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Maddie is online: the ethics of online safety and security: an innovative co-creation cartoon story-telling project with schools.

MARTZOUKOU, K.

2024

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#### 'Maddie is Online': The ethics of online safety and security. An innovative co-creation cartoon storytelling project with schools

#### Konstantina Martzoukou

'Maddie is online' is an innovative educational project that uses creative storytelling to produce learning and teaching material for everyone involved the education, support and safeguarding of children (aged 9-13 years old). It focuses on the development of online information, digital and media literacy skills through digital cartoon animated stories, drawing attention to critical issues of online connectivity, in a way that is fun and engaging and linking to children's and young peoples' own online experiences within everyday life. At the heart of the project is co-creation, via active learner involvement, working closely with young people and engaging them in critical dialogue. This approach invites learners' perspectives, motivates dialogue, and enhances learners' feelings of engagement with the topics explored, as well as creates a sense of ownership and student empowerment (Cook-Sather et al., 2014). It also supports learners' belongingness (Bovill, 2017) and an inclusive approach to engaging with the student voice, empowering learners' agency. The participatory design and collective learning approach helps learners to identify digital skills areas of importance to them, based on their own learning trajectories and creates the foundations for fostering the importance of critical reflection.

Currently, there are four series in the project, online resilience misinformation, copyright, and the ethics of online safety and security (Martzoukou et al, 2023). This paper offers an overview of Series 4, funded by the Scottish Government (and supported by Digital Xtra Fund). The project engaged 8 teachers and 49 pupils (12 and 13-year-olds) who produced stories and animated cartoon video teaching resources on the theme, following the Scottish Government (2021; 2022) Ethical Digital Nation strategy. Series four included five themes: 'Online Behaviours', 'The Internet of Things', 'Online Terms and Conditions', 'Identifying Phishing and Scams' and 'Private and Personal Information'.

The project initially sought creative student teams (third level - S1 and S2) from schools across Scotland to write a short story of around 500 words on one of the above themes. Young people who participated in this project examined aspects of users, privacy and choice which are three of the "Pillars of Trust" for the Scottish Government as part of growing up as a 'Ethical Digital Nation' (Scottish Government, 2022). Online ethics in our project was concerned with behaviour, activities and decisions related to the digital world, when collecting, storing, publishing, communicating, using and sharing information. A total of twenty-five stories were submitted, and five stories were short-listed with the purpose of converting them into cartoon animated educational videos, co-produced with the teams of young people. The animated stories were included into an educational toolkit which addresses the ethics of online safety and security and includes 'Lead in Questions', an 'Activity Plan', 'Ideas for Educators' and 'Did you Know' sections, where learning outcomes, activities, and learning resources are introduced. The final project outcomes are freely available via 'Maddie is Online' bookshelf. The project also offered six online safety and security workshops and two career talks on online gaming and ethical hacking with total engagement of 502 national and international participants.

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Keywords: online ethics; schools; co-creation



'Maddie is Online': The ethics of online safety and security. An innovative co-creation cartoon story-telling project with schools

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Associate Professor Robert Gordon University

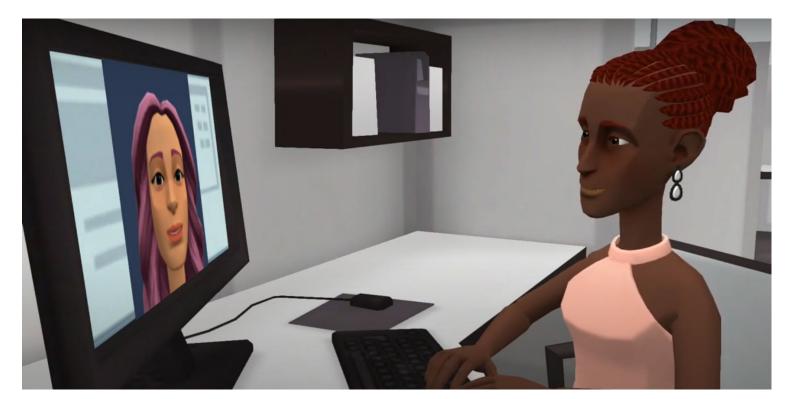
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Twitter: @Dinamartz











## Maddie is online

### Blog:

https://maddies online.blogspot. com/



Video Playlists

bit.ly/2LwnE 6T



Final Series Showcase

Series 4 Video Playlist

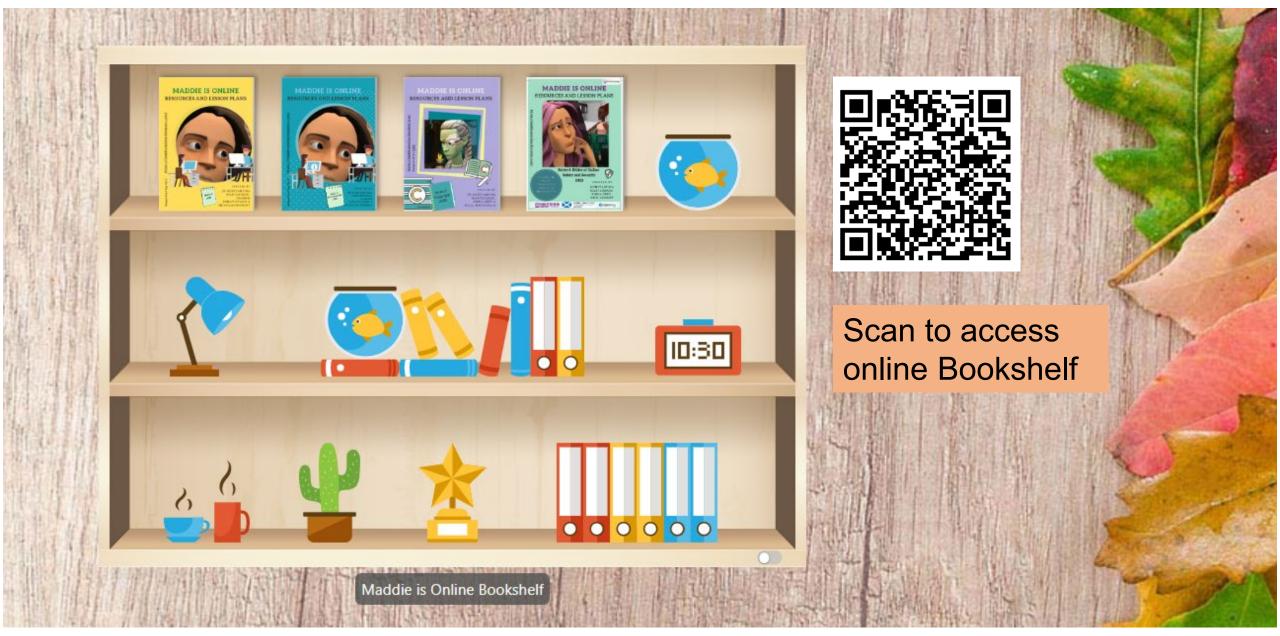
### @MaddiesOnline

- Have you tried 'Maddie is online' before?
- What series do you like and why?

# A cartoon-based resource for schools

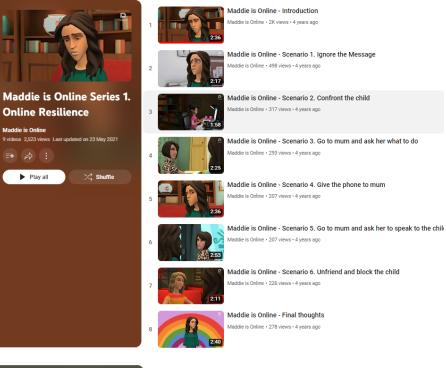


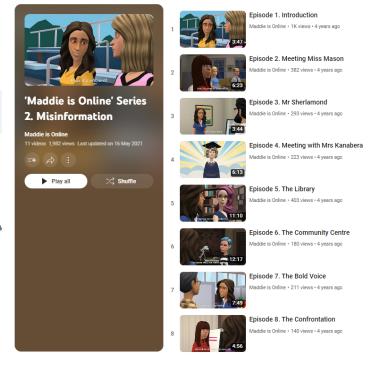




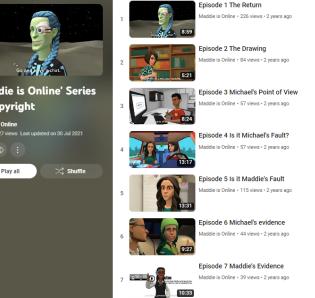


## Video play lists

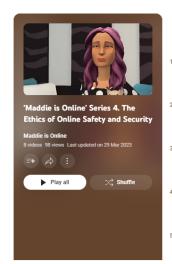


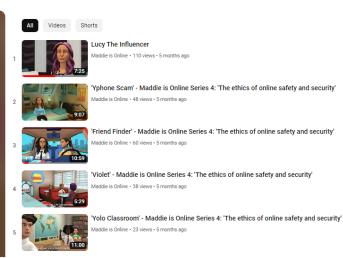






Episode 8 The Verdict Maddie is Online • 54 views • 2 years ago









Kyle: hey i checked out your profile and u look super cute

Maddie: 😂

**Kyle**: do u wanna be best buds??

Maddie: uh sure..





### SERIES 4 'ETHICS OF ONLINE SAFETY AND SECURITY'











### **DIGITAL ETHICAL NATION**

In 2022 the Scottish Government appointed a **National Digital Ethics Expert Group:** recommendations for becoming an Ethical Digital Nation and developing a Scottish digital ethics framework.

The framework utilises the **Objects of Trust tool** to guide policy makers, tech companies, and other private and public bodies in the creation of digital products and services informed by ethical principles.



Technology, Usefulness, Privacy, Choice, Fairness, Transparency, Institutions, Users.

Three of these objects have primarily been applied in the development and progression of Series 4 of the Maddie is Online resource series (Privacy, Choice and Users):



Scottish Government, 3rd November 2022





### **SERIES 4 'ETHICS OF ONLINE SAFETY AND SECURITY'**

#### THEME 1 – ONLINE BEHAVIOURS

online behaviours that may result in risk of harm to others

private versus public ideas of personal data on social media

#### THEME 2 - THE INTERNET OF THINGS

how different devices can collect and share data about people with or without their knowledge

### THEME 3 - UNDERSTANDING ONLINE TERMS AND CONDITIONS

making safe and age-appropriate choices of online tools, apps and services

browsing the Internet safely, e.g., online consent, understanding digital cookies

'Maddie is Online': a creative learning path to ethics of online safety and security for young people



## THEME 4 - IDENTIFYING ONLINE SCAMS/PHISHING AND FRAUDULENT WEBSITES AND DIGITAL MESSAGES

how a device - computer, laptop, webcams, phones etc. can get hacked

#### THEME 5 - PRIVATE AND PERSONAL INFORMATION

protecting personal data/information online

data handling and privacy

setting up strong passwords

keeping devices up-to-date and backing up data



### **SERIES 4 'ETHICS OF ONLINE SAFETY AND SECURITY'**

### **Digital Literacy Scottish Curriculum for Excellence**

The competition addressed 'Experiences and Outcomes' within the following 'Digital Literacy' Third Level Technologies curriculum organisers:

- Using digital products and services in a variety of contexts to achieve a purposeful outcome.
- Cyber resilience and internet safety.
- Awareness of technological developments (Past, Present and Future), including how they work.
- Impact, contribution, and relationship of technologies on business, the economy, politics, and the environment.

'Maddie is online' supports the Scottish Governments 'Getting it Right for Every Child (GIFFEC) policy and the United Nations Convention of the Rights of the Child (UNCRC).





. Ellon Academy - Story title: 'Friend Finder'



Ellon Academy short-listed fearn when received the news



Ellon Academy short-listed team in action

. Hazlehead Academy - Story 1 title: 'Lucy the Influencer'



Haelchool Academy 'Lucy the Influence' team member working on the story

· Hazlehead Academy - Story 2 title: 'Violet'



St Andrew's and St Bride's High School - Story 1 title: 'The Yolo Classroom'





St Andrew's and St Bride's team 'The Yolo Classroom' working on their story

. St Andrew's and St Bride's High School - Story 2 title: 'The Yphone Scam'





## School Competition: The ethics of online safety and security

We are seeking creative student teams (third level - S1 and S2) from schools across Scotland to share a short story of around 500 words on the theme 'Ethics of online safety and security'.

All schools entering the competition

 Gain access to free school and parent workshops on the 'ethics of online safety and security'.

Selected tear

- Gain support to develop their story, using cartoon characters, voice-overs and animation.
   Develop creativity, technical and teamwork skills as well as confidence as they design and
- Gain access to two free animation/online safety careers workshops for young people.
- Receive a free subscription to Plotagon Story animation tool for a year.
- Receive 'Maddie is Online' personalised gifts.

Winning team

Gift Voucher (£100) for each member of the winning team.

#### APPLY NOW!

FUNDED BY THE SCOTTISH GOVERNMENT AND SUPPORTED BY DIGITAL XTRA FUND



@MaddiesOnline

Applications close by 1st September 6pm



Scottish Government Riaghaltas no h-Alba goviscot

(D) digital Xtra

ROBERT GORDON



The competition addresses 'Experiences and Outcomes' within the following 'Digital Literacy' Technologies Scottish curriculum (Third Level):

 Using digital products and services in a variety of contexts to achieve a purposeful autome.

- Cyber resilience and internet safety.
- Awareness of technological developments (Past, Present and Future including how they work.
- Impact, contribution, and relationship of technologies on business, the conomy, politics, and the environment.



The Internet of Thing

Private and Persona







# MADDIE IS ONLINE RESOURCES AND LESSON PLANS

https://maddiesonline.blogspot.com/



Series 4. Ethics of Online Safety and Security 2023



CREATED BY

KONSTANTINA MARTZOUKOU EMMA GREY NICK HERBERT



Funded by the

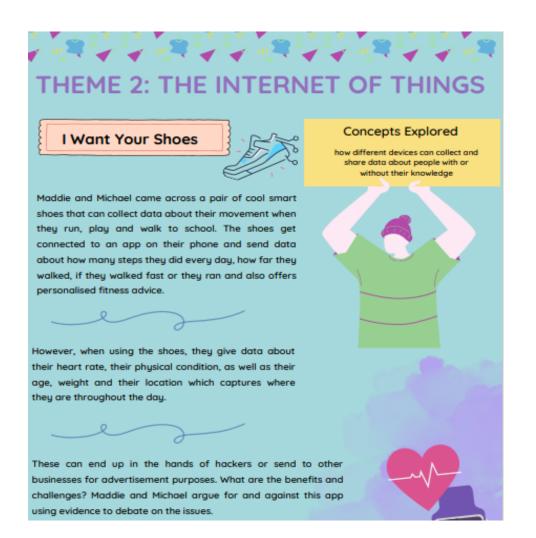


Scottish Government Riaghaltas na h-Alba gov.scot





### SERIES 4 'ETHICS OF ONLINE SAFETY AND SECURITY'



#### How Warm is your House?

Maddie's and Michael's parents found out about an amazing system to regulate their house temperature using a thermostat that changes the temperature to warmer when it detects that they are at home. They are considering buying the system but they have been told that it will be collecting data from the family when they are using it, and it will know, for example, that at 4pm the house gets warmer (as it is the time when they are back from work and school), what time they wake up and how much energy they spend.



The system can detect family preferences and can organise automatically a personalised programme for them which will be very helpful for saving them a lot of money and using less energy, which is good for the environment. However, it also collects personal information and there are some security concerns (e.g., the times when the family is away can be found).

Maddie and Michael argue for and against the system and get their parents to decide about installing the system or not, but the decision is not that straightforward. They have to explore the pros and the cons in detail and decide how to best move forward.

#### Theme 2 Learning Outcomes



From Education for a Connected World



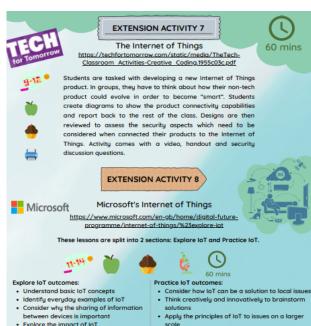
- I can explain the terms 'connectivity' and 'Internet of Things' (i.e., Internet connected devices or toys).
- I can explain how the security of devices connected to the internet may be compromised (e.g., webcams, monitors, phones or toys.
- I can demonstrate actions people can take to minimise such compromise (e.g., covering cameras on computers when not in use).

### SERIES 4 'ETHICS OF ONLINE SAFETY AND SECURITY'









Explore IoT Educator Guide:

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Explore IoT Lesson Slides:

/api/am/binary/RWEH8a

https://queru.prod.cms.rt.micr

https://query.prod.cms.rt.microsoft.com/cms

Practice IoT Educator Guide:

Practice IoT Lesson Slides:

m/bingry/RWELeg

m/binary/RWELeh

Includes videos, case studies, group work and supplementary learning links.

https://queru.prod.cms.rt.microsoft.com/cms/api/a

https://query.prod.cms.rt.microsoft.com/cms/api/a

Series 4: The Ethics of Online Safety and Security

### KEY ACCOMPLISHMENTS

- Series 4 was co-produced with 8 teachers and 49 pupils (12 and 13-years), offering 6 online safety and security workshops and 2 career talks on online gaming and ethical hacking with 502 participants
- The work was circulated by Police Scotland staff to the Children and Young People team and the local Crime Reduction Officers and the Cybercrime Unit It been circulated to students and staff in nursing by Augusta Georgia University USA
- It was endorsed by <u>The Queen's Nursing Institute Scotland</u> and the School and Public Health Nurses Association (SAPHNA).
- The work was presented to 150 nurses ('UK wide Community Children's Nursing online forum').
- RGU is the first university in Scotland to include the online safety resources in its <u>Nursing MSc Advancing Practice</u>.
- The work was featured on BBC and large newspapers such as <u>'The Scotsman'</u>







"A much-needed resource for our school aged children who are subject to increasing online abuse and misinformation. Using animations and cartoons built on their self-identified needs is a fabulous example of coproduction and, as such, much more likely to help empower them in making safer online decisions".

Chief Executive Officer for the UK's School and Public Health Nurses Association

### **TEACHER FEEDBACK**

"A real-life focus on the ethical dimension...and allowed them to think" how "they can stay safe online themselves" (Maria Murphy, Principal Teacher).

Pupils worked "creatively together in an authentic interdisciplinary challenge, across both English and Literacy and Computing" (Susan Brownlie, Teacher of English)

Developed "digital resilience, increased confidence" promoting "online safety & security within the rural northeast of Scotland." (Ewan Armstrong, Principal Teacher).



### PUPIL FEEDBACK

"This opportunity has helped me both with my story writing and computing skills. I've also learned more about how to avoid getting scammed online and I hope our animated stories can help other pupils learn more about avoiding this happening to them too". **David McElwee** 

"This whole experience has really taught me to think about what I do online and to learn more about Cyber Security "in a fun way. I loved taking part and my teamwork skills have improved too". Liam Roe

"Taking part with my group has helped us learn to animate a story we've created together and to keep myself safer online. People can get easily scammed and it's important we know how to prevent it".

Aiden Kurdell

"I have really enjoyed this experience, particularly working in a group with other pupils in my class and getting the chance to learn how to animate our own story. I hope what we've produced helps other young people learn about sc"amming and how to stop it happening to them. That would really be good!" **Rory Kyle** 

"I never thought we'd get so far in this competition and it has been a lot bigger than we imagined it would be but it has also been great fun to take part in. It's been educational but in a really enjoyable way and we learned new skills together. We've learned to animate and make decisions as a team. We've also learned a lot about online safety and the steps we can take to avoid being taken in and scammed". **Ava Hetherington** 









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### Maddie is Online

Cartoon Video Playlists Email: tomaddleonline@gmail.com



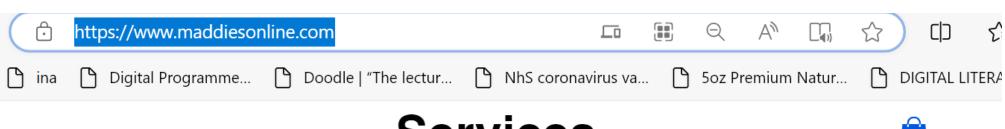
#### About

Maddie is Online

'Maddle is Online' is a series of innovative educational resources supported by cartoon video stories with real voice-overs and toolkits that contain learning activities. The series addresses the everyday life experiences of preteen children (9-13 years old) in the online connected environment and empowers them with Information and digital literacy skills that help them deal with challenging phenomena in their digital lives (e.g., online bullying, online misinformation, online copyright and ownership of creative material, online privacy and security, online reputation).







### **Services**



Select one of the following services offered as part of the series.



### Download the free online toolkits

You can download the education resource toolkits freely below. The toolkits contain useful resources and activities linked to the series themes. They also have links to open YouTube cartoon videos, step-by-step structured digital lesson plans, learning resources and systematic guidance for running the series



#### Order a Printed Toolkit

The series is designed to work best with the free online toolkits (as there are active links that work online), but, after popular demand, we also offer the option of a printed copy for reference purposes. You can order below. The cost is not for profit. It covers printing, and there is also an additional shipping cost.



#### **Book a Consultation**

You can book an online consultation with the series creator to go through all the steps you need to follow for using the resources at school or at home. As part of the consultation, you also receive a free copy of one of the toolkits of your preference. Booking a consultation helps to support the development of new topics in the







## Maddie is online

### Blog:

https://maddies online.blogspot. com/



Video Playlists

bit.ly/2LwnE 6T



### @MaddiesOnline

- Have you tried 'Maddie is online' before?
- What series do you like and why?

# A cartoon-based resource for schools





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#### **Publications**

MARTZOUKOU, K. 2020. 'Maddie is Online': An educational video cartoon series on digital literacy and resilience for children. *Journal of Research in Innovative Teaching & Learning*.

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MARTZOUKOU, K. 2023. Blog post: Maddie is online – ethics of online safety for children | SAPHNA – School And Public Health Nurses Association