

Cybersecurity Skills/Education

Research project proposal



GFCE Theme/Topic	Cyber Security Culture & Skills
Research Idea	Developing cyber skills amongst young people
Existing work/literature on the topic	<p>Edwards, S.: <u>Young children's everyday concepts of the internet: A platform for cyber-safety education in the early years</u>, British Journal of Educational Technology (2016)</p> <p>Dishkova, M. and Papancheva, R.: <u>Digital skills and the cyber addiction at primary school</u>, New Trends, (2019)</p> <p>Lombana-Bermudez, A., Cortesi, A., Fieseler, C., Gasser, U., Hasse, A., Newlands, G., Wu, Sarah: <u>Youth and the Digital Economy: Exploring Youth Practices, Motivations, Skills, Pathways, and Value Creation</u>, Youth and Media, Berkman Klein Center for Internet & Society (2020)</p> <p>Work being done by the NICE conferences/framework</p>
Problem statement/Knowledge gap	<p>Cyber skills are specialist digital skills but, in many countries, the education system is not fully equipped to provide students with the necessary digital skills at sufficient depth and scale. The objective for a number of countries is to fund initiatives that create and develop a sustainable pipeline for cyber security talent both now and in the future to meet the growing global need for individuals to possess cyber skills. Many countries are working to develop cyber skills amongst young people. However, many countries are not aware of what other countries are doing in this space and are unable to learn from best practice.</p>
Scope of Research and limitations	The research will not be able to cover situation in all countries, therefore a sample will need to be specified.
Research question(s)	What is the presence of digital skills and specifically cyber security skills, in national curricula/extracurricular activities in 5-23 education?
Research objectives	<p>The primary objective of this research project is to understand how countries are developing a sustainable talent pipeline of cyber security professionals, from school age.</p> <p>The secondary objective of this proposal is to engage with selected countries to understand what they are doing in this space and to draw best practices.</p>
Suggested research approach (method)	This will be a qualitative research, consisting of desk research and case studies development based on interviews.
Research output	A research paper of max. 50 pages and a policy paper of max. 5 pages with recommendations.
Beneficiaries	The working group will be interested and will benefit from

Cybersecurity Skills/Education

Research project proposal



	<p>understanding best practice and transferable measures which can be taken in their countries.</p> <p>The wider GFCE Community will benefit from understanding best practice and transferable measures which can be taken in their countries as countries interested in this topic extend outside of the working group.</p>
Time estimate	The research work is suggested to span over 6 months.
Estimation of human resources needed	<p>Lead researcher – 30 person days</p> <p>Assistant researchers – 48 person days</p>
Selection Criteria (of research supplier)	<p>Lead researcher: Policy practitioner with academic background, expertise in digital policy and education</p> <p>Assistant researchers: digital policy and education expertise, solid research and writing skills</p>
Budget	Estimate 60K USD / 50K EUR