learning seems a prescribed formula that all humans follow, since it is part of their nature and the way they grow and evolve. Since the moment of birth, learning is a fundamental and unconscious activity performed by instinct. Then, in early ages, it will be translated into the actions taken when going to school and understanding how some actions have consequences either good or bad. Nevertheless, there is not an established training to practice the art of metacognition and being aware of one’s thinking and knowledge, does not represent a common exercise.

Metacognition by itself, represents important benefits for students. It helps them to auto-regulate themselves, to be independent learners and to have an active process of discovering themselves and their study habits while learning.



In this section, those benefits will be discussed while presenting the key findings of a study about metacognition. It will be also examined the incorporation of storytelling techniques for metacognition purposes and the way it can improve these processes. The study mentioned was developed by Suzanne Van Aswegen, Estelle Swart and Marietjie M. Oswald, members of the department of Educational Psychology at the Stellenbosch University in South Africa.

The first step is to recognize metacognition as an actual model that requires its own methodology and that its development can be taught in an early stage. This can redefine the study habits and enhance the students' beliefs about themselves. So, where to start? The study analyzes Vygotsky's, Russian psychologist and epistemologist, vision about the cognitive development. His theory states that in order for student to "understand themselves as learners and how to learn, they need to interact with more knowledgeable others" (Van Aswegen, 2019, p.2). In other words, students can have a better thinking and comprehension while interacting with competent others, understanding the value of collaboration and the improvement of the results due to it. Another important concept is "metacomprehension," a term that encourages students to go deeper and evaluate how much they have learned from a topic, by reading a text for example, and to go further than just analyzing the meaning of it.

Once the basic terms are understood, storytelling comes into play. The above-mentioned study analysis the intervention of storytelling as an approach to enhance self-awareness and to learn how to apply a metacognitive strategy while using stories. The experiment was developed by presenting stories about characters that are learning and performing learning activities. In this way, students would be able to identify the related vocabulary, learning strategies and the self-knowledge required to perform these activities on their own. There were two main characters in the story, Abe, and Annabel. Their objective is to become expert learners while going through experiences with their friends.

The experiment was developed during the period of 10 weeks, and it had nine stages:

1. First questionnaire with multiple-choice questions to assess how much students were aware about the metacognitive strategy.
 2. First reading exercise
 3. First comprehension test (during and after the previous exercise) with self-reflection tasks about the learning process.
 4. Interviews conducted in small groups in each class.
 5. Story-based intervention
 - a. Story time was practiced twice a week for 20 minutes
 - b. The rest of the week, students had time for the discussion of the stories and practical exercises to understand the text.
 - c. In this stage, the students were exposed to stories about Abe and Annabel. The idea was that they were able to recognize which characters' actions were relatable to them. This was also aimed to help students to analyze and adopt learning attitudes that could benefit their study processes.
- Repetition of the previous data-collection process
6. A second and similar questionnaire with multiple-choice questions but with a change of order of the questions.
 7. Second reading exercise
 8. Second comprehension test with a similar difficulty level.
 9. Second round of interviews to recover the final feedback of the students.

The result of the metacognitive/story-based intervention help teachers and students to recognize its benefits and to even consider using it or not in the future. If teachers felt that it was too arduous to be applied, they could just simply not use it. Most of the students, on the other hand, were able to increase their understanding of the proposed topic by connecting information between the first stage of knowledge they received, and the information contained in the stories. Peer collaboration was also a beneficial factor of these processes, by sharing their learning experience, students were able to relate to the characters of the story.

The main character, Abe, had reflection moments where he analyzed his way of thinking and learning, introducing words and expressions that could be replicated later by the student. In other words, beneficial learning attitudes and phrases were presented through a fictional character's experiences and that was translated into new knowledge for the students.

This method made learners aware of themselves as learners, improving their thinking and enhancing skills like previewing, questioning, predicting, and verifying. (cite) In this case, the concept of storytelling became a learner-centered method. This means that by increasing their self-knowledge by identifying themselves throughout the plot of the story, students are aware of a meta-comprehension method that helps them to reflect on their own learning. The appliance of an intervention of this nature will depend on the student's and teacher's reception but, if it is successfully developed, it will represent a beneficiary impulse to improve learning methods. Some of the benefits of this study include awakening of senses, personal and constant reflection, identification of patterns, reinforcement of previous knowledge, development of learning strategies, autonomy, active state of mind and productive thinking.

This study developed in South Africa is a great example of how important it is to propose a resignification on study and learning methods. Adapting to the context it is also necessary to develop an intervention of this kind and if a topic requires a content approach, this method will represent a good alternative for learning.



STORYTELLING DURING THE PANDEMIC *COPING WITH SOCIAL DISTANCING*

In March of 2020, an international lockdown was established to prevent the spread of the covid-19 virus. The date and conditions of this depended fully on the government decisions of each country and the initiative of its citizens. At the beginning of this period, millions of people shared the common thought that it would be momentary stage that would be solved through the relevant authorities. Unfortunately, a whole new period of social distancing was starting, and the dynamics of coexistence were about to change. Digital platforms became a necessary medium of communication, and they were used for work, personal interconnections, and leisure. As it has been mentioned before, the digital transition increased due to this time and people try to adapt on the best available way possible. One of the most important issues worldwide was the situation of coping with social distancing, an issue that brought up questions about mental health, isolation, and new ways of relating with people.

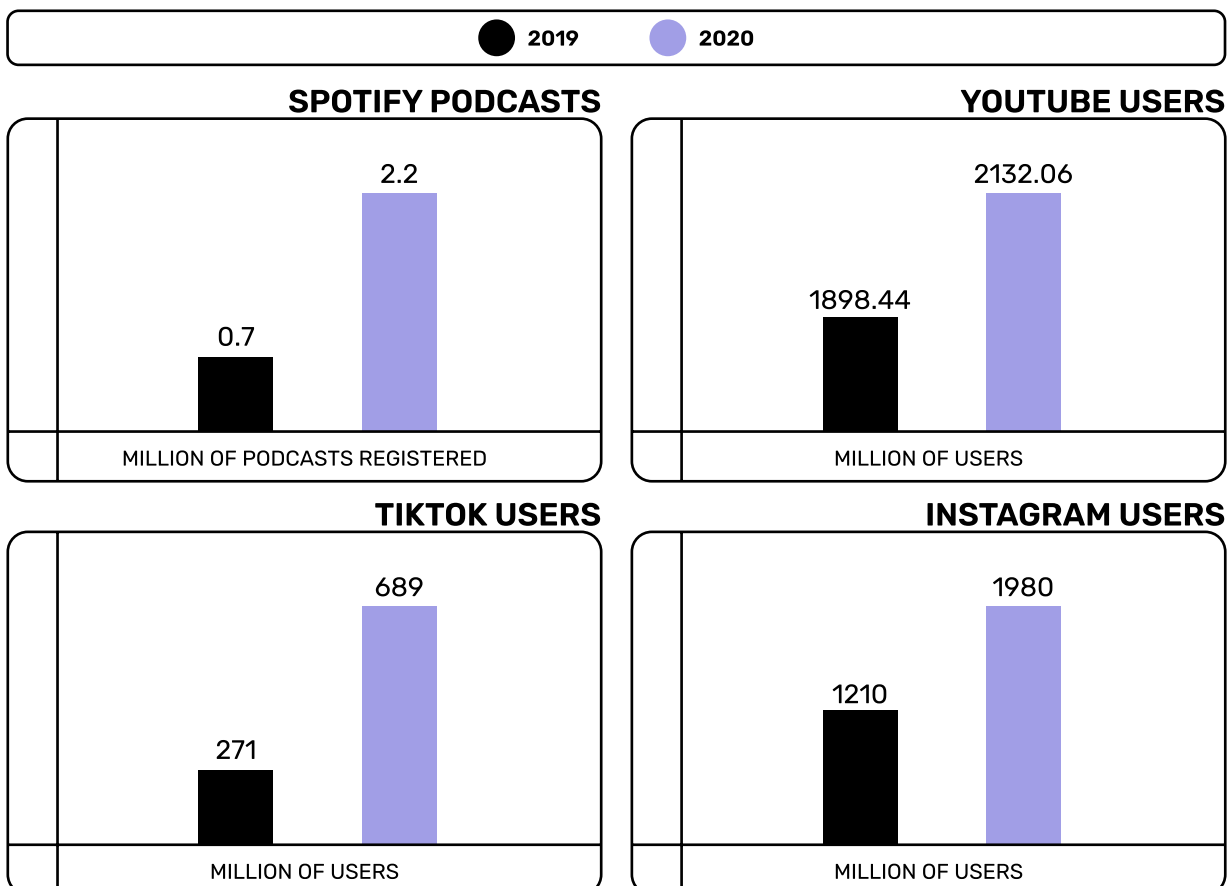
The digital means of self-expression increased as the only way of sharing individual stories and social media was the ultimate medium for one to keep updated about what was happening in everybody's life. This resulted in a considerable growth of social platforms like TikTok, Instagram, Spotify, YouTube, and Twitch; but also, entertainment platforms like Netflix, which established new methods of streaming services and even gave a place for early creators to generate new content made from home. Overall, there was a common need to establish methods to avoid loneliness and to look for a better way to communicate and share personal truths. Based on this situation, some examples of communication and digital platforms will be discussed, relating them to storytelling as a valuable mean of expression and as a recurrent way to cope with social distancing during the pandemic.

Why do we need to connect with people?

The human being is a social creature that is used to give and receive constant feedback and to relate to other's emotions and stories. There are mirror neurons that unconsciously make humans match with other's emotions and the brain activity can also be mirrored by using storytelling and listening (Morgan, 2015). There is a feeling of happiness when people are able to connect and find others that are alike and share the same thoughts and understanding of life. Since most of the human activities require social interaction, it is natural to look for ways of establishing connection and common communication.

SOCIAL MEDIA AND DIGITAL PLATFORMS DURING THE PANDEMIC

On the particular case of the pandemic, social media and digital platforms function as the mirror neuron that motivated people to watch and create content that was relatable to them and to others. There were many kinds of expressions in this sense, from the most professional creator to the newest individual incorporating to social media. No matter the quality of the content, there was a mutual goal of sharing stories and recognizing that there was a worldwide situation happening and affecting each context, creating a common state of mind. Anxiety and stress were two of the most common emotions of this state of mind, and media consumption was a useful method to counteract these feelings. Multiple podcasts, videos, stories, photos, and digital channels emerged to talk about this, and the human connection reached a digital nature.



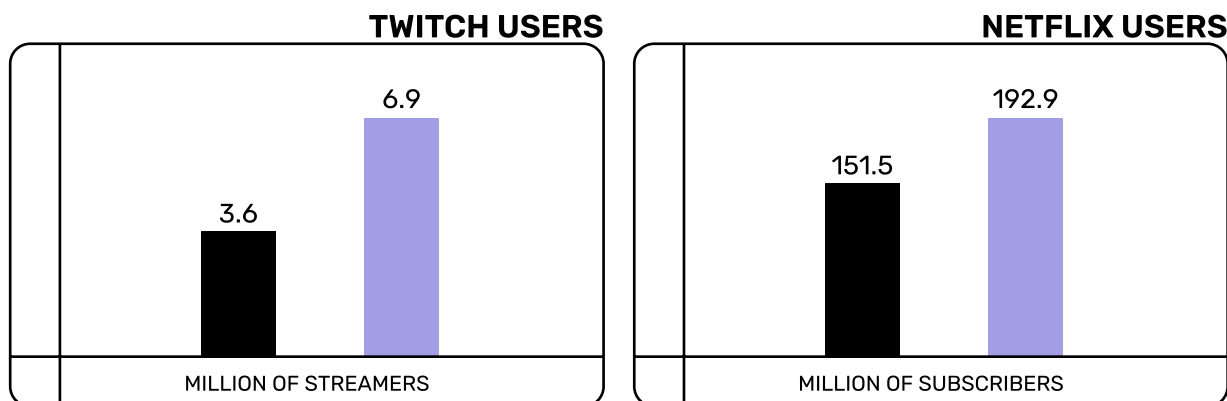


Figure # 8: Statistics of digital platforms during 2020

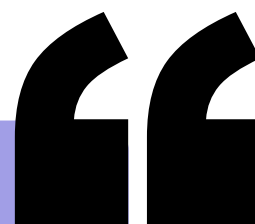
Here are some statistics of digital social platforms whose usage increased considerably during 2020. Most of them duplicated their users and content creators, and their numbers keep growing nowadays.

- Spotify represented a streaming platform to talk about any kind of topic, most of them related to ways of distracting from the situation, to be productive during the lockdown or just to share common and international thoughts.
- YouTube saw a growth of 112.3%, allowing more users to see and create videos, also becoming an important medium to broadcast live sessions of any kind of source.
- TikTok was and still is one of the strongest platforms of short videos these days. This platform allows users to create content of different lengths and most of them are based on personal experiences, artistic processes, music, or comedic slices of life. From the analyzed platforms, it is one that had a considerable growth of 254.24% from 2019 to 2020.
- Instagram was an important source of knowledge and information that allowed users to keep updated with the changes during the pandemic. Since it is one of the oldest platforms, it did not have a remarkable change, but it is still managed to increase its users.
- Twitch was born in 2011 but saw an incredible growth during 2020. It is one of the leaders in live streaming and is mostly dedicated to videogames and e-sports. This platform had gained its popularity due to the great number of online users that play videogames and relate with other gamers digitally.

- Netflix was benefited from the free time of millions of people worldwide. The content of the platform was binge-watched for almost all the time of the lockdown and even new content was produced while staying at home. An example of this content is “Homemade,” a collection of short films created by different filmmakers that portrayed personal experiences of their life in quarantine.

What do these platforms have in common?

As mentioned before, they represented most of the main channels that keep the communication alive during the period of isolation. Establishing connections also involved to be aware of other’s situations even if the person on the screen was a complete a stranger. User content became a common denominator among people of all kinds, and it became genuinely appreciated when more and more users started to join this digital movement. It was a common ground when all voices could be heard and where the digital possibilities allowed people to feel close to each other.



“Through storytelling, we can capture narrative time capsules of this remarkable period in our lives.”

-Providence, 2020



THE CASE OF GEORGE FLOYD FROM A STORYTELLING PERSPECTIVE

During this period, there were many stories told every single day. Yet, there were stories that transcended considerably and that transformed into social movements with the help of media and social media. On May 25th of 2020, just a few months after the lockdown was established in the United States, George Floyd was murdered by a policeman of the state of Minneapolis, placing his knee on Floyd's neck and interrogating him after someone suspected that he could have used a fake bill on a store. "I can't breathe" were the three last words of this innocent man that was killed unfairly and whose viral video woke up a massive social movement essential for the Black community on the USA known as Black Lives Matter.

The movement skyrocketed online and offline, joining millions of people together worldwide, people that were furious and engaged with the situation. Online activism was accelerated, and people expressed their thoughts and rage through multiple digital platforms using the hashtag #BlackLivesMatter. This unjustified murder also helped to raise voices and talk about the economic injustice that the Black community suffers due to racism. The movement was so huge that it encouraged people to go out on the streets and made physical protests, even when the national order was to stay home. People united in such an incredible way and gave life to a justified movement that was led by Black representatives and that gave international audiences the possibility to solidarize with the situation and to support it somehow. The feeling of impotence generated after watching an online video transformed into acts of solidarity of millions of different voices that were led by humanity.

From the point of view of storytelling, this movement gave way to a united speech that moved more than twenty-six million people. As it has been discussed before, storytelling works as a method to cope with difficult situations and experiences. The story of one single man moved the hearts of millions, allowing them to share

their own stories and to support the movement while connecting with each other. Even different communities unrelated to the case were able to speak out for their rights: women, LGBTQ+, Latino and immigrant citizens. “I can’t breathe” became the slogan of the movement and it has been the inspiration for protests, signs, songs, documentaries, and pieces of free self-expression that could only look to communicate in three single words, the voice of a whole community. If storytelling objective is to create memorable pieces and to be used as a source of empathy, then the #BlackLivesMatter movement was truly developed by these means of communication, and it still transcends until this day.



Figure # 9: Protesters demonstrated in front of City Hall in Downtown Los Angeles, on May 29. Credit: Bryan Denton for The New York Times

At the end of the day, the digital behavior manifested worldwide allowed to establish new ways of connecting and it was important to maintain an active online persona that felt human enough to listen to other people's stories. Sharing and consuming valuable content became indispensable during this period, and it had redefined the way people communicate nowadays. Coping with a difficult situation could always use another mind that share the same feeling and thoughts, even when there is nothing else in common but that situation. Storytelling became an unconscious method of communication allowing people to break the walls of their own homes by having an international reach through digital channels. Human beings will always be social creatures but, as the pandemic has shown, the capacity of adaptation is indispensable to keep evolving. Everyone has the chance to become their own storyteller.



***“And the challenge for those of us caring about social justice issues is to make sure that these tools get in the hands of those people who have been the most oppressed and most dispossessed to get their stories out and get their stories in the circulation.*”**

As we expand as the power to tell stories, we have the potential for stories to grab our imagination, to touch our hearts that come not from the entertainment infrastructure but from some average citizen out there whose reality never been depicted on the screen before, and I think that is the real excitement of our present moment of media change.”

Henry Jenkins on Transmedia
2008



STORYTELLING AND EDUCATION ***INTRODUCTION TO TRANSMEDIA*** ***STORYTELLING***

What if humanity was trapped in a simulated reality where machines have taken over the control of the world and humans have no longer more value than to be transformed into energy source? What if there was a whole different truth that needs to be uncovered to escape from that reality? Those are precisely the main questions that are meant to be solved on the Matrix saga, a saga that needed more than movies to portray the story, involving videogames, animated short films, books, websites, comic books and even two more movies. Released in 1999, The Matrix is one of the biggest productions characterized by being a transmedia storytelling product, with a whole narrative spectrum that could be shaped into many different sources and delivered through many channels.

So, what is transmedia storytelling? According to one of the biggest exponents of the matter, Henry Jenkins, it is a concept characterized by two main elements: first, it is a story that can expand itself in different media and platforms and second, it invites the audience to become active participants and to be part of the narrative world. Spectators participate by creating “user-generated contents,” immersing themselves into the story and collaborating on its expansion. Although it emerged as a product on the field of fiction, it has quickly shaped itself into more fields like transmedia documentary, transmedia journalism, and transmedia branding.
(CA. Scolari, et al, 2019, p. 118).

The example of The Matrix is often used to illustrate scopes of this phenomenon. When the movie was released in 1999, it became a sci-fi sensation that impacted audiences worldwide. It had revolutionary special effects and talked about a new perspective of Artificial Intelligence, a topic that was popular among the sci-fi movies of that time. The philosophical approach was good enough to be combined with martial arts and action scenes, establishing the standards of future films,

raising the expectations, and leaving the audience excited for more content. In March of 2003 when *The Matrix Reloaded* was released, the audience not only was able to enjoy a second movie but also, they had the chance to play a video game called *Enter the Matrix*, a piece that let the user experience events that happened before and during the new movie. And if the audience were invested enough, they could also connect pieces of the story by watching *The Animatrix*, a collection of nine short films that connected with the missions of the videogame and also helped to understand the narrative of *The Matrix Reloaded*.

In November of the same year, *The Matrix Revolutions* step the cinemas as the third film of the saga, and it had a simultaneous release worldwide. Due to the time difference, a “zero hour” was established to be projected at the same time, so that fans worldwide could enjoy the film internationally together. The universe then expanded through comics published on the official website and with the release of two more video games in 2005. One of those videogames, *Matrix Online*, allowed the community of fans to be connected directly with the characters of the story, with the help of a script created for them and to announce events to the fandom. 2021 saw the last release of the franchise, when *The Matrix Resurrections* film arrived in the cinemas. Through all those years, the audience has been actively participating and creating pieces of their own, feeding the narrative with their own interpretation of the world.

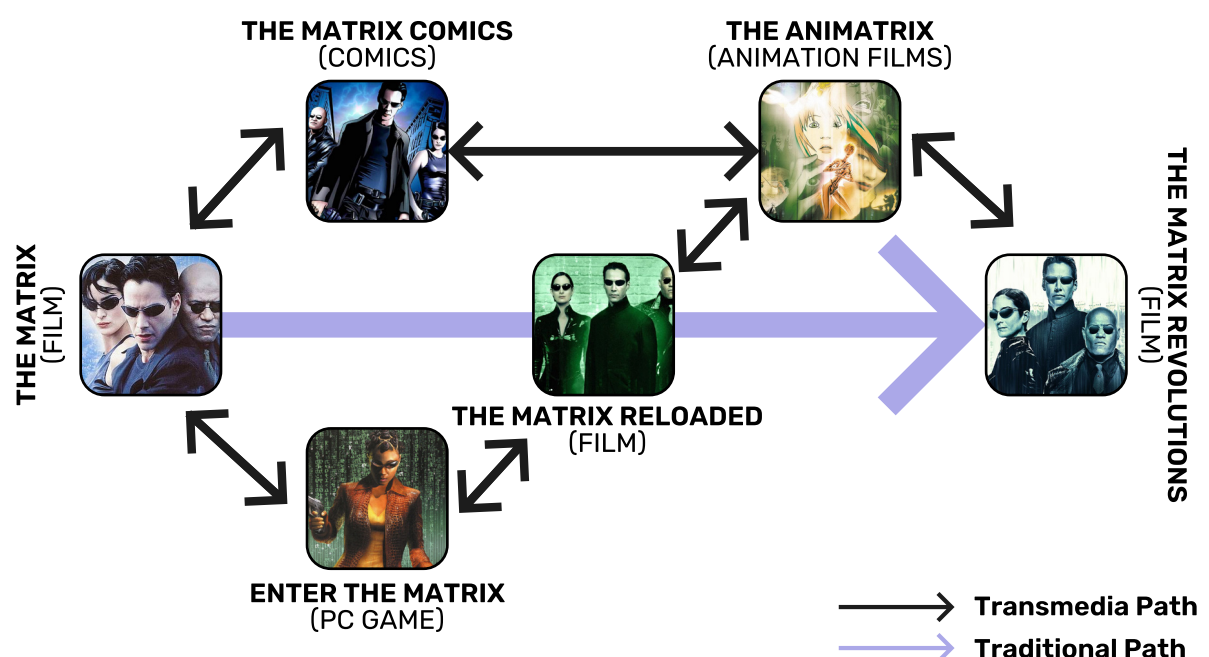


Figure # 10: Matrix Transmedia Example

The lesson learned from The Matrix franchise is that a great narrative world is free to evolve, expand and express itself through all kind of media platforms. The audience is a crucial element of this process, without an entertained public, there would not be new material to be produced from both the original creators and the public. Henry Jenkins himself recognized that The Matrix is the maximum exponent of the Transmedia Narratives. This franchise became a role model for future narrative creations that have extended their own worlds through many platforms and have created a new way to consume entertainment.

So, in sum, which are the elements that characterized a transmedia piece to evolve in such a Matrix way? According to Jenkins, there are seven principles needed to a piece to be considered a Transmedia creation.

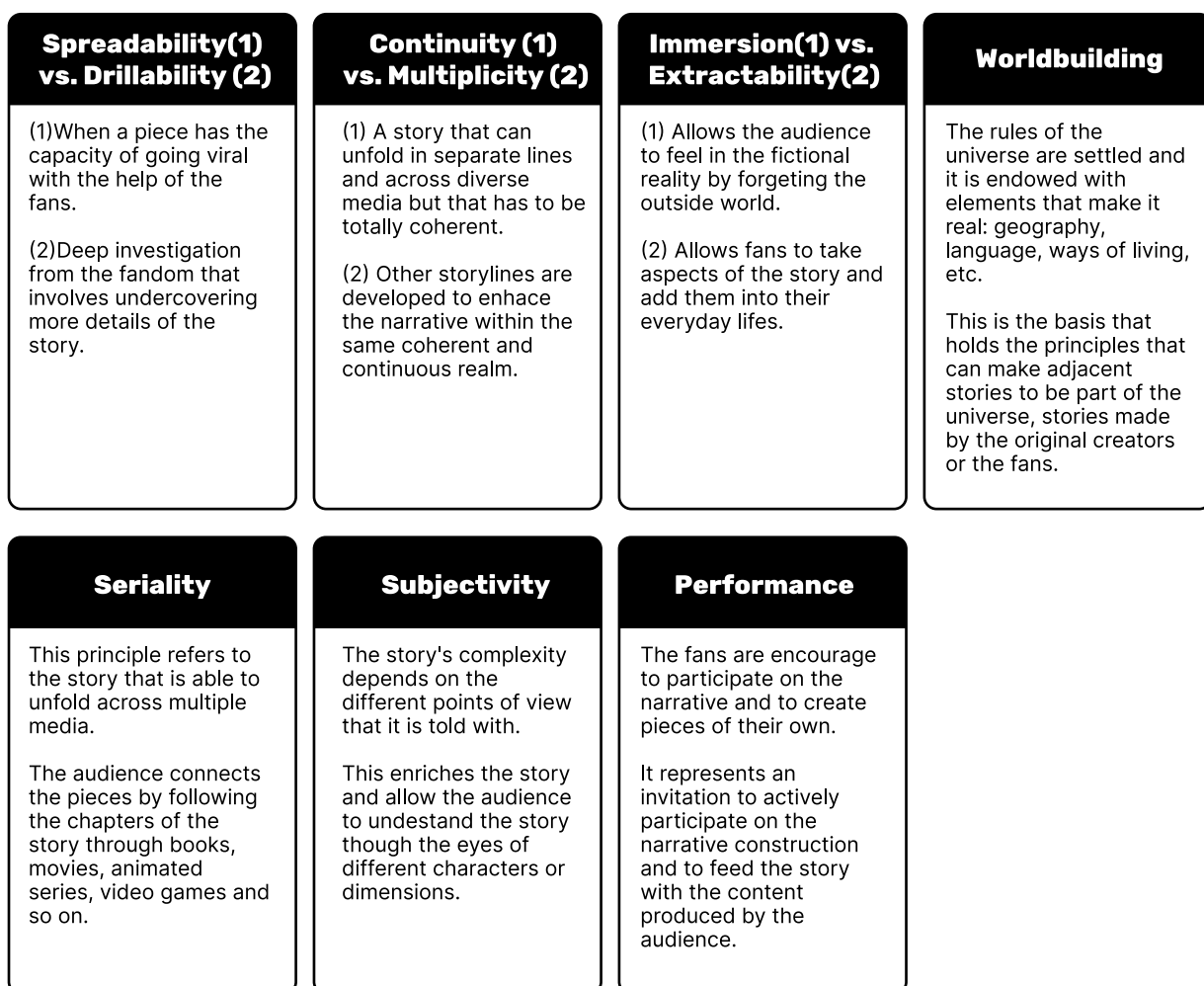


Figure # 11: Seven Principles of Transmedia creation by Jenkins

With these principles, there are certain concepts that need to be understood in order to create or analyze a Transmedia project and to have a proper immersion into the media environment. These concepts will be discussed on the next section and will be described on relation to the application with learning, in order to start the analysis about Transmedia Education.

NEW ALPHABETIZATION: MEDIA LITERACY (MEDIA GLOSSARY)

When a narrative world is created, there are certain laws that need to be followed and respected to create a coherent story development. The same situation happens when there is a new environment ahead, new concepts need to be comprehended to start digging into the topic. In this case, a new alphabetization is required for Transmedia Storytelling, and this is achieved by the analysis of Media Literacy. In these sections, this notion and other adjacent terms will be discussed to cover the basic knowledge about Transmedia and the applications that it could have, which on the matter of this thesis, will be dedicated to its incorporation into Education.

Media Literacy

According to Carlos A. Scolari and other authors of an article about Transmedia Education, Media Literacy could be understood as the practice to cope with the media environment and to be professionally trained to understand the matters related to it. A media environment here is recognized by the processes of communication and distribution of information in digital and analogue channels. On the article, Media Literacy is defined by a “set of skills and competencies that the subject should possess in order to cope with the media environment in the best possible way” (CA. Scolari, et al, 2019, p.120).

In the Educational field, this information may well be beneficial for both teachers and students, by applying such practices to open the mind to complex digital terms while working inside media environments. Due to the continuous evolution of digital terminology, there are concepts that have being established through the last decades, but new terms are constantly added into this list.

Education In Media

With Media Literacy comes along the Education in Media, focused on providing “tools and subjects to move within the media environment” (CA. Scolari, et al, 2019, p.119). Here, individuals have enough understanding to participate and to start producing themselves. This last part about production is connected to the Transmedia principle of performance, where the audience is invited to participate and have the ability to do it. This is differentiated from Education with Media, which addresses the possibility of using media for learning as an instrument of educational technology or as a pedagogical resource.

Use Of Media As A Pedagogical Resource

This media literacy has a genuine inclusion of the technologies within the classrooms (Albarelo, F. et al, 2018, 228) and also can help to develop knowledge within an inform environment apart from the closed and formal educational path. Media users themselves might be seen as not well trained, hence the incorporation of this digital and media training can also represent a beneficial feature that can and currently is incorporated into some educational institutions. (CA. Scolari, et al, 2019, p. 130).

Transmedia Literacy

The next term to be analyzed is transmedia literacy, a set of skills distinguished by giving someone the ability to manage different environments from social networks to communities for video gamers, it could also refer to a program composed by these skills that could be incorporated into formal education.

Convergence Culture

Remembering the exponent by excellence of Transmedia, it is worth to talk about some concepts that Henry Jenkins introduced to this new world of media. In 2006, he dedicated an entire book to the concept of Convergence Culture, a term that is explained in two parts. First, Jenkins defines convergence as the “flow of content across multiple media platforms, the cooperation between multiple industries, and the migratory behavior of media audiences who will go almost anywhere in search of the kinds of entertainment experiences they want” (Jenkins, 2006,

p.2). Then, the culture is defined to be a participatory one, where the producers and the consumers are seeing at the same level because they interact with each other, showing off different skills and collaborating on different ways. These two terms together let the Convergence Culture develop, manifested through the individual consumers interactions through media and a collective intelligence that changes every day.

Participatory Culture

A term defined by Jenkins himself, the participatory culture is the one that uses relationship wise technologies to create and share content, like social media and open platforms. A culture of distribution and reception is key to help the culture to develop since the users will interact with the content. (Albarello, 2018, p. 223).



A world governed by participatory culture has the potential to be much more diverse in a world controlled by a small number of media producers. As average people developed the ability to tell their stories, we are seeing different perspectives emerged, we are seeing different groups gain representation, we are seeing groups challenge the dominant media images that it been constructed for their lives.

Henry Jenkins on Transmedia

2008

Media Producer And Media Consumer

Within online communication, users can adopt two types of behaviors, they could be either media producers or consumers. A media producer is understood as the one that creates content that will be distributed through different media platforms. A media consumer could be understood with two variants: the one that is passive and the one that is active. The passive media consumer is the traditional one, the one that is the receptor of the media communication cycle but does not intervene or gets involved with the content. On the other hand, an active media consumer can also be defined as a prosumer (producer + consumer), an active element of the media process where he or she can develop digital and interpretative skills to understand new digital narrative and formats, in order to become a creator of new content that will be shared through social platforms (Albarelo, F. et al, 2018, 227). In terms of education, the students can be considered as users and when they are able to analyze certain media matter and create from it, they will take the role of prosumers. This term will be retaken in further chapters that will specifically talk about Transmedia Storytelling Education.

User Generated Content

Complementing the term above, the content created by the now understood prosumers, will be called user generated content. This content should be created starting from a known topic or narrative product, allowing the users to expand the world with their interpretation of it.



***“Tell me, and I forget.
Teach me, and I remember.
Involve me, and I learn.”***

—Anne Shirley from Anne of the Green Gables



TRANSMEDIA STORYTELLING EDUCATION (STATE OF THE ART)

WHAT IS TRANSMEDIA STORYTELLING EDUCATION?

Similar to the journey of a cinematographic story, a Transmedia Storytelling focus in education will create a possibility to dig into the narrative of a topic by exploring it with the use of different media resources that could be a support of a lesson. The content that is generated by the audience, in a conventional Transmedia case, will be generated by students, considering that they play the role of prosumers that need information from a media source and ways to portray their own interpretations in order to keep the interest alive. Seeing from a didactic point of view, a transmedia implementation can enrich a pedagogic experience when it is directly connected to the understanding of the students (Albarello, F. et al, 2018, p. 228).

The elements that are needed for an ideal Transmedia Storytelling environment are: a digital trained teacher, students eager to learn, digital and media resources, platforms (no need to be entirely educational) and proper planning. In order to understand this concept in a deeper way, a general overview of it will be presented, the relation with education will be explained, and the insights of three case studies will be analyzed in order to understand how a project of this nature could be performed.

The basis of Transmedia Storytelling Education is the acceptance of the power of digital techniques and how they have changed the way information is distributed. With everything being digitalized and distributed online, information also becomes a digital component and everything that surrounds it, can also be thought of as a digital product (Gray, 2011) (Martínez, M.I, et al, 2014, p. 134). Supplementary and, related to education, there are certain boundaries that have been broken with the digital influence and this is the moment where the informal education

comes into play.

After the pandemic, it has been more than clear that a physical location is not a restriction for learning and the same happens with the acceptance of informal educational methods that are able to transcend the classroom and represent a major benefit into the learning process. Informal education refers to the learning path that does not take place in school and that inspires new educational techniques to be developed, creating an influence in both teachers and students' lives outside the institutions. (Burbules, 2014, pp. 3-4). In this sense, Transmedia Narrative, originally understood as a media and entertainment principle but now thought within the educational environment, allows to enrich the pedagogic experience when it is directly connected to the comprehension of the students. Within educational institutions and systems, the required knowledge is redefined and evolving as time goes by and with this, the role of the school as an educative source also changes. It becomes interesting how schools can also take advantage of what is being offered outside the classroom and how that could be incorporated into the educational paradigm, changing the perspective, and evolving from the changes (Albarello, F. et al, 2018, 228-230).

WHAT DOES TRANSMEDIA AND EDUCATION HAVE IN COMMON?

One of the biggest challenges that education has always encountered, before, during and after the pandemic, is to engage students to encourage them to participate and even collaborate with their teachers to enrich the learning process. The interesting fact about Transmedia Storytelling is that it is a phenomenon that, when done correctly, immediately engages the audience into fantastic realities without seemingly effort. When it comes to the implementation of this phenomenon inside the classroom, not only the participation of the students is active, but the creations of teachers and other actors involved, improve the experience and the projects could be enriched even more (Albarello, F. et al, 2018, 243). It happens a lot that students do not actually learn but they memorize concepts that they can just forget after the exams. However, the consumption of information without a clear understanding of it, is not useful or productive, "students are able to process the information more effective if they have the possibility to interact with other students, with teacher, with new technologies through interactive programs" (Dudacek, O. 2015, p. 695).

In other words, it can be said that a Transmedia path has the elements that could be missing within the educational process. According to Maria Luisa Zorrilla, researcher of Transmedia Education, a teacher can create a Transmedia Educational experience by using elements that were not thought to be used inside a Transmedia logic and by adapting activities that can help students to explore their writing and reading skills through different media. The digital culture of the students evolves when they are able to comprehend topics by expanding them with their own perspectives, like consumers creating fanfics (stories involving fictional characters that are written by fans) of their own narrative educational world. (Zorrilla, M. 2019, p.36)

To design proper Transmedia experiences within the educational area, it is important to consider that creation should be a constant concept that is always present in every step of the way. The combination of Transmedia content and creation helps both students and teachers to enhance a double learning, “the one of the main topic of the transmedia experience and the development of transmedia literacy itself as a transversal learning” (Zorrilla, M. 2019, p.37)



CASE STUDIES

Imaginantes, a pioneer of the Mexican Transmedia Storytelling

In 2006, a project in Mexico called “Imaginantes” was introduced in order to create and broadcast digital content for young audiences, to inspire them to learn about literature topics. It all started with the development of animated videoclips that were distributed via internet and television, illustrating pieces of different stories with topics like science, art, movies, and literature. The main goal was to portray these clips as a communication tool that encourages the Mexican youth to read, helping them to feel identified with the content that they were watching and to take it as an interpretation of their own environment and community (Martínez, M.I, et al, 2014, p. 135). The scopes of project transcended in such a way that it not only became a viral phenomenon, but it woke up the initiative of the audience to create their own stories. This represented a fantastic way to give feedback to the project and a wonderful opportunity for the public to transform the project on their favor and do creations of their own. The main reflection on the project was that the path of communication did not have a one-way direction between the producer and the consumer, but it had the potential to turn into a platform for consumers to become producers and to tell their stories through the media resources. (Martínez, M.I, et al, 2014, p. 140)

Although the project was not defined as a Transmedia Storytelling experience, by taking a look at the results that came from it, one can definitely understand that the undercover goal was established in terms of Transmedia. The term of media literacy was analyzed in order to give a technological argument to the project, claiming that the Mexican society should increase the incorporation of media for educational purposes, helping young people to develop skills need to understand and analyze content in all kinds of formats, including the digital ones. In terms of distribution and production, this project could be considered as one of the pioneers that pushed the development of more products of Transmedia nature

and, the tangible products that emerged from it, have a great educational quality that can still help to address different subjects.

The creation of the animated clips followed the visual thought of Dan Roam from his book called *The back of the Napkin*. The principles of this book intend to push the creator to sell ideas through drawings and the ideology that was followed by the creators of *Imaginantes* included four steps: 1) See, 2) Observe, 3) Imagine and 4) Show. On the first stage of “See,” the team looked for the information that will be the basis of the script, as well as visual references that will be followed for the visual development. Then, on the second stage corresponding to “Observe” is dedicated to a deeper analysis of the main message, breaking down the concept so it could be adapted to the culture (Mexican) and the context (young audiences). In terms of narrative resources, the team used storyboards and the technique of motion graphics to translate their ideas into the initial draft of the product. For the third stage “Imagine,” the team set up the ideas that will define the visual style of the videos, starting from the initial references that were collected, also establishing the animation technique and the art that would be part of the product. Finally, the team was ready to start working and during the fourth stage of “Show,” they were coordinated by the director until every aspect was ready for the distribution of the content.

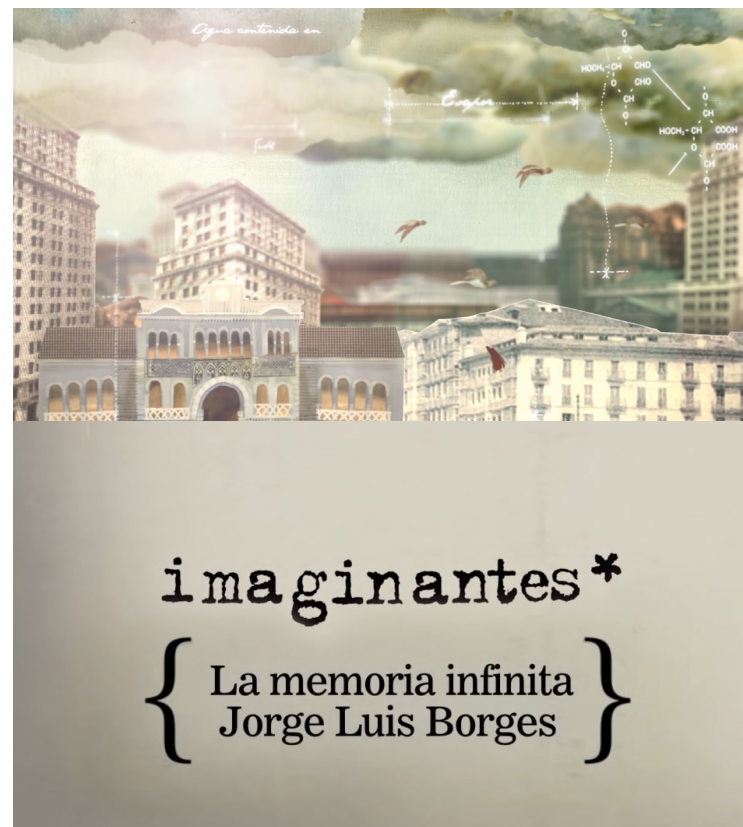
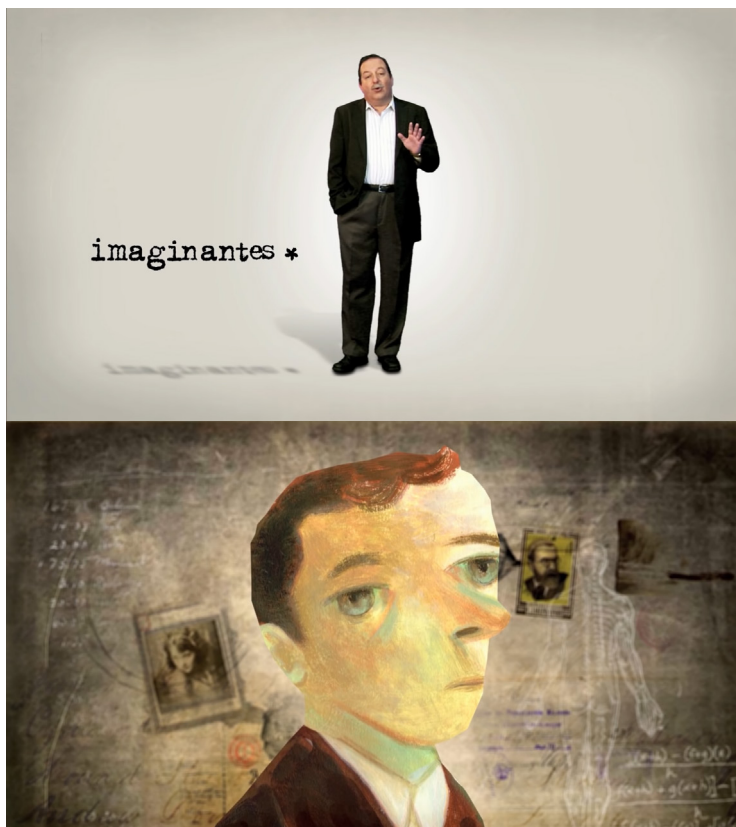


Figure # 12: Fragments of the short film called “La Memoria Infinita of Jorge Luis Borges” by *Imaginantes**

The project was an amazing approach to Transmedia Storytelling development in the Mexican context and with the distribution through television, it achieved its goal to become an inspiration for younger audiences that started to express themselves in an equivalent way through YouTube, social media, and personal blogs. In the words of the media of that time:



“Imaginantes is the closest thing to poetry that has been done in the Mexican television industry, they are instants where the word, the image and the sounds are mixed from an idea, a phrase, or a legend to create something new that changes us, that improves us, that reminds us how much there is to do in a matter of television.”

- (Cueva in Milenio.com, n/d). (Martínez, M.I, et al, 2014, p. 140)

#Orson80 as an Educational Transmedia Storytelling experience

In 2017, a project called #Orson80 was created by the initiative of Argentinian teachers based on a private school in Buenos Aires. The idea was born with the analysis of the media and its importance for communicational and educational environments. This pedagogical experience was also supported by the need of adapting and updating teaching practices into the sociocultural context of each period of time (Albarello, F. et al, 2018, 225). Also following the McLuhan principle that “most of the teaching happens outside of the school” (Albarello, F. et al, 2018, 225), this project was able to incorporate different elements of daily life into teaching practices that improve the learning experience.



Figure # 13: Profile picture of #Orson80

The name of the project referenced the radiophonic adaptation of *The War of the Worlds* by H.G. Wells, narrated by Orson Welles in 1938. That night, thousands of radio listeners were horrified by the words that Welles was broadcasting live through the radio station. He was narrating an alien invasion that was actually the main plot of *The War of the Worlds*. Without precedents or previous context, the audience believed those words were real.

For the development of the Transmedia Project, the idea was to develop the activities in a timespan of three weeks, following pedagogical goals adapted for primary and secondary levels of education. The main principle of #Orson80 was to “integrate the creative logic of the transmedia narratives inside the classroom to favor the critical reflection of the use of technological resources and social media” (Albarello, F. et al, 2018, 233). Within the learning objectives: collaboration was key to develop creating content to be distributed throughout different media platforms; students and teachers can play with a great number of narrative products like posters, drawings, stories, infographic designs and even memes; resignification and repurposing was also an important element so that

new narrative worlds could be created from *The War of the Worlds*, as the main piece of literature; and finally, the creation of media content could also help the students to think about their digital behavior by discussing it in the classroom and then creating content based on that subtopic (Albarello, F. et al, 2018, 234). In this way, teachers were able to help students to question about their own practices and students themselves became producers of transmedia based creations.

The evaluation of the project was based on the development of several activities that help students to develop their digital skills but also to understand the main topic with a deeper approach. (Albarello, F. et al, 2018, 235) For example, the activities for secondary level included the creation of team boards using the social platform Pinterest where the students could upload information after analyzing the topic with videos and lectures. The students were also encouraged to create their own website and to participate in collaborative productions in order to reflect about the relationship between the main topic of the project and their daily lives. All the information can be found in their designated website that was created for the means of the project and that also works as a repository of information for who is interested in applying something similar to this.



#Orson80 se erige como un homenaje a probablemente la primer expansión transmedia de la novela **La Guerra de los Mundos**, de H. G. Wells, llevada adelante por **Orson Welles** la noche del 30 de octubre de 1938. Ese día la emisora de radio CBS transmitió en vivo una adaptación de la novela en formato de boletín de noticias desencadenando, según los medios de la época, escenas de pánico masivo en algunas ciudades estadounidenses.

Figure # 14: Homepage of the website #Orson80

The process followed for the development of this project could be a great structure to create more transmedia based projects and activities. The results of #Orson80 were beneficial for both teachers and students that were able to be part of a different kind of experience that was able to combine pedagogical goals with media resources in a balanced way.

Don Quixote

Between 2014 and 2016, a Transmedia Storytelling intervention was implemented at a public secondary school in Barcelona. The main goal was to identify fields of opportunity to develop transmedia-based projects and to discover the potential that students had to adapt to this approach. It all started with the agreement with a teacher that wanted to take Don Quixote as a main basis for the project and that was interested in literature, theatre, and art. The intervention lasted 12 weeks with a group of twelve students between 15 and 16 years old. (CA. Scolari, et al, 2019, p. 122).

In the diagnosis stage, it was noticed that the book in question was perceived as boring and not easy to read, so in general there was a clear rejection of the main subject. With the development of the activities, it was discovered that students were interested in stories and the media that portray them in the shape of films, series and more. Additionally, students were familiarized with digital platforms and social media, using these tools to express themselves and to communicate between peers. Moreover, it was identified that media was not actually used for educational purposes or that it was limited content.

So, with this initial analysis it was clear that there was a good opportunity for applying the Transmedia approach, helping the students to feel connected to a topic that they feel like boring through platforms that they perceived to be interesting. With this in mind, several goals and priorities were settled to develop the project: one of them was to feed the interest of the students by making connections with their context and media culture; another goal was to use graphic and visual content to facilitate the understanding of a complex literature piece such as Don Quixote; also it was important to take advantage of the benefits of digital media and its collaborative features as well as to endorse the transmedia learning process; and finally to encourage creativity as a main principle of the procedure.

Following these criteria, the teacher implemented different activities throughout the course of nine sessions, helping the narrative of the main novel to expand “through different media and adapting it to their different languages” (CA. Scolari, et al, 2019, p. 124).

To assess these activities, a similar case occurred as the above-mentioned example of #Orson80, students were able to develop new and individual skills that were translated into new knowledge and teachers were able to evaluate according to that. (CA. Scolari, et al, 2019, p. 127). Due to the fact that this intervention followed a pedagogical approach, students were able to use their “transmedia skills related to storytelling and production” (CA. Scolari, et al, 2019, p. 129) to produce and create unique content of their own. Furthermore, the understanding and likeness of the story was achieved and there was a “real link between formal and informal learning” (CA. Scolari, et al, 2019, p. 129), validating the media elements as a real source of educational support and implementation.

The three case studies present elements in common that are actually useful to take into consideration when a Transmedia Storytelling project is developed within an educational environment.

First of all, the projects shared a similar goal to help students or young audiences to feel identified with topics that seem to be difficult to understand by using writing, reading, and analyzing skills. Each of them required a process of creation, the first one was exclusive from the team of the project but the other two, applied planned activities that followed pedagogical principles that could actually contribute to the learning of the topic. In every project, the active participation of the actors involved was a common result that allow consumers or students to become producers and to tell their own stories while developing new skills related with technology.

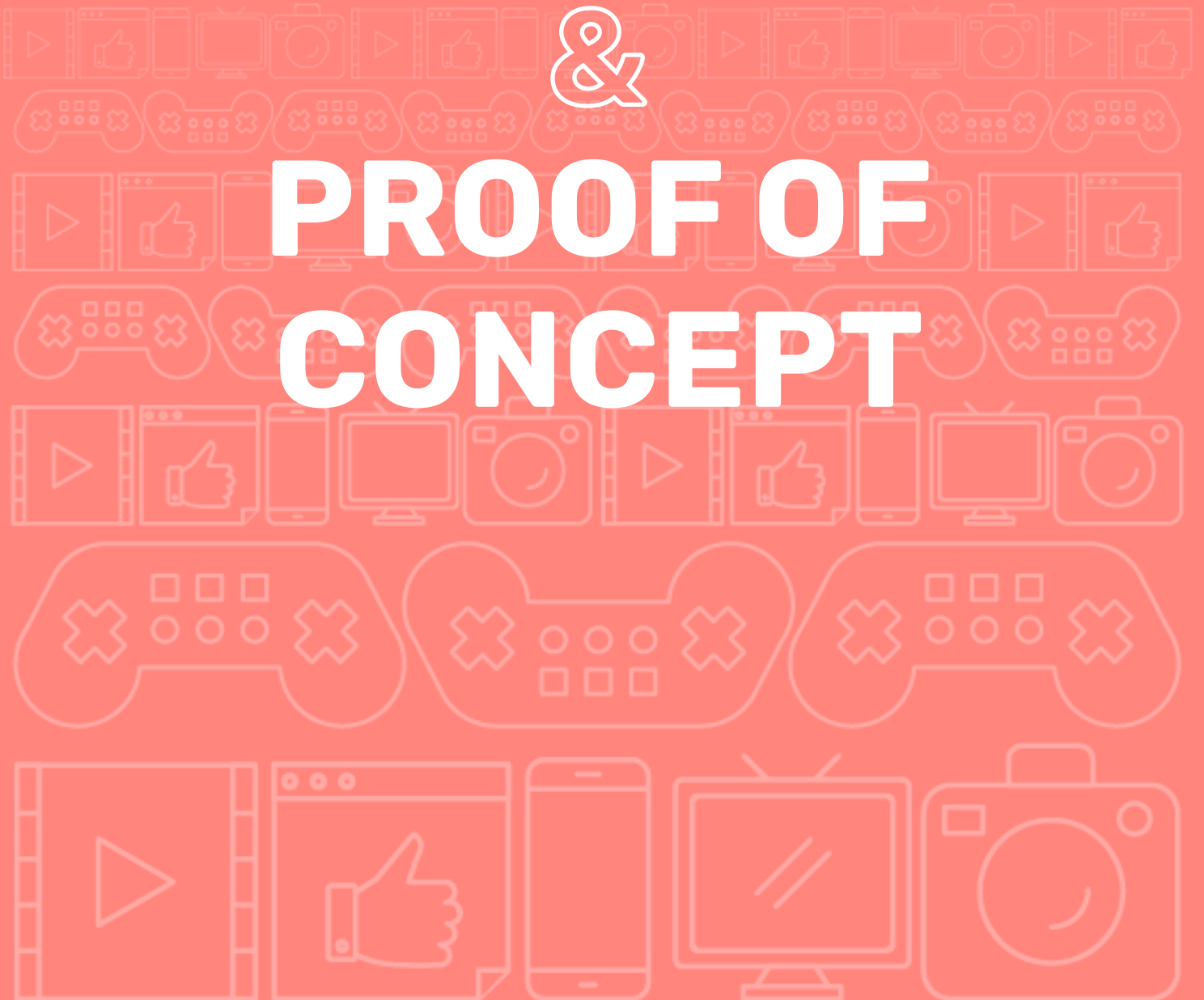
Finally, the two last projects shared a similar evaluation process that was based on the development of activities and the new knowledge acquired during the project. This analysis will function as a solid reference to explore the next chapter, now it is time to present the thesis proposal and to achieve the research question.



PROPOSAL

&

PROOF OF
CONCEPT



The current chapter will be dedicated to the explanation of the proposal and the elements that were taken into consideration to create it.

First, a comparison between the educational programs that were applied previous, during and after the pandemic will be analyzed in order to discover the opportunities to change and evolve from the situation. Then, the needs of the teachers within certain levels will be discussed, in order to detect the elements in common. After that, the analysis of a high school lesson will be examined in order to prove why this educational level is the most suitable for the proposal. Next, the Transmedia Storytelling Based Learning framework will be presented as a response to the proposal of the thesis, answering the research question. And finally, the implementation and test of the proposal will be introduced in order to identify how to improve and to apply the methodology for real, looking to achieve a beneficial performance.





COMPARISON BETWEEN PROGRAMS

To start off, it is important to take a look at the characteristics of the situation of education in Mexico previously, during and after the pandemic. This analysis will be useful to identify the opportunities to grow and the main challenges, plus it will complement the information presented in chapter one, by linking it with the goals of the proposal.

Before the changes that the pandemic brought with it, classes were taught in the classroom inside a physical and tangible space, involving face-to-face interactions and only programs like the “tele-secundaria” one, which provides education through television to low resources communities, were of remote nature. The technologic devices were used for everyday life activities but with few digital implementations within the educational sphere. The educational programs had not been updated for a few decades and in 2019, 26.8 million of people did not finish their middle school preparation. If teachers wanted to update their educative methods, they have to look for innovative process themselves.

Then, when the lockdown was implemented, classes changed to an online and virtual space with a lack of social interaction and transforming every process into a remote nature. The government implemented the program “Aprende en Casa,” previously discussed and the schools tried to adapt it but there was a lack of communication between the government and the institutions. There was a forced digital adaptation to maintain communication between the different actors of the educational area and, videoconference, web-based and video recording platforms started to be used. Both students and teachers struggled with the sudden change, and they experienced mental health issues since they were not prepared to tackle with all the obstacles. Teachers had to adapt their personal homes to continue teaching their lessons and they were required to autonomously adapt themselves with the digital resources available or with the ones that they could find by themselves.

After the lockdown and with the opening of schools, there was a return into the physical space or even the possibility to apply a blended mode. The face-to-face interactions are back but the interest in education has decreased since it was mostly a traumatic experience that was not easy to cope with. There is a considerable loss in education and the changes increased the inequality between the different social levels inside the country. There are a lot of educational resources online but no an actual digital training since schools were more focused on returning to the physical space in the hope that the situation gets better with that adaptation. Government programs have been working on the re-evaluation of curricular topics, but the implementation of those innovations is still in process at the moment.

What does this represent? It means that there is a need for a change, a different one, a change that take care of teachers and students in a totally different way and that can introduce new perspectives for every actor of the educational process.

NEEDS DETECTION

Now, it is important to understand the different needs that were detected with the interviews and the research corresponding to the period of the pandemic. This will also function as a recap of all the analysis previously presented in the prior chapters, in order to establish the main points of the background that is fundamental for the methodology that will be proposed. The needs correspond to the teachers' perspective, since the proposal will be dedicated to give possible solutions to the pain points detected in different levels.

The following figure presents the different needs that were detected in the levels of Digitalization, Educational Resources and Pedagogical Methods. The points of convergence are also presented, finding opportunities within the detected ideas and a possible implementation for the proposal.

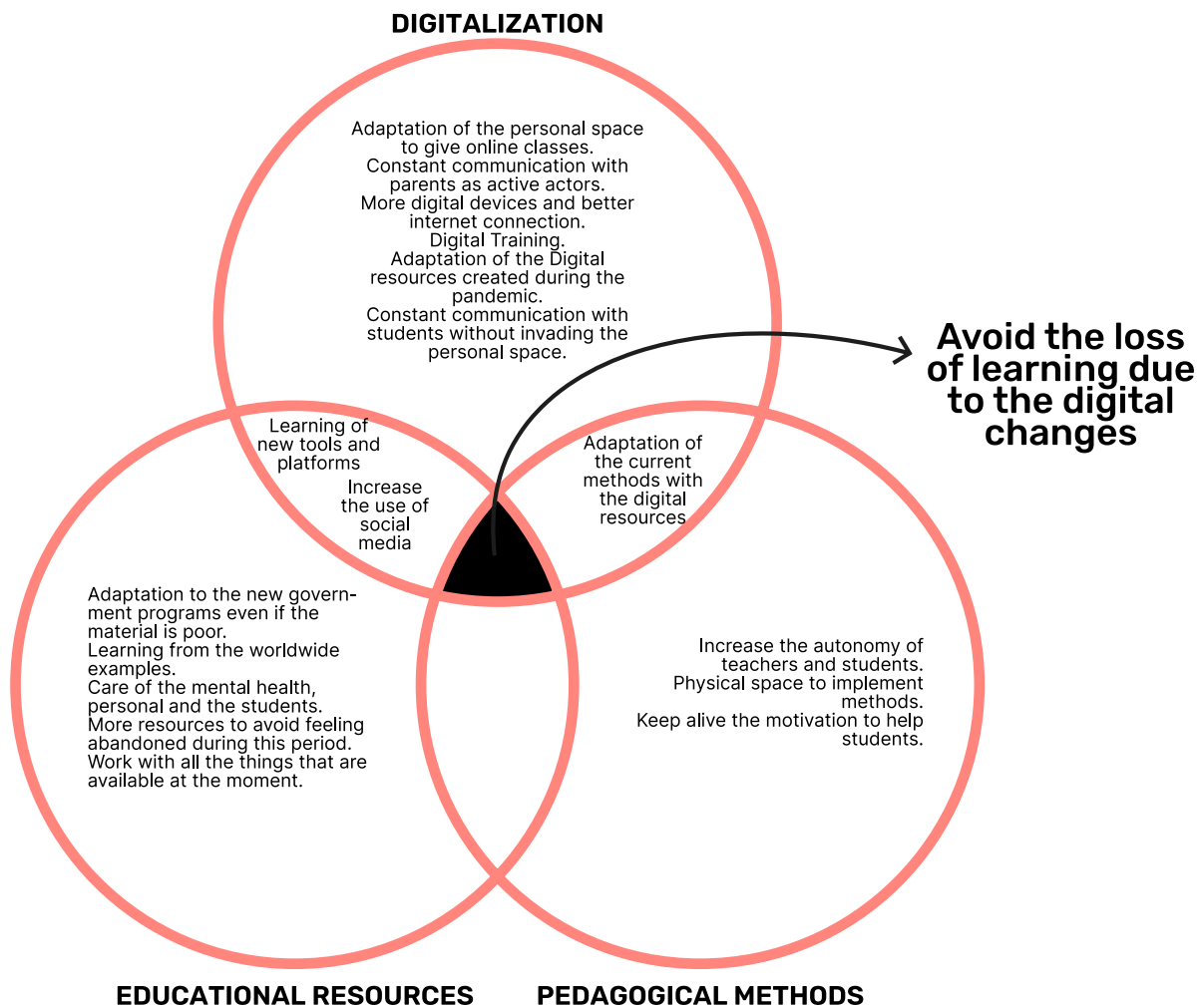


Figure # 15: Needs Detection

Analyzing the figure and the needs detected, it is clear that teachers were trying to adapt themselves into a digital environment with not enough material and with the common fear that there will be a major loss of learning due to the all the changes. Unfortunately, this loss was inevitable, and teachers realized that without a proper adaptation, there will be complicated consequences for the educational process. It is important to notice that they also needed to learn how to use new platforms and to adapt themselves into social media while communicating with both students and parents. Teachers were also struggling with adapting what they knew how to apply inside a physical space into a virtual one, since it has been realized that just replicating the methods in front of the camera, will not have the same beneficial effects.



LEVEL OF EDUCATION SUITABLE FOR THE PROPOSAL

One of the most essential elements for the proposal to be developed is to understand which level of education is the most suitable one to allow the framework to have an optimal performance. From the beginning of the research, it has been thought that the methodology could be applied to a high school level, and according to the interviews performed and the needs detected, it is clear that this level represent an area of opportunity to encourage teachers to keep learning and to help students to explode the skills that they have developed so far in their educational path.

In order to analyze the possibilities of this implementation, an analysis of an actual high school class will be presented. It should be noted that every teacher is different, and this is just an example of what it can be expected during a lesson, but it still works as a good reference to detect the opportunities to improve and to apply a new methodology.

The example presented follows the teacher Veronica Rivera, previously interviewed in the first chapter, during a Communication class for students of first semester of high school level at a public school in the city of Aguascalientes, Mexico. The main elements of the class are listed below:

- Duration: 60 minutes
- Number of students: from 40 to 50
- Modality: On-presence
- Resources: Notebooks, PowerPoint presentation, Physical Blackboard

The goal of the teacher was to expose a new topic, starting from the ideas that were covered during the last session and asking the students to remember and participate using their knowledge and even the objects that they have in hand. The teacher used a Power Point presentation to present the concepts and terminology that was needed to understand the subject, and between the presentation of

some topics, she performed some activities/games to help the students to have fun while they were learning.

Section	Stage	Activities	Observations
Introduction	Recap of the last session	The teacher starts with a question related to the topic.	High schoolers are used to write what the teacher tell them word by word.
		Asks the students to remember what they learned last session.	To capture the attention, it is necessary to be repetitive.
		She tells a story to make the topic more relatable.	Students participate when they feel related to the information that is provided.
Development	Presentation of the topic with the Power Point Presentation and the Blackboard	The teacher ask relatable questions to introduce the topic.	Students do not like to admit that they have questions.
		The teacher present the key concept of the lesson (she constantly repeats to guarantee the comprehension).	
		The teacher writes an example on the blackboard. The example involves students of the classroom to make relatable.	Students write to remember things but can forget it really easily.
	Game 1: Broken telephone game	Practice the concepts of the class though a game. Result: Integration, Participation, Learning (?) Create movement but keeping the control of the class.	Students feel integrated and seen when they are collectively participating.
		She asks directly to the students what they learned and what is needed to be understood now.	Direct questions are a good resource to make students participate and think about the topics of the class.
Presentation of new concepts	The teacher uses the PP presentation to present concepts with graphical resources, she adds examples to increase the comprehension.	Graphical elements are useful for students to understand complicated topics.	
Closing	Game 2: Hangman game	The class plays hangman with concepts related to the lesson. The price is that if they get it correctly, they will go home without homework.	If the game involves a price at the end, students are more eager to participate.
	Homework assignment	The students did not win the game and they have to look for information related to concepts of the next lesson.	

Figure #16: Class description

It can be noted that, even with a limited amount of time to present a new topic, the teacher was able to divide the lesson in elements that help her and her students to have a first glimpse of a topic while playing and challenging themselves to remember information. The relevant information for the framework that is about to be proposed, is the observations section, since most of them describe that participation and engagement is a constant priority that could be achieved in many different ways but that it will involve the active presence of the students during the lesson.

Now, how to achieve an active participation? This will always present a challenge for the teachers, and it will be determined by the attitude that he or she could have inside the classroom but, based on the previous example, here are some ideas that could be useful and that will be discussed later on in the proposal of the framework:

- If questions are a constant resource, can they use to unite the elements of the class in key moments? It could be interesting to three acts formula discussed before.
- Stories can be used from the beginning to create a better learning journey.
- It will be interesting that the concepts can be used in a different way that is not just knowing the words but by applying them into their own project or narrative learning structure.
- Participation could increase by asking students to provide examples of their own.
- A teacher can propose a situation where students have roles to perform and to keep their interest alive (Giving active responsibility to students during class help them to feel seen).

Summarizing, the detection of these opportunities was possible due to the analysis of the level of education that was proposed in the first instance, the high school level. Furthermore, the first interview with the teacher Rivera gave a clear panorama to understand that the majority of high school teachers are eager to learn and to keep updating themselves with new processes and methodologies that they can adapt inside their classroom.

As an aside note and evaluating the elements of the High School Mexican Program, it is important to know that its structure gives opportunity to the teachers to

take the lead with the development of their activities as long as they follow the parameters dictated by the Secretary of Education and their own institutions. One of the main goals of the program is to provide students with skills that are needed to join the workforce, in a way that they obtain their own way of thinking, reshaping the knowledge into their own perspectives and realities. Teachers are ought to act like role models for their students and to facilitate the learning culture while designing didactic situations that encourage knowledge.

Axis	Component	Central content	Specific content	Expected Learning	Expected Product
What is the skill that the student need to achieve?	Which is the topic that is going to be discussed?	Which is the main goal of the axis?	What are the specific activities that can be developed?	Which are the learning that the student is able to develop through the activities?	Which is the final result and how would it be delivered?

Figure # 17:Content Table

Here is an example of the main components of a Content Table that is commonly used while planning the development of the lessons of the high school level. There is an expected learning that the teachers need to help the students to achieve. In this sense, teachers have the opportunity to experiment with the specific content and with the expected product, as long as they take note of the skills, topic and goal that is previously determined. Here is where the opportunities to implement a new framework emerge, helping teachers to obtain a new perspective and to have even more tools to achieve this requirements.

Of course, a new framework will not be well received by every teacher, it will depend on his or her context and the desire to learn, but it will be interesting to present it to them and see which are the scopes that it could have. Now, it is time to present the Transmedia Storytelling Based Learning (TSBL).

PROPOSAL



PROPOSAL FRAMEWORK

INTRODUCTION TO THE METHODOLOGY

Active methodologies are a common path that have been introduced in the last decades and that have served as a way to motivate both teachers and students to have an interactive development within the classroom environment. These methodologies include concepts like Project Based Learning, Flipped Classroom, Problem Based Learning, Challenge Based Learning, Service Learning, Cooperative Learning, Learning by Discovery and so on. Nevertheless, the correct implementation of them relies on the adaptation and flexibility of teachers and institutions that must be interested on innovate their preestablished methods and evolve according to how society changes every day. As it has been discussed throughout this thesis, digital knowledge and training became an indispensable feature that teachers had to develop to overcome with the necessities of schools during the pandemic. Nowadays, this training has the potential to keep preparing teachers with more tools and introduce them to an environment where physical and digital resources can be combined for a better good.

Following this statement, this section will be dedicated to the explanation of the Transmedia Storytelling Based Learning approach (TSBL), an active learning methodology that aims to be a guide for teachers by applying Transmedia Storytelling as a way to engage with broad topics and that can be compared with a Project Based Learning, in order to present a familiar approach that has been used before. This methodology is mostly built from the Mexican High School context within the Public-School atmosphere but can have the potential to be applied on different environments, allowing teachers to lead students to be their own protagonists of their unique learning path.

To explain the methodology, it is important to address the following topics:

I. The general explanation of the framework

II. The pedagogical principle that it follows, as well as the learning frameworks that work as a reference

III. The steps to apply it

IV. The perks of being a Transmedia Storytelling teacher

V. The storytelling rules that can be applied to the educational path and,

VI. The repository of resources that will be essential to correctly apply the proposed method.



I. GENERAL EXPLANATION OF THE FRAMEWORK

In traditional education, it is common for teachers to act like authorities that could have the absolute reason and that will strictly dictate the parameters of the classroom. This type of approach has considerably aged throughout the years and has given way to the so-called active methodologies, strategies that are focused on the student and that are a contraposition to the traditional education (Thinkö, 2022). Furthermore, the pandemic left one important lesson for teachers: teachers are definitely not the ultimate authority of the classroom, they can be replaced if they cannot keep up with the last digital updates and autonomous development of both, them, and students, is more needed than ever.

So, what will be the result of combining active learning strategies with the current situation and, in this case, relating it to the Mexican context? The proposal is called Transmedia Storytelling Based Learning, a methodology that aims to use digital resources in favor of education and by applying Transmedia Storytelling principles that benefit the learning experience. Within this proposal, students and teachers actively participate in the development of the lesson. Students take a lead role while teachers' function is to function as a guide that provides the correct resources (physical and digital) and establish the range where both agents can experiment and explore.

As far as Transmedia Storytelling is concerned, there are great elements that have been successfully adapted into the educational environment with the incorporation of Transmedia Education. This last term, previously discussed, has revolutionized the perception of Transmedia and has opened the door to new ways of combining the amazing marketing and communication of strategies used in entertainment to develop the participation and imagination of students, processing information on a better way and going beyond the classroom.

What are the elements of the proposed methodology?

In order to understand it, a list of features will be presented. It has the potential to change and evolve and to be adapted depending on the future implementations it might have.

- I. The main goal is to develop creativity, use digital resources and create interactive experiences that are a way of expression for students. It is thought for the lesson planning of teachers and to accompany them on their learning-teaching path.
- II. It has nine steps, keeping the first two steps to the general presentation of the Transmedia Approach. Since it is not a common methodology, there is a need to familiarize the actors involved with the concepts that will be used.
- III. It can be compared with the Project Based Learning (PBL) since this method is also an Active Methodology and asks both teacher and students to collaborate to solve an established problem.
- IV. Although the student is the center of the learning process, the training of the teachers is essential for the framework to be developed, the preparation is key to elaborate a correct path that is beneficial to both agents.
- V. The framework could be adapted depending on the needs of the teacher and the students. Since it requires the incorporation of technological elements, it could be understood that more resources should be added into the learning process. However, the methodology can adapt within the scopes of the school, the tools that the teacher can work on and the devices and digital elements that students can use. For further implementations, it will be ideal that schools adapt the method in order to consider investing on new equipment and further training.
- VI. There will be a general repository of resources, elements and activities that can be available for new students and teachers that involve themselves within the framework. The elements used and created by both teachers and students can help next generations to create their own paths.



II. PEDAGOGICAL PRINCIPLE

As it has been mentioned before, the Transmedia Storytelling Based Learning methodology is defined as an active framework that allows teachers to use media on their advantage to develop topics, achieve goals and obtain new skills. It could be considered as part of the Active Methodologies because it centers its attention to the student, but it also works as a source of encouragement and knowledge for the teachers. It involves interactive process of teaching, but it goes beyond it, involving interactivity as a communication path and a way of transferring ideas into different media. It requires the active participation of students, and it has a starting point where their interests are considered in order to create an exciting learning development.

According to the educational platform Thinkö, the goals of the active methodologies are based on a competence development where students are responsible for their own work, acquire useful knowledge for their daily life, ask questions instead of being passively receptors, develop skills related to the analysis of information and learn how to work in a collaborative way. It also allows the autonomous knowledge and could be adapted according to the environment where the school is situated and according to the needs of both teachers and students (Thinkö, 2022).

THE PROJECT BASED LEARNING (PBL) REFERENCE

One of the most common Active Methodologies, is the so-called Project Based Learning or PBL. This framework, as it has been mentioned before, is applied during the development of a project that can involve students into real problems that consist of helping their own community, looking for solutions that could help their environment. In order to present the TSBL Methodology, is important to analyze the PBL framework, familiarizing teachers to a language and a method that must of them already know, and to which they can relate.

Now the steps to follow this methodology will be described below, in order to remember how it works and how it can potentially be an excellent reference for the TSBL framework.

These steps are explained using the example provided by Academy Pop on their blog entrance called: "What is project-based learning or PBL, and how to implement it in the classroom?" (Academy Pop, 2021).

STEP	DESCRIPTION	RESULT
Step 1: Create a guide question	<p>The teacher ask the students to give their opinions and ideas about a topic and think about a possible solution about the topic or situation.</p> <p>The question must present a challenge to the students and has to involve the situation as a main element.</p> <p>It also has to be related with the curricular goals that the teacher needs to develop.</p>	Guide question
Step 2: Establish the goals	The goals will be shaped into the final products.	Planning Activities' schedule
Step 3: Presentation of the project	The teacher present the requirements and proposals of the class project.	Written document of the guidelines and technological tools that will be used for the project.
Step 4: Create groups	<p>Teacher and students create groups of 4 or 5 participants.</p> <p>The goal is that students create their own knowledge, be autonomous and analyze and solved everyday situations.</p> <p>Elements like role integration, technological tools, time, and organizational tools can be used in this step.</p>	Formed groups with roles assigned and with possible tools that could be useful for them
Step 5: Context research and data collection	<p>Students choose their activities and the way they are going to develop them. The teacher can post the progress on the classroom's blog.</p> <p>*It includes activities to develop their technological skills.</p>	Information collected from desk research, community, and members of the society.
Step 6: Data Analysis	<p>Students perform comprehension exercises to analyze data with different perspectives like descriptive, statistics, comparative activities.</p> <p>Students develop analysis made from the different knowledge areas, in other words, the different subjects that are involved in the project.</p>	Document of Data synthesis using technological tools.
Step 7: Creation of the final product	Following the schedule proposed at the beginning of the project, students perform the activities divided by products (developed in order).	Activities developed following the schedule and delivering final products.
Step 8: Project's presentation	<p>Teacher and students invite other classes and their educational community to see the results and talk about the topics developed during the project.</p> <p>Every group can explain their own process and results to audience interested in the topic, they could also record videos to publish them on social media.</p>	Present the final product to various audiences (digital and physical).
Step 9: Project's evaluation	This step is complemented by the evaluations made during the development of the project. The teacher checks if the goals of every stage are achieved.	Teacher evaluates the goals achieved overall and in every step of the project

Figure # 18: Steps of the PBL Methodology

As it can be seen, it is important to maintain an active participation from the students, involving the teacher as a guide to achieve common goals and to create a learning environment conducive to look for practical solutions while developing skills.

III. STEPS TO APPLY THE TSBL METHODOLOGY

Now, taking as a major reference the PBL framework presented above, the TSBL methodology has similar elements to be applied during the development of a project. Although both methodologies have nine steps, the approach is different and the TSBL is mostly based, as it has been discussed before, on the utilization of media and the development of creative projects that could be adapted to different subjects. Each step is dedicated to help the teachers to coordinate the content with their students and to reach certain results with the proper consideration of the expected goals by the educational system.

The process is described as follows:

STEP	DESCRIPTION	NOTES AND SUGGESTIONS	RESULT
Step 1.1 Present a topic to be developed	<p>The teacher present a topic that will be developed throughout a period of time during the course.</p> <p>The teacher ask how familiar the students are with the topic and together, they create an initial brainstorm.</p> <p>Both teacher and students think about possible outcomes (digital and creative content) that could be created based on the topic.</p> <p>The professor identify the needs and skills of the group, thinking about a learning path that could be suitable for them.</p> <p>The final learning should be in accordance with the curricular goals that each institution asks the teacher to reach.</p>	<p>The general ideas could be written in individual pieces of paper and then shared to have a common understanding of the topic. Teachers can also use brainstorm digital platforms to interact with the students.</p> <p>The topic should be broad enough in order to be rethought in different formats and several subtopics should be extracted from it.</p>	<p>Topic presentation.</p> <p>Teacher's analysis of the group (needs and skills)</p> <p>Possible ideas that could be developed throughout the project.</p>
Step 1.2 Present the resources	<p>The teacher present the available resources that could be used throughout the development of the project.</p> <p>These resources are listed in the section called "Repository of Resources," they are digital platforms that could be used depending on the needs of the group and the accessibility there might be.</p> <p>The teacher also presents the possible "products" that could be understood as outcomes of the several stages of the project.</p>	<p>The teacher can use his personal laptop to work or the one provided by the institution. In the absence of material, they could also use their cellphones since most resources are also available as apps that could be easily downloaded.</p> <p>These resources and products are related to the Transmedia Storytelling production, and they are thought to expand the mind of the students to think about new ways of expressing themselves.</p>	<p>Presentation of the resources and products.</p> <p>Downloaded apps and prepared equipment.</p> <p>List of material needed to the development of the project</p>

STEP	DESCRIPTION	NOTES AND SUGGESTIONS	RESULT
<p>Step 2 Establish the goals</p>	<p>The teacher will think about the goals of the project, relating them to the expected outcomes (products).</p> <p>This is a way for the teacher to determine the duration of the stages of the project.</p> <p>The goals should be thought in accordance with the Expected Learnings and Curricular Expectations pre-established by the institution that the teacher is part of.</p> <p>The goals are essentially related to the topic and the teacher can breakdown it by himself or in collaboration with the students.</p>	<p>The teacher can create a calendar of deliveries where the planning should be thought in a consolidative way. The individual pieces developed in every stage, will be connected with the final result.</p> <p>The teacher can establish individual, group and final deliveries, depending on the breakdown of the project and the subtopics that are derived from it. There should be an established hierarchy, thinking that the final product will be the maximum outcome that will contain the content of the rest of the activities.</p> <p>Example of the relation goal-product: Goal: Understand the characteristics of "X" term that was identified during explanation of the topic.</p> <p>Product: Infographic of the main elements and functions of "X" term.</p>	<p>Goals' Planning: Possible structure for the activities' calendar.</p> <p>Breakdown of the topic into key terms and subtopics.</p>
<p>Step 3 Presentation of the Project</p>	<p>The teacher present a calendar with the established products and the expected deadlines.</p> <p>The calendar includes individual and group activities, resources and expected products.</p> <p>Activities are related to the outcomes, and they could be defined by different clusters of skills that the teacher can help the students to develop.</p> <p>The teacher can also determine the skills.</p>	<p>Teachers of different subjects can join in order to create shared activities that could be evaluated by both of them.</p>	<p>Written/online document of the guidelines, deadlines, expected products and technological tools of the project.</p>
<p>Step 4 Create groups</p>	<p>Several groups are created according to the number of students on the class.</p> <p>Particular considerations about individual development should be considered.</p> <p>There could be an assignation of roles depending on their skills. Students can develop new skills and teachers can help students to empower with their own knowledge.</p>	<p>Students are expected to create their own knowledge, be autonomous and analyze and solved everyday situations.</p>	<p>Established groups with roles assigned and with possible tools that could be useful for them.</p>
<p>Step 5 Analysis and rethinking</p>	<p>According to the established calendar, students start to work on the development of the individual or collective activities, in order to continue with the breakdown and fully comprehension of the topic.</p> <p>The teacher encourage students to post their work online in the designated platforms established within the class. The teacher decide the access to it, for example social media or a group blog.</p>	<p>The teacher can consult the online resource repository that can support the development of the activities.</p> <p>Teacher can give freedom to the students to experiment with different paths and personal outcomes. Due to the Transmedia Storytelling principle, there are many ways of portraying a single concept.</p>	<p>Individual and collective products as the result of the activities developed with the integration of digital platforms.</p>

STEP	DESCRIPTION	NOTES AND SUGGESTIONS	RESULT
<p>Step 6 Integration</p>	<p>The teacher and the students analyze the activities developed throughout the stages and connect the products resulted from them.</p> <p>The teacher identify the elements that are still missing and that need to be developed in order to complement the final outcome.</p>		<p>Draft of the final product.</p>
<p>Step 7 Creation and culmination of the Final Product</p>	<p>The final product is developed according to the goals and schedule established at the beginning of the project.</p>	<p>The teacher supervises the development of the class and assist the students if there are needs to be solved.</p>	<p>Final Product Delivery</p>
<p>Step 8 Project's presentation and circulation</p>	<p>Every group and individual share their process and products either physically or digitally.</p> <p>Social media platforms are ideal in this section, helping both teacher and students to share their learning path.</p>	<p>This step is not exclusive to the end of the project. Students and teachers can establish class parameters to share the content developed during the project.</p> <p>The products can be stored within an Archive of Creative Material, where generations of teachers and students can help each other to learn from their experiences.</p>	<p>Presentation of the final product to various audiences (physical, digital or both)</p>
<p>Step 9 Project's evaluation</p>	<p>The teacher evaluates the final outcome, but the grade is complemented with the evaluations made during the development of the project.</p> <p>In every stage, the teacher evaluates if the goals were achieved. The teacher can also identify the skills that were developed during each step though the variety of products that were created by the students.</p>	<p>Teachers of different areas can evaluate a single product with their own different parameters, according to their expected goals and criteria.</p> <p>Each teacher establish their own evaluation criteria, but it is highly suggested that each activity is thought in terms of skills developed and obtained knowledge.</p>	<p>Teacher evaluates the goals achieved overall and in every step of the project</p>

Figure # 19: Steps of the TSBL Methodology

**It is important to remember that the integration of digital resources is essential for the development of this framework and that teachers have total freedom to decide where to incorporate these elements.*



IV. PERKS OF BEING A TSBL TEACHER

Is there an actual recipe to become a good teacher? There are many advice, rules, manifests, studies, even this thesis aims to serve as a guide to help teachers to be curious on improving their own abilities. But in reality, the behavior that a teacher follows inside the classroom is a personal decision that will be influenced by all the knowledge that he or she could have obtained before. Another reality is that a teacher is also a student that needs to keep learning and evolving from difficult situations and that initiative and innovation should be essential characteristics that can help teachers to improve their labor.

A good teacher then, could be considered as one that is willing to grow and to encourage his or her students to keep growing and adapting as well. Within the Transmedia Storytelling Based Learning method, teachers have the possibility to implement creativity as a basis of the learning process. They also can increase interaction between them and their students and with different digital platforms that are available online for free and that are of common use. Both agents can work on their own pace, learning from each other and discovering skills that they did not know they could develop.

ESSENTIAL CHARACTERISTICS OF A TRANSMEDIA STORYTELLING TEACHER

Now, a list of several features will be presented to describe a teacher that follows this methodology. These characteristics correspond to an ideal situation; however, each teacher has his or her own training path and individual personalities that can also enhance the proposed elements.

A TSBL TEACHER...

1. Has a proper amount of knowledge concerning media, digital resources, and online interactivity. This could only be achieved after being exposed to scopes of the TSBL that is prepared to endow teachers with the initial elements that will wake up their own creativity and digital interest.

2. Incorporates Storytelling as a method of teaching and breaking down broad topics. **The purity and magic of Storytelling can lead educators to understand their own topics in a different and more interesting way.** The power that storytelling has within the digital communication is undeniable and teachers can deeply benefit from using that power on their favor.

3. Uses existent resources to construct and enrich the learning experience. From movies to videogames, **TSBL teachers are able to incorporate entertainment pieces into their planning** in order to identify elements that can help students to digest difficult topics. They could use them as examples or pure recommendations that could open their imagination and feed their creativity.

4. Is interested in helping his or her students to discover new skills that are developed by the creation of interactive activities through digital devices and platforms. **If younger generations are already using digital devices for their leisure time, why not giving them a chance to keep learning with the tools they have at hand?** TSBL teachers should not be against technology, on the contrary they should be eager to explore it and understand it in order to use it to their

advantage and guide their students while they use it as well.

Encourage his or her students to expand their knowledge with new tools that are not necessary education wise but that can be beneficial while learning.

5. Thinks outside the box. A TSBL teacher allows him or herself to experiment and to **combine his or her previous knowledge with new tools and activities** that are not common but that can exponentiate the learning experience.

6. **Is not intimidated by failure.** It is important that a teacher learns from his or her mistakes and with TSBL being an active method that requires experimentation, failure can be a possible element of the course. Nevertheless, it is important to use transform that into a possibility to continue improving.

7. Works side by side with his or her students. TSBL gives the opportunity to teachers to **explore the non-formal education route**, by allowing them to listen to the digital experiences of their students to direct the objectives of the classroom into the most beneficial results. Most of the students are familiar with digital devices and social media, so it will be recommended that teachers understand the digital skills and situation of their students before digging into a topic.

8. Loves to keep learning. In the digital world, innovation is a constant that pushes the evolution of all kinds of platforms and the online environment is constantly adapting into the changing world. For teachers, it is important to **maintain an open door to keep learning about new tools, platforms, and media.** Without constant updates, teachers can find themselves missing out and ignoring a variety of possibilities that digitalization might offer.

This list or what could be understood as a presumed manifesto, will continue to be updating itself as long as the method keeps developing. However, the main fundament will remain with the digital adaptation and the possibility of pushing to the limits of Transmedia and Storytelling into the Educational environment.



V. STORYTELLING RULES WITHIN THE EDUCATIONAL ENVIRONMENT

As it has been discussed on the previous sections of this chapter, storytelling is an adaptative tool that is useful for communication and creative development. In terms of the TSBL, it works as main basis for teachers to communicate with their students and to elaborate creative educational narratives that work within the project environment. The art of telling stories has certain features and rules that are useful for a classroom environment and the proposal of this framework is the combination of Transmedia Storytelling based structure with Storytelling behaviors, in order to have a complete experience and immerse students feeding their interest in learning.

The rules will be listed as follows and will contain some examples and advice on how to apply them inside the classroom. This set of rules is inspired in the methodology proposed by Guillaume Lamarre within his book of “Storytelling as a communication strategy,” a reading that is also recommended for the teachers that are interested in applying the framework.

Be memorable. The main goal of storytelling is to transform simple ideas into memorable stories that help the audience be engage with the plot. In the educational path, teachers can use this feature while developing a topic, looking for the best way to portray it to their students and to show the essential messages that are needed for the understanding of the matter. It can involve extra media resources, but it also gives room for imagination and to take interesting decisions when teaching a class.

Think about your audience. It is important that messages are portrayed in the best way and in order to achieve that, it is essential to know the audience and, in this case, to know the students. A teacher could have a preliminary stage to identify the needs of the classroom, in order to propose appropriate ways to develop the skills they need to learn.

The plot is an organic and dynamic element.

In terms of storytelling, the plot represents the element that holds together the pieces of the story, but it can transform itself as events are developing. Inside the classroom, there is a similar situation, there should always be an established goal (the plot) but the way of achieving it can have a dynamic performance and both teachers and students can collaborate to find the best ways to create their unique learning path.

Follow the formulas. Every story is told within seven stages, a structure that was formalized by the professor Kenn Adams and that was established by him to help his drama students to improvise. This structure has been already revised in the section “Breaking down the concept of Storytelling” but the important thing to remember is that there are pre-established structures to tell stories that could be applied to the development of a class and the performance of it. This could help to maintain the interest of the students alive and to help to reimagine complicated topics into familiar terms and situations. This is a way to find a direction and to experiment inside the classroom, proving that there is room for improvement and for teachers to become storytellers. (Link to narrative structures extra information).

Stories are found everywhere and told by everyone. Teachers can have let their students the possibility to tell their own story, exploring individual ways to develop it and discovering new tools along the way. This also allows students to become active participants in the learning process, asking them to question themselves and to interpret the topics that are presented during the class.

Storytelling is a path to empathy.

In the active methodologies, the role of the student and the teachers evolves, in order to help the student to empower himself and to become an autonomous learner with the constant guidance of the teacher. In order to understand how to lead students into that position, it is important that teachers develop their own sense of empathy and storytelling is a possible way of creating this path. Stories are able to help worldwide audiences to identify themselves to the situations they see on the screen and the element of identification could help students to feel part of their own educational environment. In other words, teachers have the

chance to help students to feel part of their school by constructing the learning paths based on elements that are familiar to them and that represent their story in a distinctive way.

A good example of this approach is the movie called "Freedom writers," a movie that tells the story of a teacher that helps a conflicted classroom to cope with their own personal problems with the help of storytelling.

These rules could be considered just as a glimpse of the scopes that storytelling can have but they can change and evolve as long as teachers are interested in applying this ideology into their own classrooms.

VI. REPOSITORY OF RESOURCES

In order to complete the experience of the framework, teachers can find useful to have online tools and platforms that can help them to expand their own creativity and to empower themselves with digital resources. The main argument is that a Transmedia phenomenon can only exist if there are several media involved and here, different options will be discussed. During the interviews made, it was constantly noted that the lack of information could make teachers feel lost when using their devices, so this section emerges as a response to that concern, presenting online tools that are free and that can mostly be accessed through devices like cell phones, laptops, and smart tables. Following the sixth characteristic of the methodology, previously presented, this section will be dedicated to explaining which platforms and websites are useful for the development of the TSBL. Also, there will be a breakdown of different types of resources related to Intertextuality, a Transmedia concept, and the ways in which they can be used inside the different steps of the framework will be presented.

The main advantage of including specific types of platforms inside the framework is the possibility to expand the repository by providing an initial set up for teachers. The idea is that, after they understand the scopes of using digital resources inside their classrooms, they will be interested in autonomously look for more of them and even help the TSBL framework to evolve with their creativity. **These**

resources are thought to help the teachers to maintain an active participation of both, them, and their students, acknowledging their own abilities, taking advantage of the use of ICT and Social Media, and learning opportunities that can emerge from the experience.

Within the Transmedia Storytelling Education realm, there are conceptual categories called intertextualities that were identified by María Luisa Zorrilla through the analysis of literature and educational media-based projects. These categories help to understand the points where media is converging or, in other words, where the information of one media product is reproduced, reinterpreted, or rethought in another kind of media expression. This process is identified when

the user is able to expand the narrative through a unique perception and a dynamic thought that happens inside his or her mind. While Zorrilla was able to identify ten different categories of Transmedia Intertextualities, there are four categories that are perfect to be adapted within the educational path. These categories are Repurposing, Expansion or Complementation, Transmutation and Generation.

The several resources that will be presented in the following figures are divided into these categories and they are a proposal to help teachers build their learning world, interacting with their students in exceptional ways. There will also be two extra categories, the first one to control the organization of the projects and the second one to understand how to use social media on the favor of education. Here, the nuclear text will be understood as the main topic that could be developed within the classroom projects or the information that sustains this topic.

I. Transmutation

Transforms the nuclear text into a new version, changing its form or nature. This could be translated into the creation of interactive activities that allow students and teachers to experiment.

NAME OF THE PLATFORM	DESCRIPTION	FOR WHOM IS IT CREATED FOR?	ACCESSIBILITY	LANGUAGE	STEP OF TSBL
Educaplay	Website use to generate educational simple games that can be used for any topic.	Teachers and Students	Free	English and Spanish	Step 5 and 6
Cerebriti	Website with a variety of knowledge games to play with the students. Both teachers and students can also create unique games.	Teachers and Students	Free	English and Spanish	Step 5 and 6
Mentimeter	Website to create real time interaction with the students while sharing ideas and answering questions.	Teachers and Students	Free	English and Spanish	Step 5 and 6
GeoGebra	Website and app that are used to understand complicated math topics through different tools and online boards.	Teachers and Students	Free	English and Spanish	Step 5 and 6

Figure # 20: Transmutation Resources

II. Repurposing

Uses the information of the nuclear text and places it into a different platform. It gives place to interactivity to be the main basis of the learning process.

NAME OF THE PLATFORM	DESCRIPTION	FOR WHOM IS IT CREATED FOR?	ACCESSIBILITY	LANGUAGE	STEP OF TSBL
Scratch	Website and app where programming language is used to create games, stories, and animations. Students can learn the basic concepts of coding while interacting with a graphical interface.	Teachers and Students	Free	English and Spanish	Step 5 and 6
Tinkercad	Website use to introduce students to a 3D world while using a simple platform that lets them create their own designs.	Teachers and Students	Free	English and Spanish	Step 5 and 6
Active Textbook	Website dedicated to enriching teachers' and students' reading experience while adding dynamic elements to PDF texts. This is a great tool to ask students to breakdown within the details of the nuclear topic or the subtopics that derive from it.	Teachers and Students	Free	English and Spanish	Step 5 and 6

Figure # 21: Repurposing Resources

III. Expanding or Complementation

Goes beyond the nuclear text and unfolds deeper storylines of the main one. It respects the main rules set out in the original world, but it analyses related paths. The world is expanded within its boundaries and students can analyze parallel subtopics.

NAME OF THE PLATFORM	DESCRIPTION	FOR WHOM IS IT CREATED FOR?	ACCESSIBILITY	LANGUAGE	STEP OF TSBL
Canva	Website and application that provides an easy tool to create diverse types of content that could be used digitally or with printed versions. This platform allows to create presentations, magazines, comic books and more.	Teachers and Students	Free	English and Spanish	Step 5, 6, 7 and 9
Pixton	Website to create comics and graphic representations with a ton of visual resources that will help the students to wake their imagination up.	Students	Free trial	English and Spanish	Step 5, 6, 7 and 9
Fotojet	Website dedicated to creating different visual content with accessible graphical tools to edit and imagine concepts from scratch.	Teachers and Students	Free	English and Spanish	Step 5, 6, 7 and 9
Jigsaw Planet	Website with a variety of jigsaw puzzles that could be solved by the students or even created by them.	Teachers and Students	Free	English and Spanish	Step 5, 6, 7 and 9
Popplet	Website that provides a free space to create mind maps that are visually clear and that help to analyze complicated topics in a deeper perspective.	Students	Free trial	English and Spanish	Step 5, 6, 7 and 9

Figure # 22: Expanding Resources

IV. Generation

Encourages the creation of material derived from the nuclear text. It help the students to develop their imagination and create and share their own interpretation within the boundaries of the original topic.

NAME OF THE PLATFORM	DESCRIPTION	FOR WHOM IS IT CREATED FOR?	ACCESSIBILITY	LANGUAGE	STEP OF TSBL
Flipsnack	Website and app use to create magazines without previous design knowledge.	Students	Free trial	English and Spanish	Step 5, 6, 7 and 9
Ivoox	Website and app to create podcasts.	Students	Free	English and Spanish	Step 5, 6, 7 and 9
DevianArt Muro	Website that provides a digital canvas to draw and imagine and that is easy to use.	Students	Free	English and Spanish	Step 5, 6, 7 and 9

Figure # 23: Generation Resources

V. Organization

To complete the TSBL path, there are other types of platforms that are useful for both teachers and students to enrich their educational experience and to reinforce the dynamism within the classroom. These digital tools will be listed below, in the hope that they can give a broader perception of how to improve teaching performance and to have fun along the way.

NAME OF THE PLATFORM	DESCRIPTION	FOR WHOM IS IT CREATED FOR?	ACCESSIBILITY	LANGUAGE	STEP OF TSBL
Google Classroom	Website and app to track the progress of students, assign tasks and maintain a coherent educational path to accompany students at every step of their learning process.	Teachers	Free	English, Spanish	Step 1.2, 2, 3, 4, 7, 9
Miro	Website and app that serves as an amazing tool to organize, conduct brainstorm activities, create mood boards, set goals and more. This app can be used to translate ideas into a visual conception that will make everything easier.	Teachers and Students	Free Version	English, Spanish	Step 1.1, 1.2, 2, 3, 4, 7, 9
Briefly	App that help teachers to get informed in a useful and effective way. They can find articles and podcasts that will help them update and train with current issues, entrepreneurship, and technology. This app could be use in every step of the progress since it is thought, in this case, to help the teachers to be updated and constantly learning.	Teachers	Free Version	Spanish	N/A

Figure # 24: Organization Resources (1)

NAME OF THE PLATFORM	DESCRIPTION	FOR WHOM IS IT CREATED FOR?	ACCESSIBILITY	LANGUAGE	STEP OF TSBL
Transmedia Literacy	Website that let teachers apply didactic activities based on Transmedia Literacy concepts to help them to conduct lessons based on this concept. The repository is divided between the different knowledge areas, age, and language.	Teachers	Free	English, Spanish, Italian, Portuguese, Finnish	Step 1.2, 2
Didactalia	Website with digital tools to create lessons or get inspired with the existent lessons generated with artificial intelligence.	Teachers	Free	Spanish, English, Portuguese, Catalan, Euskara, Galego, French, German, Italian	Step 1.2, 2
Times Higher Education	Website with a deeper guide to develop online-based teachers that are able to cope with different situations by using digital resources.	Teachers	Free	English	Step 1.2, 2
Whiteboard Explain Everything	App to access to an online board to explain topics and to interact with students while learning new concepts.	Teachers	Free version	English, Spanish	Step 1.2, 2
Plickers	App to use printed cards to conduct polls or to make student participate. It combines physical and digital resources to interact within the classroom and to have a different approach during your lessons.	Teachers	Free	English, Spanish	Step 1.2, 2
Inanimate Alice	Website with a notable example of a Transmedia Storytelling Based project that encourage the user to learn about different technological topics while following a story.	Teachers and Students	Free	English, French	Step 1.2, 2
Trello	Website and app that provide a tool to organize projects within groups or following an individual path.	Teachers and Students	Free	English, Spanish	Step 1.2, 2, 3, 4, 7, 9
Teacher Kit	Website and app to organize teaching activities, keeping track of activities and projects, as well as the different resources that can used in the planning of the lesson and inside the classroom.	Teachers	Free Trial	English, Spanish	Step 1.2, 2
ClassDojo	Website to create a community with students and their parents, sharing the process obtained and the learning achievements.	Teachers	Free	English, Spanish	Step 1.2, 2

Figure # 24: Organization Resources (2)

VI. Social Media

Finally, it is totally recommended that teachers use existent and known platforms such as social media on their favor, taking advantage of the nature and popularity of them. By using these platforms, teachers and students have a common language that allows them to break the boundaries of online communication and repurpose it for the educational benefit of all.

NAME OF THE PLATFORM	DESCRIPTION	FOR WHOM IS IT CREATED FOR?	ACCESSIBILITY	LANGUAGE	STEP OF TSBL
TikTok	This is a worldwide known tool that can help students to learn new ways to use the app in favor of education. Teachers and students can create, share, and watch content that could be useful for the class and to increase the interest of the topics. Teachers can ask students to create a video, make duets or summarize lessons.	Everyone	Free	English and Spanish	Step 8
Instagram	This app could be useful to share the work of students and to encourage them to share it as well. It could provide a common place to record activities, helping students to feel seen and eager to continue learning.	Everyone	Free	English and Spanish	Step 8
YouTube	This platform is composed by a vast number of channels dedicated to education, as well as tools provided by the app to create videos or to use the educational content to perform thrilling lessons.	Everyone	Free	English and Spanish	Step 8
Pinterest	This platform can help teachers to find ideas to be inspired as a group or to help student to develop their own digital portfolios. Teachers can take the visual path to teach concepts and to encourage students to explore new possibilities to find inspiration and enhance their own work.	Everyone	Free	English and Spanish	Step 8
Telegram	Platform that provides an easy message tool that help teachers and students to stablish new ways to communicate about homework, projects, group projects, their general opinion and to have a manageable storage app to share online content useful for the lessons.	Everyone	Free	English and Spanish	Step 8

Figure # 25: Social Media Resources

The use of this material is up for the consideration of the teachers, it could be or not be useful inside their educational development, but it is important to analyze it and evaluate how suitable it might result. The TSBL Framework suggests that this repository is used in specific steps of the methodology, but it is so versatile that it could be reinterpreted and readjusted in order to be a real beneficial aid.



PROOF OF CONCEPT

For the purpose of shaping the presented information into a friendly way, a website was developed to be shared with teachers for its implementation. In an ideal situation, this framework could be rethought as a course for teachers to increase their technological training and their storytelling skills but, for the purpose of this project, a website gives a fantastic opportunity to present the first glimpse of what can be thought as a framework in development.

The goal of the website is to be a guide for teachers: to introduce them to the methodology, so they can learn from it, apply it, read useful advice, and get involve into a community of teachers that are enthusiastic on learning and giving new purposes to their education style. For the means of the project, a desktop version of the concept was created, since it contains a big amount of information that could be better explored while using a bigger device. In terms of functionality, there are different sections that have scrollable pages that contain interactions to help the user to navigate through it while learning and connecting the information that is presented. All the text is written in a second person speech in order to talk directly to the teachers and welcoming them into a learning space.

PAGE	SECTIONS	DESCRIPTION
About	Introduction	Presents the slogan and goal of the project.
	Welcome	Gives a small introduction to the project, mentioning the TSBL framework and the goals of it.
	What will you learn?	Explains the structure of the website: (1) Framework, (2) Teaching Guidance, (3) Digital Resources and (4) Community (Participation Section)
	Who will you become?	Explains the principles of a TSBL teacher and the pedagogical principle the framework is based on.
	Why now?	Gives a context to the creation of the project, relating it to the Mexican Educational system and providing to testimonies of real teachers that helped with the development of the methodology.
Framework TSBL	TSBL (Introduction)	Introduce the user to the framework and gives the possibility to skip directly to the steps of it.
	Information to get started	Explains the attributes of the framework.
	Transmedia Storytelling	Gives a quick introduction to Transmedia Storytelling and provides an example with a YouTube video.
	Transmedia Education	Gives a quick introduction to Transmedia Education.
	Methodology Stages	Presents the three stages of the methodology: (1) Preparation, (2) Development and (3) Culmination
	Preparation Stage	Presents the four steps to apply this stage. By clicking the (+) button of each step, the user can get to now extra guidelines.
	Development Stage	Presents the four steps to apply this stage. By clicking the (+) button of each step, the user can get to now extra guidelines.
	Culmination Stage	Presents the two steps to apply this stage. By clicking the (+) button of each step, the user can get to now extra guidelines.
	Extra material: Examples	Redirects the user to the Participate Section since the examples will be the ones of future teachers that implement the methodology.
	Extra material: Guidelines	Provides a printed guideline that can accompany the teachers through the development of their projects.
Guidance	Perks of being a TSBL teacher (Introduction)	Introduce the user to a section of advice that is related to the TSBL framework.
	Principles of a TSBL Teacher	Nine principles are listed, explaining how they are beneficial for the growth of the teacher.
	Storytelling Manifesto	Six rules of the Storytelling Manifesto are presented, the aim is that it keeps expanding with the teachers' experiences.

PAGE	SECTIONS	DESCRIPTION
Resources	Library of Resources (Introduction)	Introduce the user to the library of digital resources that the teachers can use during the development of their projects.
	How are they categorized?	Explains the categories of the resources, linking them to the intertextualities previously presented and with other functional purposes.
	Explanation of navigation of the Categories	Explains the user how to navigate through the resources and how to read each of them.
	Categories Menu	Presents the menu with six categories: (1) Transmutation, (2) Repurposing, (3) Expanding, (4) Generation, (5) Organization, (6) Social Media.
	Transmutation	Introduces the purpose of the category and presents the resources that are linked to it. The user can click on the "Website" button to go directly to the source.
	Repurposing	
	Expanding	
	Generation	
	Organization	
	Social Media	
Extra material: Glossary	Gives extra information to the user about concepts that could be useful to apply the methodology.	
Participate	Get involved! (Introduction)	Invites the user to give their opinion, feedback or talk about their experience while applying the framework.
	Teacher's examples	This section is dedicated to future teachers that implement the framework and that can share their experience to more teachers, creating a sense of community.
	Leave your contribution	The user can leave their ideas or send an email to express themselves even more.

Figure # 26: Structure of Website

After collecting some examples of websites related to the topic of education and training, several decisions were made regarding the composition and graphic style of the website. As it can be noted on the figure below, the elements and colors used help the user to feel welcome and to learn from the website, which is one of the main goals of the proof of concept.

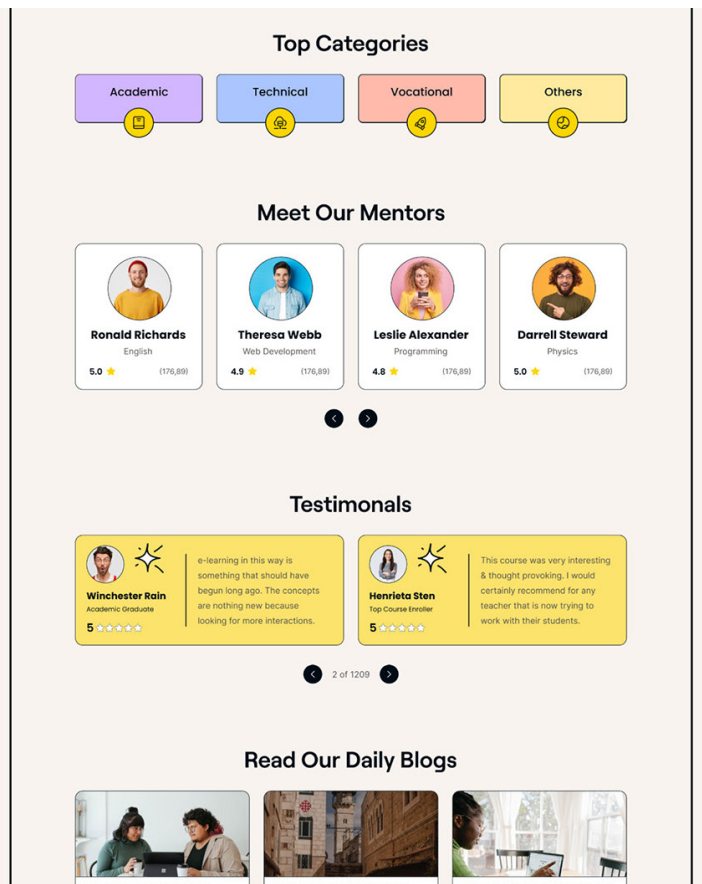
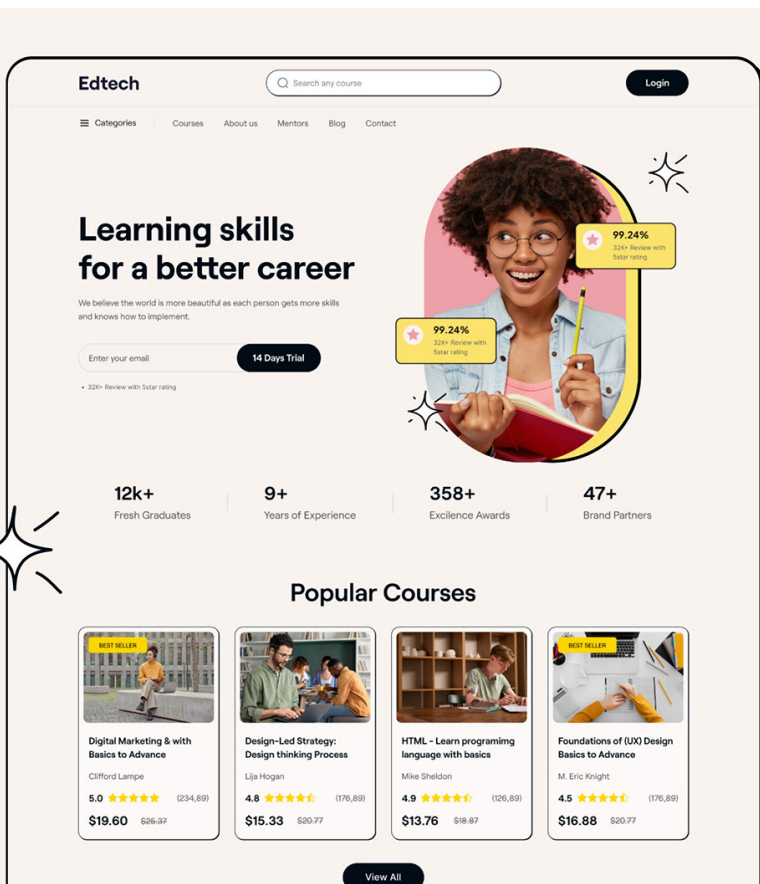


Figure # 27: Website Examples Screens

In terms of style, a balanced color palette was chosen, combining cool and warm colors, and applying them depending as a complement of the information provided.

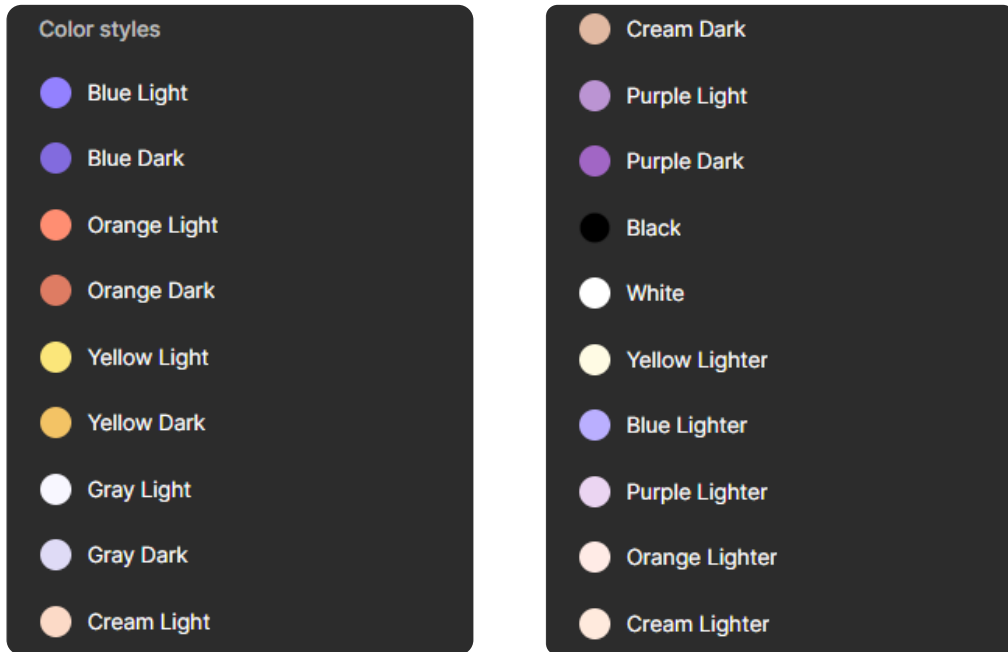


Figure # 28: Color Palette

The font is a sans-serif style with rounded shape, facilitating the reading of the user and thinking about the audience (in this case teachers) that should find an effortless way to dig into the information.

Headline - Regular
Headline - Bold
Sub Headline - Regular
Sub Headline - Extra Bold
Title - Extra Bold
Title - Regular
Title - Semi Bold
Subtitle - Semi Bold
Subtitle - Regular

The proposal is called Transmedia Storytelling Based Learning, a methodology that aims to use digital resources in favor of education and by applying Transmedia Storytelling principles that benefit the learning experience.

The proposal is called Transmedia Storytelling Based Learning, a methodology that aims to use digital resources in favor of education and by applying Transmedia Storytelling principles that benefit the learning experience.

The proposal is called Transmedia Storytelling Based Learning, a methodology that aims to use digital resources in favor of education and by applying Transmedia Storytelling principles that benefit the learning experience.

Figure # 29: Font

For the graphic elements, there are some outlined illustrations that were used to explain some concepts and to work as icons that distinguish the various categories of elements that are explore through the website.

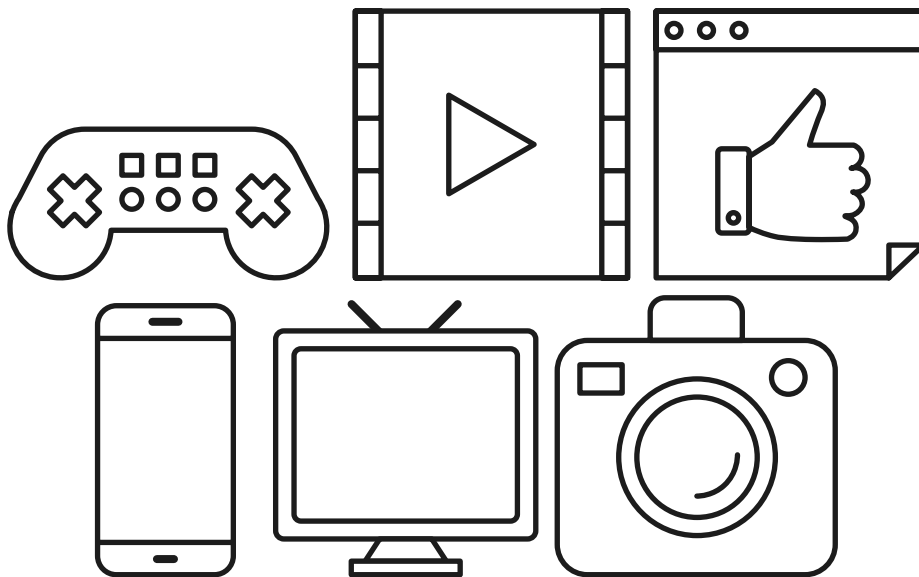


Figure # 30: Graphic Resources

Most of the elements are enclosed inside boxes to give a nice and controlled structure, dividing all the topics provided and stablishing hierarchy of the data that is analyzed.

Un maestro TSBL

Tendrán la oportunidad de implementar la creatividad como base de su proceso de enseñanza.

Utilizarán plataformas digitales y procesos en línea que optimizarán sus planeaciones y que les permitirán adquirir diferentes habilidades en el proceso.

Alentarán a sus alumnos a seguir una trayectoria mediática y digital, aprendiendo unos de otros para establecer los mejores elementos que beneficien a ambos.

La Narrativa (storytelling) es un camino a la empatía.

Las historias pueden ayudar a las audiencias de todo el mundo a identificarse con las situaciones que ven en la pantalla.

Los maestros tienen la oportunidad de ayudar a los estudiantes a sentirse parte de su escuela construyendo las rutas de aprendizaje a partir de elementos que les son familiares y que representan su historia de una manera distintiva.

Consejo: Miren la película llamada "Escritores de la libertad" para comprender mejor este concepto.

Alfabetización Transmedia

Aprendan a aplicar actividades didácticas basadas en conceptos de Alfabetización Transmedia para ayudarles a llevar a cabo lecciones basadas en este concepto.

Encuentren un repositorio dividido entre las diferentes áreas de conocimiento, la edad y el idioma.

[Sitio Web](#)

Nombre del Profesor - Nivel Escolar

"Tendrán la oportunidad de implementar la creatividad como base de su proceso de enseñanza."

Maestra Verónica Rivera

Figure # 31: Website Frames

Here are the frames that illustrate the website:

A website of this nature is able to provide a good engagement with the teachers, since is thought as a free tool with free resources that aim to be part of the teacher journey in every step of the way. Now, to understand the usefulness of it and the impact that it might have, the implementation test will be presented.



Bienvenid@s!

Hola maestr@s!

Esta herramienta está dedicada a ustedes, educadores a los que les apasiona el conocimiento y la mejora de sus habilidades como maestros a través de la práctica de la narrativa o storytelling.

Aprenderán sobre la metodología llamada "Aprendizaje Basado en Narrativa Transmedia" o ABNT por sus siglas, una estructura que busca:

- Usar los medios digitales en favor de la educación.
- Aplicar principios de Narrativa Transmedia en el salón de clases &
- Crear un ambiente de aprendizaje activo y participativo.

¡Empecemos!



Figure # 32: Website Screens (1)

- Usar los medios digitales en favor de la educación.
- Aplicar principios de Narrativa Transmedia en el salón de clases &
- Crear un ambiente de aprendizaje activo y participativo.

¡Empecemos!



¿Qué van a aprender?

1

Una nueva metodología.

Primero, aprenderán como funciona la metodología ABNT y cuáles son los pasos que hay que seguir para ponerla en práctica.

Orientación docente.

Después, descubrirán algunos consejos generales que les ayudarán a transformarse en maestros entrenados bajo el principio del marco ABNT, usando cada elemento a su favor y en beneficio de sus clases.

2

3

Recursos Digitales.

Al final, encontrarán una biblioteca de recursos digitales que les ayudarán a mejorar su experiencia docente y a estimular la creatividad de sus alumnos.

Un nuevo sentido de comunidad

Por último, tendrán la oportunidad de formar parte del desarrollo de la metodología. Podrán compartir su opinión, experiencia y formas únicas para resolver problemas, usando los medios y conceptos digitales para empoderarse, tanto a ustedes como a sus colegas y sus alumnos.

¿En quiénes se convertirán?

Narradores educativos

Tendrán la oportunidad de implementar la creatividad y narrativa como base de su proceso de enseñanza. Utilizarán plataformas digitales que les permitirán optimizar sus planeaciones, adquiriendo diferentes habilidades en el proceso.

Alestrarán a sus alumnos a seguir una trayectoria mediática, narrativa y digital, aprendiendo unos de otros para establecer los mejores elementos que beneficien a ambos.

¡Conozcan más!

¿Qué principio pedagógico seguirán?

Aplicarán una metodología activa de aprendizaje que permite usar los medios y la narrativa en el desarrollo de cualquier tema, centrando la atención en sus estudiantes e inspirándolos a ustedes mismos a aprender más.

La interacción digital se convertirá en su forma de comunicación para transmitir ideas en diferentes formatos. Sus estudiantes participarán activamente y juntos, crearán un desarrollo de aprendizaje emocionante.

¿Por qué ahora?

Esta metodología surge como una respuesta a la situación educativa del Sistema Público Mexicano, reconociendo que hay amplios y verdaderos campos de oportunidad para implementar una metodología activa que ayude a maestros a aprender de los cambios precipitados que la pandemia trajo consigo. En general, la pandemia dejó una lección importante a los maestros: ellos no son la máxima autoridad en el salón de clases y pueden ser reemplazados si no pueden ponerse al día con las actualizaciones digitales: el desarrollo digital y autónomo tanto de ellos como de sus estudiantes, se necesita hoy más que nunca.



"La pandemia nos dejó muy claro a los profesores, que si no te adaptas a lo digital, colapsas."

Maestra Nelly Loera



"El maestro tuvo que adaptarse a los recursos digitales, lo importante es potencializarlos."

Maestra Verónica Rivera

¡Empecemos!

Etapa de Preparación

Paso 1: Presentar un tema a desarrollar

Aquí, presentarán un tema que se desarrollará a lo largo de un periodo de tiempo durante el curso.
¡Recuerden! El tema debe ser lo suficientemente amplio como para ser repensado en diferentes formatos (digitales o físicos) y se deben extraer varios subtemas del mismo.

Paso 1.2: Presentar los recursos

Ahora pueden presentar los recursos disponibles que podrían utilizarse a lo largo del desarrollo del proyecto.
También puede presentar los posibles "productos" que podrían entenderse como los resultados de las diversas etapas del proyecto.

Paso 2: Establecer las metas

Ahora es el momento de pensar en los objetivos del proyecto, relacionándolos con los resultados esperados (productos).

Se pueden establecer entregas individuales, grupales y finales, en función del desglose del proyecto y de los subtemas que se deriven de él. El desglose del tema principal se puede hacer en colaboración con sus estudiantes.

Paso 3: Presentación del Proyecto

Es el momento de presentar un calendario con los productos establecidos y los plazos previstos. Las actividades están relacionadas con los resultados, y podrían definirse por diferentes grupos de habilidades que el maestro puede ayudar a los estudiantes a desarrollar.

Establezcan un resultado final y las actividades que lo complementarán a través del desarrollo del proyecto.

Etapa de Desarrollo

Paso 4: Crear grupos

Se crean varios grupos de acuerdo con el número de estudiantes en la clase. Podría haber una asignación de roles dependiendo de sus habilidades.

Los estudiantes también pueden desarrollar nuevas habilidades y ustedes pueden ayudarlos a empoderarse con sus propios conocimientos.

Paso 5: Análisis y replanteamiento

De acuerdo con el calendario establecido, los estudiantes comienzan a trabajar en el desarrollo de las actividades individuales o colectivas, para continuar con el desglose y la comprensión total del tema.

Los recursos digitales son utilizados tanto por ustedes como por sus estudiantes.

Paso 6: Integración

Ahora, sus alumnos y ustedes analizarán las actividades desarrolladas a lo largo de las etapas y conectarán los productos resultantes de ellas.

Aquí, se pueden identificar los elementos que aún faltan y que deben desarrollarse para complementar el resultado final.

Paso 7: Creación del Producto Final

El producto final se desarrolla de acuerdo con los objetivos y el cronograma establecidos al inicio del proyecto.

Etapa de Culminación

Paso 8: Presentación y circulación del proyecto

Cada grupo e individuo comparte sus procesos y productos, ya sea física o digitalmente.

Las plataformas de redes sociales son ideales en esta sección, ya que los ayudan a ustedes y a sus estudiantes a compartir su trayectoria de aprendizaje.

Paso 9: Evaluación del proyecto

Finalmente, evaluarán el resultado final, pero la calificación se complementa con las evaluaciones realizadas durante el desarrollo del proyecto.

Podrán establecer sus propios criterios de evaluación, pero es muy recomendable que cada actividad se piense en función de las habilidades desarrolladas y los conocimientos obtenidos.

De acuerdo, ¿estamos listos para aplicarlo?

Si necesitan más apoyo, aquí pueden encontrar diferentes ejemplos de proyectos basados en Narrativa Transmedia que se desarrollaron con el método que acaban de leer.

Además, no duden en descargar la Guía Impresa que pueden acompañarlos durante todo el proceso de su planificación y el desarrollo del proyecto.

Esta plataforma fue desarrollada para dar a conocer el marco llamado "Aprendizaje Basado en Narrativa Transmedia", metodología desarrollada para Proyecto de Tesis de la maestría de Diseño de la Comunicación en el Politécnico de Milán.

Tesis elaborada por Renata Martínez Tapia
2020

Figure # 32: Website Screens (2)

...sus conocimientos con nuevas herramientas que no son propiamente de la educación, pero que pueden ser beneficiosas mientras aprenden.

Un profesor de TSB, se permite experimentar y cambiar sus conocimientos previos con nuevas herramientas y actividades que no son comunes pero que pueden exponer la experiencia de aprendizaje.

No se deja intimidar por el fracaso.

Es importante que un maestro aprenda de sus errores y, dado que el marco de ABNT es un método activo que requiere experimentación, el fracaso puede ser un elemento posible del curso. Sin embargo, es importante transformar eso en una posibilidad para seguir mejorando.

Trabaja mano a mano con sus alumnos.

El ABNT brinda la oportunidad a los docentes de explorar la ruta de la educación no formal, al permitirles escuchar las experiencias digitales de sus estudiantes para dirigir los objetivos del aula hacia los resultados más beneficiosos. La mayoría de los estudiantes están familiarizados con los dispositivos digitales y las redes sociales, por lo que los maestros deben comprender las habilidades digitales y la situación de sus estudiantes antes de profundizar en un tema.

Le encanta seguir aprendiendo.

En el mundo digital, la innovación es una constante que empuja la evolución de todo tipo de plataformas y el entorno en línea se adapta constantemente al mundo cambiante. Para los maestros, es importante mantener una puerta abierta para seguir aprendiendo sobre nuevas herramientas, plataformas y medios. Sin actualizaciones constantes, los profesores pueden perderse e ignorar una variedad de posibilidades que la digitalización podría ofrecer.



Esta lista o lo que podría entenderse como un presunto manifiesto, continuará actualizándose a medida que el método siga evolucionando. Sin embargo, el fundamento principal seguirá siendo la adaptación digital y la posibilidad de empujar los límites de la Transmedia y la Narrativa en el entorno educativo.

Ahora, hablemos de un elemento esencial de esta metodología: la **Narrativa (Storytelling)**

Aunque sean capaces de aplicar este concepto a lo largo de todos los pasos de la metodología, también debemos recordar que este es un gran enfoque para aplicar dentro del aula y que ustedes, como profesores, pueden aumentar el dinamismo y la interactividad de su entorno de enseñanza con conceptos simples.

Revisemos el Manifiesto de Narrativa.

Manifiesto de Narrativa

El arte de contar historias tiene ciertas características y reglas que son útiles para un entorno de aula y la propuesta de este marco es la combinación de una estructura basada en la Transmedia con comportamientos de Narrativa, para tener una experiencia completa y sumergir a los estudiantes alimentando su interés en el aprendizaje.

Las reglas se enlisan a continuación y contendrán algunos ejemplos y consejos sobre cómo puede aplicarlas dentro del aula.



Sean memorables.

La narrativa (storytelling) transforma ideas simples en historias memorables que ayudan a la audiencia a sentirse comprometida con la trama. Esta función puede ser utilizada por los profesores mientras desarrollan un tema, buscando la mejor manera de retratarlo a sus estudiantes y mostrar los mensajes esenciales.

Puede implicar recursos de medios adicionales, pero también da espacio para la imaginación y para tomar decisiones interesantes al impartir una clase.



Piensen en su audiencia.

Los mensajes deben ser retratados de la mejor manera y, para lograrlo, es fundamental conocer a la audiencia y, en este caso, a los alumnos.

Un maestro podría tener una etapa preliminar para identificar las necesidades del aula, con el fin de proponer formas apropiadas de desarrollar las habilidades que necesitan para aprender.



La trama es orgánica y un elemento dinámico.

La trama representa el elemento que mantiene unidas las piezas de la historia, pero puede transformarse a medida que se desarrollan los eventos.

Dentro del aula, hay una situación similar, siempre debe haber un objetivo establecido (la trama) pero la forma de lograrlo puede tener un rendimiento dinámico y tanto los profesores como los estudiantes pueden colaborar para encontrar las mejores formas de crear su camino único de aprendizaje.



Sigan las fórmulas.

"Cada historia se cuenta en siete etapas", esta es una estructura que fue formalizada por el profesor Kenn Adams. Existen estructuras preestablecidas para contar historias que podrían aplicarse al desarrollo de una clase y al desempeño de la misma.

Esto podría ayudar a mantener vivo el interés de los estudiantes y ayudar a reimaginar temas complicados en términos y situaciones familiares.



Todo mundo tiene una historia que contar.

Los profesores pueden dar a sus alumnos la posibilidad de contar su propia historia, explorando formas individuales de desarrollarla y descubriendo nuevas herramientas en el camino. Esto también permite que los estudiantes se conviertan en participantes activos en el proceso de aprendizaje, pidiéndoles que se cuestionen a sí mismos e interpreten los temas que se presentan durante la clase.



La Narrativa (storytelling) es un camino a la empatía.

Las historias pueden ayudar a las audiencias de todo el mundo a identificarse con las situaciones que ven en la pantalla. Los maestros tienen la oportunidad de ayudar a los estudiantes a sentirse parte de su escuela construyendo las rutas de aprendizaje a partir de elementos que les son familiares y que representan su historia de una manera distintiva.

Consejo: Miren la película llamada "Escritores de la libertad" para comprender mejor este concepto.

Este conjunto de reglas está inspirado en la metodología propuesta por Guillaume Lamarre dentro de su libro de "El Storytelling como estrategia de comunicación", una lectura que también se recomienda para los profesores que estén interesados en aplicar esta metodología.

¡Estamos listos!

Naveguen a través de las diferentes categorías dando click en cada una de ellas a continuación:

Transmutación

Reutilización

Expansión

Generación

Logística

Redes Sociales

Transmutación

Transforma el texto nuclear en una nueva versión, cambiando su forma o naturaleza. Esto podría traducirse en la creación de actividades interactivas que permitan a estudiantes y profesores experimentar.

Educaplay
 Generador de juegos educativos con muchas opciones diferentes que ayudan a un profesor a alimentar la imaginación de sus alumnos y aprender de una manera divertida.
[Sitio Web](#)

Cerebriti
 Encuentren una variedad de juegos de conocimiento para jugar con sus estudiantes. También pueden crear sus propios juegos y animarles a crear los suyos mientras aprenden. ¡Busquen la aplicación llamada Academost!
[Sitio Web](#)

Mentimeter
 Interactúen con sus estudiantes en tiempo real mientras comparten ideas y responden preguntas. Esto podría ser ideal para los procesos iniciales de lluvia de ideas.
[Sitio Web](#)

GeoGebra
 Comprender temas matemáticos complicados a través de diferentes herramientas y tableros en línea. Desglose conceptos complicados junto con sus alumnos.
[Sitio Web](#)

Reutilización

Utiliza la información del texto nuclear y la coloca en una plataforma diferente. Da lugar a la interactividad para que sea la base principal del proceso de aprendizaje.

Scratch
 Usen el lenguaje de programación a su favor para crear juegos, historias y animaciones. Los estudiantes pueden aprender los conceptos básicos de codificación mientras interactúan con una interfaz gráfica.
[Sitio Web](#)

Tinkercad
 Presenten a sus estudiantes un mundo 3D mientras utilizan una plataforma simple que les permite crear sus propios diseños.
[Sitio Web](#)

ActiveTextbook
 Enriquezcan las experiencias de lectura al agregar elementos dinámicos a los textos en PDF. Esta es una gran herramienta para pedir a los estudiantes que desglosen los detalles del tema nuclear o los subtemas que se derivan de él.
[Sitio Web](#)

Expansión

Va más allá de la prueba nuclear y desarrolla historias más profundas de la principal. Respeta las principales reglas establecidas en el mundo original, pero analiza caminos relacionados. El mundo se expande dentro de sus límites y los estudiantes pueden analizar subtemas paralelos.

Canva
 Utilicen una herramienta fácil para crear diferentes tipos de contenido que puedan usarse digitalmente o con versiones impresas. Esta plataforma permite crear presentaciones, revistas, cómics y mucho más.
[¡Pruébalo gratis!](#)

Pixton
 Encuentren una manera fácil de crear cómics y representaciones gráficas con una tonelada de recursos visuales que ayudarán a sus estudiantes a despertar su imaginación.
[¡Pruébalo gratis!](#)

Fotogit
 Desarrollen diferentes contenidos visuales con herramientas gráficas accesibles para editar e imaginar conceptos desde cero.
[¡Busquen la versión gratis!](#)

Figure # 32: Website Screens (3)



IMPLEMENTATION

In order to understand the usefulness and performance of the proof of concept presented, a test was prepared to be applied to different high school teachers that were interested in being part of the project.

The test of the prototype consists in three steps: the first one involves an initial survey to understand the educational background of the teachers, as well as their experience during the pandemic and the ideas that they might have about Transmedia Storytelling; the second step invites the teachers to interact with the prototype and to follow the methodology in order to present an evidence of how they could apply it into an hypothetical case; finally there is another survey that asks about the experience that they had while doing the activity and while learning about the methodology.

The surveys were developed through the platform of Google Forms and the prototype was presented with a Figma file that could be tested with a desktop version. As mentioned before, several teachers were contacted to be part of the project, all of them reside at the center of the Mexican country (Guadalajara, Queretaro, and Aguascalientes City) and they are teachers at high school and university levels. At the end, five teachers were able to participate in the first section and four of them were able to proceed until the final survey. They gave relevant insights about the framework and the tools that they learned during the process. With the aim of understanding the key points of their participation, a breakdown of each step will be presented, analyzing the results as a whole and taking note of the weakness and strengths of the methodology in order to think about further improvements.

PART 1: INITIAL SURVEY

To start with the test of the prototype, the teachers were contacted, and a Google Documents file was shared with them. There, they could find three pages with the three steps that they would have to follow. **The first page had an initial survey, the second one introduced the prototype and the final one had a final survey asking for feedback.**

For the first survey, there was a welcome text that introduced the project and that help the teachers to get familiar with the topic (everything was translated into Spanish but for the means of this thesis, the English text will be presented):

Welcome teacher!

My name is Renata Martínez Tapia, and I am working on the development of my master's degree thesis, inspired by the educational Mexican context and its scopes with the digital media. I am currently developing a tool that can help you to get yourself familiar with an educational methodology that is based on Transmedia Storytelling and digital resources. The following survey is designed to get to know your context and teaching path. This is the first step of the testing process, and it will help me to understand your personal knowledge and how familiar you are with some specific concepts. Thank you for being part of this project and feel free to express yourself while answering these questions.

Let us get started!

Then, the first section was dedicated to initial questions to understand the background of the teachers, and these are the results of it:

- Almost every teacher landed in a different age range, meaning that there was a recognizable variety of ages from twenty-five to more than 45 years old.
- Eighty percent of the participants teaches to the high school level, while 60% of them is part of the university level, meaning that two of the participants give classes to both high school and university.
- Eighty percent of the participants are part of the private system, while the other 20%, corresponding to only one teacher, is part of both private and public system. In this case, the perception is limited to the experiences of the private environment but still valuable to understanding different points of view.
- Two of the teachers has a shorter experience in the education area, with one to five years of practice, while three of them have more than ten years of

1. Name (optional)

2. How old are you? * (mandatory)

- a. 25-30
- b. 31-45
- c. Above 45

3. In which educational level do you teach? * (mandatory)

- a. Middle School
- b. High School
- c. University

4. What is the educational system you work in? * (mandatory)

- a. Public system
- b. Private system
- c. Both

5. How many years have you been teaching? *(mandatory)

- a. 1-5
- b. 5-10
- c. More than 10 years

Figure # 33: Questions from 1 to 5

For the second section, the questions were related to the pandemic and the possible training and adaptation that they might have during that period.

- All of the teachers had the experience of teaching during the pandemic.
- One of them said that the experience was normal, but the rest said that they lived a challenging period in which they had to adapt to the digital model while promoting an autodidactic attitude from their students. They also manifested anxiety problems during an uncertain moment that required adaptations and that the learning of new tools helped to implement the remote nature. The skills of the students were diminished affecting their progress.
- Three of the teachers were partly familiarized with the digital resources when the lockdown was established, while two of them were mostly familiarized with them.
- Almost all of them felt very comfortable using digital tools, only one of them manifested that was mostly comfortable by using them.
- Four of the participants received a specialized training focused on digital tools,

while one of them did not. They learned how to use Zoom, Canvas, simulators, learning platforms, video maker apps and strategies to help the students to pay attention through the screen and to escape from the monotony.

→ None of them had to follow the educative programs established by the government to cope with the lockdown situation.

6. Did you teach during the pandemic? *(mandatory)

- a. Yes
- b. No

7. If the answer is "yes", can you describe your experience during that period?

(Open question) (optional)

8. How familiar did you were with digital resources for education when the lockdown was established? * (mandatory)

Scale from 1 to 5, 1 being not familiar at all, 5 being very familiar

9. How comfortable did you feel while using digital resources? *(mandatory)

Scale from 1 to 5, 1 being not comfortable at all, 5 being very comfortable.

10. Did you receive any digital training to cope with the situation of the pandemic? *(mandatory)

- a. Yes
- b. No

11. If the answer is "yes", can you describe what did you learn during the training?

(Open question) (optional)

12. Did you have to follow government educational programs to teach during the pandemic? *(mandatory)

- a. Yes
- b. No

13. If the answer is "yes", can you name the educational programs? (open question)
(Optional)

Figure # 34: Questions from 6 to 13

Section three was devoted to understanding the transition into the on-presence classes that is currently applied inside the education system and the technological tools that they and their students use inside the classroom.

- Four of the teachers were able to return to an on-presence mode while one of them did not.
- In terms of the difficulty of their transition between the remote education into the classroom, they all had different opinions: one of them said that it was really easy, one said that it was easy, two of them had a neutral opinion and the last one thought that it was really hard.
- All of them are using the digital resources that they were using during the pandemic, and they mentioned that they still use platforms like: Canvas, Quizzlet, Zoom, Educational Institutional platforms, Workspace Google, Remind, Mentimeter, Google Classroom. All of them agreed on the use of Zoom as a way to communicate with their students to give personal feedback.
- When speaking about the tools that they use during their classes, all of them agreed that their first tool is the laptop and then four of them use a projector to complement the experience. Only two of them use their cellphone and one of them uses a pc, textbooks, and other tools.
- All of them agreed that their students has any of the previously mentioned tools to study and to use within their learning process.

14. Have you returned to teach classes on-presence? *(mandatory)
a. Yes
b. No

15. Can you rate your experience with this transition (from online to on-presence classes)? *(mandatory)

Scale from 1 to 5, 1 being very easy, 5 being very difficult.

16. Do you currently use any digital resources that you used during the pandemic? *(mandatory)

(A digital resource is understood as the digital platforms that you used to communicate with your students or the ones that you used to create activities or that were useful for you to work online.)

a. Yes
b. No

17. If the answer is “yes”, can you name the digital resources that you use? (Open question) (optional)

18. Select the tools that you currently use to develop your lessons. *(mandatory)

- a. Laptop
- b. Cellphone
- c. Projector
- d. TV
- e. Computer PC
- f. Textbooks
- g. Other

19. Which percentage of your students own and use any of the previous tools to study? *(mandatory)

- a. 0 - 20%
- b. 21% - 40%
- c. 41% - 60%
- d. 61%- 80%
- e. 81% - 100%

Figure # 35: Questions from 14 to 19

Finally, section four was composed by three questions that aim to know how familiar they were with Transmedia Storytelling and if they would be eager to learn a new methodology.

- When they were asked about their understanding of the concept of Transmedia Storytelling, they had different points of view that give note of their knowledge, but most of them agreed that it is a way to use different media or tools (not necessarily digital) to talk about a certain topic.
- All of them said that they constantly prepare themselves to innovate their teaching methods.
- Finally, all of them agreed that they would be interested in applying a new methodology within their own classrooms and to develop their lessons.

20. What do you understand with the term “Transmedia Storytelling”?
(Open question) *(mandatory)

21. Do you train yourself constantly to innovate your teaching methods? *(mandatory)
a. Yes
b. No

Figure # 36: Questions from 20 to 22

This preliminary information was useful to understand that even with the variety of backgrounds, points of view and knowledge, almost all the participants were interested in keep learning and to evolve from the past experiences. **It was relevant to discover that they actually had a digital training to use platforms for remote education and that they still use them in this period post lockdown. Some of them mentioned the platforms that were introduced with the proposal and that gives an opportunity for them to feel familiarized with the information that they were about to learn.**

PART 2: APPLYING THE FRAMEWORK

In the second section of the prototype, **teachers were asked to review the prototype itself, by getting to know the desktop version of the tool created for the TSBL.** They were also asked to think about a hypothetical scenario where they could implement the methodology and to manifest the ideas that they might have for planning a class based on the TSBL. They could follow different and unique paths to perform this activity: they could write key points or create a document or create a presentation for example.

The following text was presented to them in this second part to explain their contribution:

PART 02: METHODOLOGY'S IMPLEMENTATION

In this section, you will get to know the tool that was mentioned in the previous survey. This tool works as a way to present a methodology called "Transmedia Narrative-Based Learning" and is presented as a website with open resources. To understand the effectiveness of this tool, you will be asked to read it and follow the presented methodology thinking about a hypothetical case. So, imagine that you are going to plan a lesson and that you will follow the framework that you are about to learn, how would you do it? You can use any tool to develop their ideas, it could be a Word document, a presentation (PowerPoint for example), an idea board or any format that works best for you to develop the planning.

I ask you to contact me via WhatsApp with the result of this activity or send me an email to the mail: renimar.art@gmail.com. You will find tools and guidelines to develop this task, but feel free to express your ideas in the way you feel most comfortable.

Thanks again for being part of this project and let's get to work!

Link to the platform: shorturl.at/cs236

Due to the nature of the platform, it is recommended that you open it from your computer so that you have a complete experience, the mobile version is still in process.

Although it was expected to receive tangible evidence of the hypothetical case thought by the participants, **their time availability did not let all of them create any physical or digital planning that proved their implementation.** Only one of the participants was able to present a document with her ideas about the implementation of the methodology, she used a Word document to write this down and she delivered it via email. The rest of the teachers actually thought about how they would implement the methodology and they manifest those thoughts within the final survey.

PART 3: FINAL SURVEY

Therefore, **within the final survey eight questions were presented in order to understand the experience with the website and the information of the methodology itself.** It is important to notice that from the initial five participants, only four of them were able to conclude with the test during the period that they had to perform it. This circumstance demonstrates that their time availability was limited and that could be attributed to the overloaded work that they have in this current period of the educative situation.

Welcome back!

I hope you had an interesting experience while learning the “Transmedia Narrative-Based Learning” methodology. Now, let’s finish with some questions to understand how to improve the presented tool and imagine the best way in which it can be used by teachers from Mexico and around the world.

Thank you once again for your time and effort!

1. How was the experience with the tool? *(mandatory)
Rate your experience with 1 being not satisfying and 5 being very satisfying.

2. Can you describe how did you develop the hypothetical project? (Open question)
*(mandatory)

3. Did you use the digital resources of the library while developing the case?
*(mandatory)
a. Yes
b. No

4. How useful did you find the advice provided? *(mandatory)
Scale from 1 to 5, 1 being not useful and 5 being very useful.

5. Do you think that you have all the tools to apply this methodology? *(mandatory)
a. Yes
b. No

6. If the answer is “no”, which tools would you require to complete your teaching process? (optional)

7. Would you be interested in applying this methodology in a real case? *(mandatory)
a. Yes
b. No

8. Do you have any final comments or suggestions in order to improve the website and the experience of using it? (Open question) (optional)

Figure # 37: Questions from 1 to 8

The results are presented below:

- One of the teachers thought that the experience was very gratifying while two of them thought that it was just gratifying, and one last one had a neutral opinion.
- Now, when they were asked on how they developed the hypothetical project, there were different points of view:
 - One of them said that he or she used Educaplay, as a resource, since it was one that he or she already knew.
 - Then the next teacher thought about “developing a project on visual studies, based on key concepts, processes and contexts that would allow to expand the project in different approaches and applications.”
 - The third one, just stated that they followed the steps suggested inside the website prototype.
 - And the final one talked about how she thought of developing a “boring topic” in order to make it interesting through the methodology. She stated that at first, she thought to divide the theoretical part from the practical one but then she saw an opportunity to actually give the students the chance to learn the concepts through the practice. She thought that she could develop the topic of “copyright and plagiarism” and that the students could search for a real case and report it. She thought that that could imply a lot of commitment from the students, in a sense that they will be exposed to a real situation and that they had to present reliable evidence to make the denunciation. Then she thought that maybe the students can become the protagonists of the

topic, imagining if they suffer from plagiarism and the way they should act if this happens. At the end, she stated that she thought about other side topics that could be developed and she arrived to the conclusion that the methodology could also work with smaller topics, but with the proper adaptations. She delivered this through the survey and through a document via email.

- All of them used the resources provided within the Library of Resources.
- Three of them stated that the advice provided was very useful while one of them had a neutral perception.
- They were asked about if they thought that they had enough tools to apply the methodology and two of them agreed that they do while one of them did not.
 - In this third participant's opinion, he stated that it was complicated since "education is a living organism, which is literally changing. So, it would be impossible to assume that everything necessary is there. For example, I would like to use more videos, although they are included, from my experience, I need something more advanced."
- All of them were interested in applying the methodology in a real case.
- And finally, they presented their last thoughts and suggestions to improve the website:
 - The first teacher thought that it was a matter of preferences and personal opinion, he stated that they might be "too many options" to use and that he, and other teachers, would prefer a closed and limited path. He gave that opinion based on his experience, since he knows what he wants in terms of teaching and is not really open to revise other methods. But still, he recognizes that that could be an opportunity for him to learn more. He also suggested to have more animated elements inside the platform to make it visually more attractive.
 - The second teacher gave an excellent feedback in terms of Transmedia Storytelling concepts, recognizing that there are some concepts that could be rethought to help the platform to be clearer.
 - He mentions that in the Orientation section inside the Storytelling Manifesto, it is written that the plot would represent the objective of the project and he suggests that the conflict is actually the one that determines the goal of the stories. He adds that this could be thought by asking: what is the central idea? How do you want to tell it and which devices can help you to do so? The objective then could be referred to the central concept of the project. He then suggests integrating

the Transmedia concept more within the About section, since it is not properly mentioned in this part, and it is then used in the consequent sections. He also proposes to add examples of the formulas that could be used by the teachers, a concept that is mentioned also in the Manifesto. He states that he loves the project in general and he adds a final thought that the teachers could struggle between focusing on one of the two extremes of the methodology (Transmedia VS Storytelling), in a sense that they could feel lost by planning the journey of all the suggested interactions without a core structure. He finally suggests that infographic examples could help to set up a clearer base for teachers to implement following a proposed path that starts from the main plot as the origin of the project.

- The third teacher thought that she wouldn't add anything else but that the methodology requires a lot of preparation and training to be implemented.
- The final teacher said that there is a lot of information, that despite being really good, it would be better to understand it through videos and visual elements that could replace the amount of text.

With the analysis of the results of this last survey, it is noted that the prototype achieved its goal by communicating the main concepts of the TSBL methodology to the participants. The general feedback is positive, and their experiences were good in average. The comments are enriching since they are mostly suggestions on how to improve the methodology and actually represent a benefit for a real-life situation. Each teacher has his or her own point of view and that is actually a point in favor for the methodology since it allows a personal interpretation of the steps and the advice presented. The teachers that were more familiarized with the concepts of Transmedia and Storytelling were able to expand their ideas and to implement the framework in a deeper way, while the ones that were new to the concepts, thought about an easier implementation that would require more preparation to actually become a real project.

The general recommendation was to increase the visual elements and to transform some parts of the text into graphic examples, infographic explanations or videos that translate the ideas in a clearer way. All of these ideas are relevant to apply changes to the prototype, thinking that it could actually become an open-source website that keeps evolving with these kind of feedback, until it becomes an autonomous and sustainable tool.



FURTHER IMPLEMENTATIONS

The progress made for the TSBL methodology during the development of the current thesis is still in an early stage that requires more improvement, hard work and the involvement of more educative entities. It has the potential to become a real methodology that could be useful for the Mexican context but that can be adapted to be used by international audience. Now, several ideas will be presented in order to explain the further implementations that the TSBL can have. These ideas are also extracted from the perceptions of the participant teachers that were able to test the proof of concept and that recognized the strengths of the framework due to their educative experience.

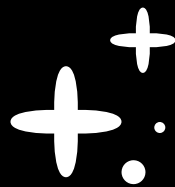
First of all, the information of the TSBL could transform into a training program with adjacent courses related to Storytelling and Digital processes. This would represent a deeper preparation for the teachers that are interested in applying the methodology and that want to continue with their digital preparation. They could have an opportunity to grow and improve their skills and it could be adapted to the possibilities of the schools or institutions that they are part of. Specialized teachers could be invited to participate as mentors, training other educators by following the guidelines dictated by the methodology. These same mentors could join this author to be a research team that continues with the improvement of the program, until it becomes a reliable and beneficial tool.

The website could still work as a reference source that is available for them when they are working autonomously. In addition, and speaking about teaming up with more educators, it will also be beneficial to join graphical and visual experts that can help this author to create a better visual experience. This will improve the clearness of the concepts presented inside the website and will help teachers to learn quicker and easier.

Following the suggestion of one of the teachers involved in the implementation section, **the TSBL should be registered in the Mexican Institute of Intellectual Property in order to guarantee its ownership and to be able to be presented to the Secretary of Public Education or to recognized Private Schools. This would require the actual development of the website and the protection of the ideas that are contained within it.**

This plan is thought to be carried out after some improvements are made and after the delivery of the current thesis. To achieve this idea, one of the arguments could be that the TSBL methodology could be easily adapted within the new proposals to renovate the Higher Education program that are currently being developed. In this way, there could be a real possibility to be part of the system and could receive support for that goal. With the funding of the government, the framework could have economical resources to create the proposed teams and to apply the training program available for the public and the private system.

CON CLU SION



After several months of desktop research, interviews, observations and testing, the structure of a new methodology was created to answer to the research question presented at the beginning of the thesis.

The question to solve was:

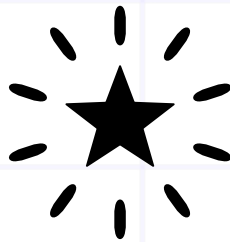
What is the methodology that could be developed and implemented to prepare Mexican teachers and academic authorities to apply a transmedia storytelling educational model for the planification of the courses in a high school level?

And the answer will be: *The TSBL Methodology.*

This result was possible due to the analysis of the Mexican context since it represented a great opportunity to look for the pain points of the situation caused by the pandemic. Also, the proximity to that country of this author, help to have connections with real teachers that were valuable elements for the elaboration of the framework.

As it has been mentioned in the previous section, there are further implementations and proposals that are being thought to be implemented once the proof of concept transforms into a real website with better graphical elements. It is a scalable product that could continue to improve as long as more people is involved. The creation of it will required investment that will be search with the support of the Mexican government and a Creative Commons license could allow the information to be distributed in a national and international way.

As one of the teachers mentioned during his participation, education is a living organism which is literally changing, and it will always need to be updated and evolve. **The TSBL Methodology is a proposal that, with the proper elements, could be a reality and benefit thousands of Mexican educators that are still recovering from the pandemic and that need a new way to start.**



***“No matter what anybody tells
you, words and ideas can change
the world.”***

-John Keating from the Dead Poets Society 1989

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APPENDIX

INTERVIEW WITH VERONICA LOPEZ

At what educational level do you think it could be used and why?

The context in which she operates:

→ I do not have the pedagogical foundation, most of the high school teachers, few not all, have the part of practicing teaching without the pedagogical foundation. Pedagogy leads us to learn teaching tools so that the expected learning in children is achieved. Teachers in secondary education do not have that foundation, but because the labor field opens up in Mexico with the simple fact of having a subject. I have a bachelor's degree in communication and in the profession you choose what suits your program. The fact of having a pedagogical foundation or not does not exempt you from being a good teacher.

Middle education:

→ There is a lot to exploit, I find the specialization approach of what you as a student want to learn very interesting. This part of using the transmedia strategy interests me a lot in the question of teacher preparation because it is to potentiate your abilities to use the media in children. In high school there is a transition, talking about socio-emotional ability, where the boy jumps from high school from being a pre-teenager to emotional maturity. The teacher breaks a little in generating strategies that in the pandemic did not give us time to process it. I think that part of the media would be very good as a pedagogical tool / strategy to learn and to potentiate what they want to express. On the teaching side, we could see that technology is not contrasted with personal interaction, we have the mentality of teachers of having a resistance of not implementing technological solutions because we swear that the only way to impart knowledge is to interact personally but no, there are other methods. It is necessary to train teachers in digital resources, because we have to realize that technology is not opposed to a personal interaction, it is complementary and is a tool for the acquisition of knowledge. If I see that the student is good at writing, I would propose using a blog, but I don't know how to do it. The transmedia would give the teacher several routes so that the child can learn

several routes. It covers routes dividing it into the type of resources (graphic, literary, visual) and thus you would help the teacher to give routes with specific steps so that he can implement it inside and outside the classroom.

Secondary:

→ My pandemic experience, given the area in which I operate and the area in which I am working, a dangerous part of the city in the eastern zone, was not easy because they do not use technology. Kids are super good at using social media as a recreational activity. We have to change that paradigm that technology also serves for the acquisition of knowledge. That emotional interaction shock would have to be done from the teacher because if they don't have a tool at home, the teacher has to show that part. If I came on my iPad and showed them a rustic animation, it would capture the attention of the boys, that shaping part helps to capture the boys. Secondary school teachers if they have pedagogical education, due to the training of normal. They can be perfect planners, but when it comes to implementing it in the classroom, development is null. In the personal definition of the student, the part where it can be potentialized is in middle education and higher levels. In secondary education, there are many teachers like me who still have the willingness to learn. A high school teacher just graduated from normal, they swear they know everything about technology, but they don't share their knowledge. They see it as a tool that they cannot transmit to their students, it has to do with the union culture.

What would be very interesting?

→ It would be to amalgamate technology with the essentials that the teacher would have to learn. It would be nice to see the basics... imagine a digital music plan. As for the different subjects, what would be that element that can be related between all of them? You can use this tool for this, this and this. From my point of view, I think that this way you can make the most of transmedia, to know everything that I can learn from the media in order to continue improving the education of children. The important thing would be to show the benefit that these tools that are being provided have. The tools you develop can be adapted to different subjects. In this way, when you give them the range of tools, you can help them, but already the teacher would decide if he would like to specialize and do beyond that. This is important for teachers who like to be preparing. It took a lot of work for me to use the technology, it was an empirical learning, but my teaching colleagues

also helped me. When my students send me a material like a video, I often wonder how they did it. It is important to be self-taught, maybe your programs or strategies would have to be quite specific so that the teacher understood it step by step.

→ The SEP forced us to follow a program called “Passport in Education” that are very bad videos and that are copied from these countries and that are distant from the situation in Mexico. All entities have a different educational situation, but it should work for all states. It’s not about copying from other countries, it’s about adapting it to the context. Many of the videos were not useful, the student sometimes does not use the phone for anything other than something recreational. The teacher should drive correctly to use his mobile device for educational purposes.

Have you returned to the classrooms, how was the transition?

→ It has involved continuing with a digital system, that’s very good, the children are already used to a device and to see a presentation by the teacher. There are still colleagues who put a YouTube video, it should be a mixture that is technology that meshes with personal interaction. Many classmates created their avatar, put it in their presentations and it caught the attention of the guys. In the end it is to do it personally, not everyone finds it on the internet and it does not end up being a content alien to your reality. I during January and February interacted with the boys, I arrived with my computer and activity and I captured the attention of the boys, but it is always important to keep this gear.

Was there any support from the school principals?

→ Zero. Ifocus more on prep because most of the teachers, graduates of universities, we prepared on our own since there was no support from the management. It would be very important to potentiate leadership, as long as the management does not buy it, the teacher looks for his own resources to be able to the class. It’s good to be self-taught, but without good guidance, you can’t invent your system. When I was an assistant principal, I asked my teachers for help. When I proposed strategies, I wanted to be based on the technological. It is not a cold way of imparting knowledge, it is a complementary way. We had to learn it all at once, but it complements each other.

The most valuable thing is that the student is in his transition, the university raises a much more specific panorama. In high school, there is much more field to explore and get to know personal interests. I was reading that a reevaluation of the subjects that have to be taught is being done, that is, classical subjects can change for topics that had not been important before such as mental health and digital issues. I find it quite interesting to know if the teachers have considered changing the curricula.

At what point can the program evolve and be changed?

- I ask myself this question a lot, as a secondary, the programs and plans and innovations that they want to do are not focused on Mexico. What good is it for my kids to learn about an equis topic if they don't have the basic skills? I always ask myself this because there are times when the topics are not useful for my students. I don't have the authority or autonomy to remove it from the program so I have to give the topic. However, autonomy within the classroom is important, this is related to what you want to focus your students to learn, what is known as expected learning, which is different from the final product. That autonomous part leads me to take away 2 important things: I focus on the expected learning that is not the same as the final product. Expected learning: that the student learns to write clearly, accurately and concisely. Final product: prologue.
- I don't have to make it known, but I do direct it to the needs of the group. In high school, it starts from the idea that students already bring it from high school, but if they don't bring it, you repeat it. In high school, he is much more autonomous. That's landing according to the context. In Mexico there is no follow-up, there are good proposals, but with the change of government progress is always cut off. Of course, you can do that part of adapting, but not massively, but individually as a teacher. Transmedia seems very interesting and innovative to me because you give routes and paths, because the teacher will be able to help propose several paths depending on the needs of the students. With this method you can take the student out of the classroom space, with the correct use of the media you can be wherever you want, that took us a lot of work to understand it in the pandemic. I don't need to be in the classroom to take classes, it can be positive or negative, a specific space at home had to be adapted to work, before video calls looked strange but now it is the most common thing to find. This issue of transmedia is adaptable for any learning medium.

Physically return to the classroom if it represents fulfilling the lack that he did to us during the crisis. But going back does not mean going backwards, it should mean evolving to analyze what we did wrong and that all the frustration we feel allows us to create solutions in a more creative way. Teachers during the pandemic continued to teach their classes in the same way and although they were good teachers in the classroom, it was very difficult to keep up with them during this time of crisis. Many teachers also became frustrated with his entrenched methods. How much balance can we do with the before and after of this digital crisis? How can the balance between the classroom and the digital space be? If returning to the classroom means strengthening cognitive skills, does it do us good to be in the classroom to be able to continue training?

Is going back to the classroom is evolving not going back?

→ Back to the classroom: evolve, not regress. How good it is, depends on the teacher's journey to evolve and not to regress. Many returned without evolving, stagnated and returned to their traditional pedagogical practices. It is clear to me that sometimes a monologue-type interaction is needed, but the next class could be dynamic. The "inverted classroom" could also be used, send the topics by mail and the student arrives with something learned and based on that a product is created. That's the important thing, the teacher had to return to the classrooms with a question of evolving, if he is not prepared for that, there can be no change or dynamism. The guy has already got used to being interacting and using a device. The students have become analytical, observant and defiant before the authority because the teachers have already become mere facilitators to only be able to guide the children.

There is a disadvantage or threat that the student may or may not want to continue with the school or that the teacher feels comfortable to continue.

→ There has to be a balance, obviously there are rules and there is a code regarding educational entities, it depends on the teacher's openness to learn. The teacher is not good if he is only authoritarian and linear. The part in which the teacher also learns from his students has to be part of the mentality in Mexico. The fact of returning to classrooms and technology is not used, does not mean that you do not evolve, if I implement something new that I did not implement before the pandemic, it is also to evolve. If the dynamic is changed

and the boys can teach me with the ingredients that I give them, we are also evolving. The emotional issue is necessary, but it is important to always look for something more. When I was assistant principal, I told the teachers to teach the students something that they would like to learn, when returning face-to-face to the classrooms. If you don't apply new methods, you stagnate and there is no evolution. It can be evolved with technology or with an interaction that helps to enrich personal development.

It does not need to be imposed, we come from a forced imposition. What happened in a time of crisis can help create a different picture. It is good to know that technology cannot always save us, although generations will depend a lot on it.

→ In India, as a result of all this, there were low-income schools where laptops were provided to them. The teacher had to adapt to these resources, the important thing is to potentiate those resources. If we can potentiate autonomous learning, that evolution cannot be left aside. The children followed the activities of the teachers and even if there was no class, the children worked. Those who do not want to learn can fall by the wayside and can stagnate. It's not going backwards, it's evolving, you either adapt or you perish.

***Do you think that communication between student and teacher can evolve?
How do you consider the connection between students and teachers to be?***

→ This answer is very personal: because of my way of being, of interacting face to face, I was overwhelmed by the fact that the students have not understood where the limit is. There must be clear operating rules, we Mexicans do not know how to measure rules. The fact that you are sent tasks at extracurricular times causes boundaries to be broken and respect not to be consistent. It took me a lot of work to set those limits with my students, the children feel that the teachers can answer at any time. When one is in a personal way, the emotional issue is enriched. There are teachers who are much more technological and feedback has much more digital purposes. The rules should be clear and boundaries should not be broken.

It is part of the transition to find ourselves as education entities again.

→ The other side of the coin is the teachers who went on vacation, taking advantage of the technological issue. What I insist is that technology should not quarrel with the personal issue. There is a control that also affects teachers on social networks. A teacher in Tlaxcala opened her cell phone network for them to learn and she said that the media should instill in them the hunger to get ahead.

What is the age range of teachers according to your experience?

→ It is between 33 to 40 years old. There are no age limits because many entered by contest. There is no age limit in high school. My classmates are still preparing so that they can continue to pay attention to the needs of their students.

How was the transition for your colleagues?

→ They grew up, there was a change in the teaching field. It was a frustration for us because the guys wanted to go back to the same thing, it was the opposite case. Now it's about working on raising awareness in children, not teachers. Very few teachers have returned to the old methods of work. The fact that students learn to readapt also depends a lot on the teachers, but it is an arduous task. Adaptability, the implementation of strategies are the responsibility of teachers, but it is better that the teacher facilitates the rules in order to continue supporting students and that they can adapt. The work in the classroom comes from the teacher not from the student.

How could this plan be presented to be added to the program?

Key elements:

1. Security
2. Mastery of the topic/agenda
 - a. How can it be adapted to my subjects?
3. General content of the program
 - a. Examples and application cases
4. Benefits (when and how) - needs-based
5. Accessibility
 - a. Easy to implement

→ The most important thing is to adapt it to Mexico. Focus group to be able to show the program. There are pages where guys from Latin America offer courses to be able to teach different topics. You could enrich yourself with this type of strategies, offering different courses or development methods. At the Latin American level, there are strategies that can be implemented in Mexico. One underestimates the students, they have the restlessness, the desire to continue growing. It would frustrate me if the limiting factor was technology or a teacher who doesn't want to grow or advance. It would be very practical for the teacher to be injected with that part of interest, what makes your product different? I want it to be more than just a tutorial. Something that is not like another course that they gave you to be able to become technological.

Do you think the panorama of different states of the republic can be valuable? How broad could it be in relation to Mexico? I am aware of rural areas where there is no access to education and technology, but how specific could the target market be?

→ It would be worth focusing on two entities and not closing yourself off from the public system. It would be better to just close yourself to the level. The universe is already closed with middle school teachers in Mexico. The most important thing is to land it and polish it, maybe it would be good to focus on a regional level, but you could open the panorama to different angles of the country. The important thing is to soak up programs and creative tools that they will be able to use.

Important words to take into account to delimit

- Needs detection
- Results Learning alternatives for teachers and students
- Linked to growth
- Focused on the reality of Mexico
- with tangible results in the short/medium term
- Develop a learning tool
- Data on how many teachers there are in Mexico in the public education system and in which subsystems (Ags, Gdl)
- Challenges of higher secondary education

