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Supporting Digital Resilience: Embedding 'Maddie is Online' in SCPHN School Nurse Education

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In an increasingly digital world, children and young people (CYP) navigate both opportunities and risks online. While digital platforms provide valuable spaces for learning, communication and socialisation, they also expose CYP to potential harms, including online exploitation, misinformation, cyberbullying and digital addiction. The pervasive nature of digital technology means that the boundaries between online and offline worlds are becoming increasingly blurred, making it essential for CYP to develop the skills and resilience needed to navigate these spaces safely. Ensuring CYP's digital safety is becoming a growing concern in Europe, as highlighted by the World Health Organization (2024). It is an area requiring urgent interventions for positive societal impact. School Nurses, as Specialist Community Public Health Nurses, play a crucial role in supporting CYP to develop digital resilience and safely engage in online spaces. Their role extends beyond traditional health promotion to encompass the digital well-being of CYP. By fostering digital literacy and resilience, School Nurses can help CYP recognise and mitigate online risks, promote healthy digital habits and empower them to make informed decisions in their digital interactions. Integrating digital resilience education into the SCPHN curriculum is essential to prepare future School Nurses to address the digital challenges faced by CYP. This article explores the 'Maddie is Online' initiative, an innovative educational resource co-created with young people, which serves as a model for how Higher Education Institutions (HEIs) can integrate digital literacy education into School Nurse education, ultimately enhancing the capacity of School Nurses to support the digital well-being of CYP.

'Maddie is Online' Initiative

'Maddie is Online' (Martzoukou 2020; Martzoukou et al. 2023 Oct 31) is an educational resource co-created with young people to promote safer and resilient online connectivity. Led by Dr. Konstantina Martzoukou (Assoc. Professor) at Robert Gordon University (RGU), the initiative builds upon the concept of "trust" outlined in the Scottish Government (2022) Ethical digital nation strategy underpinned by Getting it Right for Every Child (GIRFEC) (Scottish Government 2022). It engages with young people who daily make "digital decisions that affect their lives" with the project upholding the rights of the child (United Nations 1989). The initiative has been funded by the Scottish Government (and supported by Digital Xtra Fund), the Scottish Library and Information Council (Martzoukou 2021), and the RGU Innovation Accelerator. The work was also included in the European Erasmus+ primary schools project, 'BRIDGE' with 6 EU countries and has been disseminated in other European countries, such as Greece and Romania in invited presentations and conferences.

Co-Production of the Initiative

'Maddie is Online' is comprised of fun and engaging animated cartoon video stories, aimed at children aged 9-13 years old, young people to strengthen their digital citizenship skills and keep them safe. Stories have been developed with the voice of young people at their heart with CYP narrating the online adventures of a pre-teen girl, Maddie, who experiences online

challenges navigating an online world of both opportunities and dangers. The co-creation and co-research methods used in the work have had a positive impact on young people's agency, motivation, learning, expression, feelings, and experiences about their online realities. CYP directly engaged with the themes, developing knowledge and exercising their creativity, opening dialogue to facilitate building resilient and healthy digital communities for CYP. 'Maddie Online' uses creative storytelling through the production of open learning and teaching material on digital literacy, digital citizenship, and online safety. Being co-created with children and young people, the initiative utilises an inclusive pedagogy that empowers young people to express their voice and critically engage with challenges they may encounter in their experiences of online connectivity, adding real-world rich experience. The stories are freely available on [YouTube](#) (Martzoukou 2019) with different cartoon characters, real voice-overs, step-by-step scripts, scenes and expressions. The stories are also accompanied by openly accessible online educational toolkits (with Creative Commons Copyright Licenses) that contain learning activities and resources. Recently, the project also created a new [website](#) (Martzoukou 2025) which offers easy navigation to the available content, with links to download the free online toolkits, to order a print version of the toolkit if required, and to book a consultation, which explains all the steps to follow for using the resources at school or at home with parents. As the project is not-for-profit, booking a consultation helps support the development of new topics and supports School Nurses to contribute as well as offering incentives for young people to engage with the series, freely donating their voice-overs and creative talents.

Integrating 'Maddie is Online' into SCPHN School Nurse Education

At RGU, 'Maddie is Online' has been successfully incorporated into the SCPHN School, Nurse curriculum, serving as an exemplar for how HEIs can integrate digital resilience education into professional training. The resource supports School Nurses students to:

- **Understand digital literacy as a public health issue:** Recognizing the importance of digital literacy in promoting the overall health and well-being of CYP and understanding its relevance to contemporary School Nursing practice.
- **Develop skills to facilitate conversations about online safety:** Equipping school nurse students with the necessary communication skills to engage CYP and their families in discussions about online risks, digital resilience and healthy digital habits.
- **Engage in multi-agency collaboration:** Encouraging school nurse students to work with educators, parents, digital policy experts and other stakeholders to create a supportive environment that promotes the digital well-being of CYP.

The initiative aligns with the SCPHN standards of proficiency (Nursing and Midwifery Council 2022), particularly in the domains of safeguarding, partnership working and health promotion. Expanding its use across other SCPHN programmes could enhance the national approach to embedding digital resilience education within School Nursing. This initiative serves as a model for how HEIs can incorporate innovative educational resources into their curricula, ultimately contributing to the development of a digitally resilient and informed generation.

Future Directions: Generative AI and the Next Steps

Building on the success of 'Maddie is Online', the project team has launched a new funded project, Generative Artificial Intelligence Skills in Schools (GenAISiS). This initiative is supported by the Engineering and Physical Sciences Research Council [grant number EP/Y009800/1], through funding from Responsible AI UK (RAI-SK-BID-00024) (RAi UK 2024). This research explores CYP's engagement with AI technologies, co-creating educational resources to promote ethical and responsible AI use. The project highlights the need for School Nurses to be equipped with knowledge of emerging digital trends, ensuring

they can support CYP in navigating these rapidly evolving online landscapes. The work has been featured on [STV news](#) (Rankin 2024) and the cartoon video series will include five co-created stories with young people, the first of which is available via [YouTube](#) (“Maddie is Online” Series 5. Episode 1 Introduction to Gen AI 2025). The research outcomes will be disseminated in June 2025 via practical workshops and freely available seminars. The first openly available event take place in Glasgow (Chartered Institute of Library and Information Professionals 2025).

Conclusion

As digital technology continues to shape CYP’s lives, SCPHN School nurses must be prepared to support them in developing resilient and informed digital behaviours. Initiatives such as 'Maddie is Online' provide a valuable model for embedding digital literacy education into School Nurse curricula, ensuring that future School nurses are equipped to engage in this vital area of public health. By integrating these resources into HEI, Specialist Community Public Health practice takes a proactive role in promoting safe, ethical and informed digital citizenship for CYP. HEIs, 0-19 services and policymakers must continue working together to ensure that digital health education remains an integral part of SCPHN education.

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