

CSI-COP

Citizen Scientists Investigating Cookies and App GDPR compliance

Deliverable D6.5 | D24

Parent-Teacher Round tables

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Executive Summary

In reaching as far and as wide stakeholders as possible, especially organised inclusive CSI-COP project events engaged parents, teachers, and with the approval of a fresh research ethics application, under-18s: school pupils aged 13 and above. Parent-teacher roundtables were part of CSI-COP's series of communication, dissemination and exploitation activities in the project's sixth work package (WP6). Over twenty events were organised allowing parents, teachers, school pupils and university students to attend in-person or online to gain knowledge about how to protect personal data when online. Attendees also learnt about the rights accorded in the general data protection regulation (GDPR). The multiple engagement activities and discussions detailed in this report convey the outcomes of CSI-COP partner's interactions with parents, teachers and pupils across Europe and in Israel in local languages. The impacts achieved included increasing scientific literacy, building trust between attendees and scientists, raising aspirations and ongoing and future partnerships. Through these events, CSI-COP succeeded in raising awareness of the data protection issues online and the protection of young people as they use the Internet.

Keywords: aspirations, citizen science, cookies, data protection, games, GDPR, online tracking, parents, privacy, pupils, scientific literacy, scientists, schools, students, teachers, trust, universities.



Introduction

This public report details one specific series of stakeholder engagement events organised by CSI-COP project to reach parents, teachers, school pupils and students. The parent-teacher roundtables were part of the project's communication, dissemination and exploitation task T6.5 in work package 6 (WP6). The CSI-COP partners involved in this task between them organised over twenty of these events in local languages with accessible venues nurturing an inclusive approachable environment. The short-term goal of this activity was raising awareness of:

- a) The rights accorded in the EU's general data protection regulation (GDPR).
- b) The new knowledge created in CSI-COP, the free informal education resource 'Your Right to Privacy Online' (MOOC), and
- c) Outcome of CSI-COP citizen scientists' website and app investigations (i. Taxonomy of cookies and online trackers, and ii. Repository of cookies and trackers).

Following ethical approval for CSI-COP project in 2022, from the lead/Coordinating partner's university research ethics panel, partners were permitted to engage under-18s. Hence the design of the parent-teacher roundtables expanded to include school pupils aged 13 and over. The parent, teacher, school pupils' activities were held online, and in cities across Europe and in Israel: Barcelona, Coventry, Budapest, Oulu, Prague, Munich and in Tel Aviv. The attendees were able to interact in their native language with their local CSI-COP event organiser, including in Catalan, English, Greek, Hungarian, Finnish, Czech, and in Hebrew. One online parent-teacher event was organised to include Romanian speakers. Through the hundreds who attended the CSI-COP parent-teacher and school pupil events, the project reached thousands beyond through word-of-mouth and social media posts on Twitter and LinkedIn. It is to be noted here that two partners, NaTE (in Hungarian), and IB (in Romanian), took on the extra task of organising parent-teacher and school pupil activities on the termination of one CSI-COP partner in the first amendment to CSI-COP grant agreement in 2021 thereby reaching a wider audience.

Impacts arising from the parent-teacher events entailed:

- 1) Informally educating the general public about the scientific method through approachable interaction between the CSI-COP researchers and activity participants.
- 2) Raising awareness of the benefits and risks of the Internet.
- 3) Inspiring under-18s, including school pupils who would not ordinarily consider higher education, to recognise the *access to opportunities* to rewarding careers in science, computer science, and artificial intelligence.
- 4) Reducing barriers by influencing youth from different socio-economic backgrounds to step up the ladder of progression.
- 5) Motivating more girls into computer science improving gender balance in this area.
- 6) Upskilling educators by making them aware how to conduct increased due diligence of recommended educational websites and apps to avoid accepting tracking technologies where possible.
- 7) Explain how CSI-COP adhered to responsible research and innovation (RRI), by showing how the project itself adhered to data protection regulation and preserved people's privacy.
- 8) Demonstrating to young people, their parents and teachers how to stay safe online.



- 9) Encouraging people to note their screen time: could they spend less online, use their active imagination and creativity to socialize with friends offline and chat with their parents, siblings and friends more?
- 10) Increasing the trust between the general public and scientists.

Over twenty parent-teacher, school pupil and university students' events were organised by CSI-COP partners across Europe and in Israel. The location of the partner organised events for the task T6.5, and the impacts realised from the parent, teacher and school pupils' engagement with CSI-COP are summarised in Table 1.

Partner	City	Number of activities	Impacts achieved
UAB – Task lead	Barcelona, Catalonia-Spain	4	<u>Expected Impacts (EI)</u>
CU – Coordinating partner	Coventry, UK	4	<u>EI4:</u> Impact on Responsible Research and Innovation.
UPAT	Patras, Greece	3	<u>EI6:</u> Impact on Society
NaTE	Budapest, Hungary	3	<u>Other impacts (OI)</u>
UOULU	Oulu, Finland	3	<u>OI1:</u> Screen time
BIU	Tel Aviv, Israel	2	<u>OI2:</u> Staying safer online
CTU	Prague, Czech Republic	3	<u>OI3:</u> Upskilling the Public and Educators
IB	Online for attendees in Romania	1	<u>OI6:</u> Reducing Barriers
			<u>OI7:</u> Gender, socio-economic and geographical factors

Table 1: Summary of impact from CSI-COP parent-teacher-roundtables

In the next sub-sections, the partners' activities are presented with outcomes. The details would be useful for future citizen science projects engaging parents, teachers and young people.

Universitat Autònoma de Barcelona

Universitat Autònoma de Barcelona (UAB) led task T6.5 for parent-teacher roundtables. UAB conducted four workshops with a total amount of 143 school pupils and university students. Two workshops involved university students and were delivered in English (2nd year degree course on AI degree and European ECIU students). The other two workshops were delivered in Catalan for secondary school pupils aged 13 and 14 years. To organise the workshops and to evaluate them after, the UAB team met with the academic responsible and teachers beforehand and talked with them during and after the sessions. In addition, short satisfaction surveys were passed to all attendees for their completion.

The workshops conducted by the Universitat Autònoma de Barcelona (UAB) aimed to achieve specific impacts related to digital privacy and security education. These impacts were intended to benefit students from diverse educational backgrounds and foster a culture of privacy awareness. These workshops demonstrated a commitment to providing educational opportunities across different age groups of young people. The involvement of university students indicates a focus on engaging and enhancing the learning experience for higher education students. Additionally, reaching out to students of 13 and 14 years old demonstrates a commitment to inspiring and educating younger learners. Introducing them to workshops and activities at this age can have a significant impact on their academic and personal development, sparking interest and curiosity in various subjects. Talking specifically about CSI-COP project, the students became aware of their rights under GDPR (seeing informative videos adapted to their ages), about risks (by watching recent news related to privacy issues) and they observed and learned about their own devices in group activities. The workshops aimed to inspire and educate younger learners (Figure 1), centering them in the activities. By reaching out to these students, the UAB demonstrated its commitment to introducing digital privacy concepts at an early age. This early exposure sparked interest and curiosity among the students, potentially influencing their academic and personal development.



Figure 1: Group of students of Sant Nicolau secondary school from Sabadell

After a presentation of the project, learning some tools and tips, watching and discussing real cases, the students were invited to join some dynamic activities about concepts related with rights, risks and prevention of digital rights and privacy data, examining their own devices. They shared knowledge

between them on the problems of accepting cookies without checking before. This enabled the attendees to think about ways to protect and improve the privacy in their smartphones. Having students examine their own devices and discussing concepts like rights, risks, and prevention allows for a deeper understanding of the importance of digital privacy. The workshops successfully increased students' awareness of digital privacy and security. They actively applied this knowledge by examining their own devices, learning consequences and reflecting on ways to protect and improve their smartphones. This practical application empowered students to make informed decisions and take responsibility for their personal data in the digital realm. The collaborative and co-creative nature of the activities fostered knowledge sharing and cooperation among the students. This type of collaborative learning environment encourages critical thinking, problem-solving, and the development of practical skills.

Moreover, as the students reflected on ways to protect and improve their smartphones data protection, they are actively applying the knowledge they gained from the project. This reflective practice not only helps them understand the importance of personal data protection, but also empowers them to act and make informed decisions regarding their personal privacy. Students were encouraged to carefully attend to cookies notices they encountered and consider the potential risks associated with accepting cookies. By engaging in UAB's activities, students developed practical skills to navigate the digital landscape responsibly. The interactive learning environment and peer-to-peer knowledge sharing promoted a culture of mutual support and knowledge exchange.



Figure 2 Another group of students of Sant Nicolau secondary school checking their own mobiles and apps in a dynamic

The different activities consisted in their own observations, reflections and sharing their own thoughts around all the concepts learned: rights, risks and ways to prevention. Observation: After UAB's presentation, the students were invited to observe their own mobile phones and those of their classmates in small groups (Figures 2-4). Reflection: Through the various dynamics, UAB managed to encourage pupils to reflect on the cookies to which they were exposed. By incorporating observation and reflection into the learning process, students actively engaged with the concepts and deepen their understanding beyond mere theoretical knowledge, without realising it and in a pleasant way. These activities promoted a higher level of engagement, critical thinking, and self-awareness, allowing students to apply

the learned concepts to their own digital lives. This empowers young people to take ownership of their privacy and make informed choices in the digital realm.



Figure 3: ECIU students checking their own devices and reflecting in small groups

The space chosen for the workshops was a special room designed to provide interactive knowledge in a non-formal learning, planned for the co-creation, with experimental mode and different ways of engagement and free movements. Continuing with the group work, as pupils analysed themselves, they were able to distinguish and differentiate the concepts proposed in the CSI-COP workshop.

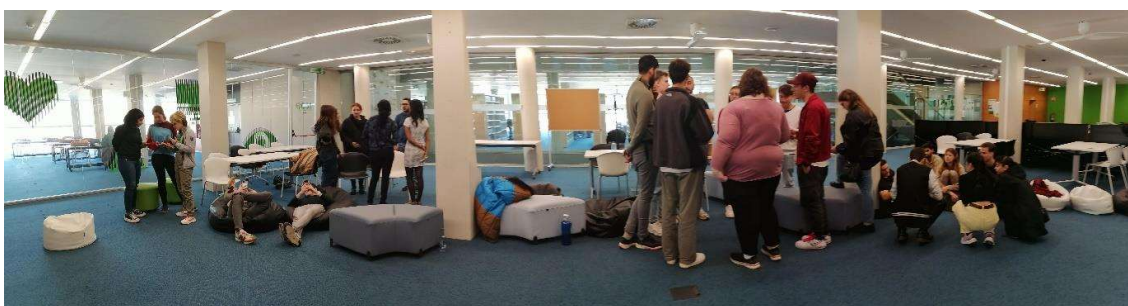


Figure 4: ECIU students engaging in discussions during the dynamics in our open concept space

As a result of all the conducted activities, the pupils and students were able to identify the risks associated with cookies, the ways to prevent accepting them, so gaining a better understanding of their rights, and elements to consider before accepting the installation of an app or browsing a website (Figures 5 to 7). Overall, the activities successfully enhanced the students' awareness of digital privacy and security. They developed the skills and knowledge necessary to identify risks, prevent potential threats, understand their rights, and make informed decisions. By equipping students with these

essential digital literacy skills, they were better prepared to navigate the online world responsibly and protect their privacy in today's digital landscape.



Figure 5: Group of students of Sant Nicolau secondary school thinking and placing their results



Figure 6: Group of students of Sant Nicolau secondary school thinking and placing their results

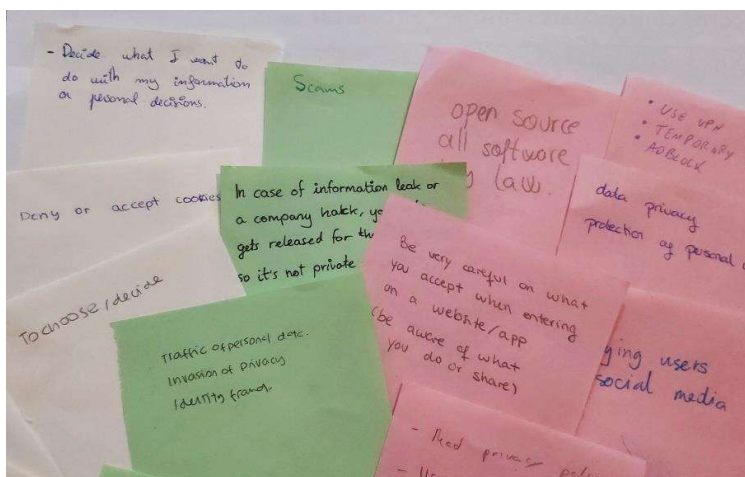


Figure 7: some examples of the final results of our workshops (2nd. Course AI degree from UAB)

At the end of UAB's workshops, the pupils and students explained to their peers the results, conclusions and the reasons of their choices (Figure 8 and 9). This peer-to-peer knowledge sharing fosters a collaborative and inclusive learning environment, allowing for a deeper understanding of the workshop outcomes. This kind of learning promotes and facilitates a culture of mutual support, where students collectively contribute to the overall learning experience.

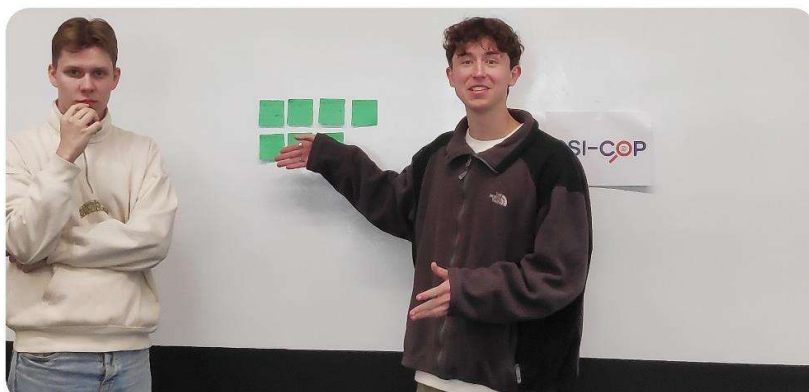


Figure 8: students explain their results to all the participants

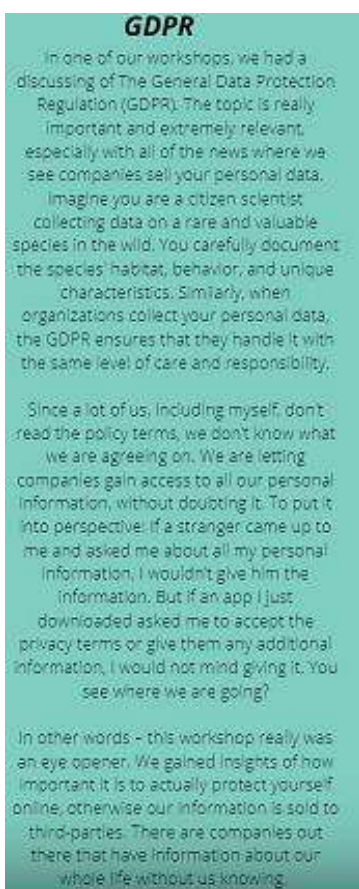
These dynamics reinforces the workshop outcomes, facilitates knowledge diffusion, and creates a supportive learning environment where students can learn from each other's perspectives and experiences by sharing all the different group results.



Figure 9: A student explains and shares their results to all the participants

Concluding UAB's parent-teacher and school pupil activities, t by conducting workshops with young people at different educational levels, CSI-COP partner UAB fostered a diverse and inclusive learning environment. This approach encourages interdisciplinary exchanges, benefiting all participants involved. By participating in these activities, the young people not only acquired knowledge about digital rights and privacy but also gained practical skills to develop a sense of responsibility in safeguarding their own digital presence.

Overall, UAB's holistic approach to learning, combining theoretical knowledge, real-world cases, and practical activities, contributed to a comprehensive informal educational experience that equipped students with the necessary tools and knowledge to navigate the digital landscape. UAB's activities aligned with CSI-COP's expected impacts of promoting digital literacy, empowering students, and cultivating a culture of privacy awareness.



The success of these workshops can be measured by the number of students engaged and the outcomes achieved, such as increased knowledge, improved understanding of specific topics, and enhanced critical thinking skills. The workshops created a positive impact on the students' educational journeys and equipped them with essential tools and knowledge to navigate the digital landscape responsibly. Students gained a better understanding of their rights and the factors to consider before accepting app installations or browsing websites (see Figure 10). The CSI-COP project dedication to providing these informal educational opportunities helped to create a positive impact on the young people's educational journeys.

Figure 10: students review after the CSI-COP workshop (ECIU University Magazine)

Coventry University

Coordinating partner, Coventry University organised four afternoon CSI-COP parent-teacher pupil visits on top of the university's STEM morning visits from schools in the UK's midlands region. This is an area of the UK which has an ethnically diverse populace but one in which there are social mobility issues. In the UK's '[State of the Nation 2017: Social Mobility in Great Britain](#)' document, it was reported that

"In working lives, the West Midlands ... the worst unemployment rate in the country – due largely to Birmingham, which has the lowest employment of any area in the country. It also has below-average pay and below-average levels of skilled jobs. Indeed, 26 per cent of residents earn less than the voluntary living wage, the third lowest rates of the regions. The Midlands is the only part of the country with rising unemployment – and the increase is particularly worrying in the West Midlands – up from 16 to 20 per cent since 2015. (SMC, p.106)

Some schools in the UK region in which Coventry University-Coventry is based has pupils from disadvantaged homes, and families without members having studied in a university. Thus, it was important for CSI-COP to meet the EU's Horizon2020 SwafS-15-2018-2019 grant scope to design activities that would:

- Act as tools to motivate young people into formal science pedagogy through engaging informal education exercises
- Counter perceived anti-intellectual attitudes about researchers and scientists in universities
- Raise the scientific literacy of attendees, school pupils and their parent-teachers
- Promote inclusivity
- Demonstrate employability through skills in computer-related areas

The topic for the visits were entitled '*Are Cookies Bad For You?*' (Image 1). The purpose of the parent-teacher and school pupils' activities was to learn about digital cookies, what they do and which ones should be rejected online to protect personal data and privacy. Permission for photos was granted.



Image 1: Screenshots from PowerPoint slides opening the activity sessions

The total number attending Coventry University with pupils aged 13-14 and their teachers was 157:

8 March 2023: [Finham Park 2](#) school, Coventry: 47 pupils and 3 teachers (50 visitors)

22 March 2023: [Higham Lane](#) school, Nuneaton: 15 pupils and 3 teachers (18 visitors)

26 April 2023: [Heath Lane Academy](#) school, Earl Shilton: 50 pupils and 3 teachers (53 visitors)

9 May 2023: [Grace Academy school](#), Coventry: 33 pupils and 3 teachers (36 visitors)



The parent-teacher, school visits were planned as *activity-led learning*. The first two visits, in March 2023, were during Coventry University's second semester, which prevented the booking of computing labs due to their use in undergraduate and postgraduate classes. Activity booklets were provided for each attendee along with CSI-COP branded lanyard, coloured post-it notes, and pencil (Figure 11).



Figure 11: Activity booklet

For these two visits the activities began with three privacy-related questions for the children to think about what privacy means to them. Pupils were asked to anonymously record one or two words that came to mind about 'privacy' on coloured post-it notes. The pupils were then asked to stick the post-it notes on a wall in the classroom (Figure 12). The questions were:

1. What does privacy mean to you?
2. Do you close your curtains at home?
3. Do you close the washroom door when you are in there to have a shower or bath?



Figure 12: photos of pupil's participation in post-it answer activity

The question-answer on post-it notes activity introduced the notion of privacy and provided a space for pupils and teachers to *see* what 'privacy' meant to others through a rainbow post-it note cloud of words (Figure 12). A short video on YouTube was shown that explains simply 'What cookies are? And how they work: <https://www.youtube.com/watch?v=rdVPfIECed8> (2019)

Following that, and to put the new learning from watching the video into practice, the next activity entailed a word-search game to find data protection and privacy related words in a word-table devised by CSI-COP's Creativity Manager, Jaimz Winter (Figure 13).



Figure 13: Word-search game



Figure 14: School pupils playing the word-search game

For the word-table game, pupils were asked to find the data protection related words listed in the right column in the word-table (Figure 13). The purpose of this activity was to understand the nature of personal data, that it could be sensitive and could be tracked through apps and websites. The final activity in the first two school visits entailed attendees invited to come to the lectern and use the Internet-connected computer to play a free online cookie avoidance game (Image 2) made by [Fred Wordie](https://cookieconsentspeed.run/) accessible at this web address: <https://cookieconsentspeed.run/>

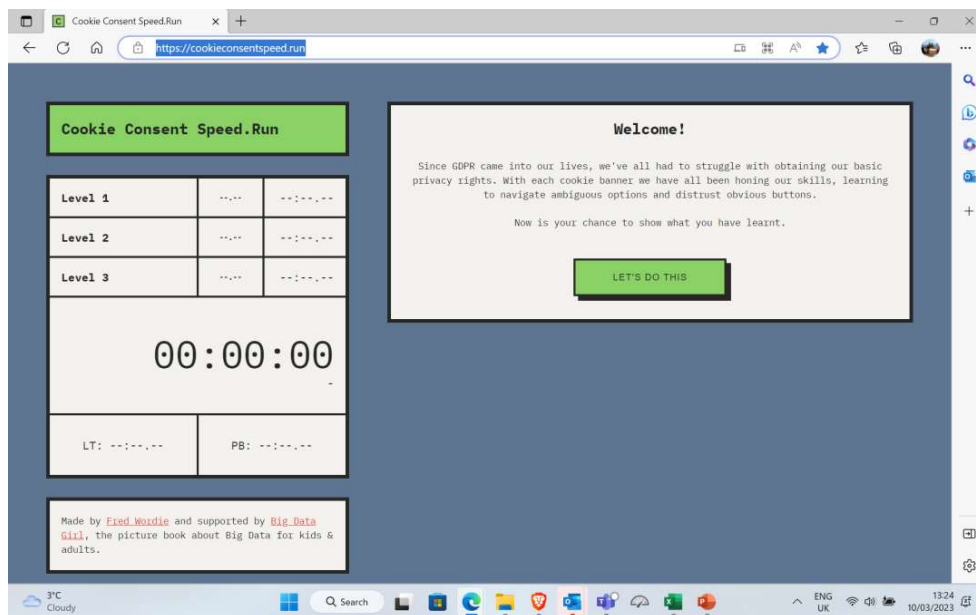


Image 2: Cookies consent speed run game

This game (Image 2) is designed with actual cookie notices and cookie banners from the web. The goal of players in this cookie avoidance game is to carefully read the text in the cookie notices and banners to avoid accepting tracking cookies. In the first two school visits in traditional classrooms, teachers and pupils came to the front of the classroom (Figure 15) to the lectern and tried the cookies avoidance



game. The results in time it took to play the game's different levels and avoid cookies was displayed on the screens in the classroom for attendees to see. For one player the time taken was over two minutes to avoid cookies in the different levels of the game (Figure 15: bottom image). This demonstrates the problem of no standard notice for cookies which could result in people accepting cookies online when visiting websites, because the text in the cookie notice could be ambiguous and lack transparency about what third-party cookies are present underneath a website.

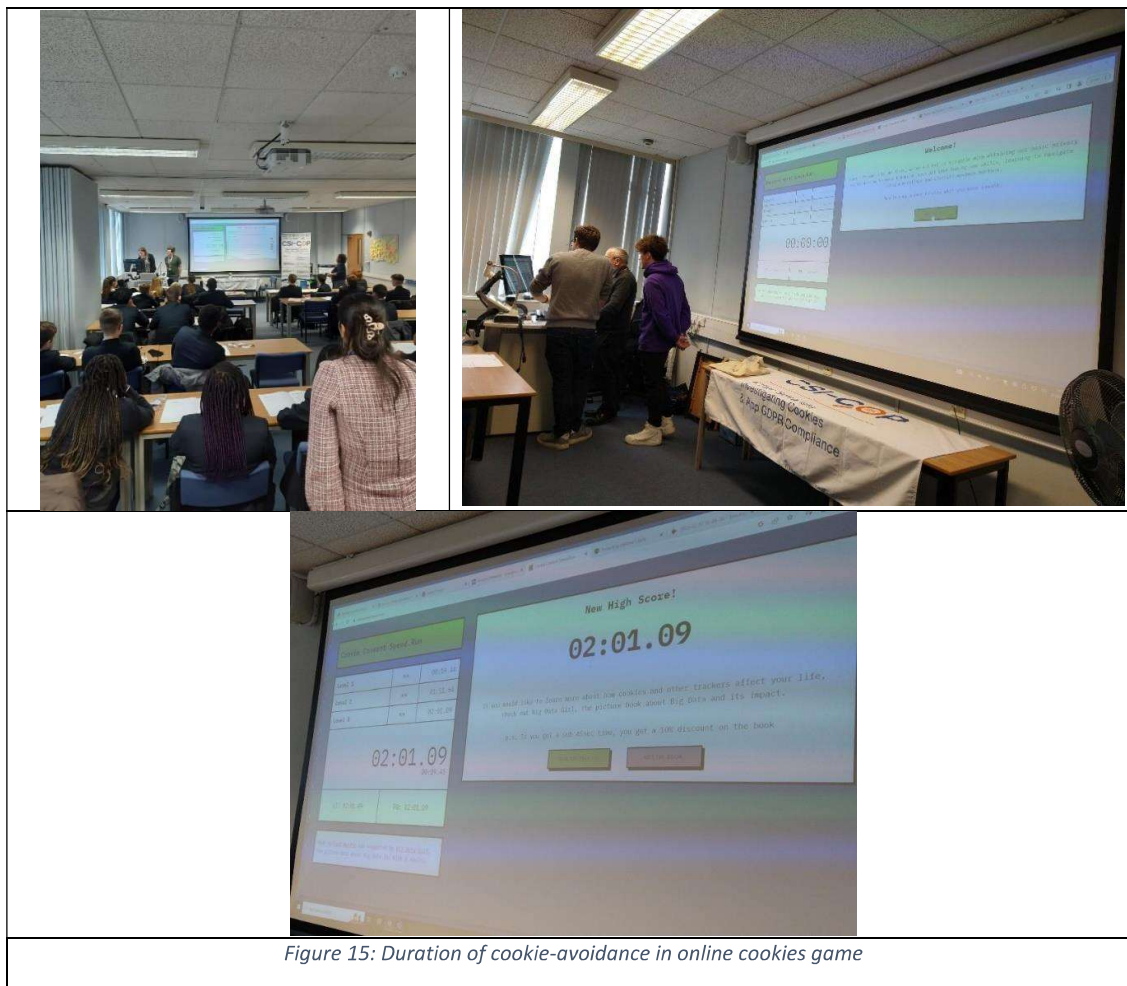


Figure 15: Duration of cookie-avoidance in online cookies game

For the next two school visits in April and in May 2023 to Coventry University, a computer lab was available allowing attending pupils and teachers to use interactive online tools such as the free word-cloud builder [AnswerGarden](https://www.answergarden.com/) a “minimalistic feedback, educational tool” (Creative Heroes, 2023). The computer lab activities were similar to the classroom ones, including the viewing of the YouTube video *What cookies are? And how they work*: <https://www.youtube.com/watch?v=rdVPfIECed8>.

In place of the post-it notes used in the earlier two classroom visits, *AnswerGarden* was used to build the attendees joint word-cloud around the concepts of data protection and privacy. Image 3 shows the words and terms the school pupils and parent-teachers associated with the question ‘What is data protection to you?’. The main term emerging was ‘keeping data safe’ demonstrating that 13–14-year-old school pupils and their teachers had a grasp of the importance of protecting one’s personal data (Image 3).



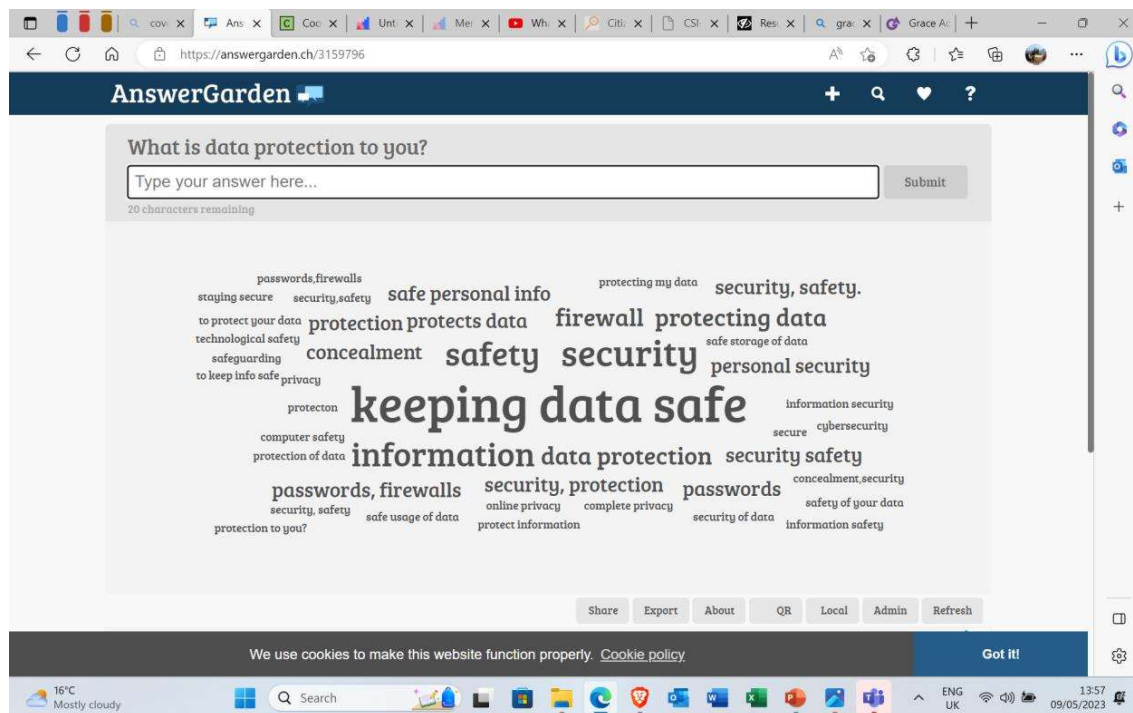


Image 3: AnswerGarden word-cloud of 'What is data protection to you?'

Using Coventry University's subscribed [Mentimeter](https://www.menti.com) online interactive educational tool, polls were created especially to engage visiting school pupils and teachers through a live colourful visual display of changing bar sizes (Images 4-5) as options were chosen for these two privacy-related questions:

1. Do you close your curtains at home? 22 of 34 responses (65%) said 'Yes' in 9May visit
2. Do you close the washroom? 29 of 34 responses (85%) said 'Yes in 9May visit

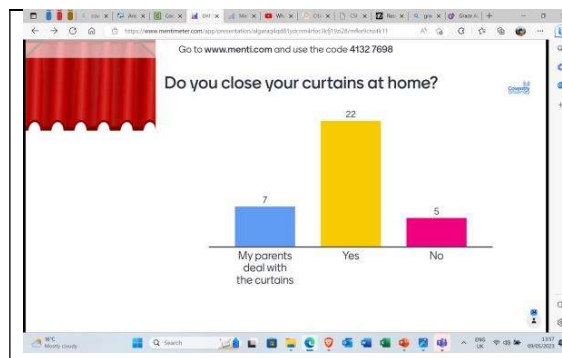


Image 4: Mentimeter chart for closing curtains



Image 5: Mentimeter chart for washroom door

With access to individual computers connected to the Internet, the pupils were asked to explore the cookie notice and privacy policy of their school website, then discuss if they felt these were clear and easy to understand about any third-party tracking. The visitors were then given the web address of a free online privacy audit tool, [webbkoll](https://www.webbkoll.com) (Dataskydd, 2023), and asked to investigate their school website

for any third-party tracking. The pupils were then invited to discuss their findings with the school pupil or teacher sitting next to them.

The last activity in the April and May school visits entailed showing the parent-teachers and school pupils how to check settings of apps in their smart phones to only allow those permissions which enable the app to work. Visitors were shown steps to follow for Android or Apple devices (Table2). Additionally, the visitors were made aware of an app privacy auditing platform: [Exodus Privacy](#) (2023). This free online service “analyses Android application and lists any embedded trackers” (Exodus Privacy, 2023). Armed with this knowledge, the visiting school pupils and teachers with Android powered smart phones were able to check what third-party trackers might be extracting data from the mobile devices. Visitors were made aware that using privacy-preserving browser apps in phones, on laptops or desktop computers, such as [Brave browser](#) (2023), could limit the amount of personal data leaked.

Check permissions in your apps

Android device (e.g. Samsung phone)	iOS 14 device (Apple phone)
On your Android device: open the Settings app .	Go to Settings >
Tap Apps & notifications	Select Privacy>
Tap the app you want to review	Tap a category of information, such as Calendars, Reminders, or Motion & Fitness.
Tap Permissions	
If a permission is turned off, the switch next to it will be grey	
Try using the app again.	For other iOS devices go to Apple support:
For more go to Google Support : https://support.google.com/googleplay/answer/6270602?hl=en-GB#zippy=%2Csee-all-permissions-for-each-app	Apple Support

09.05.23

CSI-COP - School visit

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Table 2: Steps to check app permissions in Android or Apple smart phones.

The EU’s Horizon2020 SwafS-15-2018-2019 grant call’s expectations from citizen science projects, which CSI-COP responded to, included:

- ❖ Balanced participation of citizens regardless of background, gender and age.
- ❖ Raising public knowledge of science.

Coventry University’s CSI-COP team included a female from an ethnic minority as lead scientist (Dr, [Huma Shah](#)), and two young male Research Assistants in their early 20s, not too distant in age from the school pupils aged 13-14 (Jaimz Winter, and Giacomo Masone). In this way the visitors could appreciate that science is inclusive, so meeting the criteria of “regardless of background, gender and age”. The parent-teacher and school pupil visits contributed to CSI-COP’s overall mission by packing the time in the afternoons visits with discussions around data protection and privacy, interactive engagement exercises and the use of different free online tools, such as *AnswerGarden*, *Mentimeter*, *webbkoll* and *Exodus Privacy*. School pupils and parent-teachers and non-parent teachers learned about



their rights accorded in the general data protection regulation (GDPR), through informed learning, and through reviewing their own school websites and apps in their smart devices. In this way multiple aims served through the school visits were acknowledged by the visitors in Coventry University's STEM team surveys completed by some attendees. Teachers' feedback on the university experience included:

- "It was a good opportunity for pupils to understand more about university and raise aspirations." (See Appendix 1a).
- "A good day out – showed the children that university is accessible" (Appendix 1b)

Teachers gave feedback on the CSI-COP activities:

- "Afternoon activity about cookies. I learned a lot about how my data can be used Scary!" (Appendix 1a)
- "An interesting session on cookies – interactive for the students" (Appendix 1b).

Other outcomes from Coventry University's successful parent-teacher and school pupil activities included one school planned an after-school club concerned with online safety and data protection. This meets CSI-COP's 'other expected impact' for online safety.



University of Patras

The University of Patras (UPAT) organised three parent-teacher roundtables in the city of Patras, Greece.

The first parent teacher roundtable event was through an external school visit to the 34th kindergarten of Patras on the 24 October 2022 (see Figure 16).

UPAT engaged participants with kindergarten teachers, a CSI COP citizen scientist and parents of pupils. All attendees showed keen interest, highlighting their clear demand for information on the topic.



Figure 16: UPAT first teacher roundtable event 24.10.22

Throughout the discussion, it was evident that both parents and teachers shared a common concern: finding effective ways to introduce the concept of online privacy to young children and instil in them the importance of safeguarding it.

UPA's second parent-teacher round table event on online privacy was organised on 13 March 2023, at the 3rd High School of Patras. This brought together parents, teachers and CSI COP citizen scientists (Figure 17). The event witnessed the active participation of teachers and parents who engaged in lively



Figure 17: UPAT's second parent-teacher roundtable 13.03.23

discussions with the citizen scientists present, sharing their perspectives and insights regarding the significance of online privacy, safeguarding personal data and ensuring children's safety on the internet. This round table served as a crucial milestone in raising awareness and fostering education on digital privacy concerns among parents and teachers. It emphasised the pressing need for ongoing initiatives to address online privacy issues, particularly within the realm of high school education.

UPAT's third parent teacher roundtable event was organised on the 15 March 2023 15.03.2023 with an external visit to the 12th Elementary school of Patras (Figure 18). This round table hosted parents, teachers and citizen scientists. The participants engaged in fruitful discussions, sharing ideas and expressing concerns regarding the measures needed to guarantee the online safety and privacy of their students and children. Various effective strategies were deliberated on, focusing on educating students



about the potential risks and threats prevalent in the digital realm, as well as equipping them with the knowledge to identify and avoid such dangers. The discussions again underscored the pivotal role of schools in promoting digital literacy and emphasising the significance of collaborative efforts between parents and teachers to achieve this objective. The importance of parental guidance and monitoring was highlighted, particularly considering the young age and limited judgement of children concerning online safety and privacy matters.

Figure 18: UPAT's third parent-teacher roundtable

The parent-teacher roundtables organised by the University of Patras brought together both teachers and parents who displayed a strong eagerness to enhance their understanding of online privacy and safety. The discussions shed light on the ongoing necessity for concerted endeavours to foster digital literacy and cultivate awareness regarding online privacy concerns among parents and teachers.

Association of Hungarian Women in Science (NaTE)

As part of Task 6.5 in CSI-COP's Work Package 6 the Association of Hungarian Women in Science (NaTE) organised a face-to-face roundtable discussion for teachers, educators, and parents on April 13, in Budapest. The event took place in the building of the Faculty of Electrical Engineering and Informatics of the Budapest University of Technology and Economics and focused on the topics of online privacy and data-protection, with a special emphasis on the protection of children's online data.

Among the 24 participants, there were several science teachers from Budapest and the countryside, who have children of their own, as well. Two special guest experts also attended the event: *Dr. Gábor Pataki*, data protection lawyer, lecturer at the Faculty of Law of the Eötvös Loránd University of Science and *Ms. Veronika Pelle*, assistant lecturer at the Corvinus University of Budapest, communications officer of the Hungarian National Media and Info Communications Authority. The attendees arrived full of insights, experiences, questions, doubts and ideas, which they shared with each other very enthusiastically.

After a very brief overview of CSI-COP's MOOC "Your Right to Privacy Online" (to meet the expected impact of science communication through informal education into GDPR), NaTE's team members and the invited participants talked about the blessings and dangers of the Internet, the data protection challenges posed by the students' use of the Internet, including hot topics such as catfishing and cyberbullying, and the steps parents can take to protect their children in the online space, etc. The conclusion of the lively, interactive discussion was that instead of definite bans by parents or teachers, open conversations, mutual trust building, and prevention are crucial factors in protecting children's data both in the family and at school.

After the event Ms. Pelle indicated her intention to become a regular member of NaTE, thus strengthening the bonds between the public and the civilian sector. Parents and teachers had the opportunity to realise their shared interests in the protection of children's online data. Furthermore, since the vast majority of the participating teachers are part of NaTE's network and they are in regular contact with NaTE, often acting as intermediaries between their students and the Association, their commitment to the topic of children's data protection may have a spill over effect, which can help CSI-COP's message to reach the stakeholder group of students, as well encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.



University of Oulu

Event organised and held by UOULU under task T6.5 are explained in this section.

Science Garden with families (children and parent/guardians) and teachers at educational point

The science garden was a large event for families (parents and children) guided by teachers. Engagement of about 50 people of all genders, and variety in age (mothers, girls), allowed public discussion. Science Garden (<https://www.oulu.fi/en/events/science-event-whole-family-university-oulu-science-garden-0>) was an event organised at the Botanical Garden Museum on 3.11.2022. In the area are placed various educational points led by teachers to offer experience about various scientific disciplines. To the event participated 750 people constituted by children and their parents/guardians that went through the points. Children could then fill in and complete a Science Passport (Figure 16 right).



Figure 19: On the left, the entrance to the area. In the middle the first few points. On the right, the “passport” for children to fill-in when going through the education points.

CSI-COP UOULU team was present and reached parents also through material in distribution, about protection of children security and safety, personal data collection and the related risks, and advertising the project and its activities (Figure 17).



Figure 20: The CSI-COP UOULU presence near the entrance (left), with project material on distribution (middle). On the right, particular of the leaflet warning parents of the risks for minors.

Parent teacher commission at comprehensive school Pöllönkangas, Oulu

Parent-teacher commission hosted a female majority with the engagement of five parents (4/5 females) and 2 teachers (all females). Parent-teacher commissions meet regularly at schools with the scope of increasing school-home collaboration and giving families possibility to influence school's decision-making. CSI-COP UOULU team participated one of these parents-teachers commission (vanhempaintoimikunta) meetings at the Pöllönkangas School in Oulu on 3.4.2023. With seven participants, of which two teachers (2/2 females) and five parents (4/5 females) and a focus on protection of children security and safety, the discussed themes were the current status of online tracking and the various online tracking technologies, the dangers of personal data release, the main points of GDPR, the countermeasures to protect ourselves. The CSI-COP project activities in this direction were also advertised. Printed CSI-COP material in Finnish was left in the teachers' room (opettajainhuone), in which the meeting was held.

Parent teacher commission at comprehensive school Oulu Teacher Training School



Parent-teacher commission, female majority. Engagement of 3 people (2 female, 1 male). CSI-COP UOULU team participated in one meeting of the parents-teachers commission (vanhempaintoimikunta) of the Oulu Teacher Training School (Oulun normaalikoulu) on 13.4.2023. Two participants (2 female, 1 male) participated together with CSI-COP UOULU team, see Figure 18. The themes discussed were protection of children security and safety, specifically personal data collection and the related risks, including dangers of personal data release. Project activities were also advertised.

Figure 21: CSI-COP UOULU team preparing for welcoming participants to the event.

Bar Ilan University

Bar-Ilan University organised two parent-teacher roundtables, both were delivered in Hebrew. The first one was an online event that took place on November 30th, 2022. Bar Ilan hosted 18 participants (about half of them were female) from all over the country, all of them were either parents to young children or teachers or both. To recruit participants to this event we posted the following advertisement on social media, sent it to our friends and colleagues. The topic was "End of privacy act with forethought – privacy challenges on the web" (סוף פרטיות במחשבה תחילה) (סוף פרטיות במחשבה תחילה).

הנכם מוזמנים
לסדנה ושולחן עגול בנושא:
"סוף פרטיות במחשבה תחילה"
אתגרי הפרטיות ברשת

★
הסדנה מיועדת להורים ואנשי חינוך

★
הסדנה תקנה למשתתפים:
✓ ידע, התמודדות והגנה בנושא הפרטיות ברשת
✓ קבלת כלים מעשיים להדרכת ילדינו כיצד לשמור על פרטיותם ברשת

★
הסדנה תתקיים באמצעות מפגש זום
ביום רביעי 30.11.2022
בשעה 20:30

★
ההשתתפות חופשית
ומותנת בהרשמה מראש
להרשמה לחצו

בהשתתפות הפאנל:
פרופ' מעיין גפת-טמיר
ד"ר שלומית חדד
הילה בן אבי – מדריכת הורים

Figure 22: Bar Ilan's advertisement for 30.11.22 parent-teacher event

In this first parent-teacher event Bar Ilan hosted a special guest, a privacy champion citizen scientist, Hila Ben-Avi, who is a parent to 3 kids and teacher in the elementary school and also a parent counselor. Hila helped us disseminate the information about the roundtable and recruited quite a few participants through her network. The roundtable included a short presentation of CSI-COP and definitions of basic concepts (e.g., trackers, cookies, digital fingerprints) by Bar Ilan's CSI-COP lead Professor Zhitomirsky-Geffet, about privacy threats and tools to protect privacy in websites and mobile apps. This was based on CSI-COP's MOOC 'Your Right to Privacy Online' demonstrated by Dr. Shlomit Hadad. Parental guidance was offered with multiple examples of how children can be hurt online and what parents can do to limit their screen time and ensure their safety given by Hila Ben-Avi. Hila incorporated the knowledge gained from the participation in CSI-COP with her knowledge and education as a parent counselor and teacher. The participants were very enthusiastic, asked questions and at the end of the roundtable there was a fruitful discussion between the participants and speakers. In particular, one of the raised issues was beyond privacy, it was related to boycotts and shaming which are frequently done by children using social media, e.g., via WhatsApp. Hila explained how this is done and how parents and teachers should be aware and involved to prevent such harmful actions. The roundtable started at 20:30 and lasted for about 1.5 hours (see Figure 23).

The second parent-teacher roundtable took place face-to-face on January 5th, 2023, between 12-13:30 at the Information Science department lab at Bar-Ilan University. There were 22 participants (about

65% female), most of the participants were M.A. and Ph.D. students at the university, who are parents to young children.

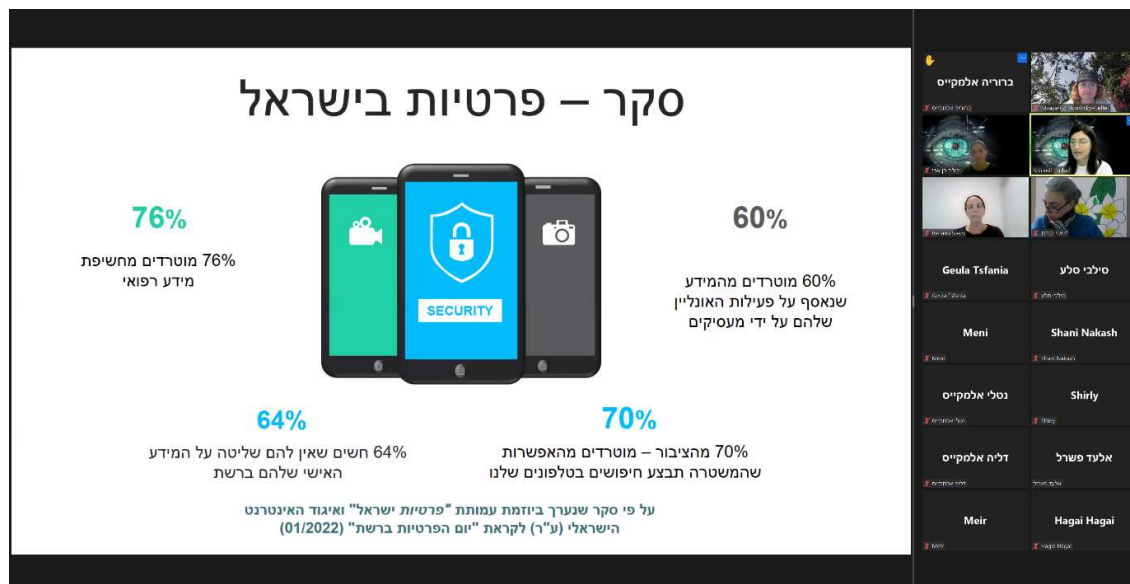


Figure 23: Screenshot from Hybrid parent-teacher event

The special guest was Guy Rosenwald, the director of R&D in eBay Israel, who is also father to three teenagers. First, Prof. Zhitomirsky-Geffet presented CSI-COP project and goals, and talked about the basic concepts of privacy and related regulations, raising awareness of the participants of the threats on our privacy online and how it can be protected. Guy informed the participants about the challenges large companies such as eBay face and how they protect the personal data of their clients. Guy further explained about privacy and data security policies in eBay which provides an e-commerce platform for the public where everyone can easily become a seller and advertise their products online to potential buyers. Both sellers' and buyers' personal information should be protected.

Since GDPR was introduced, sellers on eBay are obligated to comply with it and protect their buyer's privacy. The participants were thrilled, and the presentation was followed by the discussion of privacy online on e-commerce websites and apps and in general. In the last part of the roundtable, we discussed the threats posed on children online and how the participants can protect them.

The outcomes of Bar Ilan's organised roundtables were dozens of parents and teachers who became well aware of privacy issues online, and who gained knowledge and practical tools and guidelines to teach their children and pupils how to be more cautious when using the web. Hila Ben-Avi continues to deliver workshops partially based on CSI-COP materials to groups of parents and teachers. Additionally, Bar Ilan received positive feedback from several teachers who participated in the roundtable reporting that it inspired them to build and deliver a special lesson to their pupils devoted to privacy and cookies on the websites and trackers in apps, as well as using tools such as Exodus Privacy and webbkoll. Teachers felt that it was extremely beneficial for the pupils.

Czech Technical University.

Czech Technical University (CTU) organised roundtables for different ages of the population in Prague: for elementary school, secondary school, university students, for all kind of teachers (since kindergarten). To engage the attendees in CTU's parent-teacher events we used the game that CTU had created for its second "Researcher's Science Night" (as part of CSI-COP stakeholder engagement see deliverable D6.4) – see Image 6 and Appendix 2.



Image 6: First page of CTU's Cookie Mansion game

CTU reported that their offers for discussion about on-line privacy was much better accepted by persons that they already know and who have some confidence in CTU members than by total strangers. That is why they decided to organise two types of parent teacher roundtables:

- The smaller roundtables intended for their long term contacts and friends – each person was individually invited by a member of the CTU team. Some of such roundtables were organized for 2-3 friends on-line.
- The roundtables for larger audience that were offered as a complementary activity to some other actions (e.g. lectures for public) that their institute has organized. It seemed that the initial activity served as an "ice-breaking event" which helped in creating bonds between CTU and the audience that became open to arguments on importance of privacy on-line of CSI-COP.

Parents and teachers, in some roundtables, were impressed and they wanted to learn more about the results of CSI-COP. Some participants showed medium-low level of understanding how the GDPR is supposed to protect them, and they showed a general feeling that the GDPR is not



offering a protection by default and a general perception of digital vulnerability. Teachers and parents displayed a strong eagerness to enhance their understanding of online privacy and safety. In all the cases, we let some minutes to ask questions and solve doubts about privacy and cookies and time to share their concerns, perspectives and insights. In other cases, the roundtables were useful to reconfirm the need of initiatives to address online privacy issues, particularly within the realm of high school education. In all the cases, the CSI-COP roundtables provided valuable opportunities for all the participants to share concerns.

One of the outcomes of the lively, open and interactive discussions was that instead of definite bans by parents or teachers, open conversations, mutual trust building, and prevention are crucial factors in protecting children's data both in the family and at school. The importance of parental guidance and monitoring was highlighted, particularly considering the younger age and limited judgement of children concerning online safety and privacy matters. Prevention emerged as a central theme during the discussions. Participants emphasized the importance of equipping children with the knowledge and skills to make informed decisions online. This involves educating them about the potential risks, teaching them about privacy settings and online safety practices, and promoting critical thinking skills to evaluate the trustworthiness of online sources.

Another outcome was that the discussions underscored the pivotal role of schools in promoting digital literacy and emphasised the significance of collaborative efforts between parents and teachers to achieve this objective. Schools play a significant role in ensuring online safety. By integrating online privacy education into the curriculum, schools can provide students with the necessary tools and awareness to protect their personal data and make informed choices online. Moreover, the discussions shed light on the ongoing necessity for concerted endeavours to foster digital literacy and cultivate awareness regarding online privacy concerns among parents, teachers and even the children themselves.

CTU realised that CSI-COP partners, members of the public and parents, each of them, are interested in the protection of children's online data. This collaborative effort strives to create a privacy-conscious society where all stakeholders are equipped with the necessary tools and awareness to protect children's online data effectively. Because of this, CSI-COP gave the opportunity to all involved to start bonds with teachers and with their communities to start working and learning together in future events. CTU aimed to empower individuals with knowledge and to bridge the gap between regulation, educational institutions and parents for fostering a privacy-conscious society. So, in this way, from now on, the partners can be the place of reference, for their communities, to be in contact with for cookies and privacy matters. CSI-COP initiative has opened the doors for continued collaboration and learning among partner members, teachers, and parents. By positioning partners as trusted resources for cookies and privacy matters, the aim is to foster a privacy-conscious society where knowledge is shared, regulations are understood, and individuals are empowered to protect their privacy in the digital world.



Immer Besser

Immer Besser (IB) connected with former colleagues and other parents in the area, including with schools they graduated from, and schools in which their children studied. The approaches were to

- our own schools.
- the schools/universities of our children.
- in universities: search for IA & Ethics teachers and citizen sciences net.
- searching families associations for children image and data protection.
- social media: robotics or AI teachers.
- social media: families associations.
- make a calendar with the university main events, example family's day.

IB's meeting was organised in Zoom for Romanian participants. In total, a number of eight Teachers and one parent participated. Among them, five were female participants and three were males. The online parent-teacher engagement was hosted as an open conversation, without any breakout groups. IB presented CSI-COP in a nutshell and opened the online floor for discussions. IB gave enough time to everyone to discuss their observations and to launch their questions. We encouraged the participants not only to launch questions but also to answer and comment the other one's questions.

Through discussions, we were able to dive into the CSI-COP citizen science approach. The parents and teachers were impressed wanted to learn more about the project's results. Online participants showed medium-low level of understanding of how the GDPR is supposed to protect them, and they showed a general feeling that the GDPR application is not offering a protection by default.

IB asked the teachers and parents to explain if they feel or are aware of the risks that exist in the "surveillance economy", including the erosion of the data privacy rights. IB presented tools that could help people to identify the number and the types of cookies a website or a mobile app could have:

- starting with CSI-COP project presentation.
- testing the knowledge of the audience about rights (GDPR).
- showing risks of not protect our data with latest news
- tips and tools of the MOOC for prevention.

IB's approach was to allow attendees to experience the sessions through their own interests, instead of lecturing them for long. We bounced between facts, experiences and their own vision about the digital world should look like if they could re-write it from the scratch. Participants were encouraged to express their feedback at the end of the meeting or to contact us at any time after it. Their feedback was very positive and the participants showed gratitude for being invited and having the opportunity not only to meet the CSI-COP team, but also to learn from other voices how they experience the current course of digital developments.



Final comments on parent-teacher engagement

More than twenty CSI-COP parent-teacher and school pupil roundtables were organised as hybrid, online or in-person events as part of the project's communication, dissemination and exploitation activities. These events were held across Europe and in Israel in local languages reaching widely. Partners organised different types of events that afforded the delivery of the new knowledge arising from CSI-COP research and innovation: 'Your Right to Privacy Online' informal education resource. Ethical approval to include under-18s in CSI-COP led to the inclusion of school pupils aged 13 and above in some of the events (see UAB, CU). The expected outcomes from these events included a better understanding of the different kinds of work undertaken in universities, raising aspirations of young people about inclusivity, increasing scientific literacy through learning about the CSI-COP project's objectives. Citizen science is an effective way to bring diverse topics to the general public, including engaging through knowledge of the science around data protection and online privacy. CSI-COP succeeded to raise awareness of the rights accorded in the GDPR through its parent-teacher and young people roundtable activities.



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Appendix 1

Appendix 1a: Feedback on Coventry University school visits

Staff Feedback Form for Campus Visits

Thank you for completing this feedback form, your opinion is very important to us, so please answer honestly and feel free to add any comments.

1. Have you visited Coventry University before? (please circle) ☒ Yes ☐ No ☐ Not sure

2. Can you rate today's visit overall out of 10?

1	2	3	4	5	6	7	8	9	10
Very poor									Very good

3. What did you / your students enjoy most about the event today?

Afternoon activity about cookies. I learned a lot about how my data can be used. ... scary!

4. Did the event meet your expectations? Please provide details.

Yes.

5. What other areas would your students benefit from seeing/hearing about during future visits?

Art/Design. Performing Arts. Game Design? Product Design.

6. Would you consider bringing your students on a similar visit with us in the future? Please explain why or why not.

Yes - I think it's a good opportunity for pupils to understand more about University & raise aspirations.

7. Please use this space to add any further comments.

Thank you 😊



Appendix 1b: Feedback on Coventry University school visits

Staff Feedback Form for Campus Visits

Thank you for completing this feedback form, your opinion is very important to us, so please answer honestly and feel free to add any comments.

1. Have you visited Coventry University before? (please circle) Yes ☐ No ☒ Not sure

2. Can you rate today's visit overall out of 10?

1	2	3	4	5	6	7	8	9	10
Very poor							<input checked="" type="checkbox"/>		Very good

3. What did you / your students enjoy most about the event today?

An interesting session on cookies -
interactive for the students.

4. Did the event meet your expectations? Please provide details.

Yes.

5. What other areas would your students benefit from seeing/hearing about during future visits?

The social side of University / leaving home /
accommodation etc / costs of University.

6. Would you consider bringing your students on a similar visit with us in the future? Please explain why or why not.

Yes - would be good for Year 10.

7. Please use this space to add any further comments.

A good day out - showed the children
that university is accessible.

Appendix 2

Images from CTU's Cookies Mansion Game

