

Comparative Analysis of online platforms and activities in digital education since the beginning of COVID-19



Up2DigiSchool

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Introduction

COVID-19 has resulted in schools being shut all across the world. The education system had to pass into a digital era suddenly to ensure a continuity in education. For this reason, teachers had to redefine their teaching and learning in a short period time. They were struggling to learn new techno-pedagogies, to teach online classes and they needed new resources and online tools to engage students in learning.

In support of the above, the UP2DigiSchool project aims at improving the current situation in digital education in Europe. Schools should be prepared to develop students' digital skills and competencies and for the ongoing digital transformation, In addition, the main objective of this project is to strengthen teachers' profile by providing resources and digital tools and prepare them so that they feel confident in adopting innovative teaching practices based on digital tools.

Specifically, this document is the first intellectual output of the Up2DigiSchool project and a comparative analysis of online platforms and activities in digital education since the beginning of COVID-19 is presented. The main purpose of conducting this analysis was to identify teachers' needs and be able to support them by providing them with resources and learning scenarios during our project. Therefore, we tried to learn more about the difficulties that teachers faced during the pandemic, their access to pedagogical resources and the usefulness of the online platforms in case of the different subjects.

This survey was conducted in Greece, Lithuania, Poland and Italy and the target group was secondary education teachers. The method that was selected for conducting this survey was a semi-structured questionnaire which was translated in partners countries. The results of this survey are presented in detail below and will be used by the partners to develop material and tools which will be included at the Up2DigiSchool platform.

1.Evaluation methodology

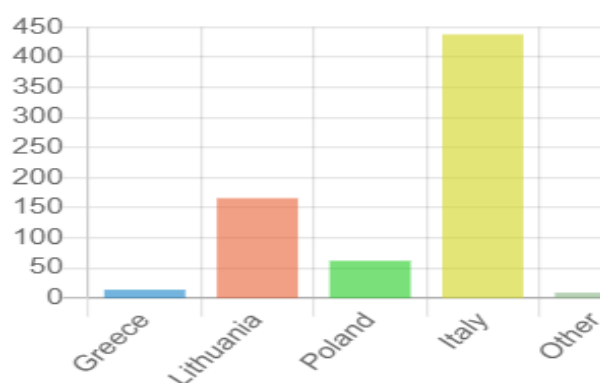
It is true that to implement an effective evaluation the goals of the evaluation study should be clearly defined. In other words, the question that should be carefully considered is “What would you like to know after the study is completed?”.

Since the goal of the evaluation was to collect teachers’ opinions and experiences regarding the period of the pandemic a questionnaire proved to be the most appropriate method. In this way we were able to collect large volumes of self-report data simultaneously from many different respondents. Additionally, open questions are included in the questionnaire that enables respondents to freely express their opinions in their own terms, to explain and qualify their responses and avoid any limitations.

In particular, the first part of the teachers’ questionnaire refers to personal data (Teaching experience, field of specialization and their ICT skills.) Afterward, teachers were asked about the digital tools and platforms that they used during the pandemic. At the last questions of the survey, we tried to focus on teachers’ needs because this way we will be able to develop useful and interesting material and tools for them during the project.

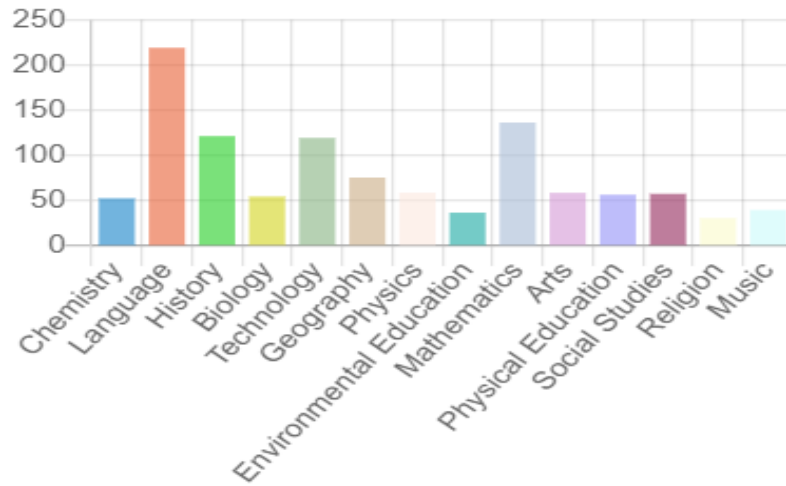
2.Results of the Survey

In this survey 1163 teachers participated who work both in public and private schools mainly in Greece, Lithuania, Poland and Italy. However, 689 of the questionnaires are fully completed. Therefore, the results which are presented below are based on the completed questionnaires. As far as the schools are concerned, we received answers from teachers who work in 513 schools in partner countries mentioned above.

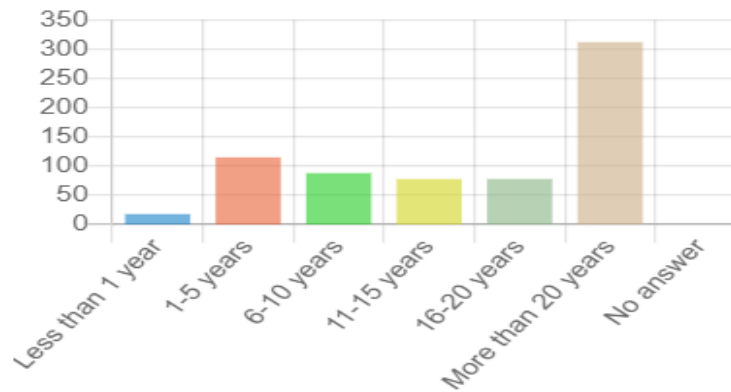


Graph 1: Countries

In addition it was crucial to involve in this survey educators who teach different subjects at school because this way the tools and the material which will be developed during the project will be addressed to all teachers of the secondary education. Therefore, as depicted in the 2nd graph below as far as their field of specialization is concerned there is enough variety. However, as we observe the majority of them teach language. A high percentage of them is specialized in mathematics, history and technology. It is also important to note that most of the teachers based on the 3rd graph have more than 20 years of teaching experience. Another interesting aspect in regard to teaching experience is that 117 teachers have reported that they teach at school 1-5 years.

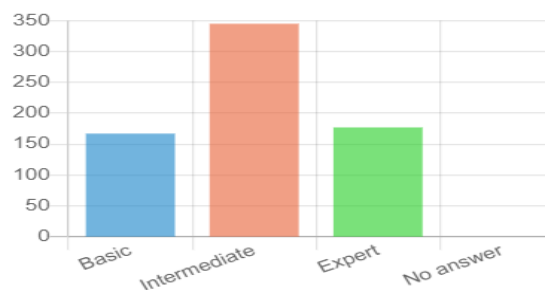


Graph 2: School subjects

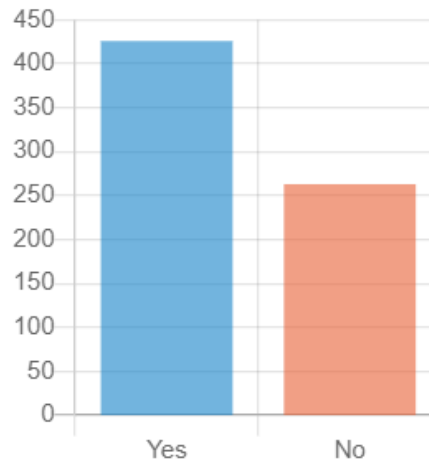


Graph 3: Teaching experience

Moreover, as far as teachers' ICT skills are concerned based on the graph 4 the majority of teachers (345) declared the intermediate ICT level and a minority of them stated that their ICT skills are basic. In accordance with the previous responses almost 263 teachers responded that they didn't use online tools before the pandemic. It is important to note that the online tools that they mainly used is Google classroom, Moodle and Microsoft Teams.

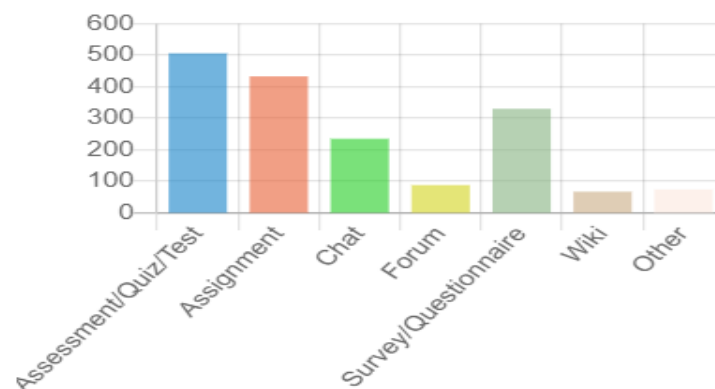


Graph 4: ICT skills



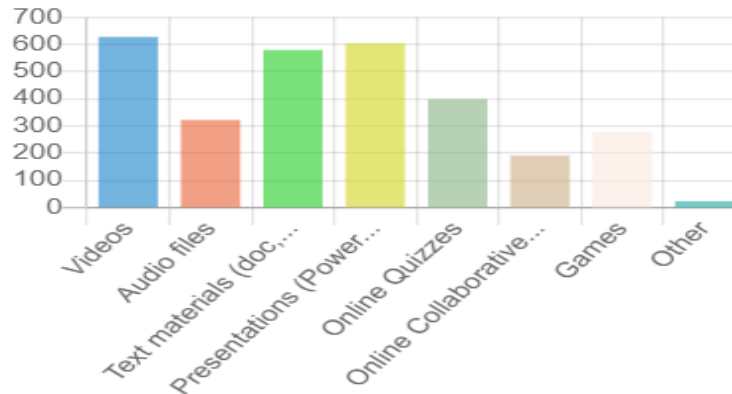
Graph 5: The use of online tools before the pandemic

It is also interesting that as depicted in the graph 6 below teachers use a variety of tools of the online platforms. They mainly use the assessment and the assignment features of the platforms. A high percentage of them also prefer surveys and questionnaires. Some of the teachers reported that they also use the communication tools (chats and forums). A minority of them stated that they use wikis.



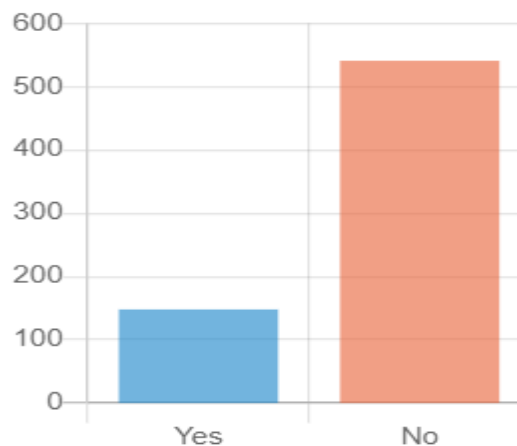
Graph 6: Features of learning platforms

Furthermore, another important aspect of distance learning that was revealed in this survey is the resources that teachers use in class. Their material is mainly based on videos, text and presentations. Online quizzes, audio files and games are also among the resources that teachers prefer to use. Some teachers also use collaborative tools.



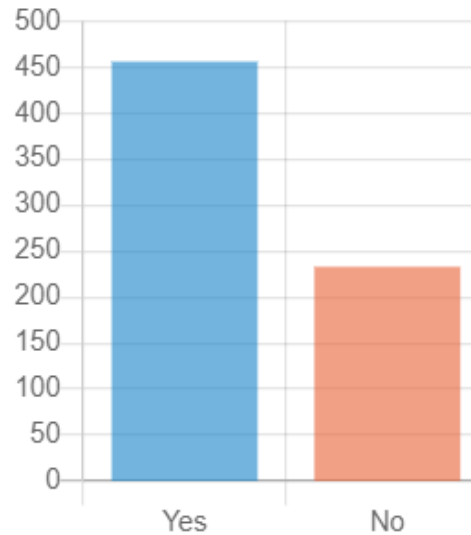
Graph 7: Resources used in online lessons

Additionally, it is impressive that based on the graph below most of the teachers stated that they didn't face any problems during the pandemic. However, the ones that had difficulties with distance learning mainly had to tackle connectivity issues and technical problems. Secondly, teachers referred to their lack of knowledge and difficulty using the new platforms and tools. Specifically, they felt a lot of pressure as they had to learn new tools and create new material in such a short period of time. They didn't know how to choose the tools, find the most appropriate one and how to organize their courses in the new digital setting. Apart from the difficulty they experienced with the tools they reported that it was difficult to engage students' in this new learning context and receive their feedback. Another issue was students lack of knowledge on how to use the online platforms and the fact that it was equally difficult for them to familiarize themselves with the tools and the online learning in a short time. A few teachers also mentioned that some parents couldn't provide help to their kids especially as far as the digital skills are concerned.



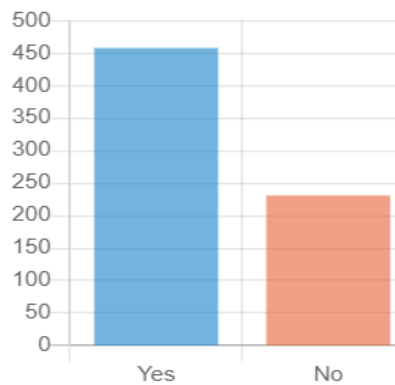
Graph 8: Problems in distance learning

Another question of this survey referred to the timetable of the teachers. As we observe in the graph below a high percentage of teachers (456) didn't change their timetable during the pandemic.

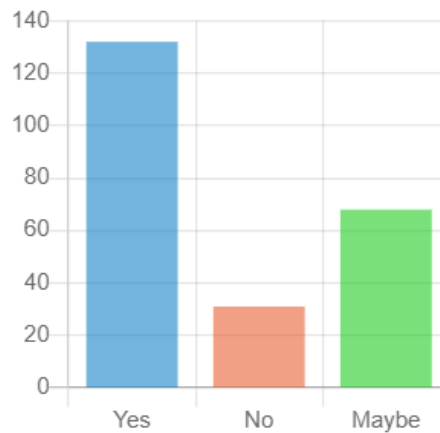


Graph 9: Timetable during the pandemic

Moreover, although the majority of teachers received a training during the pandemic, a high percentage of them showed a preference to be trained during the pandemic to enrich their resources and improve their digital skills.



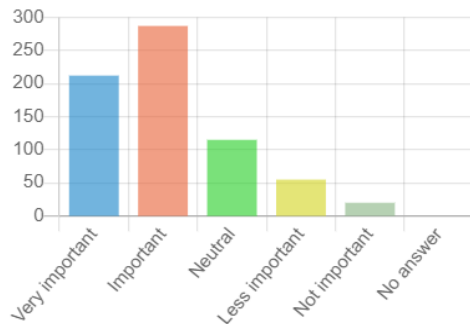
Graph 10: Training during the distance learning



Graph 11: Preferences for a training

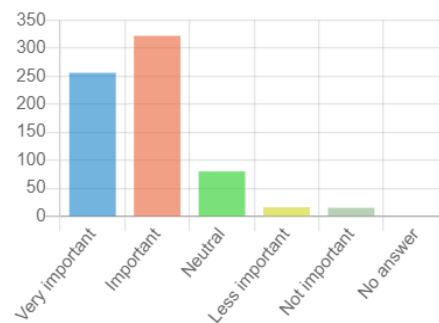
In addition one of the most interesting questions of this survey was about the digital competencies and skills. Based on the following graphs we observe that teachers consider all the digital skills and competencies mentioned below as important. However, they stated that actively engaging learners and facilitating students' digital competencies are more important than the rest of the digital skills. As a less important skill they declared the teaching using asynchronous communication technologies.

What digital competencies and skills do you feel are important to improve in your practice?



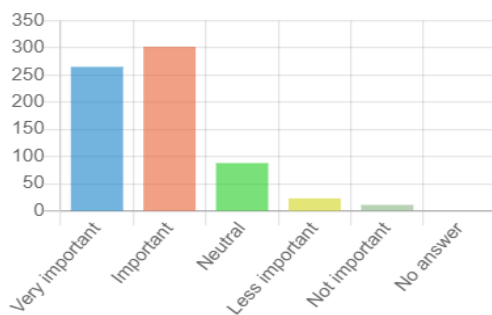
Graph 12: Using technologies to reflect and collaborating with colleagues

What digital competencies and skills do you feel are important to improve in your practice?



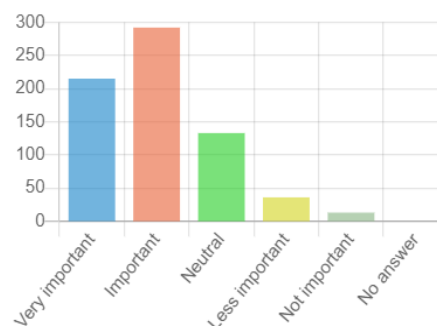
Graph 13: Creating and modifying digital content

What digital competencies and skills do you feel are important to improve in your practice?



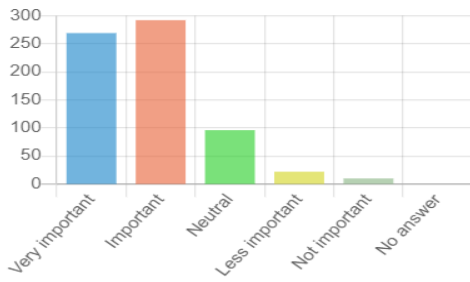
Graph 14 : Managing, protecting and sharing of digital resources

What digital competencies and skills do you feel are important to improve in your practice?



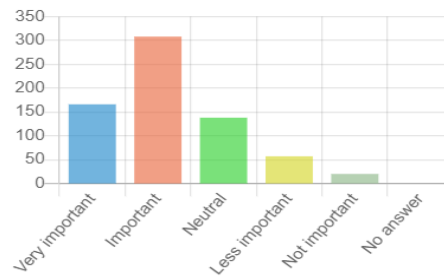
Graph 15: Choosing and implementing assessment strategies

What digital competencies and skills do you feel are important to improve in your practice?



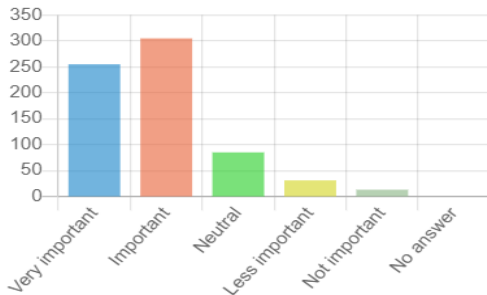
Graph 15: Planning and providing feedback to learners

What digital competencies and skills do you feel are important to improve in your practice?



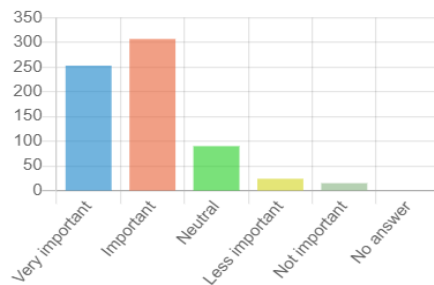
Graph 16: Teaching using synchronous communication technologies

What digital competencies and skills do you feel are important to improve in your practice?



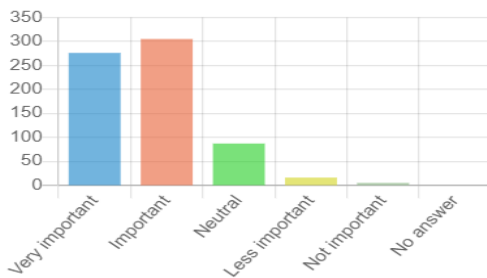
Graph 17: Providing guidance and support to students

What digital competencies and skills do you feel are important to improve in your practice?



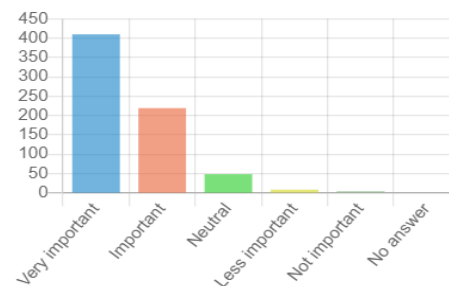
Graph 18: Facilitating collaborative learning

What digital competencies and skills do you feel are important to improve in your practice?



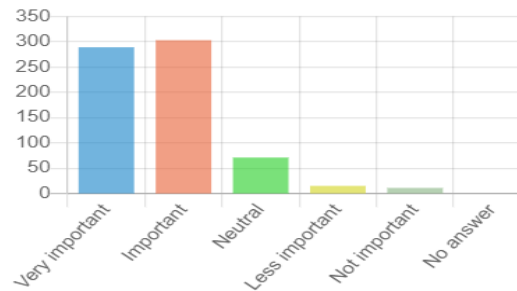
Graph 19: Differentiation and personalisation of learning

What digital competencies and skills do you feel are important to improve in your practice?



Graph 20: Actively engaging learners

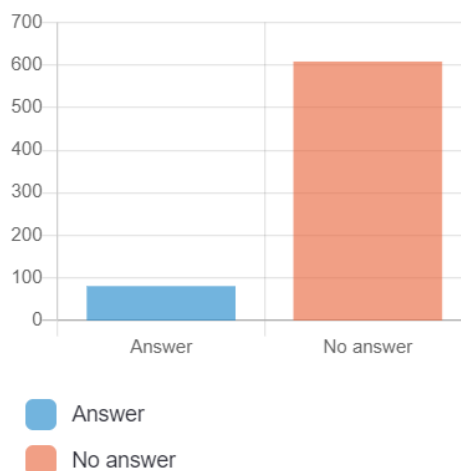
What digital competencies and skills do you feel are important to improve in you practice?



Graph 21: Facilitating learners’ digital competencies

To conclude, the last question of the survey is an open question in which teachers were encouraged to share other ideas and thoughts apart from the ones that they have referred to in their previous responses. A few teachers wrote some additional comments on this question. Many of the ones that responded to this question think that there should be a combination of the traditional methods, tools and digital tools in education. In line with the above an improvement in students and teachers’ digital skills was regularly mentioned as a last comment by teachers. In some responses teachers highlighted that they were improved as far as the digital skills are concerned due to the pandemic. In addition, one teacher reported that teachers should always be prepared and have a backup plan in case the digital tool doesn’t work. Some teachers mentioned that they found a lot of tools and resources online, but most of them were not free of charge. Moreover, two teachers declared that the digital content should be created by teachers and they should receive a payment for this. Other interesting comments were about the material of the platforms. According to the teachers’ opinion the material of the platform should be diverse and personalized based on the developmental status of each student. Finally, another comment worth mentioning is about the personal contact students lost with their classmates and their teachers due to online learning.

Would you like to add something?



Graph 22: Additional comments

Conclusion

The results of the survey which was conducted in Greece, Italy, Lithuania and Poland are documented in this deliverable with the view to observe the challenges that teachers faced during the pandemic and investigate their needs in terms of material and tools.

Specifically, most of the teachers stated that their digital skills are at the intermediate level. A high percentage of them but not the majority received a training during distance learning and most of them declared that they would prefer to be trained during the pandemic. In line with the above statements, teachers' responses regarding the importance of digital skills and competencies also prove their willingness to improve their teaching methods and materials.

To conclude, we will take into serious consideration all the information gathered regarding the use of the platforms and the resources teachers regularly use in class for the development of features of the platform and the material that will be integrated into it.

References

- [JRC Publications Repository - European Framework for the Digital Competence of Educators: DigCompEdu \(europa.eu\)](#)
- [<https://education.ec.europa.eu/news/guidelines-for-teachers-and-educators-on-tackling-disinformation-and-promoting-digital-literacy-through-education-and-training>](#)
- [<https://uis.unesco.org/sites/default/files/documents/ip51-global-framework-reference-digital-literacy-skills-2018-en.pdf>](#)
- [\[https://www.cidree.org/wp-content/uploads/2021/12/cidree_yearbook_2021_digital_literacy_2.pdf\]\(https://www.cidree.org/wp-content/uploads/2021/12/cidree_yearbook_2021_digital_literacy_2.pdf\)](#)
- Cobb, P., Confrey, J., diSessa, A., Lehrer, R. & Schauble, L. (2003). Design Experiments in Educational Research. *Educational Researcher*, 32(1), 9-13.
- Cohen, L., Manion, L. & Morrison, K. (2007), *Research Methods in Education*, Routledge Falmer

ANNEX 1: Questionnaire

<https://survey.up2digischool.eu/index.php/494887>