e-Privacing

O1A1 & O1A2

National Report on e-Learning in Cyprus
HESO

Revision History

Version	Date	Author	Description	Action	Pages
[..]	DD/MM/YYYY	PARTNER ORGANIZATION	[Creation/Insert/ Delete/Update of the document]	[C/I/D/U]	[No. of pages]
1.0	17/06/2021	CIVIC	Creation of template	C	5
2.0	22/07/2021	HESO	National report for Cyrus	C/U	11

(*) Action: C = Creation, I = Insert, U = Update, R = Replace, D = Delete

Referenced Documents

ID	Reference		Title
1	2020-1-UK01-KA226-SCH-094506		e-Privacing Proposal
2			

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2 Introduction

The outbreak of COVID-9 and the necessary national measures taken to tackle the spread of the virus caused significant disruption to the provision of education, training and mobility opportunities for learners and teachers across the EU. Helping ensure continuity in education, there is a wide range of online learning material and tools that were made available online (EC, 2020). The EU has already prepared a holistic approach over this issue, taking into consideration the outbreak of COVID-19, the "Shaping Europe's digital future" (DG Connect 2020) and the EU Digital Education Action Plan (EC, 2020a).

Despite the fact that this procedure is a long-term priority for EU, the emerged digitalisation of education due to the pandemic, has raised big concerns over privacy issues and the danger of sharing large amounts of personal data online, and so the national data protection authorities examined issues related to several e-learning platforms and the protection of personal data (HDPA, 2020).

One of the main aspects to be considered in order to achieve a high level of student's personal data protection is the human factor and particularly the training of teachers and educators, and the awareness of the educational community over the privacy issues.

Most educational institutions passed into the digital era in a sudden and short period of time. Restrictive measures to contain the pandemic affected almost 1.6 billion children in 195 countries worldwide who, suddenly, could no use their classrooms. Initially, educational organisations were using online learning platforms just as an auxiliary tool in the educational process. After the outbreak of COVID-19, these organisations were forced to digitalise every aspect of their operation, without proper examination of the effects in the protection of students' fundamental rights, such as the protection of their personal data. Schools, universities and educational organisations in general have replaced the traditional way of teaching with the use of existing or new e-learning platform. In some cases, teachers have even used Social Media platforms to deliver online courses throughout the pandemic. Zoom's security scandal (Wakefield, 2020) proved that in some cased the use of online platforms carries risk for the users (teachers and students).

In addition, the digitalisation of every operational aspect in educational institutions, as a consequence of personnel teleworking policies, created a huge amount of personal data that transmitted and stored online. Taking into consideration all the above, there is clear security gap that exists for the protections of individual's personal data when using online tools for education and training.

Therefore, the e-Privacing project responds directly to the above issues by mapping existing e-learning platform used in Partners' countries, by proposing best practices to be adopted by schools and educational centres in the field of data protection, by delivering a GDPR roadmap for teachers and by raising awareness in the educational community with the organisation of multiple events and workshops and by creating an online learning platform to be used as an educational tool for teachers and students over data privacy and protection.

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e-Privacing encourages the use of digital means in the educational system of EU countries while suggesting a holistic approach towards the protections of personal data. By creating a roadmap for GDPR compliant technological solutions in the field of digital education and by training the users of these platforms to respect the EU privacy legislation and to avoid data breaches, the e-Privacing goal is achieved.

3 Current state-of-play of e-Learning in Cyprus

This section will describe the current state-of-play of distance learning in secondary education in Cyprus during the COVID-19 pandemic in regard to methods, tools and their technical characteristics. In particular this section will explore mandatory technical characteristics that are connected to aspects of data protection. This section will try to answer the following sub-sections:

3.1 COVID-19 and distance learning

Tackling the spread of the COVID-19 outbreak, the Cypriot government suspended the in-school operation of every public and private educational institution at all levels, starting March 13th, 2020 (MOEC, 2020).

Immediately after the lockdown of schools, educators along with academic staff and government officials, arranged meetings in which they discussed and agreed on school-specific action plans for distance synchronous and asynchronous learning options in order to ensure the continuation of education during the lockdown period. Teachers continued working from home using a set of online tools and resources, and they were only present in school premises when necessary and according to instructions from the government on the safe operation of public and private educational institutions (CEDEFOP, 2020).

On May 4th, 2020, the gradual lifting of restrictions was commenced, focusing solely on finishing the school year without compromising the quality and credibility of the education system at the different levels. The next academic year was expected to begin on September 1st, 2020, taking into consideration existed epidemiological data of the spread of the COVID-19 virus. For re-opening the schools, priority was given to the final year of upper-secondary education, both general and vocational. On May 11th, 2020, a hybrid model of in-class and remote teaching was implemented for upper secondary general and vocational education, splitting students into two groups who physically attended school lessons on weekly rotation basis (CEDEFOP, 2020).

On May 21st, 2020, primary and lower secondary schools reopened under the same weekly rotation basis. Students of the first and second year of upper secondary education did not return to in-class lessons but continued with remote learning methods. Individuals belonging to vulnerable groups received specialised support at home, through e-learning methods and tools (CEDEFOP, 2020).

The ministry of education decided that the Pancyprian Examinations, which determine learners' access to public universities in Cyprus and Greece, would begin on June 9th, 2020, taking place in school buildings with reduced numbers of learners per classroom in accordance with safety protocols. The ministry also decided that no other examination

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would take place in first and second years of upper secondary, lower secondary and primary general and vocational education. Remote teaching was used instead, to ensure that students acquired the necessary skills and knowledge needed for their smooth transition to the next academic year (MOEC, 2020).

Shifting to remote teaching carried numerous challenges for both public and private schools. Students' access to education and prolonged school closures that lasted more than a year brought disadvantageous effects on students' well-being, socio-emotional needs and overall school performance. Various gaps in all levels of education were identified during the crisis and Cyprus was no exception (OECD, 2020; UNESCO, 2020).

The Cypriot educational system was entirely based on traditional, face-to-face teaching and there was no legal framework to support remote education during a crisis (Hall et al., 2020). As a result, educators were struggling to shift their daily teaching routines into online modes. One of the main challenges towards remote teaching was poor digital literacy of teachers as well as students. Although Cypriot educators were familiar with using e-learning tools in their teaching practices, shifting to solely remote education proved very difficult and, in some cases, prohibitive (Nisiforou et al., 2021).

In fact, the most common issues that were identified in Cyprus primary and secondary education were:

1. Interrupting learning.
2. Unequal access to digital learning portals.
3. Social isolation.
4. Prolonged school closures.
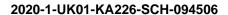5. Low digital literacy.

3.2 Methods and tools for distance learning

The Cypriot ministry of education gave priority to ensuring that all learners had access to a computer device (PC/laptop/tablet) and Internet at home. For situations that access to the above was the case, existing infrastructure was used to support these students during distance learning. The Cypriot Ministry of Education provided more than 12 000 tablets to students that did not have access to a computer device ("In-Cyprus-Philenews"-26 January 2021). A synchronous distance education programme was implemented, and more than 110 000 licenses of Microsoft Teams were acquired and offered to students and teachers/educators (CEDEFOP, 2020). However, the whole process of setting-up the accounts and signing in the students took several weeks since the first lockdown was so sudden that caught off-guard the Cypriot education system (Sofianidis et al., 2021).

Apart from MS Teams, which was the dominant teaching delivery method, several other platforms were used for communication and remote learning, such as E-mail, Facebook/Messenger, and Zoom (Vrasidas et al., 2020).

During the first lockdown of schools, an intensive online teacher training course was provided by the Pedagogical Institute of Cyprus, starting with upper secondary teachers. Supportive educational material for learners of all ages was hosted onto the ministry's website and on individual school websites. Public and private TV channels also supported

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the efforts to distance learning education by broadcasting live lessons and other educational programmes for students of primary and secondary education (CEDEFOP, 2020).

At school level, many different teacher networks were formed, offering peer assistance on the use of learning tools for distance learning. Educators and students alike were taught how these tools can be used in the different contexts with other teachers' assistance and guidance (CEDEFOP, 2020; Nisiforou et al., 2021).

Although great efforts to provide a sustainable and robust action plan towards remote teaching were made, there is currently no data available related to the protection of students' personal data and overall e-privacy. The Cypriot education system implemented a systematic approach for e-learning focusing on remote learning infrastructure, adaptation of the various curriculums and training of educators, however there is no proof that these approaches also covered the important aspect of data privacy when using online tools and platforms that manage and manipulate personal data of underage students.

3.3 Technical characteristics and data protection

The most popular platforms/tools for remote teaching in primary and secondary education in Cyprus were identified as:
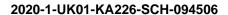
- Microsoft Teams
- E-mail
- Facebook/Messenger
- Zoom

Microsoft Teams enforces two-factor authentication, single sign-on through Active Directory, and encryption of data in transit and at rest. Files stored in MS Teams are backed by high-level encryption. Microsoft has set various layers of protection for their users' data in accordance with compliance standards, the GDPR framework and other data protection frameworks. For more information regarding MS Teams technical characteristics and data protections, please visit the following link: https://docs.microsoft.com/en-us/microsoftteams/security-compliance-overview

Facebook/Messenger uses similar data protection protocols with Microsoft Teams, although one should not forget various scandals regarding Facebook's policy on data usage (https://www.techrepublic.com/article/facebook-data-privacy-scandal-a-cheat-sheet/). More information about Facebook's policies to data privacy and protection can be read in the following link: https://www.facebook.com/business/news/facebooks-commitment-to-data-protection-and-privacy-in-compliance-with-the-gdpr

Zoom is a popular tele-conferencing tool used by various organisations worldwide. During the pandemic Zoom's scandal on security and data privacy issues came to shore (https://www.bbc.com/news/technology-52133349), however the company promised fixes focusing of data privacy for its users. More information about Zoom's policies on data privacy and protection can be read in the following link: https://zoom.us/privacy

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Using e-mails for remote teaching is not something new in Cyprus as well all over the world. Depending on the provider, different data protection measures and policies are implemented, however it is safe to say that providers such as Google and Microsoft have various layers of protection for their users' personal data when using their email accounts. However, one should be cautious of cyber-attacks that often happen via email, such as phishing, identity theft, pharming, virus, malware and spam. More information on how users can protect themselves from such attacks can be read in the following link: https://www.cloudsecuretech.com/types-of-email-attacks-and-the-damage-they-can-cause/

4 National Data Protection Laws in Cyprus

This section will describe the most important aspects of National Data Protection (NDP) Laws in each partner country in regard to the education of underage students via distance learning. This section will try to answer the following sub-sections:

4.1 Specific data protection laws

Data protection in Cyprus is governed by the General Data Protection Regulation (Regulation (EU) 2016/679) which was implemented in Cypriot Law by virtue of Law 125 of 2018 Providing For The Protection of Natural Persons with regard to the Processing of Personal Data and for the Free Movement of Such Data.

The Law which entered into force, on 31 July 2018, implemented certain provisions of the GDPR and repealed the Processing of Personal Data (Protection of Individuals) Law 138 (I) 2001, which had implemented Data Protection Directive (Directive 95/46/EC).

To ensure the proper application of the GDPR, the Office of the Commissioner for Personal Data Protection ('the Commissioner') has adopted certain guidelines issued by the Article 29 Working Party ('WP29') which has been replaced by the European Data Protection Board ('EDPB') and has also issued its own guidelines and opinions.

4.2 Legal implications for online tools for education

The Commissioner for Personal Data Protection issued on 20 May 2020, guidelines for educational institutions in regard to distance learning and distance student assessment in the context of the COVID-19 pandemic. In particular, the guidelines mention that the educational organisations must abstain from the use of online platforms and tools or systems which use biometric methods for the identification of students during lessons or examinations via audio/video material, in accordance with Articles 7 and 8 of the GDPR. Furthermore, the Guidelines highlight that the organisations must strictly adhere to the principles of proportionality and data minimisation, avoid processing of sensitive personal data and be transparent with their processing operations.

In addition, Article 8 of the GDPR foresees the minimum age of minors that can give their consent for the process of its personal data legally. This is supplemented by national laws

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in each country. In Cyprus, legislation defines as the minimum age for minor consent to be 14 years of age (Gabel, 2019).

The complete press release can be read in the following link: bit.ly/3iSyCSY

The complete Guidelines can be read in the following link: bit.ly/3ibbf8l

Finally, the ePrivacy Directive is also implemented in Cyprus. This Directive ensures that users from EU countries grant their consent before cookies when using web browsers. It also ensures that internet providers and telecom operators must keep users' data strictly confidential and secure, and in case a data breach happens, they are responsible to inform national authorities as well as the users (EC, 2021).

4.3 Components of GDPR

As mentioned above, the GDPR directive has been fully implemented in Cyprus since 25 May 2018. Relevant laws that supplement the GDPR has been re-worked to comply with the new policy regarding the use and protection of personal data.

The GDPR requires Cypriot organisations to have at least one lawful purpose for processing personal data and an additional lawful purpose for processing special category data.

4.4 Common ground between GDPR and NDP Laws

The General Data Protection Regulation (EU) (2016/679) ("GDPR") is applied in Cyprus since the 25th of May 2018. The law supplementing the GDPR in Cyprus, law no. 125(I)/2018 (the "Data Protection Law") is applied since the 31st of July 2018.

The assigned office to ensure the proper application of these Frameworks is the Office of the Commissioner for Personal Data Protection.

The common ground between GDPR and NDP Laws in Cyprus relies on the following considerations which every educational organisation must cover in order to be compliant with the privacy legal framework:

1. Institutions should have at least one lawful purpose for processing personal data.
2. Institutions should have an additional lawful purpose for processing special category data.
3. Institutions should take the appropriate technical and organisational measures such as encryption of data, password policy, two-step authentication, etc.
4. Institutions should implement Data Protection Impact Assessment for the operation of e-learning platforms.
5. Institutions should inform their subjects (teachers and students) about the process of their personal data and their rights.
6. Institutions should take into consideration the special provisions of Cypriot national data protection laws and directives for the age of minor consent.

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5 Conclusion

The outbreak of COVID-9 and the necessary national measures taken to tackle the spread of the virus caused significant disruption to the provision of education, training and mobility opportunities for learners and teachers across the EU. Cyprus could not be any different. Tackling the spread of the COVID-19 outbreak, the Cypriot government suspended the in-school operation of every public and private educational institution at all levels, starting March 13th, 2020. The closing of schools changed education towards the digital era. Suddenly students began to be remotely educated using technology such as online course, video classes and other electronic tools for e-learning. Teachers received education on e-learning tools and platforms and acted as multipliers for the rest of the educational community. The government deployed existing infrastructure and provided schools with licenses of Microsoft Teams so they can continue teaching in a remote fashion.

Although the Cypriot government acted in a short period of time, the sudden change to remote teaching raised various concerns over privacy and data protection issues. Teachers and educators all over Cyprus used various channels, tools, and resources to deliver lessons, however there is no evidence that they received any kind of guidance regarding their students' as well their own personal data and how this data are manages and manipulated inside several tools for e-learning.

Cyprus applies the GDPR, as well as the ePrivacy directive and national data protection laws to ensure the data protection of its citizens when using online platform and tools. These directives set the minimum standards for educational organisations that use e-learning methods. Despite offering clear instructions on how in-class teaching could be done remotely, a gap was identified between embracing e-learning and having the right skills to ensure that data breaches and rights violations cannot happen.

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