

CONSULTING PROJECT

What are the key factors in the success of digital responsibility training in Greece and Italy, and how can the French association Latitudes position itself within these educational systems?



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AI (ChatGPT version 4o) was used for research and idea generation purposes during this study. This was particularly the case in the development of the interview guide to generate questions in a precise order, and in the study of interview transcripts to group ideas and draw trends. The prompts and artificial intelligence responses can be found in appendix 7.

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1 - Abstract

With the exponential growth of digital technology in our societies, the question of digital education arises. European regulations are having an impact on the digitalisation of this sector, particularly in France. Latitudes is an association that works for a more virtuous digital world, raising students' awareness of the social and environmental challenges of digital technology. This research aims to identify the key factors in the success of responsible digital training in Greece and Italy, and to discover how the French association Latitudes can position itself within these education systems. Using a qualitative study approach, semi-structured interviews were conducted with 21 respondents – 11 of them being teachers (seven from Italy, four from Greece) and 10 of them being tech experts (five from Italy and five from Greece). The data analysis confirms the need for a mandatory training destined to teachers, and the need for a concrete sensibilisation to European students around the social and environmental externalities of the use of digital technologies.

2 - Introduction

Digital technology is responsible for 4% of global greenhouse gas emissions, and this figure is increasing by 9% per year (The Shift Project Report, 2018). It is one of the externalities of the digital age that is growing every day, alongside issues of accessibility - 15% of people aged 15 and over in France do not use the internet (INSEE, 2019), physical and mental health - 80% of adults spend more than 3 hours a day in front of a screen (Santé Publique France study, 2016), or diversity - only 30% of digital workers are women (OPIIEC, 2014).

Digital technologies play an increasingly important role in the society, yet digital education is often disconnected from the social and environmental issues at stake: screen addiction, fake news, environmental impact, protection of personal data, and so on. In 2022, in France, only 7% of professors claimed to offer specific courses in managing the environmental impact of digital technology. Indeed, the education system must evolve as the society is, and the main evolutions nowadays are mostly digital (Dufva and Dufva, 2019).

The Covid-19 pandemic in Europe in 2020 has changed the way we live, work and communicate. Society has had to adapt to successive confinements, and this global event marks a considerable boom in the use of digital technology. The education sector is still very traditional in its teaching methods, which is linked to several factors: the declining attractiveness of the teaching profession, the ageing of teachers and the lack of training in digital tools for teachers are the main ones.

In September 2020, Europe adopted a Digital Education Action Plan. It aims to provide a framework for digital education, based on three pillars: high-quality, inclusive and accessible digital education in Europe. A special plan was put in place to support teachers by training them in digital tools. The aim of this action plan was to build a European education area by 2025. Alenezi et al. (2023) highlight the fact that these priorities concern the way digital technology is implemented for both teaching and learning and how people concerned are going to be trained for that.

In addition to the explosion of the digital age, there has been a meteoric rise in the number of artificial intelligences. The best known, most widely used and most accessible are generative AIs. In one of its blog posts, Latitudes wishes to highlight the difference between generative AI and AI in general (Derrac, 2025). He emphasises this difference: "Generative AI is a type of artificial intelligence system capable of generating text, images, videos or other media in response to requests (often called prompts). Artificial intelligence is both a concept and a much broader field of research and application". The works of Dufva and Dufva (2019) and Makridakis (2017) do align with this vision, defining the artificial intelligence as the common idea of "an infinitely growing and efficient digital economy".

At the same time, digital technology represents a considerable lever for solidarity when it is used to meet the social and environmental challenges of our time. Indeed, digital technologies have proven their potential for responding to problems on a massive scale. Too Good To Go is a concrete example of this, an application that aims to combat food waste and enables citizens to recover unsold goods from retailers at a reduced price. Indeed, the existence of organisations acting for a better digital world is necessary and helping a lot of people. Many organisations are setting up projects to raise awareness of these issues, with the aim of informing and equipping people to act. This is particularly the case for Latitudes, an association that has been working since 2017 for a more virtuous digital world. After creating workshops for students and French citizens, the Latitudes association has acquired excellent skills in creating educational resources and training volunteers. The workshops have met with considerable success at partner universities in France, and the question of rolling out these workshops to raise awareness of responsible digital practices beyond France's borders is beginning to be asked. However, workshops that have been very well received and influential in France will not necessarily be as well received in other countries, which may have very different challenges when it comes to digital education, as well as different legislation in different places.

The aim of this consulting project is to understand the key factors in the success of digital responsibility training in Greece and Italy, and how the French association

Latitudes can position itself within these education systems, which is relevant considering the willingness of Latitudes to raise awareness among as many citizens as possible. In response to this main question, 3 sub-questions were posed to guide the research, motivated by theoretical and managerial limitations:

- How do teachers and trainers in Greece and Italy perceive digital responsibility and its integration into their teaching practices?
- What are the levers and obstacles to the adoption of digital responsibility in training in Greece and Italy?
- What leverage does Latitudes have within the Greek and Italian education systems?

While the literature has demonstrated how the educational sector needs to adapt as quickly as possible to news ways of teaching including the digital part of it, it shows a lack of information on how it is really going in schools, what actions have been put in place for teachers' training, how do students react to these new ways of learning. This study will then demonstrate the shortcomings of the action plan evoked earlier, and the extent to which it has failed to be effective within the community of Italian and Greek teachers interviewed as part of this study.

This paper will start with a context on the association Latitudes, followed by a review of the literature on the concepts of digital revolution, digital responsibility and of the 6 causes defended by Latitudes. I will then describe the methodology used to conduct this qualitative research which consisted of semi-structured interviews conducted with 21 respondents from Greece and Italy, 11 of them being teachers and the ten others being teach experts. I will then discuss the results of the data analysis following four different categories. Finally, I will conclude with a managerial recommendation, followed by the limitations of the research and suggestions for further research.

3- Context and presentation of Latitudes

3.1 Latitudes' background

The story of Latitudes starts in an engineering school, where three students ask themselves how to combine their desire to get involved with their tech skills and their studies. After admitting few opportunities exist, they decide to make the cause their final-year project. This was such a success that they decided to create the association Latitudes in 2017. The associative choice was not the most evident at start, in a society where entrepreneurial success is mostly carried by companies. They kept in mind an idea received during training: "the social entrepreneur seeks to create a project that will disappear once the targeted problem has been solved". So, they like to ask themselves: in what case Latitudes would not exist? And the answer is: "Latitudes would not exist if our engineering training had trained and supported us in putting our digital skills to work for causes that are close to our hearts". They are convinced that digital technologies have a huge potential if they are used for the common good. In the case of engineering students, it happens during the end-of-study project in which they must analyse data published mainly by companies. The idea of Latitudes is to enable small organisations such as associations to make their data public, so that students can devote their school project to impact organisations, because digital technologies can be a lever for solving the social and environmental challenges of our time.

Nevertheless, there is a lack of attention put on the negative externalities of digital technologies: its digital impact is increasing by 9% every year. Indeed, 13 million French men and women are in a situation of digital insecurity, and the crisis of confidence in digital technology is gaining ground every day.

Today, Latitudes has 18 employees, and more than 500 volunteers mobilised every year for a more committed and responsible digital world. The movement brings together digital players such as individuals, schools, businesses and public structures around six causes that are to act for a more:

- diversified,
- digitally sober,
- respectful of human beings,
- engaged,
- accessible,
- and more socially aware technology.

3.2 The programs at Latitudes

Through the years, more project owners have been helped thanks to Latitudes' programmes. Society has evolved, and Latitudes has been able to adapt to the many technological innovations, and even to take advantage of them to create new verticals. In the early years, the team was smaller. Latitudes employees could be counted on the fingers of one hand, then two. And in the early days, the teams were organised into divisions: the community division (whose mission was to spread the word about this community committed to defending our vision of tech and to be the gateway for techies who wanted to get involved), the training division (organising training courses to run the Bataille de la Tech workshop) and the cross-functional division, which looked after human resources administration and the budget.

In 2023, it was necessary to face the facts: programmes were expanding, teams were starting to be organised by programme rather than by division, and project management needs were becoming increasingly acute. It was at this point that Latitudes reorganised its teams by programme, so today, each programme has its own existence (a target, a mode of action, a team, funding, etc.). Here is a quick presentation of the programmes at Latitudes:

The Battle of Tech

The Battle of Tech is destined to people aged 18 and over and is a card game designed to explore the social and environmental challenges posed by digital technology and the levers for action that can be taken to address them in 2 hours. The principal aim is to

raise awareness of the need to build a responsible and committed tech sector and to help people discover the opportunities for involvement that this entails.

• The Battle of AI

The "Battle of AI" is also a card game, this time to explore the social and environmental challenges of Generative AI in 2 hours and has been devised by the Latitudes and Data for Good associations. The main objective is to demystify Generative AI and its societal challenges, and develop critical thinking through collaboration, for as many people as possible.

Future of Tech & Future of AI

Future of Tech is a workshop intended for secondary school students between 12 and 16 years old which explores the jobs and impacts of digital technology. Future of AI has just been created, and the first sessions have been provided in early November about the challenges of Artificial Intelligence.

• *Ih pour changer le monde*

This programme aims at creating a bridge between the voluntary sector and digital specialists. The aim is to offer associative project leaders a one-hour video meeting with our volunteer specialists on their digital issues, and so to enable all the players in the tech industry to get moving, through an initial action that is easy to carry out, to give them the desire to go further in their commitment.

• Cyber for Good & IA for Good

These two programmes are verticals of the programme "1h pour changer le monde" that is dedicated to the same goals but in terms of cybersecurity and artificial intelligence tools.

• Open Data University

This programme is offering data training establishments the chance to get their students involved in challenges that address social and environmental issues through the re-use of open data.

• Tech for Good Explorers

Tech for Good Explorers gets students involved in real-life digital projects, for the benefit of non-profit organisations that address social and environmental issues.

3.3 Contextualisation of the problematic

In 2024, Latitudes has grown a lot and over 21 000 people have been sensitised last year to the impact of digital technology thanks to these different programs, to the 500 active volunteers and more than 400 partner organisations.

The vision of Latitudes for 2026 is to aim for systemic change. The team will be proud if the conditions are right for a committed and responsible digital future to create the conditions so that all the people and organisations in tech have the power to act and to make progress in their practices. Latitudes has a key role to play in the face of the social and ecological urgency of the many national, European and global investments in the artificial intelligence sector. Its role is to raise awareness among as many people as possible, so that awareness is raised and leads to concrete action. Artificial intelligence has undergone considerable development in recent years and is beginning to have an impact in a huge number of areas, both in the professional world (creation of robots that replace jobs traditionally carried out by humans) and in everyday life (facial recognition on telephones, large-scale use of ChatGPT, among many other examples).

The goal by the end of 2026 is then to ensure that civic involvement in tech is recognised, accessible and widespread. To achieve this, Latitudes' team (and the ecosystem) are looking to build on several pillars: content and training, ways of getting involved, a critical mass of people who subscribe to this narrative, a clear regulatory framework, and the creation of a real market for impact tech. To give concrete information, the association is willing to reach 100,000 people a year, 80% of whom will have made progress in their commitment. They are therefore aiming for a very ambitious increase in the number of people reached (x10 in 5 years), while taking care to maintain quality.

Over the last two years, Latitudes has had the opportunity to consider the relevance of extending its workshops for students beyond France, by responding to the call for Erasmus+ projects. Several schools have shown an interest in the various workshops, including Italy and Greece. It has been decided with Latitudes that focusing on two countries maximum would be the most effective, to grasp all the specificities of the different educational systems. Before embarking on a cross-border roll-out, it is vital to understand the context: what the laws are, who makes decisions in the education sector, and the differences in resources between private and state schools. And above all, to find out where Italy and Greece stand in terms of digital development: are they keen or reluctant to embrace technological innovations? What are the similarities and differences with the French system?

To do so, this paper will be written following one question: What are the key factors in the success of digital responsibility training in Greece and Italy, and how can the French association Latitudes position itself within these educational systems? The question is divided in two main subjects, the first one being the discovery of the digital habits in the education system in Greece and Italy and how do educational regulations and policies influence the integration of digital responsibility in training, and then to think about what role can Latitudes have following the programmes and workshops that already exist, and if the development of partnerships with these schools would be beneficial or not.

The information gathered in the next part of this paper is a good first step to get an overview of what's happening in Italy and in Greece, then interviews were conducted directly with teachers and experts from both countries.

4 - Literature review

Since the arrival of the Internet, society has evolved a lot. It has permitted, among other things, the development of digital technologies. Almost all areas of activity have been touched by this revolution and have had to adapt.

4.1 The digital revolution era and its impacts

The Latin word "digitalis" is directly linked to digits. In other words, digitalis refers to numbers and figures (Dufva and Dufva, 2019). By definition, and on a mathematical point of view, digitality tends to be discrete and not continuous. To go deeper, they went back to the origins of computers' logic and affirm the binary number system was introduced in the mid-20th century as the official rationale for computers. The biggest change and revolution at this time was that the computers were able to update a machine's work without any human intervention. Dufva and Dufva (2019) then provide a definition of digitalisation as being the replacement of all the tasks previously done by humans, by digital data systems. They even affirm that digitalisation is nowadays one of the biggest "megatrends shaping futures".

The concept of digital transformation has been studied in many literature reviews and studies. Verhoef et al. (2021) define the concept as a change in the way companies use digital technologies to develop new digital business models, to create and capture more value. Zhu et al. (2021) add to this definition the environmental side: digital transformation is the way companies answer positively to environmental changes by integrating digital technologies in its processes. Verhoef et al. (2021) insist on the fact that digital transformation is a multidisciplinary concept because, in a company, it has an impact on the team organisation, the strategy but also on supply chains, marketing and information technology. They make a connection between digital transformation and digitalization, that they define as the action of coding into a digital format the information existing in another format.

According to Khin and Ho (2019), this digitalization of business firms has been made possible thanks to a group of digital technologies that are at the basis of it all, such as 15

the Internet of Things (IOT), big data analytics, cloud computing, and more recently, artificial intelligence. Following Makridakis (2017), the digital revolution has taken the strength of technologies and more precisely of computers to "substitute, supplement and amplify the routine mental tasks performed by humans". He outlines the notable productivity enhancements in the redundant tasks that were mainly done by humans on computers, and he adds that the digital revolution also empowered customers to buy all they need on the Internet and do not have the necessity to move around anymore. Thus, the digital revolution has changed a lot of processes within companies such as the replacement of many repetitive and mental tasks previously run by employees by new digital tools and machines.

This digital transformation has empowered companies in many ways and made them closer to their customers. Kong and Liu (2023) affirm companies must implement technologies in a responsible manner by considering the society, the environment and the economy to create greater social value. It is the concept of corporate social responsibility. Mueller's work (2022) led to the definition of corporate social responsibility as an assistant to companies in elaborating moral norms to help decision making. He also highlights the fact that there must be a distinction between corporate digital responsibility and corporate social responsibility "because technology reshapes and extends the traditional corporate responsibilities unprecedentedly". He then acknowledges that corporate digital responsibility is supported by values and norms that govern company's decisions regarding digital issues. He cites Herden et al. (2021) who define corporate digital responsibility as "an extension of a firm's responsibilities which takes into account the ethical opportunities and challenges of digitalization". As an important driving force for future development, digital transformation enables companies to improve their corporate social responsibility. For example, digital transformation is an important tool to manage pollution emissions in conjunction with an internal control efficiency, and corporate social responsibility is now an essential proof of high-quality and sustainable business development (Kong and Liu, 2023). Indeed, digital transformation can meaningfully impact corporate social responsibility of brands. They give the example of the Microsoft tools assisting sellers and customers to reduce their digital carbon footprint. Moreover, digital revolution helps a lot of born-digital or digital native companies to succeed, and the transformation of historical firms around the world (Varadarajan et al, 2022).

The digital revolution era has led on one side, to many improvements in society in individuals' professional or personal life. But on the other side, there are negative externalities resulting from the development and expansion of the digital world. Péréa et al., 2023 alert on the fact that digital technologies also have led ecological concerns, prompting the emergence of digital sobriety. According to them, digital sobriety can be seen as like decreasing waste, water consumption or even transportation. Nevertheless, comparing these reductions to digital sobriety may be unclear, this is why they assume it is specific to reduce the use of IT devices intended to employee productivity. So, they add the notion of digital sobriety considered as one of the objectives of green IT: conducting actions to reduce excessive IT uses. To get these results, they determined the scope and features of digital sobriety using five different thresholds of the typical IT user's maturity that are: "refutation, inaction, substitution, optimisation, and disadoption". They concluded that there is a real need to stay informed and aware of the internal and external components of digital sobriety to orient actions that are environment-friendly and society-friendly.

Beyond the environmental aspect, the digital revolution has a strong impact on all individuals, and more broadly, on society. Kamberidou and Pascall (2020) write about digitalization as a liberating tool for people who have access to it, are skilled to use digital tools but for those who are excluded from it, they say they are condemned to work insecurity. Following the sayings of Péréa et al. (2023), the elaboration of a more digitally sober professional world is still in its early stages.

4.2 Technology to revolution brands

As seen previously, technologies are an essential lever for brands to develop and to answer different strategies. And even, if they don't, there is a risk of being destroyed by competitors who do so, following Khin and Ho (2019). Indeed, businesses must follow this revolution, be curious and open to change in terms of digital technologies 17

to succeed in strengthening their customer experience and engagement for example, but also to introduce new business models. This is the only way to stay in the race of digitalization. Following Mueller's findings (2022), potential clients but also investors will react positively to a corporation's adoption of a corporate digital responsibility regarding strategy because they will feel understood by the brand. He admits companies are willing to open and start using technologies more and more as it has a huge impact on the way they can differentiate from competitors to their customers and even considering future employees and to retain the actual ones. Following Chapellier et al., 2023, employees own an important form of influence and power as they have the desire to know more about digital tools. Kong and Liu (2023) do approve these theories and add the findings of the study they conducted to know more about the social value of digital technologies, in parallel with the inner scheme of digital technologies. They have found a positive correlation between digital transformation and companies as it helps improve corporate social responsibility's performance of the company. This is why companies are willing to focus more on their non-economic performance thanks to the use of these digital technologies.

Indeed, it is mandatory for directors to implement a consistent and coordinated approach to build responsible databases and take care of the negative externalities of digital tools (Mueller, 2022). This is part of the field of business ethics, that he defines as the "norms and standards that govern judgement and choices in business-related matters". Business ethics should then drive all people of the organisation, from the executives to workers on the shops, so that they influence each other in having good behaviour and taking the best decisions related to business ethics and the norms of the brand.

Davidson et al. (2017) even affirm "technology change can be evolutionary, but the results can be revolutionary". Zhu et al. (2021) agree with this statement and bring a proof from their study, finding that almost 80% of the respondents of their survey were feeling the obligation for a company to implement digital technologies and 24% even see digital technologies as their greatest need. To go deeper, this study led them to the establishment of three development steps of digital technologies research for companies

that are: "the embryonic stage, the development stage, and the thriving stage". This shows the implementation of such changes within corporations must be cautiously studied, considering all people involved in such decisions. On the customer's point of view, Verhoef et al. (2021) point out how the expectations and attitudes of such customers have evolved and have nowadays a strong impact on firms that choose to stay traditional. Indeed, as they can easily interact with brands and other customers through many media channels that are digital, they have this possibility to share their customer experience.

Verhoef et al. (2021) thus pointed out three external reasons why companies require a digital transformation: obviously the explosion of e-commerce tools, all the new digital technologies that impact all aspects of companies and more specifically competition, and then the consumer behaviour that is, as a matter of fact, responding to these revolutions and changing the relationship between brands and customers.

There is another expanding concept within companies and in society in general that is trending according to Dufva and Dufva (2019) and Makridakis (2017): the artificial intelligence and the common idea of "an infinitely growing and efficient digital economy". The works of Makridakis on artificial intelligence have inspired a lot of scientists. He studied, among other subjects, the industrial revolution and the future of our world with the rapid development of artificial intelligence. In his point of view, the primary goals of artificial intelligence are to substitute, supplement and amplify almost all actions done by humans. It looks like the definitions of digitalisation and digital revolution given before, and Makridakis (2017) adds one detail that makes artificial intelligence unique by writing this is the first time that a digital tool becomes a competitor to humans. This means artificial intelligence brings a lot of challenges in our world such as enjoying the positive impacts of AI while being aware of its negative externalities. On a positive note, artificial intelligence technologies can help companies and empower productivity (and then, stay competitive). Artificial intelligence also opens companies to implement new products and services while they can improve their productivity and benefit from a competitive advantage over other firms. On a more harmful aspect, artificial intelligence raises the possibility of an increase in the

unemployment statistics as machines are replacing humans in key jobs as said before. In parallel, he highlights the possibility of a decrease in the payroll as artificial intelligence is being more productive than humans, and able to complete different tasks at the same time.

Moreover, if robots are now able to surpass human capabilities, it is logical that companies will require greater skills from workers than before to realise the tasks that remain. This concerns both the operations humans were used to take care of before robots' arrival, and the skills of dealing and working with artificial intelligence and all the digital tools in the most efficient way. Indeed, the human resource managers will undoubtedly change their offers with a need for highly skilled employees that will have to adapt to the new tasks. Makridakis (2017) writes about some critics asserting that even if, in the best of what can happen, technological automation won't increase unemployment, it is still likely that it may delete middle range jobs and, as said before, increase high qualified ones. One resultant being it will have a negative impact on social inequalities. One example to illustrate this theory is when the salaries of data specialists were augmented in the period of digital revolution because they were the ones capable of using these tools and, as a result, ended in a competitive advantage for firms employing these people. There is a general prediction that artificial intelligence will bring the same changes, and Makridakis (2017) even affirms the impact of artificial intelligence may be bigger than both the industrial and digital revolutions put together, because it has a possible impact on all the tasks handled by humans nowadays.

4.3 Digital revolution's impacts in education

When discussing digital revolution in companies, it is also important to consider young generations and how their education may change, following these worldwide innovations. Nowadays, most young adults that have followed a "classic" education that was not digitally based are lacking important skills and first-hand experience on digital tools and their efficiency and impacts (Dufva and Dufva, 2019). It can be seen as an abstract notion, and they highlight this need to teach these digital tools during the education phase. In a society that is more and more dependent on digital tools, they see 20

the ability of coding websites as a skill that reunites critical thinking, experiential learning and the conceptualisation of the digital world. Kamberidou and Pascall (2020) studied different scenarios to imagine the professional world in the next decades and what will be the skill demand when applying to a job. They are aligned with Dufva and Dufva (2019) and say digital skills are becoming more and more mandatory, when more than 60% of the global GDP is coming from digital sources. Also, the study of Péréa et al. (2023), led them to conduct a survey where individuals responding raised interrogations about the place of digital tools in educational programmes. These skills are then seen as new manners of learning which could guide them in their professional life (Dufva and Dufva, 2019). They affirm students must be prepared for the digital world and even the post-digital world and they introduce the notion of "digi-grasping". This emphasises the importance of evolving consciously in a world that is both digital and physical. Digi-grasping is a way for individuals to reflect on the existing digital infrastructures and to let them create new ones that respond to actual needs. Indeed, the education system must evolve as the society is, and the main evolutions nowadays are mostly digital. They even affirm "digi-grasping could be used to arrange education to better comprehend the coiled and intertwined nature of digital processes" and give the example of robotics that have already been included in some schools.

Following the works of Neophytou et al. (2019) there are negative and irrevocable effects of electronic media on the development of children that the educational teams should consider. They cite studies that found that the skills learned on electronic media are restricted compared to the skills learned without electronic devices. Thus, educational media can bring a lot but must be strictly supervised and not occur before individuals are fully developed.

Alenezi et al. (2023) provide some more information to the subject of a digitalisation in educational processes. The European Commission published a Digital Education Plan in 2018 willing to prioritise some concepts, containing activities and measures to help people implement the action plan. These priorities concern the way digital technology is implemented for both teaching and learning and how people concerned are going to be trained for that. The COVID-19 pandemic marked a turning point in the

digitalisation of educational processes as they were urged to react to keep the formations open during the different lockdowns. In response to this major event, "all educators and decision-makers in higher education were closely observing the need for digital transformation" (Alenezi et al. 2023). They share their vision on this subject by enumerating challenges and opportunities of a more digitised educational process. The major challenges concern digital literacy that is not the same for everyone depending on their education, the lack of teacher-student direct interactions that is at the heart of the educational process, and the fact that digital education isn't appropriate for practical sessions. But on the other hand, the opportunities are the growing return on investment in higher education, the reduction of inequalities, the improvement of some teaching and learning tools, the concept of "anywhere and anytime" among others. Indeed, the digitalisation of education is a complex subject for governments in this digital era.

4.4 Digital situation in Greece and in Italy

o Greece

Over the last ten years, the roll-out of the Internet to private individuals in Greece has been well below the average for other European Union countries, for several reasons, mainly political and economic. One of the direct effects of this digital backwardness in Greece is to increase the digital divide. According to Karatrantou and Panagiotakopoulos (2024), "the digital divide is referred to the gap between people who have access to Internet and technology and those who don't". In their study, Karatrantou and Panagiotakopoulos (2024) have analysed the digital divide in Greece and in particular which factors have a direct influence on the digital divide. They found that certain characteristics relating to citizens, such as their socio-economic status and level of education, had a major influence on whether they had access to digital technologies or not. A citizen from a modest to well-off family is more likely to go to a school that has greater technical and financial resources, and therefore favours access to new technologies, unlike a citizen from a disadvantaged background. According to the authors, there also seems to be a direct link with where people live: the further they live

from the big cities, the less access they have to these tools. The authors also made the link with certain factors that are thought to be directly linked to the digital divide: education, age, gender, employment, income and place of residence.

Kalogeratos et al. (2024) found similar results, particularly regarding the impact of people's gender and age on their digital literacy. For example, in their research they found that the correlation between the gender and age of the participants in their survey and the use of new online learning platforms is statistically significant. For example, their quantitative study found that surveyed school principals who identified as male reported having more knowledge and skills in new distance learning platforms and appeared to be less cautious and biased toward them than female principals. And about the age, the same principals being aged 40 and over, reported having limited knowledge and skills in using distance learning platforms. They even added that this condition made them feel insecure and pressured in the post-pandemic situation.

Continuing with the COVID-19 pandemic, other authors have written about it, particularly the impact these lockdowns have had on education and teachers' adaptation, and therefore on the Greek education system. Chalkiadakis and Leonidas (2024), in their study, shows that the traditional Greek education system seems to want to resist this urgency of remote working following the pandemic. Indeed, the obvious disparities in access to digital technologies as well as teachers' skills do not seem to favor the adoption of new educational methods. Nevertheless, these lockdowns, according to Chalkiadakis and Leonidas (2024), seem to have had a positive impact by stimulating teaching flexibility, creativity, and collaboration between teachers, which has naturally energized the educational environment. They conclude their research by highlighting the urgent need to train teachers to the use of digital technologies to adapt to the society and to the students who are already highly digitised.

o Italy

The Italian digital situation seems to be quite similar as the Greek one, especially concerning the need to train teachers to the use of digital tools. Tomczyk et al. (2023) state that most of the Italian teachers surveyed in their study were unable to assess their

own technical level because they were unfamiliar with the tools listed in the questionnaire, even though they were basic tools. However, some tools such as Canva, Padlet, and Kahoot are known and used frequently by teachers. They conclude their study by emphasising the fact that educational software is useful among teachers and that they need to be trained in that sense. Magni (2024) agrees with these affirmations and depicts the growing demand for teachers' training around the digital topics and the need for new reforms in teachers' education. In his paper, Magni (2024) adds that the needs are very high, especially to adapt educational programs that must align with technological innovations to ensure the quality of teaching. The problem seems to have to be addressed on a national scale, especially since this author insists on the very significant decline in the attractiveness of the teaching profession in Italy. Schroot et al. (2024) are aligned with the opinions of the authors stated above, stating that digital skills would be essential to maintain high educational standards, and that without this adaptation to digital tools, the quality of teaching might no longer be as good. They also add the notion of inequalities in education, specifying that the increasingly demanded digital skills are a new factor that exacerbates inequalities within the contemporary and very diverse student population. According to them, the quality of teacher training represents one of the most critical issues when it comes to the digitalization of the education sector, more important than student training. To explain this delay, they emphasize the lack of time for training, as well as reluctance and a certain apprehension towards the benefits that the digitalization of teaching could bring to student classes.

4.5 The 6 causes that guide Latitudes' programs and actions

Dufva and Dufva (2019) have mixed opinions on digitalisation and say it is frequently seen as a useful concept and seamlessly tool for future growth while it is fair to position the reflexion on the other side: digitalisation raises concerns on negative externalities such as sobriety, well-being, common good, diversity, accessibility and society.

Digital sobriety

Péréa et al. (2023) bring out the negative externalities of the digital technologies' development such as the environmental impact. As seen in the previous parts, it has brought the concept of digital sobriety, supporting the reduction of technology usages that goes against the emerging settings that promote the continuous use of IT since the world is being more digitised. They add the fact that digital sobriety is running counter to actual trends of digital transformation inside companies (and supposing new digital tools and skills will be required in the future). Thanks to the works of Shahabuddin et al., 2022, it is possible to learn more about e-waste, which they define as what remains when getting rid of electronic and electrical equipment (EEE) and is not being recycled. E-waste includes a wide range of electronic devices that are used in daily life such as mobile phones, computers, medical devices, household items, sport equipment, etc. To categorise them, they elaborated three major categories such as large household items, IT and telecommunication and consumer and small household equipment.

A range of new electronic products are being added constantly in the marketplace whereas the existing ones are still existing, becoming obsolete (Shahabuddin et al. 2022). In parallel and as seen before, the digital revolution has led to the "ever-increasing generation of e-waste" which has a direct impact on the environment and health. This impact on the environment is huge: e-was represents 53.6 million tonnes of waste in the world and this number is increasing more and more every year and quickly. It is important to know that almost 83% of the global e-waste produced in 2019 hasn't been referenced. It is supposed that non-referenced e-waste is being burnt or abandoned in an illegal manner, causing health and environment concerns. Electronic devices contain a lot of different materials such as metals, glass, plastics for example. It is then a precious source for recycling processes. But Shahabuddin et al., 2022 found that only 17.4% of global e-waste is gathered and reused precisely because of the complexity of the various components.

Xu et al. (2022) have analysed the relationships between the development of the digital economy and environmental pollution. This study relies on the analysis of 287 cities in China. They write about the past times when people thought economic development 25

and environmental pollution were in dispute while today, the digital revolution in the economy has overcome this quandary. The digital economy and pollution levels seem to be closely related. Knowing pollution has a direct impact on the local digital economy, they found that the digital economy contributes to the raise of ecological concerns and development within cities and then contributes to a reduction of pollution.

Human well-being

Neophytou et al. (2019) put the cursor of excessive screen time when individuals have "more than two to three hours of exposure to electronic media including television, computers, and mobile electronic devices". They affirm this unreasonable screen time influences brain development, learning, memory but also the emotional control. In America, around 95% of adolescents use electronic devices everyday only for instant messaging and social networking. This offline communication on social media is negatively impacting the overall well-being, in comparison to the real-life interactions that have a positive impact on mental health. This is why a daily exposure to social media and more generally to electronic devices may be related to sleeping issues, bad mental health, stress and depression among other things. Silva Santos et al. (2024) agree with the previous definition of screen time and precise the notion for adults writing that it represents "the average amount of time spent in a typical day observing or interacting with electronic devices that deliver content through on-screen displays". They acknowledge digital tools can have positive impacts on brain functions but the most important is to be careful about the issues such as increased symptoms of attention deficit hyperactivity disorder (ADHD) and, as Neophytou et al. (2019) wrote, effects on emotion control, sleep, addictions, social isolation and globally, mental health. During the different lockdowns due to the COVID-19 pandemic, our daily habits were troubled and as it wasn't possible to see a lot of people, individuals spent a lot more time on electronic devices (Silva Santos et al. 2024). If there is more information about the general impacts of an increased screen time on health and well-being, the consequences are said to be a complex phenomenon which is possibly going further the sedentary behaviours. Moreover, there has not been a determination of a limit on the daily screen time for adults to keep being healthy. There is a lack of information about the ideal screen time for adults because it depends on many other external and internal factors.

o <u>Diversity</u>

The study of the concept of diversity is not that old as this field of research started in the 1960s in America in the period of anti-discrimination movements. The works of Nyanchama Ayega and Muathe (2018) have been placed under three theories of cultural diversity such as the resource-based view, the behavioural theory and the competency theory. They are convinced that cultural diversity has a lot to bring to corporations. The concept of cultural diversity aims at avoiding discriminations about gender, race, nationality, culture, disability among others that are not relevant to performance. The human resource managers are the most concerned about cultural diversity as they are the recruiters. They must handle the diversity following the rules of the company and according to Nyanchama Ayega and Muathe (2018), if the diversity and heterogeneity are well managed, it can bring a lot of improvements within the teams. They concluded that cultural diversity is an incredible competitive weapon within corporations. For example, a diverse workplace ought to be an advantage in terms of organisational performance as workers will be positively impacted and motivated by competencies and knowledge from their colleagues.

In the digital sector, the diversity is lacking (Kamberidou and Pascall, 2020). They studied the digital divide, a range of 44 scientific articles and highlight the exclusion of women from the digital market economy isn't a new issue as it has already been studied in 1998. They found a huge gender gap among AI professionals with only 22% of AI professionals globally are women in comparison with 78% who are men. Indeed, the gender gap is said to be around 72%. This underrepresentation of women in the information and communication technologies' sector finds its roots in university and highlights the differentiation between men and women at an early age. There is of course the family's influence, people around these young individuals and how they interact with each other but also the technophobia that is transmitted at school and the

stereotypes that are strongly established in the educational phase. They are alert to the fact that there are declining rates in the percentage of women getting degrees in computer science in Europe and in the United States. This shows, following Kamberidou and Pascall (2020), a lack of interventions to attract women in the sector of information and communication technology and in science, technology, engineering and mathematics (STEM).

Accessibility

Chemnad and Othman (2024) define digital accessibility in their work as follows: it implies the design of digital tools and services that give access for all individuals, including people with disabilities such as visual, auditory, motor or cognitive ones. They are certain that artificial intelligence is an impressive tool to reduce inequalities coming from these disabilities, using AI techniques such as Machine Learning, Deep Learning, Natural Language Processing, Edge AI and Computer Vision. Kulkarni (2019) asserts accessibility must be part of the mindset and the product plan of corporations. Companies cannot create and sell products that have not been used by all individuals and not just a part of them. Inside the concept of digital accessibility there is web accessibility that stands for the possibility for everyone to access the web, considering all types of disabilities. In a professional point of view, digital accessibility is a lever for companies to give access to their product in the most inclusive manner. Lythreatis et al., 2022 define digital divide as the difference between people benefiting from free access to ICT and those who don't. Nemer, 2015 agrees with this definition and adds that the digital divide is starting with a problem of physical access to information and communication technologies. This lack of access to ICT is a first inequality between individuals that have access to these resources and those who don't. On the contrary, he defines digital inclusion that, according to him, is going deeper than the access to digital devices for all. Digital inclusion means digital literacy, the free access to online content and services.

Maria Barroso Paiva et al. (2021) wanted to know more about the best methods and approaches to develop accessible software because it is a way to counter the digital

divide. In terms of techniques, they cite a kind of checklist that aims at first having a look at the environment and the original problems faced by the end-users. Nevertheless, they keep writing about the obvious lack of knowledge of the developers about the universal web accessibility and that there is a big room for improvement.

o Society

With all the changes the development of the web has occurred cited before, it is useful to add one: it has participated in the evolution of the way communities build new relations and how they can use new platforms to communicate (Beale, 2012). About communities, Beale assesses there have been so many changes that it is necessary to think back about the very nature of communities. This has been made possible thanks to this huge increase in the possibility to access the web. Smith et al., 2022 agree with Beale and say there has been a proliferation of interest in the use of data recently and they apply this to the context of refugees where they were able to use many new technologies to document the refugee journey. They cite the use of cutting-edge technologies such as blockchain to develop the global digital identity process but also to process cash transfers. Overall, machine learning and artificial intelligence are the most used emerging technologies in the humanitarian sector. This is a perfect example of the usage of data for good: technology can make a difference in the lives of 82.4 million refugees all over the world. Yoon and Copeland, 2020 also wrote about sharing data for good and they explain the positive impacts of it to strengthen communities. This sharing of data has been driven by the open government data initiative that led many companies and nonprofit and non-governmental organisations to share their data. Many people are convinced that this free access to open data can improve government transparency and accountability.

o Common good

The digital revolution has impacted our society in many ways. Now that the limits of digital tools have been explained and what their impact on society, humans and environment is, let's focus on projects that have been made possible thanks to

digitalisation. Varadarajan et al. (2022) defines digital innovation for the greater good (digital IGG) as "a digital technology-based new product, process, or practice, or improvements in an existing product, process or practice, creating economic value for the innovating firm". They acknowledge innovations for the greater good within companies in terms of product or marketing are beneficial to both the corporation by creating economic value and the society by creating social and environmental value. Musinguzi et al. (2021) in their works, evoke the social enterprises as a type of business that has emerged in the sector of social and solidarity economy corporations which aim at resolving social issues and needs. This is closely linked to social and solidarity economies (SSE), that have been studied by Ferreira Mariosa et al. (2022) explaining the difficulty to define what a SSE is. Indeed, there are various appellations depending on the country and different modes of achievements and behaviours implicated. They acknowledge the SSE is emerging from "the historical, socioeconomic, political, and cultural realities that characterise the territories, with plural realities". Despite this challenge in giving an official definition to social and solidarity economies, Ferreira Mariosa et al. (2022) share the principal features of this kind of organisation. They all have the goal of providing goods and services with a stronger social and / or environmental value than an economic one, they show a lot of comparative advantages in providing social, economic and political challenges worldwide. The governance structure of SSE is known to be inclusive and democratic in comparison with traditional companies.

Two years later, Vázquez-Pacheco and Dulce Ofelia (2024) define social and solidarity economies as "a set of socioeconomic initiatives, formal or informal, individual or collective, that prioritise the satisfaction of people's needs over profit". This definition is very close to the features provided by Ferreira Mariosa et al. (2022). Vázquez-Pacheco and Dulce Ofelia (2024) add some characteristics of SSE such as their independence from public authorities and the fact that their actions are based on important values like solidarity and inclusion.

In that way, Inariten and Angade (2022) write about the importance of the social and solidarity economy in a world suffering from economic and financial crises. Their study

is mostly about the different financing methods of social and solidarity economies, and they enumerate the self-financing (the most traditional way but also the most unstable for bigger projects), the subsidies (given by the government to finance the public policies), the bank loans, but also more innovative ones such as the crowdfunding, the private equity, the complementary currency, the equity security. In the end, they put an emphasis on the fact that there hasn't been a lot of studies upon social and solidarity economies and that it is a good challenge for the future to understand the motivations, actions and impacts of social and solidarity economies.

4.6 Conclusion

These findings highlight the crucial necessity to help the education sector to be more aware of negative effects of digital technologies. The literature is an important first step in the elaboration of the problematic and the research questions of this study. Digital technologies play an increasingly important role in the society, yet digital education is often disconnected from the social and environmental issues at stake: screen addiction, fake news, environmental impact, protection of personal data, and so on. In 2022, in France, only 7% of professors claimed to offer specific courses in managing the environmental impact of digital technology. Indeed, the existence of organisations acting for a better digital world is necessary and helping a lot of people. This research aims to fill the lack of information about educational habits in French, Greek and Italian schools by conducting qualitative research among people working in the educational sector and in SSE organisations. The main research question guiding this investigation is: how have training players in France, Greece and Italy embraced digital responsibility and how can Latitudes draw inspiration from them?

To address this question, three sub-questions will be explored:

- How do teachers and trainers in Greece and Italy perceive digital responsibility and its integration into their teaching practices?
- What are the levers and obstacles to the adoption of digital responsibility in training in Greece and Italy?

• What leverage does Latitudes have within the Greek and Italian education systems?

By answering these questions, the research seeks not only to identify the actions held to raise awareness of the impact of digital technology in higher education, but also to empower Latitudes with new segments to develop the digital Battles and create new partnership opportunities.

5 - Methodology

With the omnipresence of technology in the France 2030 plan, over 100 million users of ChatGPT 9 months after its launch, and an increasing number of cyber-attacks (38% more each year), the role of new technologies (and particularly digital technologies) continues to grow in our society. Technologies are said to be at the heart of todays' society development and require focusing more and more on digital sobriety. In the educational sector, the use of technologies and the way they are implemented to the students' journey is not well established yet. For the teenagers' time spent on digital devices and more particularly on social media is huge, there is a need of teaching the future generations how to handle their digital impact (being social and environmental) before they fall into severe screen addiction.

Following these insights, some organisations like Latitudes are willing to inform people about the impact of these technologies on society and environment in different ways such as workshops, webinars or even providing classes in the superior education classes.

5.1 Data collection method:

The first purpose of this study is to get more information about the social and solidarity economy ecosystem. The emphasis is on the education-oriented organisations, on the scholar groups that have already set things up within their structure around digital devices and around digital sobriety.

The second goal is to help Latitudes develop its programs beyond France's borders, focusing on Greece and Italy at start. Latitudes' rollout shows great results in France thanks to more than 3 500 volunteers who act for a tech change. Organisations such as Latitudes want to awaken the minds of as many people as possible around the daily use of technologies at different scales (personal, professional and daily consumption choices for example). In other words, this research aims to help Latitudes raise awareness of the impact of digital technology in higher education in Europe. To do so,

there is a necessity to identify the different approaches to technology in Greek and Italian's education systems.

To get this information, qualitative research has been carried out in the form of semi-structured interviews. Since little research has been directed into one European education's approach to technologies, a qualitative research method is the most appropriate as it provides an in-depth understanding of complex and little-explored issues (Islam and Aldaihani, 2022). The choice of semi-structured interviews is justified by the interpretative and exploratory nature of the research. This interview method allows the interviewee to express themselves authentically and naturally, while going into the details of their explanation.

5.2 Sampling:

To select the participants in this study, I opted for a purposive sampling method for it has enabled me to deliberately selects the interviewees who are best qualified to provide the most relevant answers to my interview guide. I considered important to interview both teachers and tech experts from Italy and Greece to grasp all the specificities of being in the educational sector or in the professional digital world. I managed to get 21 interviews with these different types of players involved in the digital or educational sector.

One major problem I identified was the language. Willing to interview Greek and Italian people means we must run the interview in English, which is not our mother tongue. As the interviews are run in a professional sphere, there was no feelings included and therefore I considered it was acceptable to use English. This imposes an additional criterion: that they speak English or French. I chose not to interview in Greek or in Italian because it would have been too uncomfortable and not natural. The limitation is I might not have grasped the exact concepts the interviewees want to pass on and I am also not sure they have the digital vocabulary, present in my questions.

I managed to interview twelve Italian professionals on one hand, seven of them are teachers and five are experts, and on the other hand nine Greek professionals were interviewed, four of whom are teachers and five are tech experts. I considered interesting not to focus on one type of teacher, which means they were interesting for the study whether they operate in the public or private sector, in middle, high school or in higher education, and the subject they are teaching did not matter. I was looking for professionals directly linked with the educational sector to have their opinion on how the digitalisation of society has impacted educational methods. Regarding tech experts, my research was geared towards professionals of data analysis, engineers, programmers and managers. The emphasis was on their digital studies, their knowledge of the digitalisation of the society and their knowing of digital tools.

Table 1: List of respondents

COUNTRY	PROFILE	COMPANY / SCHOOL	POSITION	NAME
Italy	Professor	Università di Bologna	FLE teacher	Fabien Gibault
Italy	Professor	EASI English	FLE teacher and translator	Laurence Daunas
Italy	Professor	Sports teacher	Teacher in middle school / Lecturer at University	Paolo Moisè
Italy	Professor	Ministero dell'Istruzione e del Merito	French Language Teacher	Sandro Perna
Italy	Professor	Databricks	Technical instructor	Victor Rivas
Italy	Professor	Quasar design	Gameplay Programmer / Animator Programmer	Alberto Virzi
Italy	Professor	Institut français Italia	Cooperation attaché for French	Baptiste Chauveau
Italy	Expert	Mela Works	Founder & Head of product	Riccardo Chiarelli
Italy	Expert	Venis S.p.A	IT specialist	Giovanni Anastasio
Italy	Expert	Targa Telematics	Go To Market Manager	Francesco Parodi
Italy	Expert	Fincons	Tech Lead	Emmanuele Villa
Italy	Expert	Qomodo	Head of merchant onboarding	Paola Pacchiana
Greece	Professor	1st Vocational High School of Xanthi	ICT teacher	Efstratios Grammenis
Greece	Professor	Ministry of Education, Lifelong Learning and Religious Affairs	Teacher In Primary Education	Spyros Dellaportas
Greece	Professor	Primary school of Platamonas Pieria	Informatics teacher	Athanasios Makrovasilis
Greece	Professor	Ministry of Education, Lifelong Learning and Religious Affairs	Teacher of Informatics and ICT	Maria Skiadelli
Greece	Expert	Dixon's South East Europe	Senior Demand planner	Dimitris Kappros
Greece	Expert	BEL	Country General Manager	Benjamin Breton
Greece	Expert	Pharmaffairs	Consultant to pharmaceutical companies	Platon Peristeris
Greece	Expert	Chubb	Data Engineer	Vasilis Gkatzis
Greece	Expert	Performance Technologies S.A.	Data & Analytics Engineer	Vasiliki Evangelia Dourou
	•		•	

In total, 79 professionals were contacted, of whom 21 agreed to give me an interview. Most of the contacts were made via LinkedIn and the business networking platform My Job Glasses.

5.3 Interview guide:

The interview guide includes 3 themes: (1) exploration, (2) the perception of digital responsibility, (3) existing resources and initiatives for a responsible digital future. Two interview guides have been prepared, one for professors and education actors (see below), and the other for digital sobriety specialists (see appendix 1).

INTERVIEW GUIDE

Before getting to the heart of the matter, I'd like to get a better understanding of who you are and the environment in which you operate.

Theme 1: Exploration

Question 1:

Could you please introduce yourself, your background and your current role?

Question 2:

Have you observed any changes in expectations or needs in the education sector in recent years? -What new demands or trends do you see emerging?

Question 3:

How would you rate your knowledge of digital devices and tools? -Do you feel comfortable with the use of phones, computers? What software do you use frequently?

Question 4:

What digital resources are currently available in your school?

Theme 2: The perception of digital responsibility

Digital responsibility is a subject that is being discussed more and more, but perceptions and definitions can vary. I'd like to understand how you see this subject and what it means to you.

Question 5:

What does 'digital responsibility' mean to you? -You can give words, examples, anything that comes to your mind. Can you give an example of a situation in which you have been confronted with these issues?

Today, education plays a key role in the way digital technology is used and understood. I'd like to explore with you how these topics are addressed in your environment and what you see as the main challenges.

Question 6:

What do you think students need from their teachers in terms of digital responsibility?

Question 7:

In the educational sector, what practices seem to you to run counter to the principles of a more responsible digital world? -Do you have any concrete examples? Are there any initiatives underway to change this?

Question 8:

In your opinion, what are the main challenges facing digital education today?

Question 9:

In your professional or personal environment, have you seen any initiatives that encourage more responsible use of digital technology? -Can you tell us about them? What do you think is effective?

Question 10:

How is the concept of digital ethics addressed (or not) in your professional environment? -Do you feel well supported by your school? Have you already had discussions on these subjects with your students/colleagues? What feedback have you received?

Question 11:

If you were to incorporate digital responsibility issues into education, what teaching approaches or methods do you think would be most effective? -Have you already tried to introduce these subjects? How was this perceived?

Question 12:

What are the main obstacles to incorporating these issues into education? -Lack of time? Lack of training? Institutional support? Do you have a concrete example that illustrates these difficulties?

Theme 3: Existing resources and initiatives for a responsible digital future

Several initiatives already exist to support the transition to a more responsible digital environment. I'd like to find out more about the ones you know about or the ones you'd like to see.

Question 13:

If you had the means to act on a larger scale on this subject, what priority action would you put in place? -Can you think of a concrete project that could have a significant impact?

I am now going to show you some cards from workshops that has been created by the association Latitudes. They are called "The Battle of Tech", which aims to encourage a critical approach to technology and to promote responsible practices in higher

education and "The Battle of AI" which aims to encourage a critical approach to generative AI.

Question 14:

What are your first impressions? Are these concepts familiar to you? Would you like to know more?

Question 15:

What skills do you think students could develop using this type of tool?

Socio-demo data

Question 16:

How old are you?

Question 17:

How long have you been teaching?

Question 18:

Do you also work in the private sector?

Question 19:

How old are the students you work with?

5.4 Data analysis method:

For this study, I used a general inductive analysis because it is a method of qualitative analysis that allows information to be extracted from raw data, derived from the transcription of details gathered during the various interviews. To maintain scientific rigour, the data collected was reduced according to a predetermined and transparent procedure. The data was classified a posteriori to ensure a process of generalisation rather than verification. This inductive method, unlike the deductive method, allows a new model to emerge that has not yet been conceptualised.

To carry out these analyses, I studied the transcripts of the 21 interviews conducted. I gave each interviewee a code name and then listed the responses obtained in an Excel document. I did an axial coding by grouping the labels into three main themes, taken from the interview guide. I created these three themes directly in the Excel document by adding the responses obtained during the interviews, still classifying them by theme. I was able to carry out open coding of the raw qualitative data, by assigning labels to sentences and paragraphs according to the patterns identified. In the tables, I categorised the respondents as followed:

- I stands for Italian
- G stands for Greek
- P stands for Professor
- E stands for expert
- The number just after has been attributed to respondents following their order of interview.

Only segments related to the research question were retained. The categories were finally identified based on the segments defined in the interview guide. The final objective was to identify a pattern among the most important categories.

6 - Data analysis

The data analysis of the interviews is meant to answer the following research question and its sub-questions: What are the key factors in the success of digital responsibility training in Greece and Italy, and how can the French association Latitudes position itself within these educational systems?

- How do teachers and trainers in Greece and Italy perceive digital responsibility and its integration into their teaching practices?
- What are the levers and obstacles to the adoption of digital responsibility in training in Greece and Italy?
- What leverage does Latitudes have within the Greek and Italian education systems?

6.1 Exploration of the environment and knowledge of respondents

The respondents to these interviews are a mix of educators and tech experts from Italy and Greece, offering diverse perspectives upon the digitalisation of the educational systems. To know better about their background and current position, I highlighted the fact that Italian teachers mostly come from language, humanities, and intercultural backgrounds, with strong international experience but less direct involvement in technical subjects. Greek teachers, by contrast, are more specialised in ICT and STEM fields, often teaching computing, robotics or AI, especially at the primary and vocational levels. On the expert side, both Italian and Greek participants hold senior positions in technical sectors — engineering, fintech, data science — and show strong familiarity with digital systems and compliance protocols. Notably, several Greek experts have academic links or freelance roles, blending research and industry. These differences in background and focus shape the way digital responsibility is perceived, taught, or operationalised across contexts.

The exploration phase of these interviews highlights a contrasting reality: while Italian and Greek professors and tech experts all recognise the need to move towards a more 41

digital and responsible approach to teaching, the institutional environments, the level of training and the digital culture vary from one country and one school to another.

The education sector urges to adapt to digitalisation according to teachers

Across both countries, respondents report a shift in expectations mostly placed on teachers, often driven by societal changes, the COVID-19 pandemic, and a globally increasing digitalisation. However, the pace and nature of adaptation differ significantly between Italy and Greece. Several Italian teachers express concern over the rigidity of the Italian academic system, which struggles to evolve rapidly unless pushed by COVID-19 crisis:

« L'Italie aussi, un pays très traditionnaliste... Il n'y aurait pas eu le COVID, on n'aurait jamais passé le cap de passer en ligne, ça c'est évident » (IP1)

The various confinements have, in a way, forced the education system to digitise, adopting new digital habits and developing new interfaces which have then remained to increase efficiency, as IP7 suggests:

« Comme dans tous les pays du monde, ça a été une révolution entre guillemets... Mais la grande idée que j'avais dès ce confinement plus ou moins, c'est qu'en Italie, il y a un peu de marche forcée »

If the COVID-19 crisis did not happen, Italy would not have gone down this digital route because it was neither a need nor a desire on the part of the government. In Greece, some interviewees also highlight the link between the crisis and some recent digital evolutions in the educational sector: « We have to move forward to catch up the train in Greece. Things moving very, very slowly in educational system » (GP1). They have a strong conscience of evident systemic delays and feel a strong need to modernise, especially to meet students' growing digital expectations: « We as the teachers, we see there is more and more kids that appear with more and more difficulties » (GP2). GP4 acknowledges recent efforts, while highlighting that the government response is still lacking: « There was no suitable, yeah, training. Especially after the installation of the

interactive whiteboards, they didn't make any, they didn't offer, I mean, the ministry didn't offer a proper, let's say, training for the teachers »

o Professionals ask for more digital formation

Pointing out that Italy and Greece seem to lag behind the rest of Europe, and indeed the rest of the world, teachers and experts emphasise the importance of training in digital tools, curiosity and openness to change. Professionals interviewed report informal learning to compensate for the lack of formation proposed by the companies or by the national education system:

- « Je continue à m'informer toujours par moi-même... j'utilise Power BI pour visualiser les productions » (GE1)
- « Oui, on a accès à tout, mais attention, le matériel c'est nous. L'école ne fournit rien au niveau des plateformes ou au niveau de quoi que ce soit. En fait, c'est nous qui créons le programme et qui apportons le matériel aux élèves. Au niveau du matériel didactique, rien. Au niveau du matériel technologique, il y a ce qu'il faut » (IP2)
- « C'est tout récemment, pour ce qui concerne l'intelligence artificielle. En fait, c'est moi qui, j'ai choisi de fréquenter un cours et j'attends encore la réponse » (IP4)
- « I think that in Italy it's up to the single school. There's no major organised organisation that, that handles this » (IE4)

A major obstacle in both countries is the lack of cohesive national-level digital training programmes, especially for non-technical professionals. This highlights an unequal digital training landscape, depending on both personal and professional context, motivation, and available resources within the structure (being a school or a company). There is also a common impression of a dissonance between the level of equipment of Greek and Italian structures that is quite high and the level of knowledge and formation of professionals to use these tools.

6.2 Digital responsibility

Most of respondents have heard for the first time the term "digital responsibility" during the interview. It seems easier for tech experts to use their digital knowledge to think about a definition of the concept of digital responsibility than for the teachers, who associate it with privacy, copyright and misinformation at best, but mostly interpret it broadly. They show enthusiasm in the idea of integrating this notion in their processes and classes.

o Personal definition of the concept of digital responsibility

When asking the respondents about how they perceive the concept of digital responsibility, professors and experts have a common intuition: the digital behaviour has real-world consequences. Nevertheless, this is a concept that has been rarely, even almost never heard by these teachers and professionals:

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« I don't know. It is the first time that I hear that » (IP5)
« Alors je... Ça me dit rien, c'est la première fois que je l'entends dire » (IE5)
« I have to say that it's the first time that I hear this word » (IP6)
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From the teachers' perspective, there is a limited and inconsistent understanding of what digital responsibility means. While some associate it with privacy, copyright or misinformation, most admit either never having heard the term or interpret it very broadly:

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« Une utilisation contrôlée des ressources des étudiants » (IP1)
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« Everything that it does online, it's real weight. That it does in real life as well... more cultural and societal approach » (IP6)

For tech experts, even if they hear the concept for the first time, they were able to offer a clearer, more operational and illustrated definition, though interpretations still vary based on their field (data, cybersecurity, HR, engineering, etc.).

« As a newbie to the topic, I mean, maybe I'm, I'm compliant or not, I don't know but what I think when I listen to this kind of digital responsibility topic is that, I mean,

digitally speaking, all information are available and so you have to be responsible of what you are sharing, where and what are you sharing mainly, what can be shared what cannot be shared so that kind of responsibility. You know personal information, so this is what I have in my mind » (IE3)

« I think about using the tools in a responsible way, meaning. Maybe maybe two things. One is maybe not cheating with it. For example in in school or at work. And the other thing is also maybe more environmental which is don't use it for stuff that doesn't matter because they consume. A lot of energy, a lot of a lot of resources » (IE4)

« Ça veut dire pour moi responsable, ça veut dire accessible, où on se donne les moyens pour que ça soit accessible, donc si ce n'est pas accessible de premier plan et de première vue, ça doit devenir accessible et facile d'utilisation. Et responsable aussi, éventuellement, qui n'utilise pas trop de ressources environnementales, possiblement pas de trop de de stockage, et cetera, et cetera. Et je dirais sur responsable aussi, une attention évidemment à l'environnement, à la comment dire, à la facilité d'accès, même pour les personnes avec un accès peut être compliqué à l'ordinateur, donc de manière un peu plus facile on va dire » (IE5)

The concept is way deeper explained by the experts, which is quite normal as they work in this field. It means they have a certain conscience about the impact of their professional missions, and this conscience does not necessarily come from the company but more from their own thoughts and personal view of these impacts. The definition of IE5 is the most complete as it evokes both social and environmental parts of the definition, the respondent even talks about the technological accessibility for the most isolated populations.

By asking the question about digital responsibility, I wanted to test their ability to associate this concept with artificial intelligence and understand to what extent the link was logical for them or not. It worked, because it was at this point in the interview that most of respondents began to introduce the subject of AI:

« Donc je pense qu'en général la digitalisation, c'est une chose positive. Après ça, c'est pour la digitalisation. L'artificial intelligence.. C'est un peu plus difficile à répondre » (IE1)

« On sait très bien que la consommation d'énergie est énorme et donc. Il faut savoir quand même. Disons que. La, la, LA, la consommation d'énergie totale. Dans le monde énorme maintenant, parce que c'est vrai qu'il y a l'intelligence artificielle » (IE2)

« Now in terms of AI, of course there are many, many issues that come along. Because. You know the the way that you use AI is you should be very careful » (GP4)

o <u>Digital responsibility</u>, a <u>concept rarely addressed within</u> <u>organisations</u>

Digital responsibility, even if not understood as such by all respondents, seem to be applied sometimes without necessarily putting a word on it. It can be applied within organisations in the form of small actions, but only concerning experts interviewed. In the case of IE2, it is mostly around data privacy, there are some training courses organised in the company:

« Nous on est obligé à suivre cette formation surtout sur la, les lois de la privacy, le GDPR européen et et donc nous on est formés, et on est obligés de suivre certains cours pour pouvoir disons avoir au moins un niveau de ce qu'est la sécurité des données et ce que sont les comportements à suivre » (IE2)

And following IE3, they are aware of the private nature of data in the sector mentioned, but there is no formation mentioned:

« Thanks to you know penalties or you know kind of boosters companies are are more willing to to be socially responsible yeah and in our case as I told you we are our core business is connected car. So social responsibility in our case is more related to privacy and the, you know, data, data security because I can I can honestly see what are you doing with your car even in your private life. » (IE3)

The terms of data privacy, data security do not seem to be used very often, as we can see that this expert is searching for the right words when talking about this subject, this does not seem natural.

Mostly, the subjects of digital responsibility, of data privacy, of accessibility, sobriety are not processed, not discussed at all within organisations, being the schools:

- « Mais qui est une réelle sensibilisation, je pense pas qu'il y en ait. J'ai j'ai pas vu en tout cas » (IP1)
- « We don't know the ethics. We're not. We were never be told about ethics » (GP1)
- « No, not in, not in the general, not in the public sector, because in the public sector they only we do the basic things » (GP2)

Among teachers, both in Italy and Greece, the integration of digital responsibility into formal education appears limited, unstructured, and mostly informal. They show curiosity around these concepts and highlight the necessity to sensitize students who are dealing with data privacy a lot on social media, and even more with the increasing use of generative artificial intelligence such as ChatGPT:

- « I think it would be very important for the teacher to to be able to speak to the students about these topics » (IP6)
- « I think it's very useful. And it is one of this new set of courses that have to be taught. That one, and also Gen. AI, how to use Gen AI for your, your advantage » (IP5)

Focusing on the experts, the opinion is similar, they are aware that there is little or no training in these subjects:

- « Il n'y a pas forcément de d'organisation là-dessus malheureusement, et donc généralement, ils demandent plutôt un débrouille-toi, recherche des informations et si tu veux à la limite tu peux le faire » (IE5)
- « Alors il y a pas. Il y a pas du tout du tout du tout de, d'analyse ou sobriété, pour l'instant je dirais et je crois qu'on est vraiment loin » (IE5)

The situation in Greece and in Italy is very similar, being from the teachers' or the expert's perspective: there is not enough consideration of how data is collected, used, shared. The educational programmes and professional formations do not consider the 47

development of digital tools and their social and environmental impacts, so there is a need to create these spaces in the educational and professional sectors in Italy and Greece.

AI is perceived as a new and useful tool, sometimes used, sometimes feared

AI is a wide subject, both in terms of compounded efficiency and socio-environmental impacts. All the respondents have introduced the subject at a moment in the interview, which means they are all aware of the existence of the tool. They see AI as a revolution with a lot of positive changes, such as the improvement of the efficiency in many domains. While teachers seem to perceive AI from an outlying perspective, as if they were more watchers than users, and quite afraid of it...

- « Je vais commencer en fait un cours pour l'intelligence artificielle parce que c'est le moment de commencer pour moi » (IP4)
- « Il va falloir trouver en tout cas une clé ou une manière de responsabiliser plus, mais autour des intelligences artificielles parce que malheureusement, quand on enseigne, on demande des productions écrites aux étudiants » (IP1)
- « Just because every time I. I bring up the conversation about AI and what the future will be, they are always interested in participating in that conversation and they are asking things they are afraid of, things they are afraid of, the future of very digitalized future » (GP1)

...Experts use it more often:

- « Pour nous, c'était c'est important, l'intelligence artificielle par exemple » (IE2)
- « Oui, c'est positif, ça va être d'abord bien sûr, c'est positif. Mais. Il faut poser des questions. Quand, quand on finit le, l'intelligence artificielle, quand là où commence, à partir de quel moment on peut commencer? Les, une activité humaine là où finit le l'intelligence artificielle. C'est une question plutôt éthique » (GE1)

Artificial intelligence's development is still at its start in Italy and in Greece, and is seen as something quite far, not necessary, and there is a kind of general fear about it.

This is not a social phenomenon yet, media don't necessarily mention it, and so this is not at the heart of the conversations.

6.3 Digital education

Both experts and teachers from Italy and Greece emphasize the importance of student guidance in the use of digital tools, being at school or in their daily life.

 What students think and need from their teachers in terms of digital education

When asking teachers and experts what students need from their teachers in terms of digital education could, they are on the same page highlighting a certain urge to adapt the programmes and turn the corner on digital before things get too out of hand:

- « Usually resource. Yeah. So it's important to move to this new kind of digital resource » (IP6)
- « Là où je travaille, bon le les élèves pensent être au top au niveau du numérique hein, finalement ils en savent pas plus que nous voilà. C'est à dire qu'ils ouvrent la bouche et ils attendent que ça leur tombe dans le bec » (IP2)
- « We need to, to tease them, we have to tease them how to use these devices and how to use this device in their everyday life, not just for surfing around or chatting in social networks and things like that? » (GP1)

Teachers feel concerned about these subjects, they want to learn more to transmit the good practices to their students. They are open to new ways of teaching and seem to be curious about digital technologies, and they are conscious that there is a discrepancy between the knowledge and usage of digital tools by the students and their own.

 Role of the teachers in sensitising to digital according to the interviewees

Once I managed to get the opinion of the respondents on what are the needs from the students' perspective, I found relevant to go deeper and ask them what is the role of 49

teachers in the digital education of their students. Teachers agree on the fact that they have a key role: to inform and to raise awareness around the benefits and limits of digital tools:

- « Inform and inform and and inform and organize the unions and with the parents » (GP2)
- « C'est notre devoir. On est censé former des gens qui vont justement pouvoir dessiner les politiques de demain, donc si on leur, on leur apprend pas dès le départ à ne pas tomber dans les pièges de communication facile, on on rate plus ou moins notre objectif central et avoir des personnes préparées à affronter nos politiques de demain » (IP1)
- « I think there are a lot of subjects that we have to teach in school or at least university and general. Technology is one of them » (IP5)

Teachers highlight the fact that they must be trained themselves to provide the best digital education. We have seen before that teachers are in demand of more digital formation such as the use of digital tools, but also concerning digital responsibility (data privacy, teenagers' presence and use of social media, online bullying for example). They confirm it by answering the question of teachers' role:

« Il faut, il faut qu'on rentre, nous profs, dans ce monde technologique et il faut qu'on apprenne à s'en servir pour apprendre ensuite aux enfants à s'en servir » (IP2) « Parce que le premier qui doit être éduqué c'est moi » (IP3)

Tech experts align with teachers' opinion:

- « And the OK the the first step for teachers is to study because they have to they have to learn how to use them no » (IE3)
- « There would be a need of some digital training in school, for example, to learn how to recognize fake things or how to use them. Avoid the scam stuff like that » (IE4)
- « Oui alors ça c'est fondamental. À mon avis, je ne pense pas qu'ils le fassent malheureusement. C'est à dire que on n'a pas forcément d'éducation à l'informatisation ou en tout cas au digital. Il y a l'utilisation de manière responsable

en fait. Donc malheureusement, à mon avis, pour moi, c'est un rôle fondamental qu'il faudrait commencer vraiment. Puis les enfants de 6, 7 ans, même si forcément ils sont pas j'espère sur des réseaux sociaux à cet âge là, mais en tout cas pour commencer à l'étudier, à l'analyser et à comprendre comment ça fonctionne et à comment l'utiliser de manière responsable » (IE5)

A recurring theme among the Greek experts was the vital role of parents in educating children about these issues. They were adamant that it was not teachers who should be providing this education, but rather parents:

« Mais pour moi l'enseignement et l'éducation c'est de l'éducation à la maison. On peut pas opposer la famille à à l'école, on peut pas opposer et c'est un peu le problème d'ailleurs je pense en France, c'est qu'on oppose trop les profs pour ceux qui ont abandonné à la maison. Pense que les profs vont être des sauveurs et réciproquement. Les profs pensent que tout va se solutionner à la maison, ce qui malheureusement n'est pas le cas » (GE2)

« The first person that needs to set the rules, for example, is the parent, not the teacher. Then the teacher can can teach a kid of how to maybe browser the Internet. UMI don't know. If there is a subject in school like this in Greece, but for example I have relatives that they have younger kids and they have parental controls in their phones and stuff like this » (GE4)

« I think that for younger generations, it's the, we have the teachers, of course, but we have the parents too who really need to take care of their children and not let them just roam on social media » (GE5)

This can be explained by Greece's low level of digitalisation: young people are not yet affected by addiction, cyber harassment is relatively rare, and digital technology is still seen as a distant concept, and is also fairly distrusted in Greece.

o Challenges facing digital education

It is crystal clear that the education sector needs to adapt to digital developments, as the digital habits of the younger generations are already out of step with traditional school

methods. If the previous sections have permitted to understand the internal needs of the education sector, an analysis of the external opportunities is in order. When asking what the challenges are facing digital education to the interviewees, the responses are fairly unanimous, or at least the same concepts come up again and again, from Italian and Greek teachers. The most common answer is concerning higher institutions; the lack of a coordinated government strategy seems to be an obstacle in both countries. First, in Italy:

- « Pour moi le maillon manquant c'est c'est le c'est l'institutionnel et c'est à dire le proviseur, c'est à dire le le rectorat, les académies, et cetera » (IP7)
- « Plus important, d'abord pour demander au ministère de l'éducation. De former différemment le programme » (GE3)
- « The fact is that yeah, there is a problem with money, but the problem is not that we don't have the money, but that we spend in... Not quite the right things. So we, we usually lost a lot of money in a lot of things that are not necessary » (IP6)

Here IP6 introduces the budget challenge, which was a recurrent one too. This teacher from Italy acknowledges the government has money, but chooses to spend it in other sectors than education. IP1 and IP7 seem to have the same opinion about Italian government's monetary decisions:

«Bien entendu c'est un problème de moyens. Et le les budgets des universités étaient coupés d'un milliard cette année en Italie, donc c'est pas trop le c'est pas trop le genre d'avoir de nouveaux projets malheureusement » (IP1)

« Il faut dire aussi que l'Italie n'a pas beaucoup d'investissements dans le numérique » (IP4)

IP7 completes the idea with an example of the material in which the government invests and teachers' financial situation:

« Beaucoup d'argent qui a été mis dans l'installation, l'achat en fait et l'installation de d'outils, ordinateurs, mais aussi ces fameux tableaux numériques. Donc là je reviens à la situation de prof en Italie qui ont pas d'argent, qui ont pas de formation,

de formation qu'on propose. C'est eux qui prennent des congés sans solde pour aller assister à nos trucs. Enfin je veux dire, on part de très loin »

Italian teachers seem to be all aware of these shortcomings in the education sector, but it looks like they deal with it, even if it's uncomfortable. They may have taken on board the fact that things won't change, and they accept it as a foregone conclusion. Greek teachers also feel the same, focusing more on the low level of investment in technological equipment:

« I think it's monetary issues. I think they don't want to spend money to, to bring new devices to schools, all these things are expensive to bring new devices, new educational programs to create new things. It's expensive and I think they don't want to spend money on that sector » (GP1)

It depends a lot on the school where the teacher is working. For example, GP3 does not have the same experience in terms of technological material at school:

« Yes. Look, before 10 years that I started working at the primary schools, we didn't have the labs. We start from the beginning in Greece. Computer lesson started from 2016. Now we have labs, we have computers, we have bulletin boards. OK, this year we have white boards, we have robotic systems. The last two years we've had a lot of money to have new robotic systems to have white boards to make the lessons on the big monitors »

Both GP3 and GP1 are teaching in schools that are in small cities (Pieria and Xanthis). But there is no doubt that teachers in Athens, which is the capital city in Greece, have more money and so, more technology equipment:

« Look, most most schools in Greece, they have at least one computer per classroom and one projector per classroom. So almost all teachers have some computer to show at least some things and to project some things on the whiteboard. And now the last two years, they have also installed the interactive whiteboards in some of the classrooms. And for us, for instance, in my school, there are five of them. These are quite expensive matches about $\ensuremath{\epsilon}5000$ each one » (GP4, teacher at the ministry of Education in Athens)

In Italy, IP1, from the Bologna university (top Italian university), explains that the situation is the same as in Greece:

« Je travaille à l'université de Bologne hein, c'est la meilleure université d'Italie hein. Donc on a une catégorie de moyens en général qui est largement supérieure aux autres, aux autres universités »

For the other category of universities, it's the teachers who must choose to train and give themselves the means to do so:

« Oui, on a accès à tout, mais attention, le matériel c'est nous. L'école ne fournit rien au niveau des plateformes ou au niveau de quoi que ce soit. En fait, c'est nous qui créons le programme et qui apportons le matériel aux élèves» (IP2)

« Our school didn't give a lot of digital resources. It's to the teacher » (IP6)

In addition, some of the Italian and Greek respondents mention the advanced age of teachers, who are not being replaced by younger ones:

- « The majority of the teachers in the primary schools and not only are for example, after 45-50 years old » (GP2)
- « Most of the teachers in Greece are like 50 years old » (GE5)
- « And the other is that the age in Italy, it's very old. So we are not a very young country and we are. Below this kind of aspect » (IP6)

The challenges concern mostly the financial investments of the government and the age of teachers, which creates a gap with new technological trends and, more broadly, with younger generations. GP4 resumes it quite well:

« Challenges, a lot of challenges. Like I should choose somehow » (GP4)

6.4 Existing resources

The questions asked enabled me to understand that the people interviewed would first like teachers to be trained in digital tools and in the issues raised by the use of these tools. The aim is to be in the best position to pass on good practice to pupils, because this is a concept that, according to the respondents, has its place in the school system. This led me to ask them what would be the best course format for dealing with these subjects, and finally to show them the Latitudes workshops and get their opinions on the spot.

o Most effective levers of action according to the interviewees

Teachers in both countries see as most effective levers for sensibilisation to the students approaches rooted in student engagement, critical thinking and contextual relevance. IP6 and IP1 evoke the relevance of talks more than real classes:

- « Probably a heart to heart talk » (IP6)
- « Très certainement avoir des réflexions beaucoup plus régulières sur l'information » (IP1)

In Greece, GP2 also refers to another type of teaching, based on digital content such as films and videos: « I would search to find a movie. Or an animation with the benefits of the technology » (GP2). There is also a prevalence of the practical side that responsible digital education should take on:

- « En fait j'ai remarqué que les étudiants quand ils peuvent faire des choses tous ensemble, ils s'amusent beaucoup et ils collaborent. Ils sont très très très actifs, très efficaces et ils préfèrent travailler un groupe en fait » (IP4)
- « Every year I integrate things about digital responsibility in my teaching and mostly I discussed with the, I think it's something that cannot be done with the real practice methods. I think you need to discuss those things with the children and the students and try somehow to make them reflect on their practices and what they do, and recognize some problematics, let's say situations, some points so some role-playing » (GP4)
- « Yeah, something practical. Yeah, because of course, you have also to teach theoretically what's here. To to know. But yeah, the practical part is very important » (IE4)
- « It will be workshops. It will be courtships once every week, probably. (GE4)

I think that in the beginning workshop would be a good start, just a soft launch to see how it's it's going and then of course, yeah, you could try doing more » (GE5)

These responses converge on one point: the most effective levers are those that enable open questioning, active participation, and contextual reflection on the use and impact of technology. It was surprising how both teachers and experts immediately thought of less traditional courses, more focused on discussion and collective awareness. These are professionals who have been teaching or working for years, yet who are curious and open to change.

o First impressions of Latitudes' workshops

The answers I got to the previous questions were perfect for making the transition to the last part of the interview, where I share the maps of the different workshops created by Latitudes: the Battle of Tech and the Battle of AI. My aim is not to tell them straight away that these are workshops created by the organisation I work for, but to say 'here's an initiative that exists in France, what do you think of it?' Most of the respondents expressed positive reactions to the workshop design, particularly its format and capacity to spark discussion. It's a concept seen as innovative and attractive because it's different for the students, allowing them to learn while asking themselves questions and making links with their personal and professional lives. Some of them value the simplicity and relevance to students:

« I think that it's a nice thing to do. Yeah, that's. That's important to have them think about it before giving them the answer » (IE4)

« Yes, of course. A good idea. And they these kind of games with cards, they are they, they, they these cards are likely to kids » (GP2)

Among experts, it was the fact of asking questions collectively instead of the teacher alone giving information and concepts to be applied without making any link with real life that came up the most:

« We are not ready for the full digitalization, so we need we need these initiatives that you're speaking about because the fact that we are a society based on personal relationship [...] it's a way to enhance the personal relation » (IE3)

« Alors je pense c'est c'est pas mal. Déjà ça peut au moins ouvrir à des questions et ça par exemple ça peut être fait dans n'importe quel cours de classe. Globalement en fait il y a pas forcément de compétences demandées pour pour travailler sur ça en fait en général. Et donc ça c'est une première piste assez intéressante » (IE5)

« It's a good thing because it makes the kid you know to start feeling is AI good for me or is it bad thing? » (GE4)

« I like the fact that you have open-ended answers because yeah, I totally agree with you, we can't be 100% on board with something or against it » (GE5)

Overall, the format's interactivity, openness and adaptability to different student profiles are key strengths of these workshops. Across all groups, there is strong support for active, discussion-based and creative formats that allow students to explore digital responsibility beyond theoretical knowledge. Teachers appreciate formats that support group interaction and practical reflection, while experts reinforce the need for ethical depth and societal perspective. The workshops are largely perceived as effective and relevant, especially when adapted to different age levels and embedded in broader educational goals.

Skills students could develop

Lastly, coupled with the general impressions of the workshops, it was relevant to me to ask the respondents what skills the students could develop as a result of this workshop. The answers are surprisingly detailed and suitable with Latitudes' perception of students' needs. IP1 feels like the workshops can impact the students on a long-term basis:

« Ben je pense que ça leur permettrait surtout d'avoir une vision plus responsable de leurs études aussi, hein? L'occasion de montrer toute la partie d'emploi et les risques en fait qu'il peut y avoir autour du numérique aussi bien pour soi que pour notre société »

GP1 gives a practical example of how they could apply the learnings of the workshop directly:

« I think that they will learn how to recognize fake from non-fake images or texts. They are always interested in participating in that conversation and they are asking things they are afraid of, the future of very digitalised society »

These insights confirm the relevance of such an initiative and offer concrete orientation points for a future deployment consideration.

6.5 Data analysis conclusion

Greek and Italian education systems.

This data analysis has enabled to highlight the main issues in the educational sector in Greece and in Italy that are the advanced age of teachers who are not up to date with technological advances; a real lack of moral and financial support from the Greek and Italian governments to the teachers in being trained to new digital tools. Initiatives such as the workshops created by Latitudes made a good first impression on all the respondents, which clearly proves that young people spend a large part of their time on digital terminals, and that awareness of the impact of this use is necessary. What's most glaring is the extent to which education is lagging behind Italy and Greece in terms of the digitalisation of society: young people are living with the times, using mobile phones, going on social networks, while the rest of society remains very traditional. This creates a huge knowledge and generation gap within the sector. This raises a positive point: the presence of Latitudes within the Italian and Greek education sector would be an enormous opportunity to become aware of the limits of not going digital, and there are many opportunities in terms of actions to be put in place. To meet these challenges, I have identified the Battle of Tech and Battle of AI

programmes as having the most potential, and as being the most appropriate for the

7 - General discussion

After analysing the results of the qualitative study, this section takes up and compares these results with the elements formulated in the literature review, as well as the resulting managerial recommendations. A section is reserved for the limitations of this study, and suggestions for further studies are added.

7.1 Conclusion

Technology is driving a huge number of changes in our society. Whether in everyday life with the increasing digitalisation of administrative processes, in the workplace with the digitalisation of sectors and professions, or even in education with the emergence of distance learning. However, this digitalisation is not happening at the same speed everywhere, or for everyone. This is particularly the case in the education sector, when we compare digitalisation in France with that in Greece and Italy.

o The digital situation in Greece and in Italy

While digitalisation in France has now been widely adopted and almost taken for granted by a large proportion of the population, particularly young people, the phenomenon does not seem to be proceeding at the same speed in all countries. In Italy and Greece, for example, digitalisation came all at once, and in a way that could be described as forced, following the various lockdowns associated with the COVID-19 pandemic. Chalkiadakis and Leonidas (2024) even claim that Greece seems to be resisting this obligation to digitalise, particularly in terms of distance working within the education system. The lack of consideration on teachers' training needs has a huge impact on the whole education system: they are not able to adapt to the digital knowledge of their students, who already spend a lot of time on electronic devices such as the mobiles phones or the computers.

The digital situation in Greece and in Italy seems to be quite similar: a lot of investments for famous schools (mainly in the biggest cities of the countries) but not enough in other ones, societies that wish to keep a traditional way of living, including a traditional 59

education system and that is not quite ready for the digital wave in coming. This can be explained by the ageing of both populations, younger generations are used to travel during their studies to seek for a different education system that will help them succeed in their future.

Nevertheless, some improvements have taken place after the different lockdowns, mainly because the Italian and Greek societies did not have other choice. However, they do not seem to be willing to keep these habits on a long-term basis, following the research of Chalkiadakis and Leonidas (2024). Education seems to be a sector that has its traditional methods and is tough to transform. Also, the governments seem to invest on the wrong parts of education, such as new technical equipment (computers, white boards) without training teachers on how to use it. And in a world where the rise of extremes is a frequent theme in many European countries, we are rapidly becoming aware of the citizenship and political stakes involved in training citizens to think critically.

o The need to train the teachers

Italian and Greek teachers interviewed during this study seem to be overtaken by the digital innovations of the recent years, and consequently unable to use the digital tools that are installed within the establishments. One of the most notable and impactful effect of this non-adaptation is they cannot update and upgrade their classes to the new ways of teaching, such as the remote learning. As Schroot et al. (2024) wrote in their essay, without a digital adaptation of the educational system, high education standards are not going to be maintained, an affirmation that had already been stated by Dufva and Dufva (2019) when they stated that digital skills are becoming the norm, and in some areas even compulsory, bearing in mind that 60% of the world's GDP comes from digital sources. The answers I got during the interviews also go in that sense, and they all seem to be in demand of a concrete and complete support to help them use the most popular and used digital tools. When asking them how they would rate their level of understanding of the basic digital tools, they all agreed they are not able to use them in a professional way. When asking them what the role of the teachers in terms of digital

education to students was, most of them mentioned a key role in informing people about the positive and negative externalities of digital use, from a very early age.

Moreover, most of teachers I interviewed mentioned a lot of self-training, mostly watching online tutorials. I understood thanks to the interviews that there is a strong willingness from the teachers to take this digital shift to maintain the quality of teaching and not feel that we are lagging behind in areas that are already moving very fast. On the student side, Dufva and Dufva (2019) reminded just how much students need to be prepared for the digital world and even mentioned the post-digital world. Nevertheless, if teachers themselves are not prepared, and seem to be the furthest behind on the subject, it looks like things are not going in the right direction. But it is still time to make things change.

• The levers and obstacles to the adoption of digital responsibility in training

Digital responsibility is an emerging concept, sometimes called digital sobriety, green IT, or even digital accessibility. Applied to the professional world, it is often called corporate digital responsibility, that Herden et al. (2021) defined as "an extension of a firm's responsibilities which takes into account the ethical opportunities and challenges of digitalization". Among the people I had the opportunity to interview, this concept was not widely known, and especially among teachers. It was, for all of them, the first time they heard about digital responsibility, which is a clear sign that they are not aware of the impact of digital technologies. Nevertheless, they seem to be aware that this is beginning to be a subject for new generations of students, as they have already had the opportunity to witness the misuse of artificial intelligence. As the discussion progressed, I realised that Italy and Greece, although not yet full users of artificial intelligence, could well become so. These are uses that challenge teachers, sometimes to the point of frightening them. Makridakis (2017) even affirms the impact of artificial intelligence may be bigger than both the industrial and the digital revolutions put together. This leads me to think that these two countries are not yet ready for what's coming, digitally wise.

Indeed, I identified several levers to the adoption of digital responsibility training in Greece and in Italy: teachers' despair at their lack of understanding of digital innovations, the positive feedback on the workshops of both teachers and tech experts who have a different vision of education (one from the inside, one from the outside), their hope at the end of the interviews and how putting words on these issues has lifted their spirits, and, of course, the fact that teachers are motivated to train and get involved in supporting students in these areas, and in adapting their courses using more up-to-date methods and supports.

However, there are still strong obstacles to keep in mind, such as: the ageing of teachers, the declining attractiveness of the teaching profession, the difficulty to change processes that have been traditional and effective for centuries, the lack of time in both students and teachers' schedules, the dependence of schools on government, the difficulty to get initiatives such as the workshops or the training for teachers accepted and financed by the government.

7.2 Managerial recommendations

o What Latitudes does already well

Before sharing my recommendations on the opportunities for developing the workshops with the Italian and Greek audiences, I think it's important to stress that the processes of reflection, programme creation and deployment are currently of the highest quality and, in my view, perfectly developed. Every time we come up with an idea for a new programme, it's after we've identified a need that's dated, quantified and represents a real problem, a social issue. I think that the level and quality of their thinking, the key contacts they've been able to maintain over time, and the creative and analytical skills they've demonstrated in creating these new programmes from scratch are all highly commendable. It's a pleasure and a privilege to be able to witness this level of thinking, and to be part of it on a daily basis. After setting up 4 workshops, which were very well received by the participants, they have a very clear vision of the education system, its strengths as well as the aspects that still need to be improved. Today, more than ever,

digital responsibility is at the heart of our daily lives, and the education sector is no exception.

More than just a desire to raise awareness of responsible digital issues, Latitudes wants to create a community of players who can work towards a more virtuous digital world. The workshops are an incredible lever for raising awareness of these issues, but they have managed to go even further: making the training for these workshops free and accessible to all. This is how the workshops can now be rolled out nationwide, and the feedback has been very satisfactory, both from the volunteer facilitators and from the workshop participants.

O The need to refer to higher authorities

Several times during the interviews, the question of government and the management of education by institutions higher than schools was raised by respondents. Decisions on education are taken primarily at European level.

For example, the 'digital act' is the first action plan for digital education. It aims to support the adaptation of Member States' education and training systems to the digital age and was adopted in 2020, in particular with a view to meeting the challenges and seizing the opportunities associated with the One of the main objectives is to provide the education and training community (teachers, students), political decision-makers, the academic world and researchers at national, European and international level with the best possible tools.

In particular, the Battle of AI workshop could be part of Action 6 of the Digital Education Action Plan, which is entitled: "Ethical guidelines on the use of artificial intelligence (AI) and data in teaching and learning for educators." To ensure that these workshops are recognised at a higher level and form part of training in digital issues at European level, Latitudes could draft a report to the European Commission with figures relating to the deployment of the workshops in France, including the number of partner establishments to date, the number of students made aware of digital issues since the start of the deployment of the workshops, as well as the score relating to participant satisfaction, for example.

European recognition of the workshops would be an enormous lever for the association Latitudes, enabling it to reach more teachers, attract more volunteers, raise awareness among pupils within Europe, and make its vision of controlled digital education fully aware of the externalities heard. If Europe listens to the concerns and needs of teachers and pupils in terms of training in digital responsibility, and takes into account the usefulness of these workshops (among other things, because there are lots of initiatives run by different organisations that are also very relevant) and includes digital responsibility in compulsory training for all teachers in Europe, the mission will be a success. To this end, here are the key initiatives to be put in place to meet the needs identified in this study.

o Creation of a training for teachers

One of the things that emerged most strongly from these interviews was the urgent need to train teachers in the use of digital tools, but also in their abuses and the negative externalities that result, particularly for young people on social networks. Whether in France or elsewhere, teachers receive very little training in current issues, on subjects that go beyond the curriculum of the subject they teach. Historically, and traditionally, there has always been something of a gap between teachers and pupils, created in particular by the generation gap and the hierarchical relationship between teacher and pupil. More recently, however, relations have become smoother, as students also have a lot to contribute to teachers, particularly when it comes to digital uses. Generation 2 are the first to have been born with a phone in their hand, and to have had access to computer screens and tablets from a very early age. With the increasingly rapid development of technologies and the creation of new tools on a daily basis, young people are much more up to date on these subjects than previous generations, which creates a huge gap.

As a result, I quickly realised the extent to which adults in general, but especially the teachers interviewed, felt neglected and behind the times when it came to digital innovations, despite themselves. They have a very strong curiosity and desire to learn. They simply don't have the opportunity, don't know where to get information, where to

start. But for other professions, particularly those in tech, there is a large number of training courses offered by companies, as the tech experts interviewed for this study can testify. Apparently, the idea of training teachers to use the tools is less of a priority than equipping classrooms with the most advanced technological equipment. Equipment that teachers have to learn to use overnight, without any real training. It seems complicated enough for them to accept a change in the needs of the younger generation, and to have the desire to adapt. If they don't have the support they need to get to grips with the equipment made available to them, the situation is likely to get worse and put them off more than anything else.

One of the solutions, which is already working quite well at the moment, is to offer teachers training in workshops such as Future of Tech, Future of AI, the Battle of Tech or the Battle of AI, since their content is fairly comprehensive on the subject. This is a short-term solution. To ensure that their training is as effective and comprehensive as possible, it would be interesting to explore the idea of a workshop dedicated to teachers, or a training course lasting several days over a month to bring them up to speed on digital technologies and certain tools, and to say that the training at these workshops is the end of their training, giving them the keys to passing on the right messages to their students.

o How the workshops can be held in Italy, Greece, and other countries

Interviews with Italian and Greek professors and tech experts confirmed an interest in raising awareness among the younger generation of the social and environmental causes of digital technology. The experts are aware of the challenges posed by the digitalisation of society and its impact, while the teachers seem to be more aware of the challenges than the impact. Nevertheless, the reactions of those interviewed to workshops the Battle of Tech and the Battle of AI are enthusiastic and confirm that positioning Latitudes beyond the French borders would be a great initiative.

I sensed the importance given to local initiatives, and an awareness shared by most of the respondents of a desire for in-house development if that were possible. By internal development, I mean above all a need for this kind of initiative to come from home, and not from an association originally operating in another country.

In my opinion, the best way to get into these new Italian and Greek education systems is to train teachers, firstly in digital tools and the issues involved (as we saw in the previous section) and then to train them to run workshops, so that they are fully capable of running them on their own. It's a way of giving them the keys so that they can then roll out the workshop and adapt it to their own challenges.

Another idea that comes to mind is to work with some of them to create certain cards that would be adapted to the challenges of the country in which they work. Some of the workshop maps lend themselves perfectly well to adaptation, such as some of the 'debate' maps in the Battle of AI or in the 'scenarios' section.

o Budgeting for the recommendations

The creation, testing and deployment of training for teachers, as well as the adaptation and deployment of the Battle of Tech and Battle of AI workshops in Greece and Italy, are projects that deserve to be budgeted for, to give Latitudes an idea of the human and financial resources required. This is what I have listed in Excel tables, based on projects that have already been deployed within Latitudes. To do this, I took into account the daily cost of each action rather than the full-time equivalent, as this is a consulting project where human resources and time spent per year is preferred to a full-time equivalent, which can be different depending on the country.

I wanted to create a budget that could be divided into several parts, depending on the different phases and timings of the projects. The budget then covers:

- Project management and coordination (project management methodologies and tools implementation and follow-up, project meeting management, project communication, deliverable coordination and synchronisation);
- Framework design: building a common academic framework (review of the existing literature and initiative, conduct surveys, data compilation, educational theoretical content production);

- Content creation: practical tools and technical deployment (educational tool production, conception of training and knowledge hub destinated to professors, connection with EU academic tools);
- Implementation: developing a network of higher education institutions and equipping professors (pilot project, network of academics, teachers training workshops, organisation of community events);
- Continuous assessment and sustainability: long-term follow-up and impact measurement (impact assessment design, evaluation and analysis, guide production).

The budget has been drawn up for a fictive period of 3 years, from 1 September 2025 to 31 August 2028. It should be noted that this budget only takes into account the costs associated with Latitudes' activities. Other structures, including the Greek and Italian partner establishments, will be taking part in this project and have not been included in the budget.

Activities	Number of working days
Project Management and Coordination	
Administrative and financial coordination and reporting	10
Project meeting management	12
Project communication	4
Deliverable coordination and synchronisation	6
Total	32
Framework design: building a common academic fro	ımework
Review of the existing literature and initiative	6
Conduct surveys	3
Data compilation	6
Educational theoretical content production	0
Total	15
Content creation: practical tools and technical deplo	yment
Educational tool production	35
Educational tool production	15
Conception of training and knowledge hub destinated to professors	20
Connection with EU academic tools	5
Total	75
Implementation: developing a network of higher edu institutions and equipping professors	cation
Pilot project	3
Network of academics	20
Teachers training workshops	12
Organisation of community events	10
Total	45
Continuous assessment and sustainability: long-ter follow-up and impact measurement	m
Impact assessment design	2
Evaluation and analysis	2
Guide production	20
Total	24
TOTAL Working days	191
Average working day	450€
Total budget	85950€

7.3 Limitations of the research

This study has several limitations that should be mentioned here.

Firstly, there is a limit to the representativeness of the sample surveyed, as there were 21 of them, nine Greek and 12 Italian. Among them, seven Italian professors, four Greek professors, and five Greek experts, five Italian experts. I chose to study several targets from two different countries, which was a risk I had to take in terms of the quality of the information and the possibilities of drawing conclusions.

When contacting potential respondents, I made sure to contact as many men as women, to ensure a certain parity in the respondents. Unfortunately, very few women responded, and I only managed to interview four, which represents a limit to my research.

In addition, the average age of the people interviewed was 41.6, which, despite being representative of the average age of teachers in Italy and Greece, is certainly not a criterion to be neglected.

The teachers did not all teach in the same type of establishment, nor with the same levels of students, which adds a limit to the representativeness of the sample.

At the same time, this qualitative research does not provide quantitative data on the key factors in the success of digital responsibility training in Greece and Italy, which would have enabled me to measure these factors more accurately and compare them with each other.

Also, I think it's also important to add that I didn't interview any students or people from the government, whose opinions would be invaluable in complementing those of the professors and digital experts interviewed, since this kind of initiative concerns them just as much.

The qualitative nature of my research may potentially leave room for research bias in the interpretation of the results, particularly through the coding of themes.

It is important to mention that some of the questions in my interview guide did not yield conclusive results in the context of this study, which was particularly the case for questions 7 and 9 in the guide for teachers and questions 3, 5 and 9 in the guide for tech experts. Over time, I realised that the respondents didn't have the necessary knowledge to answer these questions, which made them feel uncomfortable not knowing what to 69

answer. I could have anticipated this when I created the questionnaire, and I was able to adapt it once I realised that these questions would not provide any useful information for this study.

7.4 Suggestions for further research

The results I have obtained from this study, as well as the stated limitations, encourage further research to identify the key factors for the success of digital responsibility training in Greece and Italy.

It would indeed be relevant to question all categories of teachers, regardless of the subject taught or the level at which they teach. This would provide a more global view of the needs of the younger generation and would enable Latitudes to better position itself when creating new teaching resources.

The experts have provided some very relevant information, but we need to go even further and interview students directly, as well as the people who have the power to act on a larger scale, perhaps rectorates or members of government responsible for education, for example.

A quantitative study would provide figures on the relevance of integrating the subject of digital responsibility into the Greek and Italian education sectors and would complement the qualitative study carried out here.

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Appendix

Appendix n°1: Second interview guide adapted to digital responsibility experts

INTERVIEW GUIDE

Before getting to the heart of the matter, I'd like to get a better understanding of who you are and the environment in which you operate.

Theme 1: Exploration

Question 1:

Could you introduce yourself, your professional background, and your current role within your organisation?

Question 2:

Could you share some concrete examples of the projects or initiatives you're working on?

Question 3:

What digital resources (platforms, tools, methodologies) are currently available in your organisation? -Could you give an example of a tool that's widely used and discuss its advantages and limitations?

Question 4:

From your perspective, have you observed any evolving expectations or needs regarding digital training in recent years? -What trends or demands are emerging?

Question 5:

What digital training courses are available in Italy/Greece? -What role does digital responsibility play?

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Theme 2: Perceptions and understanding of digital responsibility

Digital responsibility is an actual topic, but perceptions and definitions can vary. I'd like to understand how you perceive this subject and what it means to you.

Question 6:

When you hear the term "digital responsibility," what concepts or principles come to mind? -Could you share an example of how you've encountered or applied these principles in your professional context?

Question 7:

What are the ways in which you, as a citizen, can reduce your digital impact? As an employee? Do you apply them?

Question 8:

How are concepts such as digital responsibility and sobriety addressed in your company? -Have you taken part in any discussions or training on these subjects, and what feedback have you received?

Question 9:

In your opinion, what digital practices seem to contradict the principles of digital responsibility within your company? -Are there any initiatives in your environment aimed at changing these practices?

Today, education plays a key role in the way digital tools are used and understood by the younger generations. I'd like to understand how these issues are being tackled in your company and what the challenges are.

Question 10:

What role can teachers play in managing the young generations on social networks?

Question 11:

What do you see as the main obstacles to the integration of digital responsibility in education in Italy/Greece? -Do you see problems such as lack of time, insufficient training or institutional support?

Question 12:

If you were responsible for integrating digital responsibility into a training programme in your company, what teaching approaches or methods would you find most effective? -Have you already experimented with any of these approaches?

Theme 3: Existing resources and initiatives for a responsible digital future

Question 13:

If you had the opportunity to lead a large-scale project on digital responsibility, what priority action would you implement? -Could you describe a concrete project idea with potential for significant impact?

I am now going to show you some cards from workshops that has been created by the association Latitudes. They are called "The Battle of Tech", which aims to encourage a critical approach to technology and to promote responsible practices in higher education and "The Battle of AI" which aims to encourage a critical approach to generative AI.

Question 14:

What are your initial impressions of this initiative? Does it resonate with you, and would you like to know more about it?

Question 15:

What skills do you think students could develop using this type of tool?

Question 16:

Do you have some questions or remarks after seeing all of this?

Socio-demo data

Question 20:

How old are you?

Appendix n°2: *First interview guide in French (for teachers)*

GUIDE D'ENTRETIEN

Avant d'entrer dans le vif du sujet, j'aimerais mieux comprendre qui vous êtes et l'environnement dans lequel vous évoluez.

Thème 1: Exploration

Question 1:

Pourriez-vous vous présenter, décrire votre parcours et votre fonction actuelle?

Question 2:

Avez-vous observé des changements dans les attentes ou les besoins du secteur de l'éducation au cours des dernières années? -Quelles sont les nouvelles demandes ou tendances que vous voyez émerger?

Question 3:

Comment évaluez-vous votre connaissance des dispositifs et outils numériques? — Pour préciser ma question, vous sentez-vous à l'aise avec l'utilisation de téléphones et d'ordinateurs? Qu'en est-il des logiciels tels que Word, PowerPoint? Quels autres logiciels utilisez-vous fréquemment?

Question 4:

Quelles sont les ressources numériques actuellement disponibles dans votre école ou organisation? -Pouvez-vous donner un exemple de plateforme ou d'outil particulièrement utilisé? Quels sont ses avantages et ses limites?

Thème 2: La perception du numérique responsable

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Le numérique responsable est un sujet d'actualité, mais les perceptions et les définitions peuvent varier. J'aimerais comprendre comment vous percevez ce sujet et ce qu'il signifie pour vous.

Question 5:

Si je vous dis « numérique responsable », que cela vous évoque-t-il? -Vous pouvez donner des mots, des exemples, tout ce qui vous vient à l'esprit. Pouvez-vous donner un exemple de situation dans laquelle vous avez été confronté à ces questions?

Aujourd'hui, l'éducation joue un rôle clé dans la manière dont les outils numériques sont utilisés et compris par les jeunes générations. J'aimerais comprendre comment ces sujets sont abordés dans votre établissement et quels sont les défis qui en découlent.

Question 6:

Selon vous, qu'est-ce que les élèves pensent et attendent de leurs enseignants en termes d'éducation au numérique responsable?

Question 7:

Toujours dans le secteur de l'éducation, quelles sont les pratiques qui vous semblent aller à l'encontre des principes d'un monde numérique plus responsable? -Avez-vous des exemples concrets? Y a-t-il des initiatives en cours pour changer cela?

Question 8:

Comment le concept de numérique responsable est-il abordé (ou non) dans votre environnement professionnel? -Vous sentez-vous bien soutenu par votre école? Avez-vous déjà eu des discussions sur ces sujets avec vos étudiants/collègues? Quel est le retour d'information que vous avez reçu?

Question 9:

Si vous deviez intégrer les questions de numérique responsable dans l'enseignement, quelles approches ou méthodes d'enseignement seraient, selon vous, les plus efficaces? -Avez-vous déjà essayé d'introduire ces sujets? Comment cela a-t-il été perçu?

Question 10:

Quels sont les principaux obstacles auxquels l'éducation est confrontée aujourd'hui en termes de numérique? -Manque de temps? Manque de formation? Le soutien institutionnel? Avez-vous un exemple concret qui illustre ces difficultés?

Question 11:

Selon vous, quels sont les opportunités liées à l'intégration de ces questions dans l'enseignement?

Question 12:

Si vous étiez en charge de mettre en place une formation aux outils numériques auprès des jeunes, quel format cette formation prendrait-elle ?

Thème 3: Ressources et initiatives existantes pour un avenir numérique responsable

Plusieurs initiatives existent déjà pour soutenir la transition vers un environnement numérique plus responsable. J'aimerais en savoir plus sur celles que vous connaissez ou celles que vous aimeriez voir.

Je vais maintenant vous montrer quelques cartes issues d'ateliers qui ont été créées par l'association Latitudes. Il s'agit de la Bataille de la Tech, qui vise à encourager une approche critique du numérique et à promouvoir des pratiques responsables dans

l'enseignement supérieur et de la Bataille de l'IA qui vise à encourager une approche critique de l'IA générative.

Question 13:

Quelles sont vos premières impressions? -Ces concepts vous sont-ils familiers? Souhaitez-vous en savoir plus?

Question 14:

Quelles compétences pensez-vous que les élèves pourraient développer en utilisant ce type d'outil?

Données socio-démographiques

Question 15:

Quel âge avez-vous?

Question 16:

Depuis combien de temps enseignez-vous?

Question 17:

Travaillez-vous également dans le secteur privé en parallèle de vos heures de cours?

Question 18:

Quel âge ont les élèves avec lesquels vous travaillez?

GUIDE D'ENTRETIEN

Avant d'entrer dans le vif du sujet, j'aimerais mieux comprendre qui vous êtes et l'environnement dans lequel vous évoluez.

<u>Thème 1: Exploration</u>

Question 1:

Pouvez-vous vous présenter, décrire votre parcours professionnel et votre fonction actuelle au sein de votre organisation?

Question 2:

Pourriez-vous donner quelques exemples concrets de projets ou d'initiatives sur lesquels vous travaillez?

Question 3:

Quelles sont les ressources numériques (plateformes, outils, méthodologies) actuellement disponibles dans votre organisation? -Pouvez-vous donner un exemple d'outil numérique largement utilisé et discuter de ses avantages et de ses limites?

Question 4:

De votre point de vue, comment ont évolué les besoins en matière de formation au numérique ces dernières années? -Quelles sont les tendances ou les demandes qui émergent?

Question 5:

Quelles sont les formations au numérique disponibles en Italie/Grèce? -Quel rôle y joue le numérique responsable?

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Thème 2: La perception du numérique responsable

Le numérique responsable est un sujet d'actualité, mais les perceptions et les définitions peuvent varier. J'aimerais comprendre comment vous percevez ce sujet et ce qu'il signifie pour vous.

Question 6:

Si je vous dis « numérique responsable », que cela vous évoque-t-il? -Vous pouvez donner des mots, des exemples, tout ce qui vous vient à l'esprit.

Question 7:

Quels sont les moyens que vous connaissez pour réduire votre impact numérique en tant que citoyen? En tant que salarié? Les appliquez-vous?

Question 8:

Comment des concepts tels que le numérique responsable et la sobriété sont-ils abordés dans votre entreprise? -Avez-vous participé à des discussions ou à des formations sur ces sujets, et quel retour avez-vous reçu?

Question 9:

Selon vous, quelles sont les pratiques digitales qui semblent contredire les principes de numérique responsable au sein de votre entreprise? -Existe-t-il dans votre environnement des initiatives visant à modifier ces pratiques?

Aujourd'hui, l'éducation joue un rôle clé dans la manière dont les outils numériques sont utilisés et compris par les jeunes générations. J'aimerais comprendre comment ces sujets sont abordés dans votre établissement et quels sont les défis qui en découlent.

Question 10:

Quel rôle les enseignants ont à jouer dans la manière dont les jeunes sont présents des réseaux sociaux ?

Question 11:

Quels sont, selon vous, les principaux obstacles à l'intégration du numérique responsable dans l'éducation en Italie/Grèce? -Voyez-vous des problèmes tels que le manque de temps, une formation insuffisante ou un soutien institutionnel?

Question 11:

Si vous étiez chargé d'intégrer le numérique responsable dans un programme de formation au sein d'une école, quelles approches ou méthodes d'enseignement vous paraîtraient les plus efficaces? -Avez-vous déjà expérimenté l'une ou l'autre de ces approches?

Thème 3: Ressources et initiatives existantes pour un avenir numérique responsable

Plusieurs initiatives existent déjà pour soutenir la transition vers un environnement numérique plus responsable. J'aimerais en savoir plus sur celles que vous connaissez ou celles que vous aimeriez voir.

Je vais maintenant vous montrer quelques cartes issues d'ateliers qui ont été créées par l'association Latitudes. Il s'agit de la Bataille de la Tech, qui vise à encourager une approche critique du numérique et à promouvoir des pratiques responsables dans l'enseignement supérieur et de la Bataille de l'IA qui vise à encourager une approche critique de l'IA générative.

Question 12:

Quelles sont vos premières impressions sur cette initiative? -Vous paraît-elle pertinente et souhaiteriez-vous en savoir plus?

Question 13:

Quelles compétences pensez-vous que les élèves pourraient développer en utilisant ce type d'outil?

Question 14:

Avez-vous des questions après avoir vu tout ça?

Données socio-démographiques

Question 15:

Quel âge avez-vous?

Question 16:

Depuis combien de temps enseignez-vous?

Question 17:

Travaillez-vous également dans le secteur privé en parallèle de vos heures de cours?

Question 18:

Quel âge ont les élèves avec lesquels vous travaillez?

Appendix $n^{\circ}5$: Coding document – Analysis of teachers' interviews

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Appendix $n^{\circ}6$: Coding document – Analysis of tech experts' interviews

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Appendix n°7: Prompts sent to ChatGPT and answers of the agent

Prompt:

Je vais te donner un extrait d'un tableau Excel dans le cadre d'une étude qualitative pour un mémoire. Après avoir fait les interviews, j'ai pu trier les verbatims par catégories de questions. Fais-moi un résumé de ces informations, issues de la catégorie "Presentation : background, job, current position". Ressors-en les tendances, les similarités, les différences. Fais une conclusion générale. Pour la catégorisation : I = Italie, G = Grèce, P = Professeur, E = Expert tech.

ChatGPT answer:

« Voici une synthèse des informations issues de la catégorie "Présentation : background, job, current position", pour les personnes interrogées en Italie (IP) et en Grèce (GP), toutes dans le cadre d'une étude qualitative sur les enseignants et experts en technologies.

- IT Profils Italiens (IP1 à IP7)
- Tendances générales :
- Forte spécialisation en enseignement du français langue étrangère (FLE): Plusieurs enseignants (IP1, IP2) ont un parcours académique solide en langues, avec des années d'expérience à l'étranger.
- Diversité des contextes d'enseignement : IP1 a travaillé en Chine, Espagne, Slovaquie ; IP2
 enseigne aussi à distance pour des écoles de commerce ; IP3 travaille à la fois dans le
 primaire, l'université et des laboratoires.
- Expérience importante dans le secondaire et l'universitaire : IP4, IP5 et IP6 travaillent ou ont travaillé dans le secondaire, certains avec un recentrage vers le supérieur ou des domaines plus spécialisés comme l'IA.
- **Profils variés, y compris hors du champ linguistique**: IP3 est professeur d'EPS, IP5 et IP6 sont dans les domaines du numérique, du data ou du développement.
- Fonctions spécifiques et statut particulier : IP7 a un poste d'expatrié rattaché au ministère des Affaires étrangères, ce qui lui confère un rôle de coordination plus institutionnel.
- GR Profils Grecs (GP1 à GP4)
- Tendances générales :
- Forte spécialisation en informatique et éducation numérique : GP1, GP3 et GP4 sont des enseignants en technologies de l'information ou informatique.

- Expérience dans l'enseignement secondaire et primaire : GP1, GP3 et GP4 interviennent dans plusieurs écoles, parfois sur plusieurs niveaux (primaire, secondaire).
- Très grande charge d'élèves : Certains (ex. GP3) mentionnent enseigner à plusieurs centaines d'élèves répartis sur différentes écoles.
- **Profils techniques confirmés**: GP1 est doctorant en IA, GP3 et GP4 ont des diplômes universitaires solides dans les domaines techniques.
- Polyvalence géographique et temporelle : Les cours sont courts (souvent 1h), ce qui multiplie les établissements fréquentés quotidiennement.

• Similarités entre les deux groupes

- Expérience étendue dans l'éducation : Qu'ils soient linguistes ou experts tech, tous ont plus de 10, voire 20 ans d'expérience.
- **Diversité des contextes d'enseignement** : Enseignement en ligne, en présentiel, dans des établissements variés (du primaire à l'université).
- Volonté d'adaptation : Plusieurs enseignants s'adaptent à des environnements nouveaux, que ce soit par la technologie (IA, e-learning) ou les changements de niveau scolaire.

• Différences majeures

• Orientation disciplinaire :

- Les Italiens (IP) sont majoritairement orientés vers les langues et sciences humaines (sauf IP3 et IP5).
- o Les Grecs (GP) sont tous ancrés dans le domaine technologique et informatique.

• Structure d'enseignement :

- Les IP évoluent davantage dans des structures internationales ou universitaires.
- Les GP sont plus présents dans le système public primaire ou secondaire avec une rotation entre écoles.

• Statuts professionnels :

- Certains Italiens (IP7 notamment) ont des fonctions très institutionnelles ou diplomatiques.
- Les Grecs sont ancrés dans le système éducatif national, avec un statut plus classique d'enseignant.

• Conclusion générale

Les deux groupes présentent des professionnels expérimentés, investis dans l'éducation avec des profils adaptés à leur contexte national. Les enseignants italiens se distinguent par leur ancrage dans les langues et les relations internationales, tandis que les Grecs incarnent une forte expertise en éducation numérique et informatique, souvent répartie sur plusieurs écoles. Cette complémentarité reflète une diversité de parcours enrichissante pour tout projet de coopération pédagogique ou technologique. »

Prompt:

Je vais te donner un extrait d'un tableau Excel créé dans le cadre d'une étude qualitative pour un mémoire. Après avoir fait les interviews, j'ai pu trier les verbatims par catégories de questions. Faismoi un résumé de ces informations qui formeront la première catégorie "Exploration", autrement dit celle où j'en apprends plus sur les interviewés (ici, les professeurs, dans un premier temps, c'est un élément important à prendre en compte) et sur leur environnement de travail. -> Ressors-en les tendances, les similarités, les différences. Il faut apporter des éléments qualitatifs et qui sont pertinents dans le cadre d'une étude ayant pour problématique : "What are the key factors in the success of digital responsibility training in Greece and Italy, and how can the French association Latitudes position itself in these markets?" ainsi que les questions de recherche suivantes : • How do teachers and trainers in Greece and Italy perceive digital responsibility and its integration into their teaching practices? • What are the levers and obstacles to the adoption of digital responsibility in training in Greece and Italy? -> Fais une conclusion générale, en citant les verbatims et en nommant la personne (exemple : IP1 : "..."). Les citations doivent être entre parenthèses, en italique, et reprendre mot pour mot le verbatim sans apporter aucune modification. Pour la catégorisation des colonnes : I = Italie, G = Grèce, P = Professeur, E = Expert tech.

ChatGPT answer:

Merci pour ces captures d'écran. Voici une synthèse qualitative de la catégorie « **Exploration** » (catégorie 1), qui permet de mieux comprendre les profils des enseignants interviewés en Italie et en Grèce ainsi que leur environnement de travail — un élément clé pour bien contextualiser l'implantation potentielle d'une initiative comme celle de l'association française **Latitudes**.

🔍 Résumé thématique de la catégorie « Exploration »

- 🔒 1. Évolution du secteur éducatif et attentes vis-à-vis des enseignants
- Similarités :
- Les deux pays font face à une pression d'évolution numérique, bien que celle-ci s'applique différemment.
- En Italie, le changement semble souvent impulsé par des réformes structurelles et des besoins de professionnalisation, avec une orientation vers l'employabilité des étudiants (IP1 : « il y a une demande bien entendu pour avoir des étudiants surtout en langue avec plus de débouchés... c'est un problème récurrent de personnes bien qualifiées »).
- En Grèce, les enseignants ont l'impression de devoir rattraper un retard technologique (GP1 : « Yes, we have to move forward to catch up the train in Greece. Things moving very,

very slowly »). Les infrastructures restent parfois obsolètes (GP1 : « newer computers from 2011 and also 2016 »), même si des investissements récents sont notés.

Différences :

- L'Italie fait état d'une **tradition académique plus forte**, freinant parfois l'intégration du numérique (IP1 : « l'Italie aussi, un pays très traditionnel... il n'y aurait pas eu le COVID, on n'aurait jamais passé le cap de passer en ligne »).
- En Grèce, on observe une **prise de conscience croissante** du besoin d'intégrer des compétences numériques, notamment à cause de la demande des élèves (GP4 : « especially with the AI and let's say, ChatGPT: explosion »).

• **2.** Niveau de familiarité avec les outils numériques

- Similarités :
- Dans les deux pays, le niveau de maîtrise varie fortement selon les enseignants, leur génération, ou leur domaine d'expertise.
- Les outils comme Excel, PowerPoint, Canva, Teams, etc. sont fréquemment mentionnés, mais leur maîtrise reste souvent basique, voire superficielle (IP5 : « They know the basic stuff... they struggle when they have to do more analysis »).
- Certains enseignants utilisent déjà des **tableaux interactifs ou stylos numériques** dans leurs cours, en particulier en Grèce (GP1 : « I'm using my interactive board in my lab and digital pencil to write everything »).
- Différences :
- Les enseignants grecs semblent parfois plus volontaires individuellement mais déplorent un manque de formation institutionnelle (GP4 : « There was no suitable, yeah. Training. Especially after the installation of the interactive whiteboards, they didn't make any »).
- En Italie, certains enseignants sont encore peu à l'aise avec le numérique, surtout s'ils n'ont pas de motivation personnelle ou de contexte favorable (IP2 : « tout se perd très très très vite dès que j'arrive à l'utiliser »).
- a 3. Ressources numériques disponibles dans les établissements
- Similarités :
- Les équipements numériques sont présents mais souvent sous-utilisés, faute de formation, de maintenance ou d'intégration dans la pédagogie.

- L'absence de stratégie gouvernementale coordonnée est un frein dans les deux pays (IP6 : « our government is not very advanced or on the current time ... it's just the teacher to decide » ; GP4 : « ministry didn't offer a proper, let's say, training »).
- Différences :
- En Grèce, la répartition du matériel est hétérogène. Certaines écoles disposent d'un ordinateur par élève, d'autres presque rien (GP4 : « most schools... they have at least one computer per classroom »), et la peur de casser le matériel reste un frein important pour certains enseignants (GP2 : « They're afraid of making something wrong and make a damage to the device »).
- En **Italie**, les enseignants rapportent une autonomie relative dans le choix de leurs outils, mais cela reste souvent **lié à leurs initiatives personnelles** plus qu'à un plan national (IP6 : « it is the teacher to decide if they want to use these kind of tools »).

✓ Conclusion générale (catégorie Exploration)

La phase exploratoire met en lumière une réalité contrastée : si les enseignants en Grèce et en Italie reconnaissent tous la nécessité d'évoluer vers une pédagogie plus numérique et responsable, les environnements institutionnels, le niveau de formation, et la culture numérique varient fortement d'un pays et d'un établissement à l'autre.

- En Italie, la tradition académique freine parfois l'intégration du numérique, même si la pandémie a joué un rôle d'accélérateur (IP1 : « il n'y aurait pas eu le COVID, on n'aurait jamais passé le cap de passer en ligne »).
- En Grèce, les enseignants expriment un fort besoin de formation et de structuration, avec un constat de retard institutionnel (GP4 : « they didn't offer a proper, let's say, training for the teachers »), mais aussi une envie de faire évoluer leurs pratiques.

Ces constats soulignent le besoin crucial d'un accompagnement pédagogique structuré. Pour Latitudes, cela représente une opportunité stratégique d'intervenir comme catalyseur de montée en compétence, en répondant à la fois à la demande de contenu pédagogique sur la responsabilité numérique et au besoin de formation continue accessible et contextualisée.

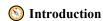
Prompt:

Ajoute à cette analyse la nuance du point de vue des experts et expertes tech, sur les mêmes questions globalement. Fais la même analyse en ressortant les tendances, les similarités, les différences, et en faisant une conclusion générale détaillée. En anglais, même règle pour les verbatims.

ChatGPT answer:

Absolutely. Here's the revised and expanded **Theme 1: Exploration** analysis, now incorporating the perspectives of **tech experts** (IE = Italy Expert, GE = Greece Expert), while maintaining the same structure. As before, the analysis is in British English and all verbatim quotes remain in their original language.

Theme 1: Exploration (Expanded with Tech Experts)



This theme provides foundational insights into the **working context** of the interviewees — both educators and digital professionals — in Italy and Greece. Understanding their **digital environments**, **perceived shifts in expectations**, and **available training opportunities** is key to assessing how and where Latitudes could effectively intervene to support digital responsibility education.

\blacksquare 1. Digital resources in their organisations: access \neq adoption

Shared tendencies:

Across both countries, **digital tools are widely available** in professional and educational environments. However, their **usage varies considerably**, often depending on role, organisational culture, and digital maturity.

- In Italy, professionals frequently mention the use of collaborative platforms (IE1: « beaucoup de des outils digitaux pour vidéo call, Google meet pour vidéo call »; IE5: « on utilise Google doc, blabla et créer Google PowerPoint... Slack... Confluence... Hubspot comme un CRM »).
- Similarly, Greek experts use multiple tools, though sometimes with limitations. GE1 describes a proprietary internal system (GE1: « une plateforme interne ... c'est un système assez compliqué »), while GE2 confirms mainstream use: « on va passer de Outlook, PowerPoint, Word et tout de l'architecture basique ».

In both cases, the presence of tools is evident, but ease of use and actual adoption remain uneven.

• IE2 shows this gap clearly: « I'm trying to learn now how to use it... I'm not joking it's l I l I can do it it's not fully remote ».

- GE4, working in a highly digitalised sector, still points out: « I think in my workspace everything is perfect like for working remotely because I'm in a hybrid model ».
- ◆ Insight: The tech environment is technically well-equipped, but onboarding and user experience are inconsistent a barrier Latitudes must consider when scaling training.

2. Evolving expectations: more digital literacy, but uneven standards

Across sectors and roles, respondents describe a **growing expectation** to master digital tools — not only basic productivity software, but more advanced data-oriented platforms. However, **formal training structures are often lacking or informal**.

- Teachers and experts both report informal learning:
- IP4 observes: « les étudiants apprennent plus à l'extérieur de l'école... ».
- GP3 remarks: « we now have labs, we have computers, we have bulletin boards », yet doesn't
 describe any structured curriculum.
- From the expert side, GE1 echoes: « je continue à m'informer toujours par moi-même... j'utilise Power BI pour visualiser les productions ».
- IE4 frames the process as incremental: « so every step that we take forward comes pretty much from them. But let's say there's an enthusiasm from the class, but there's no actual organization ».
- Formalised expectations are unclear or absent:
- IE3 points to ambiguity: « on fait pas vraiment formation... On choisit des personnes qui savent utiliser les ordinateurs ».
- GE2 questions whether AI integration is even expected at school level: « I'm not sure. I don't know if I'll know for sure that teachers are... integrating artificial intelligence ».
- ◆ Insight: Despite growing reliance on digital tools, training often comes down to personal initiative, whether among teachers or professionals. This makes standardisation of digital responsibility education difficult and highlights an opportunity for Latitudes to support or facilitate local frameworks.
- ③ 3. Digital training availability: patchy, decentralised, and often reactive
 A major obstacle in both countries is the lack of cohesive national-level digital training
 programmes, especially for non-technical professionals.
 - Mostly informal or optional training:

- IE1 notes: « il y a plus de formations aussi des exécutifs, ça veut dire pour les gens qui travaillaient désormais pour avoir des Masters ou des cours dans la digitalisation ».
- IE5 underlines a practical barrier: « apprendre tout seul ça prend énormément de temps... chose qu'on a pas ».
- In Greece, GP4 observes resistance to top-down training: « there was no suitable... the ministry didn't offer a proper, let's say, training ».
- Experts often learn independently or through expensive upskilling:
- GE3 highlights the growing complexity of tools: « les outils deviennent sophistiqués... il faut qu'on soit formés proprement ».
- GE5 links training to market access: « you have to pay and then this is something that you can do after you 'take your degree' ».

This issue is especially pressing for those in hybrid or remote roles (IE2, GE4), who rely on a constantly evolving toolset without formal support.

♦ Insight: The current digital training landscape is highly unequal — dependent on personal context, motivation, and available resources. This creates a fragmented readiness for digital responsibility education, and an opening for scalable, accessible training models.

✓ Conclusion: Key implications for Latitudes

This cross-cutting analysis confirms that the digital environments of both educators and tech experts in Italy and Greece are more equipped than prepared. Tools are available — from Office suites to collaborative platforms and CRMs — but there is no widespread framework for supporting their pedagogical or ethical use.

- While digital expectations are rising, especially post-COVID, training systems are decentralised, ad hoc, and often depend on personal initiative (IE4, GE2, IP6, GP1).
- Both groups articulate a lack of structured, accessible training, even as they recognise the growing importance of digital tools (GE3: « il faut qu'on soit formés proprement »; IE5: « on utilise Metabase comme système de data Lake »).
- Teachers and experts alike often resort to **self-training**, with very few formal opportunities to learn about **ethical**, **responsible technology use** (IP6, IE3, GE1).
- For Latitudes, this represents a dual opportunity:
- 1. **As a facilitator**: help unify and deliver structured, practical training that meets professionals where they are especially for ethical digital practices.
- 2. **As a community builder**: support peer-led training and best-practice exchange to bridge the gap between access to tools and meaningful, responsible use.

Theme 2: The Perception of Digital Responsibility (Professors only)

(S) Introduction

This theme explores how teachers in Italy and Greece define digital responsibility, how they perceive its integration into their teaching practices, and what obstacles or contradictions they observe in students' behaviours or the wider digital environment. These insights are central to understanding the existing mindset and readiness for initiatives like Latitudes' digital responsibility programmes.

★ 1. Understanding of digital responsibility: Fragmented, often vague

Teachers show **limited and inconsistent understanding** of what digital responsibility means. While some associate it with privacy, copyright or misinformation, most admit either **never having heard the term** or interpret it **very broadly**.

- Partial definitions focused on online safety and content sharing:
- IP3 links the concept to media consumption: « Alors, whiteblowing, c'est pas seulement avec le digital. C'est surtout dans un environnement de travail... ».
- IP1 refers to online content and platform usage: « une utilisation incontrôlée des ressources des étudiants ».
- IP6 aligns digital responsibility with the **cultural weight of online actions**: « everything that it does online, it's real weight. That it does in real life as well... more cultural and societal approach ».
- Many admit a lack of understanding:
- IP5 openly says: « I don't know. It is the first time that I hear that ».
- IP7 states: « Ah, complètement out of the concept. Yeah. Nothing. No, no. At least for what I seen in the university ».
- ♦ Insight: Teachers recognise that digital behaviours matter, but few are able to articulate a clear or pedagogical definition of responsibility which could limit how (or whether) they introduce the topic in class.

2. Perception of students' awareness: curiosity, but insufficient training

Most teachers feel that **students are naturally immersed** in digital environments — but that **this doesn't translate into responsibility or awareness**.

- Students are digitally active, but lack critical skills:
- IP2 mentions: « les jeunes, ils ne lisent pas trop bon à faire des adaptations ».
- IP6 says: « You go to some of these kind of new resources, YouTubers, Twitters are people, they are continuously evolving and teaching new things... but not even about programs... ».
- IP3 shares: « je regarde dans Google et il commente et dit en italien, la responsabilité... mais nous, je pense, je connais pas ».
- Some teachers sense generational gaps:
- IP4 says: « cette intelligence ici qui nous aide... cette vidéo va être problématique... », suggesting students might consume without filtering.
- IP7 warns that students' tool knowledge is not guided: « So when I approach the social network... ».
- ♦ Insight: Students are digitally immersed but not digitally literate. Their habits are shaped by platforms, not values suggesting a role for structured intervention.

3. Teachers' role in sensitising students: acknowledged, but under-supported

All respondents agree that **teachers should play a role in raising awareness** — but many feel unprepared, unsupported, or limited by institutional inertia.

- Educators feel this is part of their mission:
- IP6 insists: « I think it's for the teacher. It's important to point out that this kind of online responsibilities ... ».
- IP5 adds: « I think it's very useful. And it is one of the new school courses that have to be. Thought ».
- But many say they lack tools or time:
- IP2 states: « on a un système où on apprend à mieux maîtriser les technologies... mais c'est juste sur le moment ».
- IP1 highlights a structural problem: « il y a un pays qui est plus touché par un vie de l'isolement... », suggesting societal barriers to implementation.
- ◆ Insight: Teachers are open to including digital responsibility in their curriculum but only if institutionally supported through training, time and clear frameworks.

1. Contradictions in practice: exams, tools, and generational divides

There is a tension between **what students are taught** and **what they actually do online** — often without guidance or reflection.

- IP3 critiques current assessments: « les examens en ligne dans leur cadre actuel sont pas bons, sont pas suffisants, et tout ça ».
- IP6 points out that the platforms shaping digital behaviours are **informal and decentralised**: « YouTubers, Twitters... not even about programs ».

Others highlight contradictions within the academic system:

- IP2 says: « une bonne situation c'est qu'on devient des heures... deux heures a day without it. Mais c'est difficile pour me ».
- IP4 notes: « on utilise des ressources ... mais c'est juste sur le moment ».
- ♦ Insight: There's a mismatch between institutional teaching and students' real-world digital experiences. Teachers observe this gap, but struggle to address it within traditional structures.

5. Ethics in digital education: nearly absent

Very few teachers report any structured teaching around digital ethics or responsibility. Most confirm that, even if students discuss or practise digital behaviours, these are rarely connected to ethical frameworks.

- IP7 is blunt: « Personne ne parle d'intelligence artificielle, sauf pour dire enfin pour parler de la censure ».
- IP1 adds: « Je pense que c'est relativement abordé hein » suggesting minimal engagement.
- IP2 reflects: « Je vois pas d'autres choses... mais oui c'est une chose... mais c'est pas vraiment poussé ».
- ◆ Insight: Ethical thinking is not yet embedded in digital education. This represents a major gap
 and a core opportunity for Latitudes' mission.

✓ Conclusion: A fractured and unsupported awareness

This theme reveals a significant **openness among teachers** to discussing digital responsibility, but also a **severe lack of training, structure, and clarity** in how to do so. Key takeaways include:

- Understanding of digital responsibility is partial at best, and often absent (IP5, IP7).
- Teachers agree they should address it but feel they lack time, institutional support, or training to do so effectively (IP2, IP6).

- Students' behaviours are shaped by digital culture, not education, creating a wide pedagogical gap (IP3, IP6).
- Ethics are almost entirely absent from formal instruction, despite their importance in shaping responsible digital citizens (IP1, IP7).

For Latitudes, this gap offers a clear opportunity: to **provide ready-to-use frameworks, training, and classroom materials** to help teachers guide students through digital ethics and responsibility — bridging the divide between digital access and meaningful, values-based use.

Theme 2: The Perception of Digital Responsibility (Experts only)

(S) Introduction

This theme explores how **technology experts** and **corporate professionals** in Italy and Greece perceive digital responsibility — in terms of its definition, application, and relevance in their work environments. These insights are crucial for understanding how Latitudes can position itself not only within schools but also in relation to broader professional expectations that shape future educators and citizens.

★ 1. Definition of digital responsibility: clearer, but context-dependent

Unlike teachers, most experts offer **clearer and more operational definitions**, though interpretations still vary based on their field (data, cybersecurity, HR, engineering, etc.).

- A strong focus on data protection, platform usage, and ethical tech:
- IE1 explains digital responsibility as both behaviour and system design: « C'est peut-être une responsabilité de bien faire, mais ce n'est pas un logiciel... une éthique à avoir ».
- GE3 is direct: « C'est être conscient de l'impact de ses actions numériques... ».
- GE5 frames it in business terms: « The responsibility for me... you have to take care of yourself to present on the internet ».
- Some confusion remains about personal vs. systemic responsibility:
- IE4 admits: « I think about using the tools in a responsible way... but I don't know if I would associate it with that term ».
- GE1 echoes this: « Le terme est flou. Peut-être que ça va venir plus tard ».
- ◆ Insight: Experts tend to have more concrete views, especially around data and security, but there's a lack of consensus on broader ethical frameworks particularly when it comes to linking personal, institutional, and societal responsibilities.

2. Addressing digital responsibility at work: growing attention, but uneven structure Experts note that digital responsibility is becoming more visible in corporate and institutional environments, particularly in areas like data usage, cybersecurity, and employee training.

- Increasingly present in onboarding and compliance processes:
- IE2 states: « on est obligé à suivre cette formation sur la RGPD sécurité ».
- GE5 explains: « when I re-entered the company... had to go through ISO, models of GDPR, risk pages... ».
- GE3 confirms: « Oui, il y a des formations, mais ce n'est pas pour tout le monde. Certains départements, pas tous ».
- Yet implementations are fragmented:
- IE5 acknowledges a cultural gap: « It's a little bit cultural... it's like driving a car: you know the theory but you're not careful ».
- GE4 says that expectations exist but vary: « Si tu veux, ça dépend de ton rôle, de ton entreprise... ».
- ♦ Insight: Formal digital responsibility training exists, especially in larger organisations, but remains uneven typically compliance-driven rather than transformative or ethical in tone. This opens the door for a more human-centred framework.

3. Digital behaviours and contradictions: daily tensions

Experts frequently cite **disconnects between digital tools and behaviours**, including risks around automation, content production, and generational divides.

- Concerns about over-automation and loss of accountability:
- IE4 flags: « like for example automation, AI... people use it but don't know what's behind ».
- GE3 warns: « Les enfants n'apprennent plus rien. Ils copient. Ce n'est pas leur faute... l'outil fait tout ».
- Issues of misuse, even in corporate settings:
- IE3 mentions: « même chez moi, ce sont des outils démocratiques ... mais il n'y a pas de culture d'usage ».
- GE1 is blunt: « On voit bien les usages, mais pas la réflexion ».
- ♦ Insight: Experts are aware that digital tools outpace digital understanding particularly when it comes to AI, data usage, or platform dependency. There is a strong perceived need for critical digital literacy beyond just technical skills.

4. The role of education and teachers: necessary but underprepared

Experts agree that schools and teachers must play a key role, but many express concern about the lack of preparation, confidence, or relevance of current educational systems.

- Teachers must be involved but need support:
- IE4: « ce sont les professeurs qui doivent montrer l'exemple... mais ils ne sont pas formés ».
- GE5: « We're the teachers, of course, but it's not only us... parents too, society ».
- Schools lag behind the pace of tech:
- GE2 reflects: « Il y a un énorme écart entre les usages des jeunes et les contenus scolaires ».
- IE3 shares: « Les jeunes, ils ont une maîtrise, mais l'école ne suit pas ».
- ♦ Insight: Experts are aligned with teachers in recognising that education is central to digital responsibility but also that education systems are outdated, lacking both speed and strategy to keep up with current challenges.

5. Obstacles to integration: systemic, cultural, and economic

Experts highlight cultural resistance, lack of digital culture, and economic constraints as the main barriers to bringing digital responsibility into education.

- IE2 identifies time and institutional inertia: « le problème c'est la charge, mais l'autre côté, c'est que l'environnement ne valorise pas ».
- GE1 brings up inequality: « c'est aussi une question d'inégalités numériques... tout le monde n'a pas les mêmes accès ».
- GE4 mentions curriculum limits: « je ne vois pas de formation là-dessus, je pense que c'est une matière à part entière ».
- ♦ Insight: Experts point to the need for deep structural changes, including curriculum development, teacher training, and policy frameworks. There's also recognition that without institutional support, efforts risk remaining symbolic.

✓ Conclusion: Structured awareness, but fragmented implementation

The expert perspective offers a more grounded understanding of digital responsibility — especially in terms of risk, data, and ethics. However, their comments reveal several recurring challenges:

- Digital responsibility is **increasingly embedded in corporate onboarding** and compliance, but remains **narrowly defined** around data and security (IE2, GE5).
- Experts are deeply concerned with **tool misuse**, **automation**, and the **critical gap in digital ethics education**, particularly for youth (IE4, GE3).
- There is consensus that schools and teachers should lead change, but they are seen as illequipped and unsupported (IE3, GE2, GE5).
- Obstacles are both cultural (lack of awareness) and structural (absence of training or curricula) leaving a patchwork of well-meaning but ineffective responses.

For Latitudes, this confirms a dual opportunity:

- 1. To bridge the ethical and critical thinking gap that experts see as missing.
- 2. To partner with both educators and companies in creating training programmes that are coherent, shared across levels, and rooted in real-world behaviours.