

Bridging the Cyber Safety Gap: A Free Train-the-Trainer Course for Adult Educators

Contributors

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Aims & Objectives

- To develop a freely accessible train-the-trainer e-learning course equipping community digital educators with cyber safety knowledge.
- To address the structural gap in Irish cybersafety provision for older adults over 65 and the educators who support them.
- To adopt a co-informed development process that centred the voices of older adults and digital educators including librarians and adult tutors in course design.
- To establish a sustainable peer-to-peer dissemination model capable of scaling digital safety education across Ireland through existing community infrastructure.

Contribution Snapshot

Date and Timeframe

Academic Year 2023–2024 (development phase); Academic Year 2024–2025 (deployment and rollout); ongoing

Focus

- OER creation/adaptation/remix/translation
- Open professional development / capacity building
- Open partnerships
- Equity, inclusion and accessibility in open education

Disciplines

- Education
- Information and Communication Technologies

What level(s) of your institution does this work affect?

- Across multiple institutions
- Outreach / Community / Industry engagement

Frameworks, Policies, or Strategies Aligned

- Adult Literacy for Life (ALL) 10-year national plan.
- Harnessing Digital - The Digital Ireland Framework.
- Digital Public Services Plan 2030.
- The Library Is The Place: 5 year strategy for public libraries.

Funding & Acknowledgements Details

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Useful Resources

- https://cybersafety.ie/register-to-the-course/
- https://cybersafety.ie/resources-for-educators/
- https://doi.org/10.1109/EuroUSEC69254.2025.00023

Open Outputs

Cyber Safety Project Website

https://cybersafety.ie/

Project Publications:

Gruben, M., Sheil, A., Das, S., O’Keeffe, M., Camilleri, J., Cronin, M., and Murray, H. 2025. "It's like not being able to read and write": narrowing the digital divide for older adults and leveraging the role of digital educators in Ireland. In Proceedings of the Nineteenth International Conference on Tangible, Embedded, and Embodied Interaction (TEI '25), Article 34, 1–15. ACM, New York, NY. https://doi.org/10.1145/3689050.3704945

O’Keeffe, M., et al. 2025. Cybersecurity concerns of older Irish adults: A comparison across high, medium and low tech usage. In 2025 European Symposium on Usable Security (EuroUSEC), 138–150. IEEE, Manchester, UK. https://doi.org/10.1109/EuroUSEC69254.2025.00023

Sheil, A., Camilleri, J., Cronin, M., Gruben, M., O’Keeffe, M., Murray, H., and Das, S. 2024. Enhancing personalised cybersecurity guidance for older adults in Ireland. In Proceedings of the 2024 Designing Interactive Systems Conference (DIS '24). ACM, New York, NY. https://doi.org/10.1145/3678884.3681894

Overview

Digital skills education for older adults in Ireland largely focuses on foundational technology use rather than targeted cyber safety advice, leaving community-based digital educators, including librarians, FET and ETB tutors without accessible resources to address the growing threats their learners face. This gap is particularly pronounced in rural communities, where the digital divide is compounded by limited access to in-person support.

This work responded to these challenges through a mixed methods, co-informed development process spanning over two years (2024-2026). In the first phase, priority voting exercises and focus groups with older adults (n=58) were used to identify the cyber safety topics of greatest concern to this cohort. These findings shaped the structure and content of a five-chapter free e-learning course and companion classroom guide, developed for digital educators, using a train-the-trainer approach that recognised the trust-based nature of learning in community and lifelong education contexts.

In the second phase, a diary study with digital educators (n=11) provided longitudinal feedback that drove an iterative redesign of the course. This included revisions to language, tone, and visual design following educator feedback.

The five course chapters cover cyber safety fundamentals, staying private online, recognising and avoiding scams, password management and recovery, and responding to hacking. A companion classroom guide with ten activities of varying difficulty was designed to support in-person delivery, and allow educators to adapt materials for learners with varying levels of digital access and confidence.

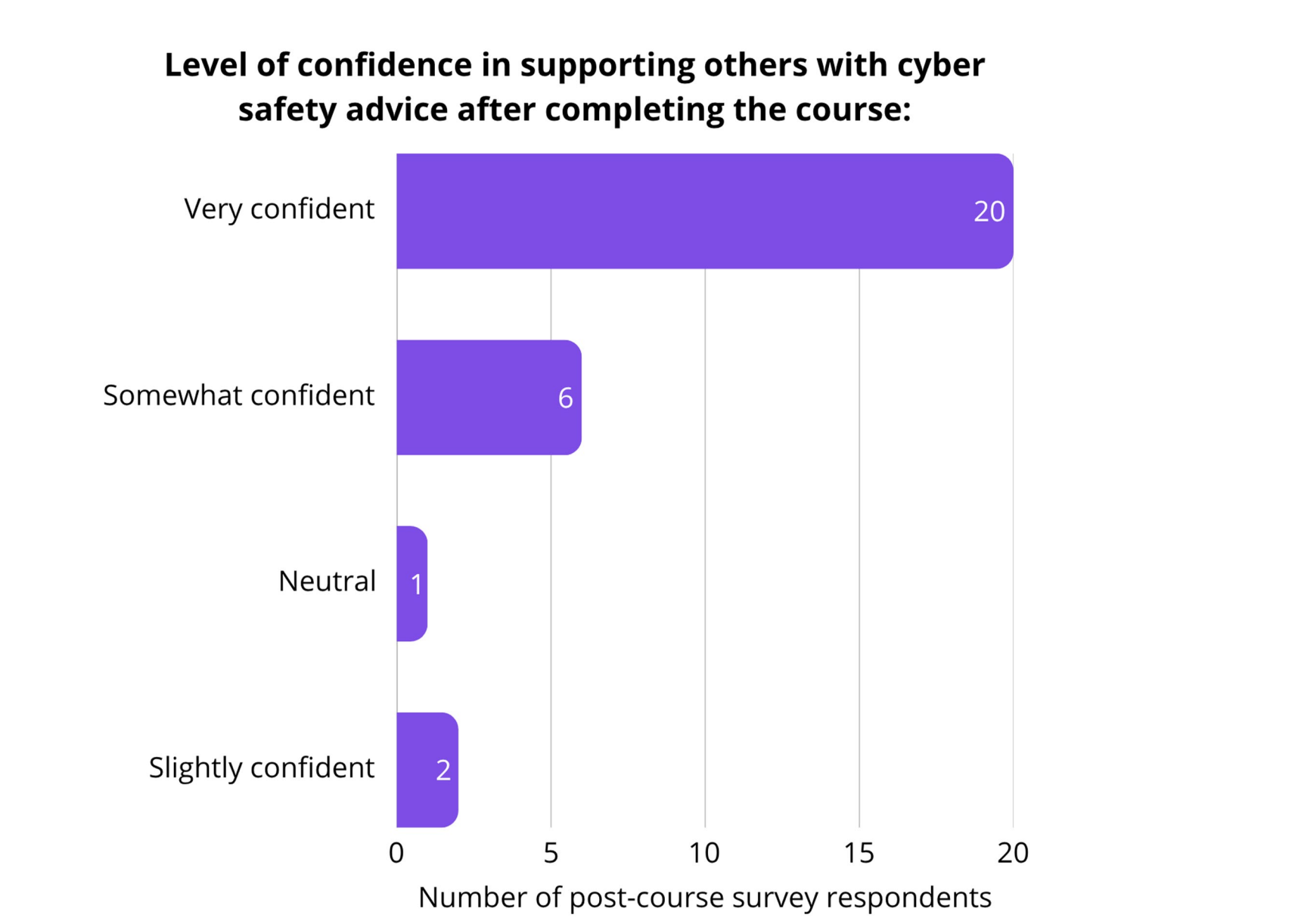
Recognising libraries as trusted, age-friendly community hubs, the course was launched to digital educators at an online onboarding event in February 2025, followed by an in-person launch in a library in County Donegal in July 2025. Nineteen library staff representing 13 libraries attended, receiving certificates of completion. The course has since enrolled 195 individuals across seven counties, including library staff, ETB and FET tutors, adult learners, and secondary school students. This unexpected but significant uptake beyond the intended cohort demonstrates the accessible and multipurpose nature of the course design, with future plans to design a version of the course tailored to young people that wish to learn cybersecurity advice for themselves and their families. Focus groups are underway with 12-18 year olds (n=18) to define priority topics of interest for both individual and community learning.

Future research aims to expand this participatory design process, and create more tailored community-based training models in the hope of generating further impact across a wider range of ages and backgrounds. This is supported by the findings, which show that cyber safety education is not solely an issue of youth or older adult digital literacy. It is multi-generational and can affect those who professionally support and inform digitally excluded populations. This initial uptake provides a promising foundation for broader national deployment, and the transferable and iterative nature of the course design also opens the possibility of international replication, with scope for module adaptation to reflect the needs of older adults and digital educators in other countries.

A post-course feedback survey remains open to responses to ensure the advice offered within remains best practice and up to date with evolving cyber threats and scams. Enrolment is continuing to grow through communities, with the long-term aim of establishing a Cyber Safety Champion in every public library in Ireland.

Quality/Scholarly Approach

The course was developed using a mixed methods research design, grounded in prior published work on cyber safety needs among older adults in Ireland. Iterative development was informed by a diary study (n=11) with digital educators, whose reflections drove redesigns of content, language, and visual materials. A post-deployment feedback survey (n=28 to date) has provided quantitative and qualitative evidence of impact following launch. All research involving human participants was conducted under ethical approval granted by the Human Research Ethics Committee of Munster Technological University (Approval number: MTU-HREC-FER-24-009-A). The course content was informed by best practice advice from internal cybersecurity experts and priority-voted topics by older adults over 65. The companion guide activities were designed for accessibility and adaptability across community settings to allow for varying levels of digital infrastructure.



Impact and Evidence of Success

As of May 2026, the course has reached 195 users across 17 Irish counties, with a satisfaction score of 4.38/5 and an average module grade of 98.47%. While the target cohort of digital educators including library staff (22%) and FET tutors (14%) represented 36% of registrants, a further 36% were under-18 students and 38% independent learners, including older adults. This unexpected uptake suggests that inclusive, accessible design need not be restricted to a single audience. Student engagement prompted ongoing co-design work with Irish teenagers (n=18) to develop a dedicated course for 12–18 year olds, covering deepfakes, scams, privacy, digital citizenship, and supporting young people who act as family "tech helpers".

Future Plans and Sustainability

The course will be sustained by dissemination through Irish libraries and existing ETB and FET infrastructure, requiring no ongoing institutional resource for delivery. Regular content updates are planned to keep pace with the evolving cyber threat landscape, including emerging threats such as AI-generated deepfakes and voice phishing. A dedicated cyber safety course for 12–18 year olds is currently being co-designed with secondary school students, which will connect to the existing course through a shared intergenerational cyber safety ecosystem. Feedback from enrolled participants will continue to inform iterative improvements to both the course and companion guide.

Top Tips

- Follow where participants lead. The decision to target the course towards digital educators rather than older adults emerged from listening to older adults' needs, which focused on cybersecurity information being delivered by someone they trusted. Designing with communities rather than for them surfaced insights that no amount of desk research could have anticipated.
- Plan for attrition in longitudinal data collection. Diary studies produced rich, grounded insights for this research, unavailable through single-session methods, but sustained engagement was a challenge. Recruiting beyond the target sample size and maintaining regular communication with participants helped to offset attrition.
- Accessible design is useful for everyone. Redesigning the course to be more inclusive, using easy-read language, multimodal learning, and a companion guide with activities of varying difficulty resulted in uptake from audiences beyond the intended cohort, including older adults and secondary school students. Building for accessibility from the outset can expand reach without additional resources.



Helen receives a text message that says there has been an unusual transaction on her credit card, and provides a phone number to call for further assistance.

She is worried that her bank account has been affected, and wonders if she should call the number or investigate first.

Next >

What do you think Helen should do?

Select an answer and then select **Submit** below.

Ring the number provided in the text to stop the transactions

Ring the bank's customer service directly

Submit ✓