



Media Literacy Policy Study

Report 2

Google's media literacy initiatives
and partnerships in Europe –
a learning review

November 2024

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1.0

Introduction

Ecorys is delighted to present this learning review of Google's media literacy initiatives and partnerships in Europe. The report is based on research carried out between September 2023 and May 2024 and forms one of a set of outputs from a Media Literacy Policy Study funded by Google aiming to inform the evolving agenda for cross-sectoral collaboration on media literacy in Europe, and to assess the implications of emerging technologies, including Generative AI, for tackling disinformation and promoting online safety. The Ecorys team also worked closely with independent expert advisers from LSE's Department of Media and Communications, who provided support and challenge throughout the project. The findings are presented alongside a second report examining Europe's media literacy policy landscape, and a series of shorter thematic policy briefs.

The study team would like to thank the stakeholders who contributed their time for interviews and surveys and without whom the study would not have been possible. They include representatives from policy, industry, civil society and academia operating at European, international and national levels as well as a cross-section of Google's strategic and implementation partners and country teams.

The report is split into three main sections:

- This first sub section presents the aims and scope of the study and the research methods used. It goes on to set the scene for Google's media literacy work in Europe, providing orientation to Google's organisational objectives, introducing the different types of programmes that have been supported, and explaining the nature of Google's involvement in funding and implementation.
- The main body of the report then presents three 'deep dive' case studies, showcasing the learning and insights from three examples of established media literacy initiatives supported by Google based on the literature and stakeholder research. For each deep dive, we tell the story of the initiative and how it was developed. We then provide an appraisal of the available evidence for its effectiveness and outcomes, and summarise key messages from the stakeholder feedback.
- The report concludes by drawing together and reflecting on the key themes from the case study deep dives, and the wider body of evidence from the Media Literacy Policy Study. The study team provides an overall appraisal of the strengths and limitations of Google's programmatic, policy and funding support for media literacy in Europe and offers a set of recommendations for future programme design, development and monitoring and evaluation, based on the evidence from the study.

In the remainder of this section, we establish the terms of reference for the study and the working definitions. We then explain the methodology used and highlight the strengths and limitations of the data.

1.1 Terms of reference

Media literacy (ML) is a dynamic concept that continues to evolve in response to technological, social, cultural and political developments. At its core, it involves a range of skills that citizens can draw on to make informed choices about content and how to interact, contribute and participate in different media environments. This includes being able to critically understand and evaluate media content – assess its sources – and understand how media production processes work.¹ ML also has a strong digital literacy component, reflecting the importance of digital tools and platforms, and the influence of algorithms and AI in media production and choices.² Being media literate also means being able to responsibly and safely use digital media services and engage with others in the public sphere, as well as fulfilling the creative and participatory potential that new technologies and services can offer.

Capturing the above understanding of ML as dynamic and multifaceted, we adopt a broad operational definition of ML as set out by the EU 2020 Council conclusions³ that media literacy is as an umbrella expression that:

"Includes all the technical, cognitive, social, civic, ethical and creative capacities that allow a citizen to access and use information and media effectively, and to safely and responsibly create and share media content through different platforms".

In the context of this study the primary focus is on media literacy initiatives (MLI) that aim to develop the knowledge and awareness of citizens and users about different media environments and critical thinking skills in relation to different media. This therefore covers a range of different types of actions and initiatives including:

- › Media literacy education and training initiatives that may be implemented through a range of curricula and resources to equip users with independent media literacy skills, knowledge, or competencies.
- › Awareness raising campaigns that highlighting relevant media literacy issues, challenges and risks, as well as psychosocial interventions to prompt behaviours when online, e.g. prebunking initiatives⁴.
- › Tools or resources that enable users to verify and critically appraise information, including for example fact checking initiatives, other community-based or capacity building initiatives, or associated tools.

Media literacy actions are also set in the context of a wider range of education and training measures. These include, but not are limited to associated education and skills activities including related educational agendas such as digital skills and literacy, and active citizenship. In addition, there are also a range of associated online safety agendas as well as counter radicalisation agendas that interact with media literacy themes and methodologies. Many of these agendas have dimensions that closely intersect with media literacy education initiatives but are not specifically media literacy actions. However, the relationship between these agendas is a theme that is highlighted across several of the case studies and is an area for consideration for the future development of media literacy education and training initiatives.

Through the case studies and overarching synthesis, the study examines how media literacy actions are set in the context of media regulation and policy agendas to address the prevalence of mis and disinformation online. Whilst media regulation is not the principal focus of the report the impact of these measures on the media risks that citizens may encounter is a significant counterpart to any media literacy efforts. The nature of risks that users are likely to encounter will inevitably shape the necessary scale, scope, and focus of broader media literacy strategies and actions. It is important, therefore, to also consider – and take appropriate action to challenge - the architecture and design of online platforms as they mediate levels of awareness of potential risks and media literate behaviours, including through content moderation, behavioural influences, and algorithms.

1.2 Introducing Google's media literacy initiatives

Google's aims regarding media literacy reflect Google's mission and objectives relating to content and child safety, access to reliable and trustworthy information, and connecting end users with authoritative sources. Within Europe, the regulatory framework is provided by the Digital Services Act (2022), the EU Code of Practice on tackling disinformation (2018, and strengthened in 2022) and AI act, alongside relevant legislation pertaining to the regulation of the audiovisual sector. Google is a signatory to the EU Code of Practice on Disinformation, providing a public account of its efforts to tackle disinformation within Europe in the bi-annual reports.

As the box highlights, Google has developed a broad portfolio of grants, direct support, and support for strategic partnerships. This work encompasses platform-based tools and measures alongside capacity building for civil society, educational programmes, and targeted communications campaigns. Key features of Google's approach include open sourcing, scalability and transnationality, cross-sectoral partnerships, engagement with end users in-product, and a focus on measures to boost resilience to disinformation pre-emptively.

Overview of Google's media literacy partnerships, tools and initiatives in Europe

Transparency tools and features

- › Google develops in-product transparency tools such as [About this Result](#), to gather information about source and credibility across the internet and within apps, and to provide a checking mechanism for the end user. This feature has been subsequently extended to include versions such as 'About this Advert' and 'About this Page' for the Google app, and is provided alongside other in-product information literacy tools including Fact Check Explorer, and Reverse image search. While these are not media literacy initiatives per se, they aim to improve information literacy among end users.
- › Ahead of the 2024 European Parliamentary Elections, Google launched the 'How to Vote' and Results features: a joint initiative with the European Parliament, to access credible sources of (country specific) information on how to vote, alongside [Election Information Panels](#) on YouTube.⁵ Google has also made a €1.5 million contribution towards an open database compiling information on common election-related disinformation narratives to make them visible to fact-checkers and citizens.⁶ This resource, branded as [Election24Check](#), complements the work of the Election Fact-checking Standards Network (EFSN), bringing together a coalition of 40+ fact checking organisations from across Europe.⁷

Open source curricula and educational programmes

- › Google advocates the use of open source educational tools and curricula, with the aim of empowering local partners to tailor and adapt the curriculum to their context. [Be Internet Awesome \(BIA\)](#) is a longstanding example. First developed and piloted in 2017 in the United States, BIA is a free digital safety and digital citizenship programme for children, educators, parents, and educational institutions. It includes branded curriculum materials and an online game, *Interland*.
- › Google.org, the philanthropic arm of Google, has supported organisations that leverage BIA in Central and Eastern Europe (CEE) through grants issued to Civil Society Organisations (CSOs) in the region to cover teacher training and resource adaptation. The media literacy dimension of the content has been updated and strengthened since 2022, in view of the misinformation and disinformation surrounding the war in Ukraine.
- › Launched in 2022, the [Super Searchers](#) initiative adopts similar principles of open sourcing content and materials, delivered in this instance through a train-the-trainer programme for libraries and schools, and in tandem with awareness-raising and familiarisation with Google's in-product transparency tools. The model was first piloted in Ireland, Italy, Portugal and the UK in partnership with Public Libraries 2030, and has since been further adapted and rolled out to the United States and India.

Capacity building for civil society to tackle disinformation

- › Google has long supported civil society led media literacy initiatives in Europe. This role has included providing financial support to the [European Media and Information Fund \(EMIF\)](#) since 2021. Google abstains from decision making about the focus or content of the grants to maintain independence. Over 70 projects have been supported and over 140,000 journalists trained in media literacy with support from Google, with instruction in the use of tools and product features to help check information integrity.
- › As the philanthropic arm of Google, Google.org leads engagement with non-profits in Europe, providing funding, expertise and tech to support civil society to address priority social issues and to reach and engage under-served communities. This activity has ranged from seed corn grants distributed to networks of fact-checkers, to strategic support for larger CSOs to scale programmes and boost reach with underserved populations.

- › Google has provided €10m to support capacity building for media literacy in the Central and Eastern European (CEE) region, with a central role for CSOs and media organisations such as Demagog, CEDMO and others. The recently announced [Google.org Impact Challenge: Strengthening Democracy in Europe](#) aims to support initiatives promoting democratic resilience to scale, through the use of advanced technology and AI. Google.org has also provided skills-based volunteering and seconded expertise. Working with Full Fact, Google.org provided financial support and seconded engineers to co-produce an AI-powered tool to identify claims in different policy debates. Financial and technical support was also provided to TechSoup, to launch a regional accelerator programme for non-profits in CEE, with the aim of building their capacity to utilise tech tools to fight misinformation online.

Campaigns and strategic communications

- › In 2022, YouTube launched [Hit Pause](#), an educational initiative providing tips on how to identify misinformation and disinformation narratives. The campaign takes the form of a short educational video on YouTube, and has since been made available in all 27 EU Member States following subsequent waves in 2023 and 2024. The annual staging has allowed for adjustment in response to need, with the most recent iteration focussed on the media sensibilities of YouTubers from Gen Z. Reach numbers for Hit Pause are reported via Google's reports to the EU Code of Practice on Disinformation.
- › As Google's 'think and do tank', Google Jigsaw has overseen Google's [prebunking](#) campaigns in CEE in anticipation of a new wave of Russian disinformation about Ukrainian refugees, working with strategic partners on campaign development and implementation at a country level. These campaigns, based on inoculation theory, ran in Poland, Czech Republic, Slovakia and Germany between 2022 and 2023, making use of short online videos to reach and engage large audiences in each case to equip the public with the confidence to recognise common misinformation tactics and narratives.

Harnessing the potential of Generative AI

- › The testing and review of Google's product tools and products is continuous to ensure safety and integrity in the context of the evolving landscape with Gen AI. Google's product mitigation strategy is geared towards smart use of metadata and watermarking of AI generated content (e.g. using SynthID). Google also makes use of Gen AI to [train its products](#) to assess the credibility of informational content, complementing media literacy programmes by further optimising Google's transparency tools. Google is also extensively training Gemini (formerly Bard) to recognise AI-generated content.
- › Google has invested in AI literacy education to make the public more aware of the affordances, strengths and limitations of AI for citizens, and to offer practical instruction on using AI for educational purposes (e.g. utilising Gemini, or AI Tutors). These competences are delivered within standalone AI literacy programmes such as [Experience AI](#), developed by the Raspberry Pi Foundation with Google DeepMind, and by mainstreaming AI literacy within other programmes, as is foreseen for BIA.
- › Google has also produced [AI Literacy Guides](#) to help teens use gen AI more responsibly as part of a specific teen onboarding process, alongside [Gemini for Teens](#) and mobile app experiences. Teens who meet the minimum age requirement to manage their own Google Account can now use Gemini for a range of purposes including study support, university preparations and for creative projects.

Google's work in Europe has included an emphasis on coordinating with other EU level stakeholders, to support an ecosystem approach to promoting information integrity. The mini case study below illustrates this approach, spotlighting Google's recent prebunking initiative delivered ahead of the 2024 European elections.

Mini case study: Google's European elections prebunking initiative

Google, Jigsaw, and partners carried out a pre-bunking initiative with the aim of tackling disinformation ahead of the 2024 European elections. The approach was based on published research, and on evidence collected from Google's prebunking initiatives delivered previously in Europe (see also Chapter 2 in this report).

Design and implementation

In view of the findings from previous prebunking initiatives run in Central and Eastern Europe (CEE), a technique-based approach was used to draw attention to common manipulation tactics in relation to elections rather than seeking to counteract specific misinformation narratives. Google worked with local partners in the target countries to amplify the initiative across their own channels and networks.

The short, animated videos were made available in all EU languages, as well as in Russian, Turkish and Arabic, and deployed as pre-roll and other ad formats on YouTube and Meta. The initiative included a focus on users of 45 years and older to address documented media literacy gaps among this target demographic. The initiative was further bolstered with paid campaigns in France, Germany, Italy, Belgium and Poland⁸.

Adopting an ecosystem approach

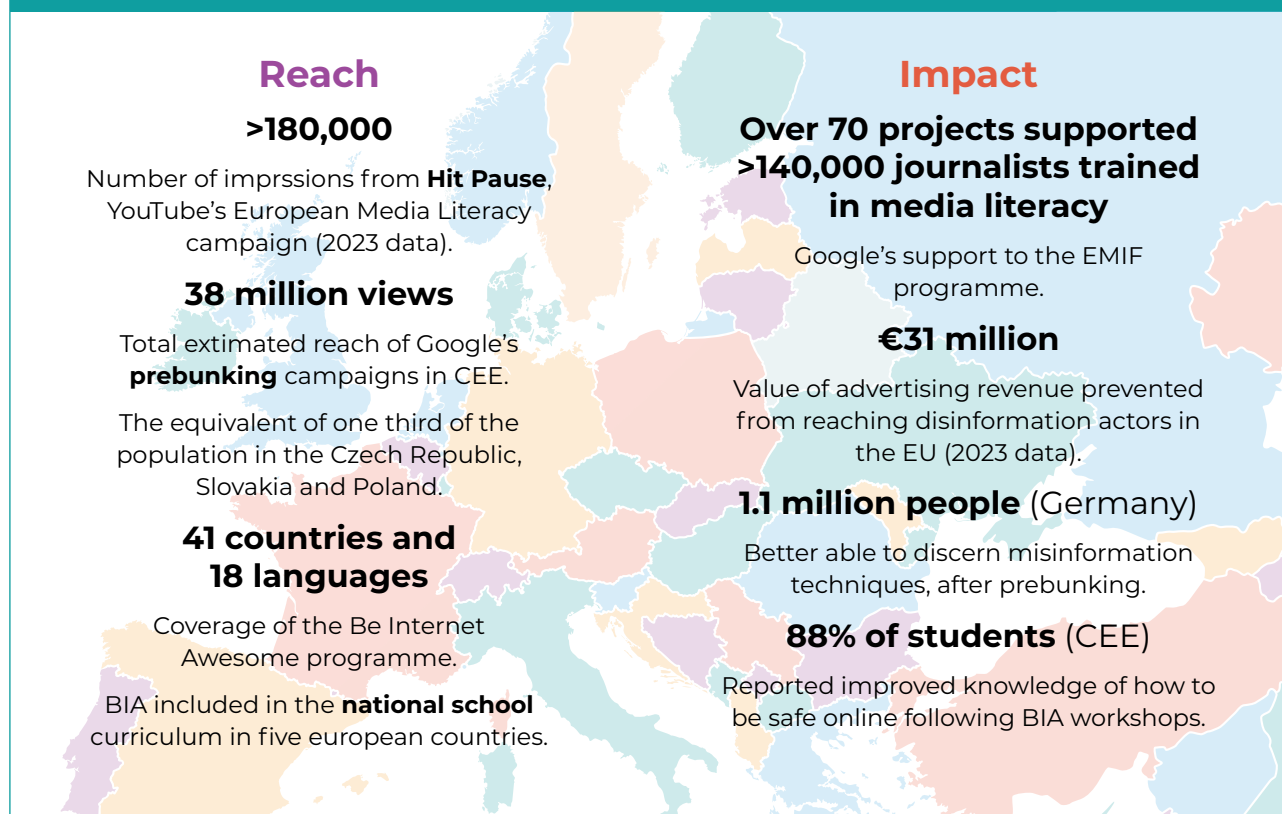
The initiative was part of a coordinated series of information integrity measures in European elections year, and Google and partners also coordinated efforts with the European Parliament, European Fact Checking Standards Network, EDMO and ERGA to raise the visibility of media literacy and fact checking resources at a broader ecosystem level, through a central campaign landing page. In turn, the prebunking initiative aimed to drive viewers across Europe towards these resources to maintain a joined-up approach.

Preliminary findings

The videos were viewed by over 120 million people in France, Germany, Italy, Poland and Belgium, while 1 million people who viewed media literacy resources from European election fact checkers, European Parliament, EDMO, media and civil society partners were from the prebunking advertising sites. Early analysis of brand lift surveys showed an overall increase in viewers' ability to identify manipulation tactics featured across all three video concepts in four out of five of Google's advertising markets. A full set of results is expected in autumn 2024 and were pending at the time of writing this report.

Some key facts and statistics from these programmes are provided in the visual below, to illustrate the scale, scope and reach of Google's work in this space. We probe deeper on the types of data that are currently collected, along with operational challenges and opportunities, in the subsequent chapters of the report. We also return to reflect on the messages from the study and to make recommendations in the final chapter.

Figure 1: Google's media literacy partnerships and initiatives in focus



The study team has developed a schematic, to help map the range of Google's initiatives falling within scope for the learning review. This is presented in Figure 2 overleaf.

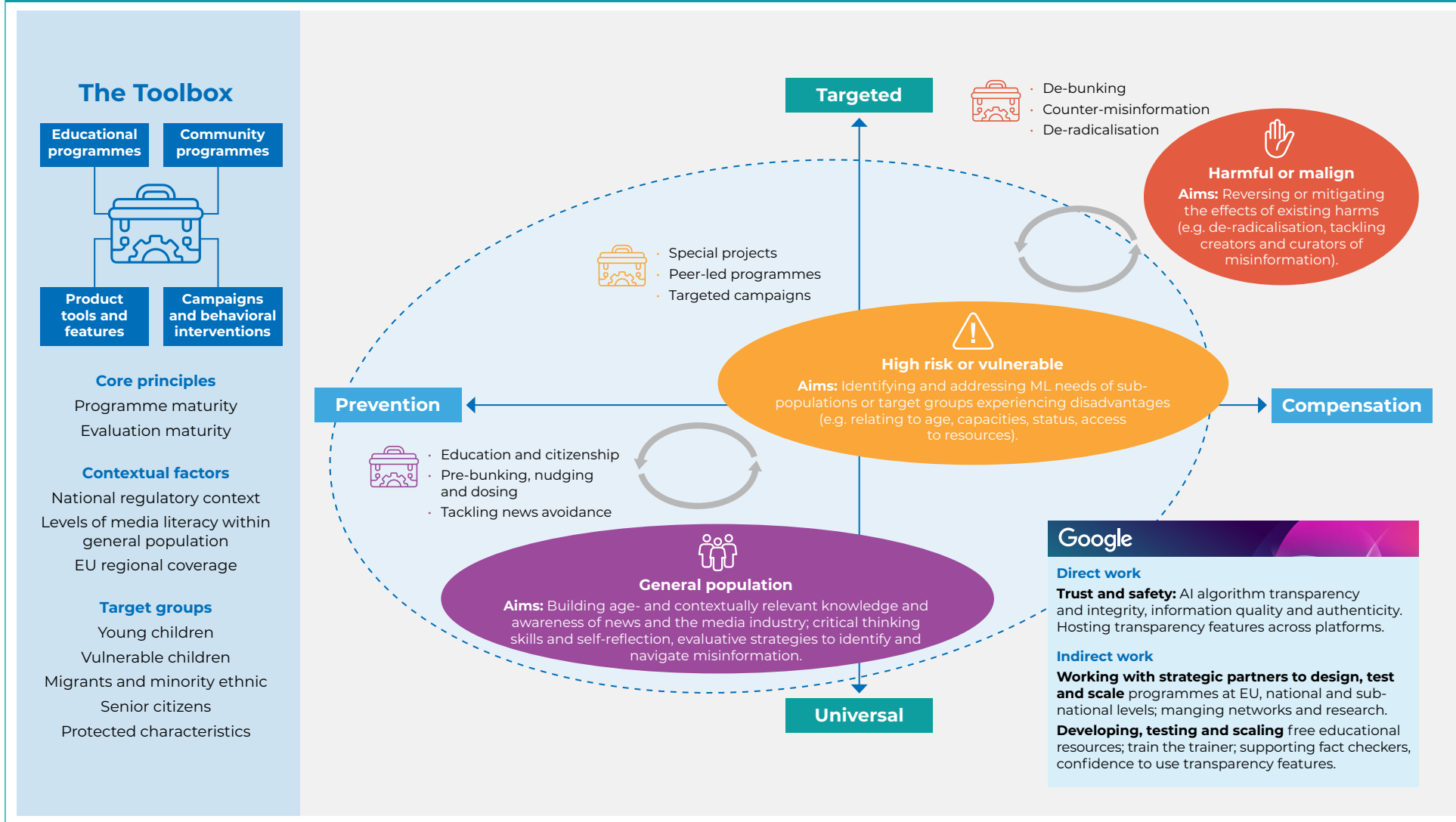
As the diagram illustrates, it is helpful to visualise how Google's media literacy initiatives and partnerships are oriented in relation to two sets of criteria:

- The first is the **targeting mechanism**. Media literacy initiatives can be located on a continuum from those that aim to reach the general population (universal) to those that seek to engage users with specific needs (targeted). Google's transparency tools such as About this Result receive billions of views, for example, while some of Google's philanthropic work aims to reach underserved populations (e.g. senior citizens, rural communities, children or adults with special educational needs or disabilities (SEND)).
- The second relates to **harm avoidance**. Google's media literacy work can be located on a continuum from initiatives that aim to build foundational media literacy capacities, wellbeing and digital citizenship (preventative), through to psychological interventions such as prebunking that prime citizens for likely exposure to manipulation (intervention), to debunking where exposure has already occurred (compensatory).

The dotted line on the diagram shows that, in general, Google and Google.org supported media literacy initiatives stop short of heavier-end compensatory work, where the efficacy of the available interventions is weaker. This reflects Google's focus on educational programmes, support for civil society and building psychological resilience. The schematic also helps to illustrate that some programmes can include both universal and targeted elements, such as where the Be Internet Awesome (BIA) open source curriculum has been tailored or localised.

The schematic is specific to this study, rather than reflecting Google's published strategy, and aims to complement the established taxonomies of psychological interventions to address disinformation.⁹ It offers a means of locating Google's existing portfolio, and identifying potential future gaps and opportunities. We go on to provide more specific recommendations for Google's future work in the final chapter of this report.

Figure 2: Conceptual framework for evaluating Google's media literacy initiatives in Europe



1.3 Connecting with policy and research

The study comes at a time when media literacy is high on the agenda from an EU policy perspective. While responsibility for media literacy remains the competence of EU Member States, the revised Audio-Visual Media Services Directorate (AVMD) requires national accountable bodies to take ownership of media skills and to set in place media literacy tools and raise user awareness.¹⁰ The EU has also taken coordinated action to support Member States through policy tools and strategy (MAAP¹¹), networks and infrastructure via the European Digital Media Observatory (EDMO), and EU funding. Following the European Council's Conclusions on Media Literacy,¹² some €14 million was assigned to support media literacy through the Creative Europe programme. Europe has also seen much cross-sectoral collaboration, including through the EDMO regional hubs, and the ongoing consultation to develop a set of European-wide media literacy standards and best practices.¹³

Despite a rich tradition of media literacy in Europe, and successive efforts to map and compare media literacy practices across EU Member States,¹⁴ the sector faces a number of challenges:

- The first of these relates to **the need for better evidence**. The 2021 report of the European Court of Auditors noted the priority for more standardised and robust evaluations of media literacy initiatives in a European context¹⁵. A lack of evaluation of national level media literacy activities was also noted by the European Regulators Group for Audio Visual Media Services.¹⁶ These findings are corroborated by the research literature. While there has been widespread testing of psychologically-informed interventions to tackle disinformation, these efforts have largely been confined to controlled studies with fewer examples of evaluations conducted in 'real world' settings. A recent literature review concluded that there is promising evidence for the effectiveness of interventions that equip users with critical thinking skills and that adopt 'system two' thinking. However, it also identified knowledge gaps regarding behavioural change outcomes, and initiatives focused on younger children and marginalised groups.¹⁷

- The second challenge is to navigate a **rapidly changing policy and regulatory landscape**.¹⁸

The Digital Services Act (DSA) and the Digital Market Act (DMA) aim to provide a stronger legal basis for tackling illegal content by forcing action on transparency and interoperability, while the AI Act has the ambition of creating a common regulatory and legal framework for Europe. Alongside specific national legislation in some EU countries, this makes for somewhat complex and uncharted legal waters. The strengthened EU Code of Practice on Disinformation, to which Google is a signatory, has also raised the bar for efforts to counter online disinformation in the wake of growing concerns regarding the risks posed by AI and algorithm-driven services. Commitment No.17 under the Code of practice includes actions to report on media literacy tools, activities and partnerships, putting a spotlight on the platforms' efforts in this space.

It is against this backdrop that Google commissioned the current EU Media Literacy Policy Study, to review media literacy policies and practices supported in Europe, to better understand emerging and future needs, and to identify opportunities for cross-sectoral dialogue with industry, public sector and civil society.

1.4 Study aims and methodology

The main aim of this learning review was to provide an independent critique of Google's partnerships and programmes relating to media literacy in Europe, and to appraise the sufficiency of Google's monitoring and evaluation arrangements in view of the changing evidence requirements for the sector.

The key research questions for this strand of the study included:

- a. What have Google and partners learned from designing and setting-up media literacy partnerships and initiatives in Europe?
- b. What are the main lessons learned from developing and scaling these initiatives, and what are the relative advantages and drawbacks of the different approaches (e.g. educational, campaigns, capacity building)?
- c. What factors have helped or hindered reach and uptake, including with seldom heard populations, and how has Google responded or adapted?
- d. What use have Google and partners made of monitoring and evaluation, and with what results?
- e. How are Europe's media literacy needs evolving, and how is Google best placed to respond? What does the sector consider to be the priorities for action?
- f. What further research, monitoring or evaluation might be undertaken to better understand the outcomes and impacts of Google's media literacy partnerships and initiatives?

Over-arching study design

The study adopted a mixed methods design. The research was grounded in an over-arching framework, informing the development of the research tools. The sources were appraised for their quality and relevance, assembled, and coded to enable explicit testing of the study objectives using a framework analysis method.

The analysis was based on the following principal sources of evidence:

- › **A rapid review of the literature**, to understand the policy, legislative and practice developments for media literacy in Europe and to map and classify different types of initiatives designed to tackle disinformation and their evidence base. This stage of the work was completed between September and December 2023 and informed the research design for the country case studies (see also report 1).
- › **A web-based consultation exercise**, to seek the views and experiences of key stakeholders across Europe on what works in planning, funding and delivering media literacy initiatives, and to identify the key actions needed to strengthen Europe's media literacy ecosystem. The survey was publicised to the sector and remained open throughout May 2024.¹⁹ Valid responses were received from 58 organisations.
- › **Semi-structured interviews**. The study team gathered detailed qualitative insights from key stakeholders operating at EU (14), international (7) and national levels (38). Within this sample, interviews covered:
 - Google's public policy, research, and product development teams, alongside representatives from Google.org, YouTube, Google Jigsaw, and Google DeepMind.
 - Civil society, fact-checking and media associations operating at a European level.
 - International partners and practitioners engaged with Google initiatives in India and the US.
 - Policy, regulatory and media sector representatives operating at a national level in the eight countries selected for the country-level deep dives²⁰, including engagement Google's country level teams and organisations delivering media literacy initiatives at a national or local levels.

Case study methodology

The 'deep dive' case studies were selected to include initiatives supported by Google that have been *scaled across multiple countries and languages* in Europe and were therefore at a sufficient stage of implementation to offer policy insights. Attention was also given to *different types of initiatives*, to offer breadth of learning for the sector. The final selection includes an open source educational programme for children of school age, delivered in partnership with schools (Be Internet Awesome); a train-the-trainer initiative supporting students and library patrons to navigate media information confidently online while making effective use of Google's transparency tools and features (Super Searchers), and a strategic communications campaign, using prebunking as a psychological intervention to boost resistance to disinformation (Prebunking).

The case study research was carried out between February and April 2024. The specific approach was determined on a per case basis to reflect the scale and characteristics of each initiative. However, all three deep dives included a combination of interviews with key stakeholders involved with design and implementation, and desk research to review available programme documents and data (including published statistics, testimonials and supporting research evidence where available).

The study team also worked with Google and partners to produce a Theory of Change logic model for each of the three selected initiatives. The purpose was to assist with framing the rationale, aims and objectives, inputs, activities, outputs and outcomes, and to guide the data collection for each deep dive. The completed logic models are presented in Appendix One.

Data limitations and caveats

The study was able to gather a wide range of high quality evidence from primary and secondary sources. The quality and integrity of the data was assured through the transparent communication of study aims and data processing arrangements, by preserving the anonymity of views shared by individuals, and by maintaining ethical walls between the study team and the funder in all processing activities. The research was conducted in compliance with EU Data Protection Laws in accordance with the codes of ethics for Ecorys.

Regarding data limitations, the deep dives were conducted over a three month period and drew on a relatively small number of interviews. It was not possible to engage directly with beneficiaries as part of this work or to secure direct access to (disaggregated) monitoring data held by Google or their partners within the terms of the study. As such, we have taken care to describe the case studies as *learning reviews* rather than being a full evaluation of the initiatives in question. We have, however, made recommendations for how Google might conduct future Monitoring, Evaluation and Learning (MEL) activities across their programmes.

The web-based consultation provides valuable insights to views from the sector and the 58 responding organisations included a mix of types and geographical operations. Nonetheless, this exercise presents the usual limitations of convenience sampling and should be treated as a snapshot, for consideration alongside the other data sources, rather than being statistically representative of opinion at the European level.

Disclaimer

The views expressed in this report are those of the authors and do not necessarily reflect the official position of Google or its partner organisations.

The report authors include: Laurie Day, William Hammonds, Maria Melstveit, Selina Komers, Valdeep Gill, Pietro Rabusin, and Robert Spence.

The full set of study outputs can be accessed online here:

<https://www.ecorys.com/case-studies/european-media-literacy-policy-study/>



2.0

Deep dive #1: Prebunking

Prebunking is a research-informed, context-sensitive approach for tackling disinformation through informational campaigns.

Future priorities include developing clear, trusted guidelines for local campaign development and building synergies with other media information integrity measures.

Case study overview

This case study examines the development, implementation and evaluation of the 'prebunking' initiatives supported by Google and partners to counteract dis- and misinformation. It primarily focuses on two examples from Europe that were initiated in response to the threat of disinformation associated with the invasion of Ukraine by Russia. This includes the initiatives delivered in Poland, Czech Republic, and Slovakia (CEE), and subsequently in Germany. It also reflects on the learning from wider work conducted to develop the model, including research in the US and UK and Asia (Indonesia). Finally, it considers learning and insights to inform the development of prospective initiatives.

The case study was developed based on a review of the documented results and outputs of campaigns, a targeted review of literature in relation to inoculation and evaluation, and a small number of semi structured interviews with stakeholders involved in the implementation of prebunking initiatives²¹. It provides a synthesis of these sources and distils lessons learned. However, it does not claim to provide a full independent evaluation.

The case study adopts the following structure.

- › An overview of the approach to prebunking developed by Google, including the conceptual foundations, , and features that were delivered in Europe.
- › The monitoring and evaluation arrangements that have been embedded in the development of prebunking initiatives, including the research and development process that have underpinned the campaigns and the results and impacts that have been evidenced to date.
- › The adaptability of the approach in the context of emerging challenges in the field of media literacy mis and disinformation, including in relation to new technologies, and factors that may need to be considered in relation to campaign selection and implementation.
- › It concludes with an assessment of potential role of prebunking in the broader media literacy landscape and recommendations for future development in the context of evolving EU policy and regulation.

2.1 Aims and origins

The initial development of the model commenced in circa 2020. An initial research phase was conducted in the US between 2021 and 2022 that established a proof of concept through experimental research and field trials in the US. The development of the programme was led by Jigsaw, a unit within Google that explores threats to open societies and scalable solutions, through a process of research and development. Jigsaw started developing the prebunking model as part of its wider work to develop targeted and scalable responses to mis and disinformation on Google's platforms and social media more generally.

Prebunking was developed as one element of Google and Jigsaw's wider work to address information threats online, including a range of measures to support open internet principles:

- › information threat research, analysis and monitoring.
- › tools and techniques to identify disinformation campaigns and manipulated media.
- › content moderation and associated moderation tools, including use of language in online forums.
- › tools to combat censorship techniques such as DNS manipulation and DDoS and hacking.
- › redirect products to counter violent extremism.
- › accuracy prompts and source verification tools.

The development of the prebunking approach was rooted in a communications concept of **'inoculation'**. The inoculation concept was originally developed by a US academic in 1961²² and has subsequently been a persistent feature of communications research.^{23, 24} The approach has been applied variously to areas such as health care, political or marketing campaigns, as well as potential applications in other social policy fields²⁵. More recently it has been the subject of renewed academic interest in the context of growing concerns about mis and dis-information online²⁶ and in the context of interest in a wider set of psycho-social and behavioural approaches to combating misinformation online.^{27,28}

A significant part of contemporary research on inoculation in relation to combating mis and disinformation has been led by UK based academics, including Stephan Lewandowsky, Sander van der Linden and Jon Roozenbeek, and Melisa Basol, who have also collaborated with Jigsaw on the experimental research outlined in the following section.

The prebunking model developed by Jigsaw therefore aims to increase users' awareness of misinformation tactics in advance by presenting stylised versions of typical misleading narratives or rhetorical techniques. The approach aims to anticipate misinformation **'upstream'** from conventional debunking or fact checking methods that react to specific pieces of information or facts that are being promulgated online. As it is based on a theory of communication, the model is primarily focused on **methods of persuasion** and the mechanisms through which audiences formulate beliefs and engage with messages, including through narrative structures and relationship to content.²⁹

Prebunking is primarily intended to prime and prepare users for the potential for encountering manipulative communication techniques or narratives, rather than the accuracy, or ways of appraising the accuracy, of information. Inoculation methods can be situated in the context of a wider set of psycho-social techniques for combating extremism and misinformation online (see table below). This contrasts, for example, with media literacy interventions that focus on the development of user competencies, creative engagement with media, and critical analysis, including through educational methods and materials.³⁰

Table 1: Psychosocial misinformation interventions

Inoculation theory

"Inoculation theory relies on two main mechanisms, namely (a) forewarnings or threat of a counter-attitudinal attack to motivate resistance and (b) a pre-emptive refutation of the attack to help model the counter-arguing process and provide people with specific content that they can use to refute future persuasive challenges... These messages are thought to do two main things: generate threat (or the realization that an existing, desirable position is at risk of being challenged) and motivate defensive protections, such as counterarguing against impending challenges." (Inoculation theory in the post-truth era: Extant findings and new frontiers for contested science, misinformation, and conspiracy theories ([wiley.com](https://www.wiley.com)))

Other psycho-social behavioural methods

Inoculation campaigns are one example of psycho-social behavioural methods for combating mis or disinformation (Kozyreva et al 2023). These are typically individual level interventions focused on reducing harm or propensity to believe, engage or share online misinformation and tend to emphasise shifting behaviours or calibrating beliefs in the media environments rather than necessarily dealing with the specific item of information. In practice, inoculation based **'prebunking'** campaigns present stylised examples of narrative or rhetorical techniques associated with misinformation to forewarn and users and reduce the traction of negative information. Other methods in this space include those that emphasise shifting or nudging behaviours including for example **accuracy prompts** – encouraging users to thinking about the accuracy of sources; **friction through design** – making misinformation slower to circulate through encouraging pauses in behaviour; **social norms** – highlighting social norms around information and share and endorsement behaviours.

Although psychosocial interventions share some characteristics with more conventional media literacy interventions, they are distinct from educational methods that emphasise the development and use of media literacy competencies, or measures to improve accuracy or verification of information. There are examples of targeted interventions that support or reinforce media literacy activities such as **media literacy tips** that are embedded in online resources. However, whilst inoculation or other measures may address typical narratives or techniques or provide prompts in relation to specific behaviours or information, they do not tend to directly address the accuracy of specific claims or information or provide information on specific sources. Examples of these types of information verification interventions include **debunking and rebuttals**, information warnings and **fact checking labels**, and **source credibility labels**.

An overview of different types of mis information strategies focused on individuals, including inoculation, and associated evidence base and examples of interventions developed by Kozyreva et al can be found at [Toolbox of interventions against online misinformation – Version 2.0 \(mpg.de\)](https://www.mpg.de)

Policy context

The development of prebunking campaigns formed one part of Google's 2022 wider strategic commitment³¹ to address immediate and longer-term information threats in Europe, including strategic responses to:

- › Immediate disinformation threats related to the Russian invasion of Ukraine, including European support for Ukraine, Ukrainian refugees, and associated energy and economic shocks.
- › Persistent misinformation challenges, including political polarisation, election integrity, and misinformation linked to COVID-19 and the public health response in Europe.

The development of the prebunking model and initiatives also responded to regulatory measures covering areas of relevance to misleading and illegal content. These include:

- › The requirements of the Digital Services Act (DSA) for very large online platforms and search engines, including Google, to assess and mitigate systemic risks in relation to illegal or misleading content that are linked to aspects of the design and operation of their services.
- › The 2022 Disinformation Code of Practice, to which Google is a signatory, which commits its signatories to support media literacy interventions, including awareness raising and education campaigns, and tools to equip users to identify misleading information, including fact checking and flagging of content.

To support compliance with the DSA the European Commission has published Guidelines for Very Large Online Platforms and Search Engines on the Mitigation of Systemic Risks for Electoral Processes. The proposed guidelines have recommended that VLOPs should consider the role of inoculation measures alongside investment in media literacy initiatives and campaigns to encourage critical thinking:

“Developing and applying inoculation measures that pre-emptively build psychological resistance to possible and expected disinformation narratives and manipulation techniques by informing users and preparing them to approach them critically. Inoculation measures can take different forms, including e.g., gamified interventions, video or other types of content.”³²

In the European context, but also with applications to similar challenges globally, the prebunking approach has been developed with the potential to be one component of a wider range of online media literacy and information measures to combat mis and disinformation. This also includes, for example, educational programmes, support for civil society organisations (CSOs) and fact checking networks, and resources that enable users to verify and critically appraise information (including web or app-based product tools and features).

2.2 Lessons learned from set-up and implementation

Developing the European initiatives

The prebunking initiatives were primarily conceived as **strategic communications initiatives**.

The CEE prebunking model ran in Poland, Czech Republic and Slovakia to pre-bunk: *“two emergent disinformation narratives aimed at undermining European solidarity and putting refugees in harm's way”³³*. The approach taken in Germany was broader and aimed to “enable more Germans to correctly identify manipulation techniques online”.³⁴ The CEE initiative ran in autumn 2022 on the major social media platforms YouTube, Facebook, Instagram, and TikTok and attracted 38 million views, and is estimated to have reached a third of the Czech, Polish and Slovak populations. The initiative in Germany attracted over 42 million views across platforms, including 21 million unique views on YouTube, whilst 50% of the overall audience on each platform are estimated to have seen the videos. Whilst both the CEE and Germany campaign were broadly targeted at the general populations of social media platforms the second phase of the CEE initiative was optimised towards those who were more vulnerable to disinformation narratives. Subsequent versions have also featured specific target groups, e.g. 18 to 35 in the case of the recent prebunking initiative in the Philippines.

The two prebunking initiatives were developed and implemented through broadly similar processes. The approach was led primarily by Jigsaw in conjunction with Google teams from local markets or regions. Google also worked with an implementation partner, Moonshot CVE that specialises in online interventions to combat extremism and polarisation, which led on practical development and implementation in partnership with Google and Jigsaw. Models were also developed by local creative agencies and included scoping research with NGOs and experts that identified priority themes or topics for campaigns. The creative agencies played an important role in delivery the materials and campaign strategies, and the initiatives were run online through paid advertisement. Their developmental nature meant that there was a broad range of inputs into from key Moonshot and Jigsaw and Google staff.


The design of the prebunking initiatives had to navigate important creative and ethical considerations, including local political and cultural contexts. In addition, as a developmental approach the evidence base and experience was often limited. This is because the model requires a high degree of judgement to inform the design, whilst drawing on core communications principles. Initiatives of this nature also risk generating backfire or boomerang effects in audiences due to the complexity of factors including personal belief systems and social settings that shape how people engage with information.³⁵ Some common considerations that were reflected in the design process included:³⁶

- › Ensuring that topics and materials were **salient** and **coherent** for audiences, including the potential range of prior viewpoints amongst the audience on specific topics, whilst also being relevant to different or evolving information challenges so as to address broader information threats.
- › Avoiding **use of fearmongering**, when presenting the 'threat' dimension of materials to engage and prime audiences, or **straw man arguments** (an inherent risk in 'refutational pre-emption') when presenting techniques, which risked alienating or promoting mistrust amongst audiences.
- › Ensuring the **credibility** or legitimacy of the initiatives. Source credibility can shape the success of communication strategies and campaigns, including in relation to prebunking strategies, as well as debunking and other types of interventions or media literacy or psychosocial methods.

The initiatives were based around **short videos** that presented common forms of mis or disinformation in an accessible **non-confrontational** style. In CEE, the prebunking videos presented a group of friends discussing themes being associated with Ukrainian refugees. A negative news story or narrative was typically introduced by one of the groups into the discussion which were then challenged by the remaining friends. The videos take a supportive and constructive tone that invite viewers vicariously through the protagonists to consider the extent to which the information that is being espoused by one of the group was articulating forms of disinformation about Ukrainian refugees. The prebunking initiative in Germany used a similar presentational style, examining messages through an interaction between friends, in a park setting. In the Germany campaign there was a strong didactic element to conclude the videos, typically through one of the characters speaking directly to camera whereas in the Ukraine example this was done by voice over. In both cases the videos conclude with the names of the partners.

Figure 3: Prebunking initiatives – example images

Central and Eastern Europe prebunking initiatives (Ukraine refugees) [videos](#) and snapshot from the videos.



Prebunking Anti-Refugee Rhetoric in Central & Eastern...

Info Interventions
6 videos • 4,803 views • Last updated on 14 Sept 2022


⋮ ➦ ⋮

▶ Play all 🔀 Shuffle

Jigsaw developed prebunking videos with input from research institutions including Demagog, National Research Institute (NASK), and One World in Schools.


These videos were launched in Poland, Czechia and Slovakia taking learnings from our

1



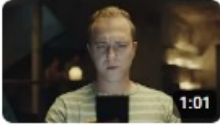
Don't let scapegoating manipulate you
Info Interventions • 7.6M views • 1 year ago
0:56

2




Don't let fearmongering manipulate you
Info Interventions • 7.5M views • 1 year ago
0:54

3




Don't let scapegoating manipulate you
Info Interventions • 5.1M views • 1 year ago
1:01

4




Don't let scapegoating manipulate you
Info Interventions • 4M views • 1 year ago
1:01

5



Don't be fooled by fear mongering
Info Interventions • 5.9M views • 1 year ago
1:01

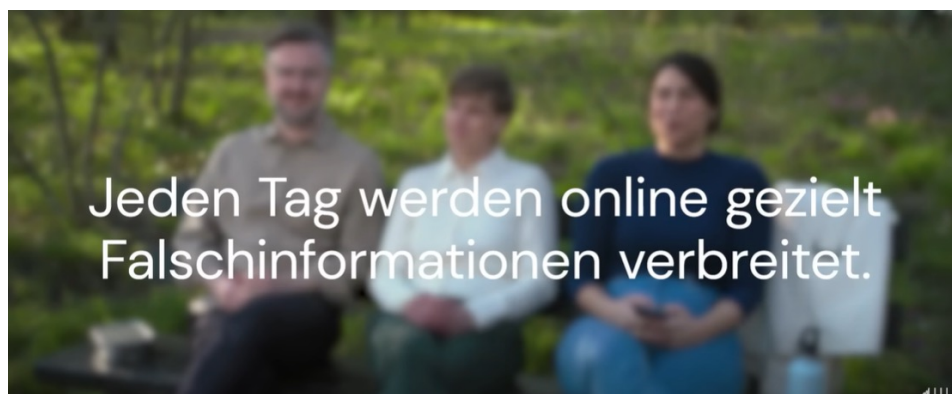
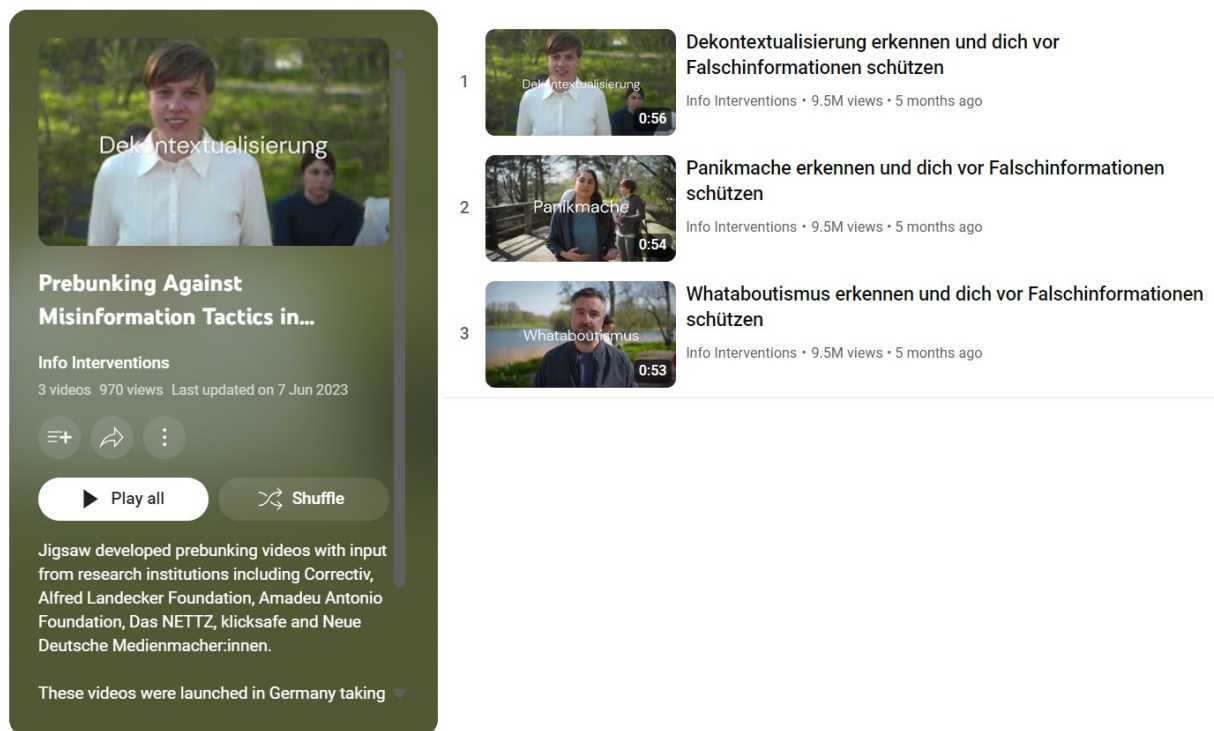
6



Don't let fearmongering manipulate you
Info Interventions • 4.1M views • 1 year ago
1:01



Figure 3: Prebunking initiatives – example images



The main conceptual difference between the two initiatives was the varying focus on specific narratives versus general techniques. In the Ukraine example, the videos directly addressed **narratives** associated with Ukrainian refugees in the region at the time. Whilst the videos addressed specific narratives and topics, they situated these in the context of disinformation techniques, i.e. fearmongering that linked Ukrainian refugees to crime and scapegoating in relation to the availability of housing for domestic populations. The German examples examined **techniques** associated with mis and disinformation, whilst illustrating these with a wider range of topics. The three techniques addressed by the videos were decontextualising, fearmongering, whataboutism. However rather than using real or clearly identifiable topics the videos used fictional examples, e.g. water shortage or schools closing, or depoliticised presentations of topics such as road safety for cyclists.

The different approaches responded to **local contexts and campaign priorities**. The CEE example was initiated directly in response to the invasion of Ukraine and to address the arrival of refugees in Europe. The specific narratives and falsehood, in this case linkages between Ukrainian refugees with housing shortages and crime, were identified through local research to be circulating online. In addition to reacting to specific narratives the campaigns also anticipated common narratives associated with refugees from previous experiences. The initiative also built on analysis of the previous wave of disinformation that had been associated with the arrival of Syrian refugees to Europe in 2015, as well as historic narratives that have typically been associated with migrant groups. However, by focusing on migration and refugees the videos talked to a live political topic. This was noted in relation to Slovakia where the issue of migration and Ukrainian refugees was already polarised in the population, and which appeared to undermine the effectiveness of the campaign.

In contrast, the approach taken in in Germany focused on more general techniques rather than politically charged topics or themes. The decision to adopt a general technique-based approach was guided by scoping research and feedback from the prebunking initiative in CEE. This broader approach is also supported by evidence that inoculation treatments can produce generalised results beyond the specific arguments that are refuted in treatments (Banas and Rains 2010). The experiences of implementing the Germany and CEE prebunking initiatives suggests there are **trade-offs** between the narratives versus techniques approach that need to be approached on a case-by-case basis.

For example:

- › The focus on techniques allowed the campaign to pre-emptively address a broader range of arguments, and with lower risks of alienating specific audience segments.
- › The use of fictional examples and techniques means that resources and materials may be more useful over time beyond the response to specific strands of misinformation which may evolve, such as in the CEE example.
- › The technique-based approach can be harder to present salient or engaging materials for audiences, for example, the translation of concepts such as 'whataboutism' were not always well understood in the Germany campaign.

A high degree of **trust and transparency** was considered an essential factor in the success of each of the examples showcased above. The branding was led by Jigsaw, alongside a **coalition of local organisations**. The decision to foreground Jigsaw aimed to emphasise the campaigns as collaborative initiatives to combat information threats rather than the general Google product brand. Local partners included local fact checking organisations, observatories of extremism and racism, and media literacy and education organisations (see Table 1.2). Local input into the design of the prebunking initiative was collected during a scoping research phase to identify salient topics and contextual or cultural considerations for the campaign strategy and materials. In addition, partner NGOs also co-branded the initiatives, with their logos included at the end of videos and co-branded campaign websites. At the same time, the initiatives ran independently from any direct or indirect support from government or public authorities. The rationale was to ensure credibility and encourage higher levels of trust than an initiative run solely by Google, as a major technology platform.

Table 2: Prebunking initiative partners

Central and Eastern Europe partners

- › [Demagog](#) is a polish fact-checking organisation working since 2014 on polish politics.
- › [NASK](#) is a National Research Institute under the supervision of the Chancellery of the Prime Minister of Poland. They mainly specialise in cybersecurity and user protection.
- › [One World](#) is a global education nonprofit funded in 2013 for the development of high-performing school systems.

Germany partners

- › [Correctiv](#) is a media company promoting independent journalism and fact-checking tools and projects since 2014.
- › The [Alfred Landecker Foundation](#) was established in 2019, committed to researching causes and effects of the Holocaust, combating anti-Semitism and promote minorities.
- › The [Amadeu Antonio Foundation](#) was established to strengthen democratic civil society since 1998. It brings support to victims of hate-based violence and promotes the creation of resilient communities.
- › [Das NETTZ](#) was founded in 2017 as the only networking centre against hate speech on the internet in Germany and is committed to a constructive culture of discourse based on the collaboration with several civil society actors.
- › The [Klicksafe](#) initiative aims to promote people's online skills since 2008, with a particular focus on people who support children and young people in developing their internet skills.
- › [Safer Internet De Network](#) is part of the European Union's Digital Europe Programme (DIGITAL) supporting [safer internet centres](#) in 27 European countries with the goal of promoting media literacy among the population, raising awareness of possible internet risks and offering advice to young people and children on online problems.
- › [Neu Medien Macher](#) is an organisation campaigning for better journalism and against hate speech on the internet since 2009, providing information about non-discriminatory media work.

Both the CEE and Germany prebunking initiatives focused on delivering **large-scale communications**. In the case of prebunking the core campaign model was focused on the delivery of short online videos at scale to raise awareness of threats, illustrate common arguments or techniques, and introduce general and or specific counter arguments. The communications-based approach focused on imparting information rather than dialogue or action learning, and as such there are inherent limitations in the extent to which audiences critically engage with content or develop active competencies, including the development of counter arguments.³⁷

For example, the Germany and CEE campaigns did not support active forms of learning, active user engagement with mis or disinformation techniques, or the active development of potential counter arguments by users,³⁸ and there was no coordination of the campaign with other types of interventions, such as educational interventions, beyond the hosting of materials on campaign websites.³⁹ This focus is further illustrated by Jigsaw's use of brand uplift surveys that has provided data on reach and recognition of manipulation techniques while not being able to capture actual behavioural changes, as we go on to explore further in relation to monitoring and evaluation below.

2.3 Measuring effectiveness, impact and outcomes

This section examines the approach to measuring the effectiveness, impacts and outcomes of the prebunking initiatives. The work to date has placed a notable emphasis on building the evidence base. The emphasis on research and monitoring reflects the relatively early stage of the development of the prebunking model and was a factor that shaped the approach to the design and scale of the prebunking initiatives in CEE and Germany. Research activities have focused on demonstrating **proof of concept** for the intervention at scale and tracking **campaign impacts** to support the implementation and improvement of interventions in real world settings. To date key features of the measurement process have included:

- › Collection of monitoring data on reach and impact, including large scale field survey research with audiences and control groups, but no reporting on statistical significance of the impacts, allied to a smaller amount of targeted follow-up qualitative research.
- › Experimental research with large survey panels, including controls for social characteristics and statistical significance tests, that informed the original development of the concept as well as ongoing analysis of the results and refinement of approach.
- › Sharing of results and lessons learned, including reports with learning and insights, a 'how to' guide on prebunking, publication of the campaign monitoring data on public blogs, and publication of peer reviewed research in academic journals.

In this context the measurement of the impact of the prebunking model and subsequent campaigns has primarily focused on the audience's **ability to recognise or identify misinformation techniques**. Measurement has not yet included broader assessment of the impact on user behaviours or competencies, such as critical appraisal or media content or users' actual behaviours and values in relation to media. Nor has measurement and evaluation yet made an assessment of the programme's contributions and impacts in relation to broader media literacy objectives on citizenship and open societies.

Monitoring the initiatives

Both the CEE and Germany examples incorporated monitoring and research arrangements as core factors in their design. This data has been presented in the online blog posts by the Jigsaw⁴⁰ team. Monitoring data focused on number of direct views of materials on platforms and in target territories. Although explicit targets were not set, both the prebunking initiatives appeared to achieve good audience reach in the respective countries and platforms. For example:

- › In CEE the videos attracted over **38 million views**, estimated to be approximately a third of the population of these countries. The videos had an overall reach of 80%, 69% and 62% of Facebook users respectively in Czech, Slovakian and Polish markets, 68% and 55% of Czech and Slovak Twitter Users and 50% of Polish TikTok users.
- › In Germany Over 50% of the overall audience on each platform saw the video, with over **42 million views** across platforms, with 21 million unique views on YouTube. Of those, the campaign reached 58% of the YouTube users aged 18-54 and 54% of users on Facebook and Instagram.

An important feature was the implementation of follow up research on YouTube through a **'brand uplift survey'**⁴¹. The surveys reported evidence of positive results across both initiatives in terms of viewers ability to discern mis and disinformation techniques or narratives. However, whilst the surveys offered comparisons with a control group the results have not been reported with information about additional tests of statistical significance which limits the strength of any potential conclusions about the impact of the campaigns. The survey was presented automatically two weeks after the start of the initiative both to users who had viewed all or part of a prebunking video, and crucially, to those who hadn't seen videos. Participation in the survey was entirely voluntary. The viewers were asked one question to test their ability to identify one of the misinformation techniques that was the subject of the initiative. In CEE viewers were presented with a survey containing one of three questions to determine their ability to identify one of the two misinformation tactics. In Germany, users who watched a prebunking video were then asked to identify a manipulation technique being used in a sample social media post.

When taking the caveats in relation to the public reporting of statistical significance into account, the reported data from CEE prebunking initiative reported some broadly positive results from campaigns (see figure 4 below). Results also indicated that the efficacy was greater when optimised for users who had a greater propensity to watch the videos all the way through. This was allied to important differences between the respective campaign countries. Viewers in Poland showed the greatest improvements in the ability to identify scapegoating and with further improvements between phase 1 (1.9 to 2.3 percentage points) and Phase 2 (3.4 and 3.8pp). In Czechia however, Phase 1 was unsuccessful, but Phase 2 did produce an increase in discernment (2.5 and 3.4pp). In contrast there was increased discernment of fearmongering by 8.1pp amongst Czech viewers during Phase 1, and 3.3pp in Phase 2, but no improvement amongst Polish viewers in Phase 1 and 4.3 to 4.4pp in phase 2. However, across both campaigns and techniques the campaign was generally unsuccessful with Slovakian audiences. Full breakdown of campaigns is presented below.

With the same caveats in relation to the public reporting of statistical significance, the survey conducted in **Germany campaign** also suggested some positive results. On average, viewers were 5.4% better at identifying any of the three manipulation techniques, which would translate into 1.1 million people who were better at identifying techniques. There was an increase of 5.3% on average in the recognition of decontextualization techniques. The ability to recognise fearmongering contents increased by an average of 6.1%, the ability to recognise whataboutism increased by an average of 5%. Results were greater among younger audiences, viewers under 34 demonstrated higher gains, with a 10.8% increase in 25-34 years old viewers' ability to identify the three different misinformation techniques. Whataboutism recognition was also higher for younger age groups, resulting in an increase of 7.1% for 18-34 years old viewers compared to the average 5%⁴².

Figure 4: Results from the prebunking initiative in CEE (Jigsaw 2023a)

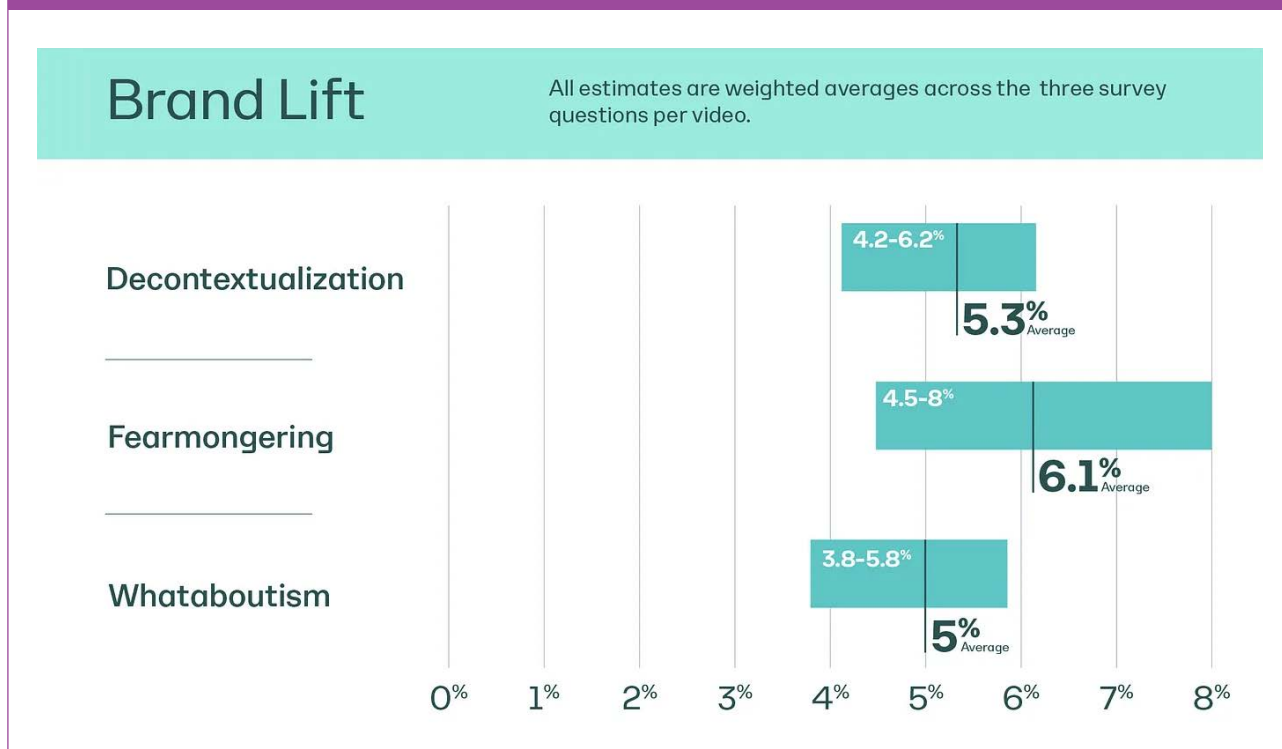
CAMPAIGN RESULTS

Difference in discernment for viewers who watched the video compared to those who did not

Scapegoating	Phase 1 (Sept. 2022)		Phase 2 (Dec. 2022)	
	Difference in Discernment (% pts.)	Questions Indicating a Difference	Difference in Discernment (% pts.)	Questions Indicating a Difference
POLAND	1.9-2.3	3/3	3.4-3.8	3/3
CZECHIA	0	0/6	2.5-3.4	2/3
SLOVAKIA	0	0/6	0	0/3

Fearmongering	Phase 1 (Sept. 2022)		Phase 2 (Dec. 2022)	
	Difference in Discernment (% pts.)	Questions Indicating a Difference	Difference in Discernment (% pts.)	Questions Indicating a Difference
POLAND	0	0/3	4.3-4.4	2/3
CZECHIA	8.1	1/6	3.3	1/3
SLOVAKIA	0	0/6	0	0/3

Figure 5: Prebunking initiative results from Germany (Jigsaw 2023b)



In addition to online survey Jigsaw and Moonshot also conducted targeted **qualitative research** to examine specific issues in relation to the shortcomings of the Slovakia initiative. The primary discovery highlighted the prevalent existence of migration narratives in Slovakia, which had already been exploited in a highly polarized context during the campaign. According to the Slovak focus groups, there was a pervasive scepticism towards most messages related to migration, irrespective of their source.

This scepticism indicated that prebunking campaigns were likely to have a diminished impact. In Slovakia, the implementation partners and brand lacked the same level of recognition, and respondents expressed that the messages conveyed in the YouTube videos oversimplified the complexities of hosting refugees in the country.

Experimental research

The programme of experimental research has supported proof of concept and refinements to the design of the model. The programme has been implemented through funding and direct support for three studies using experimental methods and field trials to test the validity of employing prebunking methods on social media. Each of the studies have examined the observable effects of inoculation treatments in the user panels by presenting inoculation treatments and then presenting different forms of manipulative content, typically in a social media format, to test users' respective abilities to identify manipulation and misinformation, including:

- › relative ability and confidence to identify manipulative techniques, including likelihood to share,
- › length of treatment effects and differences between intervention types,
- › ability of participants to appraise accuracy of content.

- › The studies were US based and used preregistered survey panels, plus one field trial on YouTube. All three used experimental methods, including randomised control groups whilst also controlling for personal characteristics and prior views. Types of variables included gender, age, education, political ideology, how often people check the news, social media use, populism, conspiracy belief, analytical thinking, numeracy skills, personality, open-minded thinking, and misinformation susceptibility. The results of these studies have or are due to be published in peer reviewed journals. Preliminary findings of the pre-print/forthcoming studies indicated broadly positive results from inoculation-based interventions:
- › The first study demonstrated the validity of the prebunking model using video-based interventions of a broadly similar type to those employed by the jigsaw campaign, including positive impacts across each of the experiments and misinformation types and when controlling for different personal characteristics and prior dispositions⁴³.
- › The second study has found that the effects of video-based interventions of a similar type employed in the Jigsaw prebunking campaign could be observed over approximately a month, but that reinforcement of interventions through booster interventions could be beneficial⁴⁴.
- › The third study has highlighted the importance of combining prebunking interventions with types of accuracy prompts to reinforce resistance against manipulative techniques but also to equip users with tools and capacity to practically discern the factual accuracy of information⁴⁵.

The first study was conducted between 2021 and 2022 and results were published in autumn 2022. It included six randomised controlled experiments of 6,464 subjects and a field study on YouTube of 22,632 subjects (a total of 29,096 participants). The first five experiments each tested one of five techniques, emotional language, incoherence, false dichotomies scapegoating, and ad hominem. Subjects were randomly assigned a treatment or neutral video after which they were asked to rate 10 randomly assigned fictitious social media posts. The follow up survey tested the relative ability and confidence of a user to recognise, appraise trustworthiness, and willingness to share manipulative and neutral stimuli. The sixth experiment sought to replicate the effects of the first experiment (emotional language) one year later. The field test showed one of two videos to a total of around 967,000 YouTube users, 30% of whom plus a control group were then asked to identify a manipulative headline.

The forthcoming publications present findings from subsequent studies that examine in further detail how long the effects of prebunking last and the extent to which inoculation interventions equip users to identify accurate or false information. The first study was based on five pre-registered longitudinal experiments with 11,759 participants that investigated the effectiveness over time of variously of video, text based and game-based inoculation interventions. The third study contrasted with the previous two studies by testing the ability of users to discern the accuracy of information after inoculation treatments, rather than just identifying manipulative techniques. The study included 5 experiments with a total of 7,286 online participants using a set of news headlines based on real-world false and true content framed by varying uses of emotional manipulation.

Considerations for evaluation and monitoring

The work by Jigsaw and partners has developed a body of evidence on the viability of the prebunking approach. Results and findings have been shared through different types of publications whilst learning has also been compiled into a guide that also includes approaches to monitoring and evaluation of prebunking interventions (Table 1). The priority for Jigsaw through this work, in line with its overall remit, has been to establish and test the validity of a scale approach. It has done this by supporting large scale experimental research, as well as testing and iterating the methodology through real world campaign applications. At the same time the research and work to date also highlights several themes and considerations when developing research and monitoring arrangements to test interventions of this type. Including:

› Trade-offs between research and reach:

A key feature of the approach has been the scale of the survey data which is appropriate for a method that is intended to be delivered at scale. The use of large-scale survey panels and experimental methods has generated a high standard of valuable evidence. There was however a trade-off between the cost and practicalities of conducting research on the results of interventions and the overall reach of any campaign. This was noted in the context of both the experimental trials and was a factor that limited the scale of the CEE and Germany prebunking initiatives. This is relevant as the evidence base on the effectiveness of the initiatives is not fully settled so is likely to be an ongoing constraint on their scale for the time being.

› **Complexity of assessing at scale:**

Experimental methods and campaign monitoring tools limited the complexity of what can be assessed. The experiments tended to test one specific dimension, whilst campaign monitoring relied on a very short voluntary brand uplift survey, with no published data on user characteristics or statistical significance. These approaches were necessary to generate scale of evidence and to support clear and specific findings but also present difficulties including the challenge of designing valid questions, statistical significance, and the potential influence and limited insight into the drivers of results in real world settings. The complexity of designing effective questions that can accurately measure intended effects was clearly acknowledged in the research, including the extent to which the design of questions may drive results. The large-scale campaign monitoring survey was augmented by qualitative research to further understand results and potential contingent factors.

› **Establishing benchmarks or comparators:**

The absence of comparative data or benchmarks limits the extent to which conclusions can be drawn about the relative effectiveness of interventions in real world settings or the impact on actual behaviours and views. The authors of the first experimental study reported that effects compared well with results of other studies using similar scales, but this was not directly incorporated into the study. Similarly the approach is not yet at the level of maturity that would realistically enable setting of targets beyond campaign metrics such as reach and target groups. At this stage research and analysis is primarily focused on establishing the evidence base of the campaigns to inform future work. However, future research and evaluation methods may benefit from benchmarking and comparators to enable further assessment of effectiveness and impacts.

› **Audience characteristics:** The importance of audience characteristics was noted across the experimental studies and the campaigns. The interventions were deployed for users of social media platforms with varying levels of targeting, primarily propensity to view (CEE phase 2) and age (Indonesia). The results from the campaigns supported prior research that inoculation interventions are appropriate for audiences that are neutral or positively predisposed to a message but not for changing existing attitudes. However, both the experimental research and the campaign results suggest that further research is required to fully understand the complex interaction between audience characteristics such as personal characteristics, contextual factors, and prior views or propensity, or other contextual factors to understand how these shape prebunking outcomes. These challenges underline the importance of developing and applying methods to understand the societal dimensions of media consumption, alongside the aggregation of data gathered from individuals pertaining to their awareness and engagement with specific campaigns or initiatives.

› **Behavioural and factual accuracy impacts:**

The focus of the research was on an ability to *identify* techniques, in line with the aim to increase resistance or slow susceptibility to mis or disinformation (discernment). However, to date the data does not examine the impact on real world behaviours of users in relation to misinformation, or indeed how the exposure of specific manipulation techniques relates to the motivations and power dynamics of the media landscape within which views towards content are formed. For example, only one of the experimental studies examined the ability of users to discern the factual accuracy of materials and none of the studies examined the impact on behaviour-based outcomes, such as sharing, or in terms of user competencies or approaches to appraising information. The experimental studies have sought to examine dimensions or proxies for behaviours, including likelihood to share, effects over time and ability to discern accuracy, but none yet present large scale or longitudinal data on actual behaviours.

- › **Programme evaluation:** The focus of the work to date has been on establishing the validity of the concept in terms of impacts on direct users of prebunking initiatives. Given the stage of development a broader programme evaluation of prebunking has not yet been conducted. Areas for consideration in future evaluations as the intervention type matures may include:
 - The relevance of the initiative in the market contexts, including arrangements for targeting of campaigns in response to specific needs and audiences and messages.
 - The internal and external coherence or links between the approaches used with other types of relevant interventions, offered by Google and with other external schemes or stakeholders, including educational interventions other behavioural interventions such as accuracy prompts.
 - Effectiveness of the implementation of an initiative such as its design, reach and engagement with target audiences as well as qualitative follow up research, and collaboration with partners.
 - Wider impacts, including on audiences as well as through stakeholders or partners and through use of materials or development of similar methods.

Table 3: A Practical Guide to Prebunking Misinformation measuring success

Potential metrics for measuring the success of prebunking interventions presented in the practical guide to prebunking misinformation

Knowledge- or skill-based outcomes

- › Ability to identify a misinformation technique
- › Ability to discern a misinformation narrative
- › Ability to distinguish between true and false information

Attitude-based outcomes

- › Confidence in their own abilities to detect misinformation
- › Trust in the reliability of a source
- › Mood as a result of seeing a piece of misinformation (e.g. anger, fear)
- › Tendency toward conspiracy theories

Behaviour-based outcomes

- › Consumption of misinformation (e.g. time spent on misinformation sources)
- › Engagement with misinformation (e.g. comments)
- › Sharing of misinformation
- › Support for misinformation (e.g. likes)

[A_Practical_Guide_to_Prebunking_Misinformation.pdf](#)

2.4 Adapting to emerging media literacy challenges

The prebunking initiative has been developed with the intention of establishing a method that can be adapted and implemented in anticipation or response to evolving information risks and challenges. The work to date has evolved from foundational research to implementation of real-world campaigns and has shared learning, including sharing of campaign materials, the guide to prebunking, presentation of campaign and research results. Campaigns have been developed in response to identified information risks, including responses to specific disinformation campaigns (e.g. CEE) or in anticipation of likely vulnerabilities (e.g. the Indonesian presidential election).

Based on a review of work to date and input from a small number of respondents who have been involved in campaign implementation considerations to support the adaptability of the prebunking approach to future and emerging challenges include:

- › **Prioritisation of campaigns**, including approaches to respond to the expectations of the Digital Services Act (articles 34 and 35) and the use of prebunking campaigns to mitigate risks to electoral processes (guidelines for Mitigation of Systemic Risks for Electoral Processes) and the broader identification of risks and prioritisation of campaigns.
- › **Agile design and implementation** of campaigns, and how campaigns will address and combat evolving misinformation techniques and narratives and audience vulnerabilities, including incorporating prior learning and feedback on what has worked well and less well and specific local contexts or needs
- › **Coherence with media literacy education and other media literacy interventions**, including the extent to which large scale prebunking or awareness raising social media campaigns can be complementary educational interventions that develop critical media literacy competencies and skills.

The use of AI to generate manipulated images and audio is likely to be an increasingly significant dimension of future prebunking initiatives. This risk was highlighted in the prebunking videos developed for the 2024 European elections, for example . Dimensions include equipping audiences with awareness and insight to identify fake or AI generated content. This may include developing of campaigns that directly address the specific risks that manipulative or deceiving content may be generated using AI, or which further highlight the types of narratives or techniques that may be presented through AI generated content.

Prioritisation of campaigns

To enable ongoing adaptation to future ML challenges consideration will be needed to the process for identifying and prioritising potential campaigns. To date the prioritisation of campaigns has been led by Jigsaw and implementation partner Moonshot in collaboration with relevant Google units, including local markets and partners . Campaigns have been implemented in Europe and internationally. The CEE and Germany campaigns were developed in reaction to known information threats and challenges that had been triggered by the war in Ukraine. In the case of CEE this has focused on responding to known risks and has identified typical narratives online. In the case of Germany, the campaign was in part reactive to the disinformation threat at the time but took a broader technique-based approach. Prioritisation of campaigns has been shaped by a combination of research and expert monitoring activities to identify potential threats and risks including:

- › Trends and prevalence of mis and disinformation including potential triggers or risks that may increase the prevalence or traction of mis and disinformation, such as pandemics, hostile actors, or events such as elections.
- › The evolution of different techniques or narratives, how these may be adapted and evolve in different political or social contexts, disinformation campaign tactics in response to specific events, or more general trends.

In Europe the consultation on European Commission guidelines for Mitigation of Systemic Risks for Electoral Processes proposes inoculation campaigns as one of various risk mitigation for electoral processes in Europe. This expectation has been developed in the context of articles 34 of the digital services act that expects that online search engines will diligently identify and analyse systemic risks in the Union stemming from the design and functioning of their services, including the use of their services, and (article 35) put in place mitigation measures. In this context there is likely to be a need to establish guidelines or a policy to inform the approach to commissioning and designing prebunking campaigns.

Considerations include:

- › Establishing the level or types of elections events that require a targeted prebunking campaign response, including European or national level elections, or other types of election or democratic events.
- › The role of strategic or prebunking campaigns to reinforce democratic norms, including addressing common narratives or techniques that may increase vulnerabilities amongst audiences.

The campaign that was recently run in Indonesia anticipated potential risks associated with the presidential elections. In line with this risk based or targeted approach, Google has more recently delivered prebunking initiatives in a European context to further tackle known disinformation risks in Ukraine (launched in July 2024) and ahead of the 2024 EU Parliament elections (see boxed case study example above).

Implementation of campaigns

Tailoring campaigns to local contexts and evolving information needs will also underpin future adaptability of the prebunking approach. An element of the design process has been the development of a campaign strategy, including targeting and associated materials that are relevant for audiences. Factors that have been considered in the development of campaigns, including through research and creative design have included:

- › Identifying priority challenges, including narratives and or techniques and how these apply in specific contexts, including in anticipation of specific threats or events, addressing strategic challenges, or 'endemic' techniques.
- › Identifying target groups, including the extent to which campaigns should target broad audiences or prioritise specific target groups, including vulnerable groups or those who are likely to benefit from the campaign.
- › Designing campaigns and material that is relevant and engaging for target audiences in support of specific or general campaign and prebunking objectives.

To date campaigns have been developed through a combination of local market research, including creative research and design. At the same time as an experimental model, campaign design and outputs have also involved a high degree of input and coordination across multiple Google units. As the campaign model matures the expectation is that the design of campaigns will become more agile. At the same time the need to identify salient narratives for local cultural contexts has also been addressed through the engagement of local partners as part of scoping research. Further measures are expected to include further embedding **creative testing** of campaigns with target groups and audiences.

Areas to consider include:

- › Refining campaign messaging and materials to empower different types of audiences, including general and targeted audiences in different contexts.
- › Developing campaign materials that enables audiences to accurately identify increasingly sophisticated fabricated images and audio.
- › Establishing credible partnerships that bring credibility and authenticity to the campaign and reinforce the campaign against potential efforts to undermine campaign credibility and objectives.

There is an acknowledged balance to be struck between reactive content that engages with contemporary topics versus more generic content that may have greater longevity. This approach has not yet been settled systematically, for example the CEE and Germany campaigns adopted different approaches and priorities. Whilst this trade-off is likely to be addressed on a case-by-case basis will also shape how the approach is developed, including as a targeted campaign tool or broader measure against misinformation. In the context of electoral campaigns considerations include developing appropriate campaigns approaches including:

- › Identifying the appropriate or optimal time for implementing a prebunking campaign, including prior to or during an electoral campaign.
- › The development of appropriate prebunking campaign materials that do not undermine legitimate political debate and promote encourage in democratic processes.
- › Maintaining trust and transparency of prebunking campaigns in the context of electoral contests including ensuring political neutrality, whilst being guided by principles of fundamental rights.

The prebunking initiative designed and implemented in the context of the EU Parliamentary elections provides a test case for the further development and scaling of the model in this regard. A short case study can be found in section 1.2.

2.5 Conclusions for deep dive #1

Prebunking is an evidence-based and sensitive tool that has the potential to be embedded in the wider online media literacy and information integrity ecosystem as a scalable awareness raising campaign tool. This case study has therefore reviewed the development of the prebunking campaign model to understand its conceptual approach, emerging lessons and impacts and potential future development. The potential role and importance of the prebunking approach has been highlighted both by the persistent challenges of mis and disinformation online and the inclusion of inoculation measures in the recently proposed guidelines for Mitigation of Systemic Risks for Electoral Processes.

In this context the work led by Jigsaw has developed and tested an approach for proactively combating mis and disinformation online and at scale using a strategic communications campaign approach that warns audiences about the types of misleading narratives or techniques that they may encounter whilst on social media platforms. Through this approach the intervention aims to reduce the vulnerability of individuals and audiences as a whole and reduce the effectiveness of mis and disinformation. At the same time the prebunking model does not aim to address more fundamental media literacy dimensions, such as the development of critical competencies or values. Furthermore, the impact on user media behaviours, or broader contributions to wider issues in relation trust, empowerment, and open societies, have yet to be fully appraised. Given the potential political sensitivities associated with campaigns of this type, further development of the prebunking model as part of the media literacy and information integrity landscape will also need to consider these dimensions.

An important feature of the work was a programme of research and development to establish the campaign concept and model and to inform the subsequent implementation of the two live campaigns in Europe. These activities involved a long-standing significant investment in experimental research alongside a prioritisation of monitoring in the design and implementation of the live campaign. Based on these findings, the approach and campaigns have been broadly successful at increasing the ability of audiences to identify mis information techniques but with caveats in relation to the statistical significance and associated reporting of real world campaign results. Nevertheless, whilst the percentage point differences are relatively small when delivered at scale these types of changes can potentially translate into significant aggregate impacts.

The development of the prebunking model by Jigsaw and Google has also been situated as one element of the development of a wider set of resources and tools to help combat misinformation. This reflects both the aims of prebunking, which is specifically focused on raising awareness amongst audiences at scale, and the inevitable limitations of this type of approach without corresponding media literacy education measures to develop critical thinking skills and increase knowledge of the news and media industries at a societal level.

Based on these emerging lessons prebunking campaigns are likely to be best employed as a targeted campaign in response to specific information risks or vulnerabilities. At the same time prebunking campaigns will also need to be set in the context of a wider ecosystem or suite of information and media literacy interventions, including interventions to shape audience behaviours as well as educational interventions to develop audience media literacy competencies. In this context when considering the potential role of prebunking in efforts to combat misinformation the following should be considered:

- a. Prebunking campaigns can help people to identify misleading narratives or themes, but other measures are needed to ensure the accuracy of information on social media or other online settings and or to help people to assess the accuracy of information, e.g. fact checking or information prompts.
- b. Prebunking can potentially deliver impacts at scale in terms of raising awareness amongst audiences and reduce susceptibility but requires complementary interventions to give individuals and audiences competencies to appraise information or challenge narratives including across different settings, e.g. media literacy education.
- c. The limited duration of the impacts of prebunking treatments on an individual that have been observed to date suggests that prebunking interventions will require regular treatments to have meaningful real-world impacts and may be more suitable to intensive or targeted campaigns linked to specific events such as elections or known risks.
- d. Prebunking can be effective as an upstream intervention that helps to equip audiences that are amenable to messages but may alienate audiences that hold different views or do not trust the source. Alternative interventions are required where there is a need to challenge or change audience views.
- e. Prebunking campaigns have the potential to be extremely sensitive, including to the credibility of organisations, the campaign objectives, the themes or framing of materials, and targeting of audiences, and present significant risks of generating negative boomerang effects amongst audiences, including polarisation, mistrust, and avoidance.

At the time of writing, Google did not have any imminent plans for further prebunking initiatives. The approach had been implemented in CEE, Germany, Ukraine (launched in July 2024) and for the 2024 EU Parliament elections. Nonetheless, there are important insights that might be considered for the future application of this approach. All those who provided input into this case study agreed that an important factor for the future success of the prebunking approach will be ensuring **trust and transparency** in the development and implementation of campaigns. Trust and transparency were considered important for ensuring the credibility of campaigns, including amongst audiences and stakeholders, whilst also underpinning potential synergies with other media literacy and information integrity measures.

Ensuring trust and transparency in relation to prebunking campaigns is likely to be increasingly important in the context of increased regulatory expectations in Europe and the potential political sensitivities of campaigns, including if prebunking is to become an established tool that may be deployed in relation to different information risks or threats. To address this challenge, it may be necessary to establish clear and transparent **guidelines on the appropriate use of prebunking**, including in the context of election campaigns or when engaging in contested or polarised information landscapes. As part of this, considerations for continued development of the prebunking model include:

- › **Targeting of initiatives:** Ensuring a clear policy or guidelines for scenarios when prebunking can be employed, allied to monitoring or intelligence arrangements that can identify potential information risks. Considerations may include:
 - Processes through which campaigns are selected and initiated, including events or persistent risks.
 - Approaches to targeting of audiences and risks and appropriate campaign approaches.
 - The timeliness, including in relation to election campaign periods, while acknowledging that disinformation can be very opportunistic and elections may have a short lead-in period.
 - Selection of partners to support trust and credibility.

- › **Agile design:** including clarity of campaign objectives and the development of relevant and compelling content that engages audiences in critical thinking in creative ways that respond to the relevant local cultural and political contexts.
- › **Collaboration with local stakeholders:** establishing effective relationships with suitable local partners to enhance the credibility and effectiveness of campaign, including appraising appropriate organisations and working with them to identify local information risks, and developing opportunities to amplify campaigns through different channels and to move quickly when the need arises. This approach is also essential in securing trust among end users, to whom tech companies may be viewed as being part of the problem.
- › **Synergies with other media literacy interventions:** recognising the limitations of prebunking interventions by situating them in the context of a wider range of media literacy and information tools including de-bunking and source verification tools for users and educational interventions that support the development of media literacy competencies.
- › **Monitoring and evaluation arrangements:** continuing to develop the evidence base for the intervention including its overall effectiveness, the statistical significance and other variables in relation to the real-world impacts on audiences, capturing impacts on actual user behaviours and the duration of effects and behavioural changes. If the model is to develop there will also be a need to continue learning about effective campaign design and implementation, including broader forms of campaign or programme evaluation, as well as assessing broader contributions and impacts of campaigns on dimensions such as trust and empowerment, and potential boomerang effects.



3.0

Deep dive #2:
Be Internet
Awesome

Be Internet Awesome (BIA)) is a free digital citizenship and safety programme, which has been adapted and scaled across Europe. It's success draws from combining formal and non-formal education with accessible open source materials.

Google could look to develop a transnational community of practice for BIA and strengthen arrangements to engage parents and carers as partners.

Case study overview

The second case study examines one of Google's longstanding open source educational programmes, Be Internet Awesome (BIA), developed for children and their parents, educators and other professionals. The case study explores the steps that have been taken to establish BIA in Europe and how the programme has been adapted and scaled. It considers the lessons learned from monitoring and evaluation, and examines how the BIA curriculum is being updated to address the need for digital citizenship and AI literacy education.

The deep dive case was carried out from January to April 2024, combining desk research and interviews with key stakeholders. The desk research covered Google's curriculum and BIA related materials, data on BIA's localisation across Europe, national and regional Impact Reports, research reports and academic journal articles, and BIA teacher and student impact story videos across selected countries.

The study team interviewed BIA stakeholders at global, regional, and national levels, covering Google Marketing Managers, BIA implementing and intermediary representatives and a Consultant/Advisor on Media Literacy for BIA (global). It was not possible to consult directly with beneficiaries (teachers, children, and parents), although testimonials of direct beneficiaries were reviewed in the desk research. These sources were used to draft a Theory of Change, which was checked by BIA stakeholders and is presented in Appendix One.

3.1 Aims and origins

Be Internet Awesome (BIA) is a free digital safety and digital citizenship programme for children, educators, parents, and the wider educational community. It was produced by Google in partnership with established internet safety experts including the Internet Keep Safe Coalition, ConnectSafely, and the Family Online Safety Institute⁴⁶ in 2017 in the United States.⁴⁷ It was later brought to other countries around the world through localisation, translation, and adaptation to new country contexts.

The BIA programme aims to provide children, educators, and parents with tools and education to confidently and safely explore, grow, and play online.⁴⁸ The programme covers the thematic areas of

- 1. communicating and sharing responsibly** (thoughtful sharing and keeping personal details private);
2. being **alert** (e.g. discerning between what's real and what's fake online, phishing, scams);
- 3. personal safety and security** (including safeguarding valuable information and protecting one's privacy); being
- 4. kind** (by creating a positive impact for others and disempowering bullying behaviour online); and
5. being **brave when encountering questionable content** (for example by talking to a trusted adult).

The curriculum is structured accordingly into five topic areas: *Share with Care*; *Don't Fall for Fake*; *Secure Your Secrets*; *It's Cool to Be Kind*; and *When in Doubt, Talk It Out*. As a result of its multifaceted structure, the initiative endeavours to go beyond media literacy in a stricter sense, by teaching children the fundamentals of being a responsible and kind digital citizen. The aim is to encourage children to think critically before interacting, posting, or clicking on the internet.

While the ultimate beneficiaries of BIA are children, the programme typically aims to reach them through educators and occasionally their parents. BIA is often implemented through teacher training, accompanied by a curriculum complete with lesson plans, worksheets, activities, and games designed for teachers' classrooms. The BIA curriculum is designed for educators and can be used with no prior professional development. It entails minimal class preparation and has no special equipment or resource requirements to be taught effectively. The curriculum is accompanied and reinforced through *Interland*, an online game that aims to make learning about the above-mentioned topics interactive and fun.⁴⁹

A key characteristic of BIA is that while its focus is on the online world, it features both online and offline activities. For example, schools implementing BIA have featured theatre performances about BIA topics, multimedia exhibitions, workshops with students and parents, online courses and webinars with teachers, online support communities, podcasts, radio shows, colouring books, escape games, activity guides in magazines or children's newspapers, and more around the focus areas of BIA.

Be Internet Awesome is open-source, and thus available to anyone who visits the website. Google does not gather any student data, so the programme does not require any logins, passwords or emails.

Target groups

BIA reaches mainly primary school students in Europe, but variations of the curriculum have also been adapted for secondary school students as well as early years (pre-school) students. For example, in Romania, the curriculum was intended for grades 2–6 (ages 7–12), but educators with both older and younger students have found value in the lessons, particularly with key vocabulary, class discussions (which they can age up or down), and gameplay. In Belgium, the target groups are students aged 8–13.⁵⁰ There are similar variations in the target groups across Europe, with adjustments made to adapt the programme to slightly older or younger students. Furthermore, even though BIA targets children, its content can be considered relevant for adults and seniors as well (including parents and grandparents of children).⁵¹

Geographical coverage

Be Internet Awesome is available in **41 countries (17 of which are in Europe⁵²) and 18 Languages⁵³**. The BIA curriculum (including activities and lesson plans) and Interland game has been translated or localised into the context of almost every country it is available in.⁵⁴ Furthermore, BIA is a part of the **official school curriculum in 5 countries**: Greece, Ukraine, Lithuania, Philippines, and Thailand. Globally, over **40 NGO partners and government agencies** leverage BIA in their program delivery.⁵⁵

3.2 Lessons learned from set-up and implementation

The story of BIA

Be Internet Awesome was first released in 2017 in the United States and brought to Europe in 2018. BIA's initial focus was on online safety for children, but this focus area was subsequently expanded to include a stronger focus on media literacy education.⁵⁶ As a result, its current (wider) focus is on equipping children with digital and media literacy skills as well as social-emotional learning, to reflect the current skill needs of children navigating an increasingly digital world. The curriculum now encompasses lessons that aim to equip learners with digital citizenship skills, such as resilience to mis/disinformation and competences such as responsible sharing and combating negative online behaviour. These newer Media Literacy lessons were written by a subject expert (media literacy educator) who has published several key books on Media Literacy teaching.⁵⁷ BIA is also adapting to new trends in media literacy by rolling out curriculum activities around AI (planned for the end of 2024) (see chapter 4.0 below). Overall, while the original target group was primary school students, it is expanding to reach older (secondary school) and younger (early childhood) students.

Google has managed the expansion of BIA through close communication between global, national, and local teams and partners. Google.org (Google's philanthropic branch) has also supported grantee organisations through philanthropic grants that leverage BIA, while research partners provide advice separately to inform the continuous evolution of the programme⁵⁸. There is then a collaborative decision-making process on programme updates, new materials or chapters. Following this, local teams are again consulted on whether they find these developments relevant for their markets. For example, the AI additions to the programme are being developed by the UK Google team with their partner ParentZone, which aims to launch firstly in the UK, and then scale-up following feedback from the piloting. Therefore, even though BIA operates on a large scale with efficiencies, there is a focus on ensuring that the program at a local level is relevant for children in that locality.

As the philanthropic arm of Google, Google.org has supported NGOs leveraging existing resources (such as BIA) to expand its reach. While these organisations may include BIA curriculum modifications into their work, Google does not implement these alterations or adaptations into its core curriculum. Indeed, BIA is an open-sourced curriculum, so organisations can leverage the content and amend it as they see fit (e.g. by choosing different target groups or age levels of children to which they adapt their curriculum).

As an example, in Central and Eastern Europe, since 2021, Google.org has supported School with Class to leverage BIA within their local programme and provided grant funding to support a regional effort which provides sub-grants to organisations across the region leveraging BIA. As a regional grantee, School with Class leverages and manages Google.org's funding by writing Terms of References and Requests for Services, and picking local grantees in different countries across Central and Eastern Europe to provide funding to.⁵⁹ Some of these local organisations have kept the original BIA curriculum, others have changed the visuals, localised it or added to it.⁶⁰ As a result of this translation and localisation, BIA is named differently across countries, e.g. *Vivi Internet*, *al meglio* (Italy), *Asy Internetu* (Poland), and *Les Super-héros du Net* (France). There are also pathways through which Google itself rolls out BIA in countries through its country marketing managers. Due to the flexibility and variety in how BIA is implemented, it is difficult to generalise about 'the story' of this initiative. However, it is possible to follow the story of BIA within specific countries across Europe, as seen below.

Table 4: Examples of how BIA has evolved within Europe

BIA first entered the European market in the UK, and then Italy, Ukraine, Poland, and Belgium in 2018. BIA subsequently launched in France and Ireland in 2019. This was followed by Romania, the Netherlands, Spain, Croatia, Lithuania in 2020; and Greece, Czechia, Slovakia, and Hungary in 2021.⁶¹

- › In **Belgium**, the original English language curriculum was translated into French and adapted to the local context of Belgium, and aligned according to the skills defined by DIGICOMP.⁶² After two years of operating in Wallonia, Bibliothèques Sans Frontières (BSF) rolled out BIA in Flanders in early 2020.⁶³ Prior to the first Covid lockdown in March 2020, BIA's primary objective was to address teachers in schools. With school closures, BSF decided to directly support families at home and adapted the pedagogical curriculum into a parents' kit. To reach even more homes, activity books for children were developed and promoted in partnerships with newspapers.⁶⁴
- › In **Central and Eastern Europe**, BIA first began targeting primary school teachers and their students and later progressed into targeting early years education. Now, there is a move towards reaching secondary schools, with an appropriately adapted curriculum becoming available in September 2024. For this, School with Class⁶⁵ are doing research with specialists and pedagogues in Europe and consulting a variety of partners.
- › In **the UK**, BIA was rolled out in partnership between Google, family safety experts at Parent Zone, leading organisations on internet safety including the Oxford Internet Institute, the Department for Education, and the National Crime Agency's Child Exploitation and Online Protection centre (NCA-CEOP).⁶⁶ It was designed to target UK Key Stage 2 pupils (ages 7–11). In the UK, there is also a version of BIA called Be Internet Legends (for children aged 7-11) as well as a program called Be Internet Citizens, which targets teenagers aged 13-15 and targets youth-workers as well as teachers in terms of its implementation with students.⁶⁷
- › In **Lithuania**, BIA initially targeted primary school teachers and therefore indirectly primary school children. However, the organisation leveraging BIA in Lithuania (Vedliai) realised that BIA was also relevant for children up to 14 years old, so they also started targeting IT teachers who teach secondary students. Vedliai adapted the BIA materials and created a digital virtual assistant for children working through an online textbook version of the BIA curriculum. This allows children to follow at their own pace. Recently in Lithuania, the educational focus at national level has been to adapt BIA materials to widen access for children with special educational needs. At the launch in December 2023, teachers working with SEN children were invited to discuss how to shape the curriculum and to provide best practices.⁶⁸

Success factors for implementation

The data collected from stakeholder consultations and desk research indicates the following enabling factors that support the successful implementation of Be Internet Awesome:

› **Gamification and play-based elements.**⁶⁹

BIA not only provides information about media literacy, but it also includes interactive resources and game-based learning. Recently published impact videos from across Europe suggest that children are interested and enthusiastic about BIA, and it helps them practice what they have learned.⁷⁰ In particular, one teacher explained that playing the game is “a type of reward for children”.⁷¹ Similarly, an interviewee for this case study noted that the Interland game provides an opportunity for children to strengthen their media literacy “muscles” and put into action what they have learned. Two other consulted interviewees also confirmed that a successful aspect of BIA is the engaging content and gamification element in the form of a very well-developed online game, completed with a thoroughly well-designed curriculum. Substantiating the interview, the Impact Study in Belgium found that “the BIA programme offers an interactive and playful approach as a first entry point to sensitive issues”.⁷²

› **The programme allows for flexibility.** Based on an impact report focussed on 6 countries that implement BIA,⁷³ a key component to BIA’s success is that it can be tailored to fit into the structural and sociocultural needs of various countries.⁷⁴ Depending on the needs of the educational systems, the existing programmes, the competencies of teachers and educators, and the in-service teacher training models in place, each implementing partner can decide on how best to support the teachers and educators in implementing the BIA programme.⁷⁵ There are flexibilities on the exact length of the teacher training, the focus on specific topics, and their form (online or offline). Based on impact videos, teachers like that it is a comprehensive but adaptable to localities and age groups.⁷⁶

› **The programme offers both online and offline activities.**

In an ECEC pre-school in Greece for example, BIA was implemented thanks to the curricular options of offline drawing and basic activities for small children. In Belgium, BSF successfully implemented BIA in both online and offline formats, hosting giant virtual assemblies from a recording studio and developing a “Cyber Heroes Escape Box”; a board game inspired by the escape game universe, which allows to raise children’s awareness about digital citizenship in a playful way⁷⁷. While BSF has not advertised this board game, they have observed “great demand” coming from word of mouth⁷⁸. Offline activities also received a good level of take-up in contexts where devices are not permitted in classrooms⁷⁹. According to an interviewee, the advantage is that since the programme offers both online and offline formats, activities can be adapted based on the needs and available technology in the learning environment.

› **The programme is tailored to the needs of teachers and schools.**

The impact stories collected by School with Class across several Central and Eastern European stories mention that BIA is a time-efficient way to complement lesson planning.⁸⁰ This is facilitated by a “script” format, where teachers are guided on how to familiarise and transpose topics into a classroom setting. When rolled out in Lithuania, for example, teacher feedback showed that BIA provided an important resource on cybersecurity in the absence of established curricular materials.⁸¹ The stakeholder interviews highlighted the importance of starting slow to analyse teachers’ needs, adapting the curriculum based on this, and then scaling-up. The fact that the curriculum is free and accessible was also perceived as an advantage, given the limited budget of schools to secure cybersecurity teaching materials.

› **There is no need for teachers to have previous specialist or technical knowledge to implement BIA.**

According to impact videos, teachers report being easily able to use the curriculum, even without prior knowledge of the topics and technology.⁸² In an impact video, a teacher who implements BIA in Czechia reported finding the “ready-made” activities of BIA useful for teachers, school psychologists and counsellors,⁸³ while the stakeholder interviews indicated that the programme was readily adaptable to staff with lower levels of digital competency.

› **The programme has been adapted to engage with everyday issues that children face, in different country contexts.** The stakeholder interviews cited advantages of the programme including its adaptation to reflect the values, attitudes, and everyday dilemmas of young people, alongside their technical skills. This contrasts with a narrower emphasis on legal aspects of internet safety (e.g. as relates to child sexual exploitation and cybercrime) among more established educational resources. The use of BIA to enhance the acquisition of socio-emotional, digital and media literacy skills has been a strength of BIA when it comes to digital citizenship efforts.

› **The programme adopts a strengths-based model of internet safety and awareness.** For example in Belgium, 75% of parents responding to an impact survey agreed that the BIA training sessions helped answer their questions about guiding their children in the digital world. The survey showed that parents were particularly positive about dialogue with their children on screen time, rather than compliance alone.⁸⁴ One parent quoted in the study said that the training “...confirmed my idea that we cannot simply fight against screens, as they are now part of our lives...we should rather educate, inform and trust our children”.⁸⁵ The stakeholder interviews similarly confirmed that BIA’s positive reception among parents related to its engaging approach to media literacy issues.

› **The programme features practical training that models how to teach the BIA curriculum.** An impact study of BIA in Belgium concluded that the teacher training sessions offers concrete tips and answers to difficulties or questions that teachers may come across in the classroom with the children.⁸⁶ Similarly, the stakeholder research cited the models on how to teach children about the curriculum as an enabling factor to the uptake of BIA.

› **The programme has a long-term focus.** Google’s long-term financial and creative support for the programme has clearly been a factor in its durability and has facilitated a process of continuous improvement and learning. Key stakeholders described how educational initiatives often suffer from their time-limited funding, and that one of the biggest challenges in the education sector is that new curricula and ideas are imposed on teachers without sufficient long-term strategies. The long-term support, funding, and consistency to enable them to fully embed.

› **Partnerships with local and national authorities help expand the reach of the programme.** Key stakeholders consistently referred to the key role played by implementing organisations that have the support of national authorities, and therefore appeal to schools and educators who are curious about the programme.⁸⁷ For example, in Belgium, Bibliothèques Sans Frontières actively builds partnerships and promotes the project to local and national authorities to train all public schools with the BIA curriculum and ensure that the training becomes part of the official training catalogue for teachers in the country.⁸⁸ In Romania, the BIA implementing organisation (AdFaber) engaged with the Ministry of Education to sign an official protocol of support, giving formal recognition and national teaching credits for teachers who attend BIA training and implement 1 hour of BIA in their classes. AdFaber managed to reach and train over 30,000 teachers with the BIA curriculum through this approach.⁸⁹

Table 5: Local implementation example – Romania (AdFaber)

The organisation leveraging BIA in Romania (AdFaber) created a national competition with prizes of 10 Chromebooks to be awarded for schools. The competition required a team of 7 students and a teacher to team up and pick one element from the BIA curriculum to create an awareness campaign. Their goal was to reach teachers who didn’t know about BIA; to teach the materials to smaller children; and create messaging to attract parents’ attention about BIA. There were over 400 teams who participated in this, with over 3,000 children actively engaging with BIA content.

Table 6: Local implementation example – Croatia (Suradnici u učenju)

The organisation leveraging BIA in Croatia (Suradnici u učenju) created an initiative to recruit BIA ambassador teachers who are offered continuous training and support to roll out the programme. They built in a call for applications to become ambassadors of BIA, with the criteria of completing at least 22 hours of training, and running at least three workshops with students or parents. They offer ambassadors certificates of participation, continuous support, inclusion in an online community, monthly meetings, the possibility of co-financing workshops, promotional support, and more. They initially had 40 school ambassadors from 10 schools, and now have 250 ambassadors from 50 schools.

Challenges for implementation

While the case study research showed what has often made BIA popular and facilitated its adaptation and uptake, it also highlighted a number of implementation challenges. These include the following:

- › **Lack of synergy between organisations leveraging BIA.** The stakeholder research highlighted that organisations are not always aware of how or whether BIA is being rolled out in other countries. The stakeholders identified an opportunity to develop stronger communities of practice, to connect implementing organisations, share best practices and support learning, therefore increasing the efficacy and success of BIA.
- › **Visibility and support among EU stakeholders.** This issue was highlighted through the stakeholder interviews, as a factor that had prevented BIA from realising its full potential in a European context. A need was identified to secure further EU endorsements (e.g. from the European Commission) to support credibility and attract local partners.
- › **Teachers' time.** A Belgian impact study of BIA found that teachers often lack time to practice or implement BIA in their classrooms. This was described by a representative from one implementing organisation as having to “fight for teachers' time”. It was further observed that not all teachers participating in the training go on to implement the programme. This indicates a need to better understand what support or encouragement might motivate teachers to go from training completion to implementation, to avoid disengagement at this point.
- › **Working with parents.** Despite widespread recognition of the importance of parents as key stakeholders in implementing BIA, implementing organisations had sometimes encountered difficulties with parental engagement at a local level. The Belgian BIA impact study further highlighted a challenge of indecision over who is responsible for teaching internet safety and digital citizenship to students, with some teachers expressing that parents should have a greater role in educating their children about digital citizenship.⁹⁰ Another issue when working with parents can be language barriers. For example, the Belgian impact study notes: “the parents' sessions were online and unfortunately in our school this communication channel is not very efficient... Many are non-native French speakers, and a face-to-face session would be more appropriate to share key messages”.⁹¹ These points indicate the importance of parental engagement in design and adaptation of BIA to ensure that their needs are reflected in the content and in the tools and support offered to parents for implementation.
- › **Political and legal challenges.** It was noted that political authorities do not always allow non-profit organisations to enter schools, which poses a barrier in terms of training teachers and implementing workshops or activities with students. This issue tended to reflect the country context, with Hungary, Poland, and Ukraine among the countries where non-profits had encountered challenges to setting up the programme.
- › **External factors.** The interviews highlighted that the Covid-19 pandemic and the war in Ukraine caused disruptions to delivering BIA and implementing the work as planned. There was a need to constantly re-evaluate and adapt the programme, which worked out well, but was time and resource intensive.

Lessons learned in implementing BIA with different target groups

As we have discussed in this chapter, some aspects of BIA have served as common success factors or enablers. They include the possibility to implement BIA through offline activities, the 'universal themes' (e.g. kindness, bravery, responsibility, safety) that BIA puts at the centre of the curriculum, the flexibility in implementing BIA, the diversity of activities and the online gamification the programme offers. However, some aspects have also facilitated the engagement of children with additional needs. These include children with special educational needs, children from vulnerable backgrounds, and children from lower socio-economic backgrounds. These factors include the following:

- › **Creative offline activities.** For example, in Poland, an organisation implementing BIA with children with individual educational needs (e.g. autism spectrum or ADHD) teaches BIA through creative and sports-based activities⁹². They adapt BIA to the needs and challenges that these groups of students face. There are short stories about BIA that the class read and discuss together, to focus on media literacy issues. Offline activities were also a successful factor in working with students from lower socioeconomic backgrounds, as they would not always have sufficient tech devices or stable internet connections at home to complete BIA activities online. In Slovakia, in a school with Roma communities, offline activities proved popular as most children do not have internet at home.
- › **Universal themes and civic education.** Impact stories revealed that special needs educators appreciated how BIA allows for activities that focus on socio-emotional learning and (digital) citizenship topics, rather than technical digital skills. For example, in Slovakia, the BIA programme was implemented in a school for children with mental health issues, and the teacher found that it contained a good package of fundamental skills covering how to use the internet, how to protect oneself online, and the importance of being friendly to others. They noted that the BIA curriculum helped them teach fundamental civic and social concepts such as accepting themselves and having self-worth and respecting the worth of other people, which can also be applied online. This was echoed by a teacher in a school for Roma students in Slovakia. Similarly, for a Lithuanian school addressing children affected by the war in Ukraine, the teachers liked that the BIA programme is not only about technical skills, but also about how to approach the internet; "it is about teaching responsibility to children".⁹³

- › **Flexibility of implementation.** Providing flexibility and shifting ownership to local implementing partners in terms of deciding who they wanted to reach and how they wanted to work with their chosen target group was also an enabling factor according to a consulted stakeholder. This allowed them to integrate BIA into what they do best.⁹⁴
- › **The diversity of activities in implementing BIA.** In Czechia, a primary school for children with physical disabilities and autism that is implementing BIA mentioned that the diversity of activities and options for children in terms of tasks (including the Interland game) makes this curriculum successful when working with children with different needs.⁹⁵ Moreover, they remarked that the Interland game allows students to train their motor skills.⁹⁶
- › **Online gamification (Interland game).** One SEN and Roma school in Romania implementing BIA had particularly valued the practical examples in the game, which had helped vulnerable children who are more exposed to the dangers of the internet. The **easy-to-understand scenarios for students to make practical choices** about safe versus unsafe behaviours, cause and effect games, and **reward games** had been utilised to build media literacy skills among this more vulnerable target population.⁹⁷

Table 7: Suggestions for SEND media literacy resources

Be Internet Legends in the UK developed SEND resources that were adapted from the Be Internet Legends curriculum. SEND professionals cited enablers including

- › the **unambiguous language** of the PowerPoint for children with auditory processing issues.
- › **the tailored text** and the **setup of questions and answers to help children with visual stress**.
- › the benefits of having **captioned videos**, and the **simplicity of the language**, which allows all children to easily access and use the materials, including those with hearing impairments.⁹⁸

Be Internet Legends in the UK further identifies the advantages of BIA relating to the **clearly scripted PowerPoint; engaging videos; simple unambiguous language; bold and easy to read keywords**.⁹⁹

3.3 Measuring effectiveness, impact and outcomes

The research team was able to gather the following impact studies, evaluations, assessments, and M&E arrangements being conducted about BIA. It should be noted that this selection represents what the research team was able to identify through online desk research and stakeholder consultations; it does not represent all BIA M&E effort to date.

Monitoring of programme reach and implementation

Overall, Google has amassed a considerable amount of monitoring data providing insights to the **scale of programme delivery, reach, and participation**, although these data remain somewhat dispersed across partners and countries. Specifically, Google tracks how many teachers have received training and how many children have played on Interland. Furthermore, intermediary organisations such as School With Class gather feedback from implementing organisations via its annual survey. For example, School with Class requires implementing organisations to submit data on the number of people trained, as well as self-reported data on satisfaction, competences gained, confidence levels, and a self-evaluation by teachers who have completed training and students who have experienced the BIA curriculum and activities.

Based on these data, some of the headline statistics on **reach** and **implementation** are as follows:

- › Be Internet Legends in the UK trained 120,000 children through 800 assemblies. Additionally, over 18,000 primary school teachers ordered the resources online, with 53% of them reporting they had used them with an average of 100 children, reaching over an estimated 955,000 children in total.¹⁰⁰
- › Organisations leveraging BIA have reached more than 500,000 teachers and students in Central and Eastern Europe.¹⁰¹
- › In Belgium, the organisation leveraging BIA (Bibliothèques Sans Frontières) has trained 250 teachers, and 700 teachers have been involved via digital info sessions or webinars. The programme has reached over 39,000 students (through activities) and 19,010 parents (through webinars).¹⁰²
- › In Greece in 2021-2022 BIA has certified more than 5,000 teachers, and over 180,000 students have been exposed to the BIA curriculum.¹⁰³
- › In Croatia, “Be Internet Genius” reached 12,498 students (about 50% of them in a disadvantaged position) and trained 10,022 teachers in 2021-2023.
- › In Romania, over 30,000 teachers were trained in BIA.¹⁰⁴
- › In Lithuania, BIA reached over 34,000 students and over 1,800 teachers.¹⁰⁵

Evaluation and impact measurement

Google has also **commissioned a significant number of independent evaluations of BIA**, adopting a range of methods outlined below.¹⁰⁶ As the programme has run since 2017, this evidence base is well established, although as with BIA's monitoring efforts it remains somewhat contained within a series of individual reports. The table below provides a summary of how these studies were carried out and what they found. Overall, some headline findings regarding **outcomes and impacts** are as follows (for more findings please see Annex Three):

- › Following BIA training, children in the UK were twice as likely to show an improved understanding of internet safety than those who hadn't received the training.¹⁰⁷
- › Overall, 8 in 10 primary school children (83%) who completed the Be Internet Legends programme in the UK said that they would behave differently online as a result of having learned how to be more positive through the lessons.¹⁰⁸
- › In Central and Eastern Europe, over 90% of the students who participated in BIA activities agree that participation in the BIA programme was useful in their everyday use of the Internet, and almost 88% of students agree that their knowledge of how to be safe online increased as a result of participation in the BIA workshops.¹⁰⁹
- › A Randomised Control Trial about BIA¹¹⁰ found support for programme improved children's knowledge of new online safety concepts and self-efficacy for handling online problems relative to students in control conditions.
- › Following BIA training, 80% of the trained teachers in Belgium now feel more comfortable to understand, discuss or address cybersecurity and/or digital citizenship in their classrooms; 76% of the reached children have increased their ability to identify danger online.¹¹¹

It is of course important to understand the specific methods used per study to set these results in context. While Google has amassed a considerable body of evidence on BIA, the outcomes are focused on online safety to a considerably greater extent than skills acquisition. The persistence of these outcomes over time is also not fully established. We now go on to consider the strengths and limitations in further detail in the next section.

The strengths and limitations of current M&E arrangements

Considering all M&E arrangements for BIA listed above, the research team has analysed the strengths and limitations of current M&E efforts:

- **Google's decision to commission a Randomised Control Trial (RCT) is a considerable strength of BIA's M&E arrangements.** This represents one of the most rigorous forms of impact evaluation, and BIA remains among an exclusive number of media literacy programmes that have been subjected to an experimental or quasi-experimental design. However, this RCT precedes the newer additions to the BIA curriculum on socio-emotional learning, media literacy, and digital citizenship, and therefore reflects an earlier iteration of the programme.
- Even though BIA differs across countries, **the use of standardised annual surveys of teachers and students provides large comparable datasets** and offers potential for cross-country comparisons. This is what School with Class asks of the BIA organisations that are implementing the programme across 11 countries in Central and Eastern Europe. This includes two constant elements of M&E for all implementing organisations: 1) participation data, and 2) self-evaluation by students and teachers of their experiences. As a result, they were able to create annual reports on BIA's implementation and outcomes that can be compared across the region.

- A drawback of pre and post surveys is that they often rely on **subjective self-assessments**. This carries some inherent biases, as self-evaluation measures perception rather than action. Such limitations are amplified when the respondents are young children. The Institute for Strategic Dialogue (ISD) which conducted the BIA evaluation in the UK in 2020 noted that "...children of primary school age are not always able to assess their understanding of concepts accurately, meaning that some of these findings may under- or overestimate the actual impact".¹¹² Some M&E efforts have combined student self-assessments with teacher perceptions, although even in this context, actual behavioural measures are still missing.¹¹³
- Qualitative assessments such as the collection of stories (e.g. in Romania) and the production of student responses to BIA topics (as in Croatia) offer **deep glimpses into how children are thinking through BIA topics** and therefore how far they have gained an understanding of the curriculum and met its objectives. A strength of such approaches is their relatively nuanced portrayal of knowledge gained and practiced following BIA exposure, which can complement self-assessments to provide a richer and more triangulated assessment of impact.

In summary, Google, partners and grantee organisations have deployed a wide range of methods to evaluate BIA and have considerable learning to share. Looking ahead, the use of mixed methods research would help to address the barriers presented by pre and post surveys alone. There is arguably a case for a future RCT to assess the impact of BIA on a wider range of competences following the expansion of the curriculum to include socio-emotional learning, media literacy, and digital citizenship.

Challenges encountered in carrying out M&E

Largely based on inputs through stakeholder consultations, the following challenges were identified with regards to carrying out the M&E of BIA:

› **The ambiguity around defining media literacy.**

It is challenging to generalise findings from the M&E of BIA if implementing organisations around the world do not have a concise and agreed consensus on how to define and measure media literacy. For example, in the US, the designers of BIA use the definition of media literacy that is “the ability to access, analyse, evaluate, create, and act using all forms of communication... media literacy empowers people to be critical thinkers and makers, effective communicators, and active citizens”.¹¹⁴ However, School with Class prefers to use the terminology of ‘digital citizenship’ instead of ‘media literacy’. They defined digital citizenship, and therefore the goal of BIA, as being “an understanding of how the online world impacts you and how you impact it, how we influence others”, adding that “media literacy is not enough as it misses the component of self-awareness”.¹¹⁵

› **Qualifying a ‘trained teacher’.** It is relatively easy to obtain quantitative statistics about the reach of BIA since it is possible to track how many teachers have received training and how many children have played on Interland. However, it is more challenging to measure what qualifies as a “trained teacher”. Indeed, a stakeholder interview revealed that it is unclear what Google’s guidelines are on how to determine that a person has been “trained” on BIA. In some countries, it consists of having watched all the training videos. Watching training videos does not, however, imply that the information has been effectively retained. A second interviewee similarly reiterated that while it is easy to view statistics of how many teachers attended a training and how many children completed a certain exercise, implementing organisations are only able to “see the minimum”, as they do not know how much teachers use the programme in their own time or how effectively they use it.

› **The flexibility and therefore heterogeneity of BIA implementation across the world.** While the flexibility of the programme is one of its success factors (see above in Chapter 2.0), it also means that it is then more difficult to evaluate BIA as it is not homogeneously implemented across all the country contexts. Similarly, since the curriculum is extensive, teachers cannot be asked to implement all the activities, and are therefore providing feedback on an incomparable variety of lessons or units. As a result, it is difficult to get an overarching perspective on the entire BIA curriculum. As mentioned by a consulted stakeholder, what could help is to create monitoring and evaluation of cohorts of teachers who decide to use specific classes of the curriculum. In this way, the data obtained from within these cohorts can be compared with each other.

› **M&E respondents may have very limited involvement or experience with BIA to provide feedback.** For example, in the regional BIA impact assessment survey that School with Class implements across 11 countries, the criteria for teachers to respond is that they need to have delivered at least 1 hour of BIA content or activities to their students. If we are to go by the lower limit required to complete the survey, it is difficult to attribute impact following only 1 hour of teaching or experiencing a topic (and to therefore assess how far BIA is the cause of changed media literacy outlooks or skills). A recommendation by a consulted stakeholder was to make a division between teachers who had 1 hour of training versus those who had more in-depth training, and conduct M&E accordingly. Another suggestion was to build long-term relationships with teachers who implement the programme, and conduct targeted consultations that ask their observations on how BIA has impacted them and their students.

› **Accounting for the contribution of external factors.** As remarked by one consulted stakeholder, evaluation is very difficult when we want to measure a change in attitudes, as there may be many external factors that have also influenced this change.

- › **Convincing teachers and students to fill in surveys or provide inputs.** One interviewee mentioned that, while an impact survey is a useful monitoring and evaluation approach, it is difficult to motivate students and teachers to fill in surveys, even if they are infrequent (and only takes place annually). This could also lead to poor recall if time has passed since the training.
- › **GDPR and legislation frameworks in terms of obtaining data from minors** (children under 18). One interviewee mentioned that they solve this issue by providing consent forms to teachers and students, but that it is nonetheless a challenge that needs to be considered.

3.4 Adapting to emerging media literacy challenges

The general adaptability of the BIA open-source resources, as well as the specific needs assessments conducted by Google country teams and partners across regional contexts, also helps BIA remain responsive to emerging ML trends and opportunities. An overview of key considerations related to emerging trends can be found below.

Artificial intelligence

Interviewees from intermediary and partner organisations stressed that AI is influencing the lives of all teachers and students. One interviewee noted that “everyone is fearful of AI” and that BIA “needs to address this”.¹¹⁶ Responding to these mounting concerns, the BIA curriculum will feature new content developed on the topic of AI in 2024.¹¹⁷ In Europe, this will include efforts to revise existing open-source curriculum, led by Google UK’s country team and ParentZone.

In line with BIA’s model of supporting geographically tailored approaches, revisions to resources are also taking place at country and regional levels. One European organisation leveraging BIA highlighted that:

“We are trying to incorporate materials and curriculum on this. One of our current staff members at the NGO is an AI expert, and together we are developing curriculum and activities tackling AI literacy and related considerations”.

While the evidence suggests that BIA is adapting to the implications of AI on digital citizenship and online safety skills needs, it is too early to assess the degree of success of these adaptations, as most of these efforts are still to be fully rolled out. It is worth noting, however, that new lessons on search literacy to meet literacy needs in the context of advanced technology were already added to BIA’s activities in 2023, developed in partnership with the nonprofit organisation Committee for Children.

At the same time, in considering the pedagogical approaches needed to equip children and young people with the skills to navigate safely and responsibly online, multiple interviewees stressed that the overall focus needs to remain on identifying – and teaching – core, transversal competences that are likely to remain constant also in the face of rapidly advancing technology. Underscoring this, one interviewee stressed that “even if ChatGPT changes in half a year, what is crucial is to keep sight of the competences you want to teach, as these competences do not change as quickly.”¹¹⁸

In line with the above need to focus on core competences in a rapidly changing digital environment, other key themes identified by interviewees as crucial in the coming years are highlighted below.

Socio-emotional learning, well-being and critical thinking

One US-based interviewee specialising in youth and digital media suggested that Europe has “clear strengths when compared to the US context, in that a lot of standards regarding internet safety have been disseminated centrally from Brussels throughout Europe. There is a more advanced and standardised framework in Europe around children’s internet safety than here in the US”.¹¹⁹ Accordingly, the interviewee suggested that it would be particularly pertinent in the European context to focus on equipping learners with the **socio-emotional competences** required to sensibly navigate in digital environments in the coming years (alongside digital and media literacy and other digital citizenship skills) as opposed to internet safety and cyber security. She noted that this is where “there is still much work to be done”.¹²⁰

These points were echoed among the wider set of key stakeholders interviewed for the case study. It was noted that while the children's online safety agenda is very important, also in the European context, it often focuses on "worst case scenarios" (e.g. as relates to children's sexual exploitation and other types of cybercrimes). However, the sentiment among interviewees was that this needs rebalancing with a focus on everyday issues at school that require specific socio-emotional, digital and media literacy skills.¹²¹ This should thus be a key focus for future efforts in the classroom when it comes to digital citizenship efforts. It is worth noting that Google has already taken steps to heed this advice, including partnering with the Committee for Children in 2023 to create new social-emotional learning activities to help guide children on their digital journeys.

In partnership with Parentzone in the UK, BIA has also recently developed a **digital well-being** module, in the context of the increasing importance of safeguarding children and young people's mental health and well-being in digital environments.¹²² These newly developed resources were created in partnership with regional subject experts –including from the UK Department for Education, PSHE Association and the Oxford Internet Institute– as well as teachers themselves. Through this multi-stakeholder approach, the module sets out to take concepts and approaches educators already use to support overall well-being and apply them to the digital world while ensuring that the messages within these materials are aligned with children's evolving relationship with technology.

Multiple interviewees also pointed to the need to "re-focus" on **critical thinking**. One interviewee noted that this is not a new concept, but that "we need to brush up on our skills, as it gets a bit forgotten with newer trends such as safety and wellbeing."¹²³

Media literacy in the context of mis- and disinformation

Lastly, the research highlighted that governments are starting to move media literacy up on the policy agenda. This is partially a result of recent crises, such as the war in Ukraine and COVID-19, as digital media literacy is seen as a crucial component in the fight against disinformation.¹²⁴ With increasing political "buy-in", one partner organisation interviewee expressed that a key action in coming years would be to scale up efforts to build bridges between the work of civil society, the tech sector and public authorities across Europe. In particular: "public authorities need to create structures for civil society to blossom" while "Google [and other tech companies] need to increase efforts to better connect with national initiatives".¹²⁵

3.5 Conclusions for deep dive #2

BIA aims to provide children, educators, and parents with online safety and digital citizenship tools and education to confidently and safely explore, grow, and play online.¹²⁶ The curriculum spans across five topic areas: *Share with Care*; *Don't Fall for Fake*; *Secure Your Secrets*; *It's Cool to Be Kind*; and *When in Doubt, Talk It Out*. As a result of its multifaceted structure, the initiative seeks to go beyond media literacy in a strict sense by teaching children the fundamentals of being a responsible and kind digital citizen. The aim is to encourage children to think critically before interacting, posting, or clicking on the internet.

The data collected from stakeholder consultations and desk research points to a series of success factors associated with BIA's approach, including its localised and needs-based orientation, interactive and playful methodology and its ability to connect with the daily realities of teachers and learners. The strategic funding from Google also has a long-term focus that allows partner organisations to continue to learn, improve and expand their initiatives over time, leveraging insights gained throughout implementation. At the same time, to maximise such insights, certain aspects of BIA's monitoring and evaluation efforts warrant further consideration. Some strands of the initiative rely heavily on uptake- and use-related statistics. As reach does not equate to understanding and behavioural change resulting from the interventions, an overreliance on such measures could restrict insight regarding the programme's effectiveness. Similarly, self-assessment evaluation tools carry inherent biases when viewed in isolation.

Lastly, given the localised and multifaceted nature of the programme, it is important to ensure comparability across countries, and to provide support to foster peer learning.

To further strengthen the programme, it is recommended that Google:

- › **Enhance synergies between organisations implementing BIA.** A crucial finding from the research is the fact that leveraging organisations do not know how BIA is being delivered in other countries. As such, it is recommended that Google facilitates structured, centralised communication and knowledge-sharing among organisations leveraging BIA in order to support transferrable learning, and in turn, the efficacy of BIA. This could take the form of an online community space for partners to share questions, challenges and good practices, allowing partners with similar goals to connect.
- › **Step up efforts to connect with national initiatives and authorities.** In view of the increasing attention – and worry – at policy levels across the EU when it comes to the impact of emerging technology on media literacy needs and the rising policy focus on countering mis- and disinformation, it is increasingly pertinent for BIA to scale up its efforts to work with public authorities. In a time when the issues that BIA is seeking to address are high on the policy agenda, it will be important to seek EU endorsements to support the programmes continued credibility and attract local partners. This is particularly critical in some European countries where political authorities don't always allow non-profit organisations to enter schools, which poses a barrier in terms of training teachers and implementing workshops or activities with students.
- › **Expand efforts to reach and work with parents.** When it comes to competence development that aims to address children's behaviours, values and attitudes, the research suggests that parents must also be involved to complement the work done by teachers in the classroom. While BIA caters to this notion in principle, the research suggests that parents have been a difficult target group to reach in practice. As such, strategic thinking around how to better engage parents, especially from underserved communities, is encouraged.

In closing, based on an analysis of BIA's M&E arrangements and inputs from consulted stakeholders, the **following recommendations can be considered to improve the M&E of BIA:**

- › Creating monitoring and evaluation of cohorts of teachers who decide to use specific aspects of the curriculum. In this way, the data obtained from within these cohorts can be compared with each other.
- › M&E that captures information on the duration and frequency of training in a comparable way, so that it is possible to marry information on the intensity of BIA training with subsequent experiences and outcomes.
- › Building long-term relationships with teachers who implement the programme and conducting targeted consultations that enquire about their observations on how BIA has impacted them and their students over time.
- › Testing students' thinking. Building on expert insights gathered for the case study, this might include:
 - providing students with scenarios and open-ended questions such as “how would you react in this cybersecurity, cyberbullying, or media literacy requiring situation?” and “what did you learn from this programme?”.
 - providing scenarios or opportunities for students to demonstrate their critical thinking skills, beyond more static knowledge-based tests. This might include action learning or action research, for example.
- › Considering undertaking a Randomised Control Trial (RCT) that assesses impacts of BIA taking into account the current version of the BIA curriculum, and the extended focus on citizenship and wellbeing.
- › Systematising and collecting qualitative stories of BIA's impact, to provide further validation, cross-checking and to understand the generalizability of their results.
- › Further promoting the use of standardised annual surveys for teachers and students participating in BIA, to provide large comparable data sets, and incorporating behaviour change measures.
- › Create some minimum criteria for implementation, to improve comparability between incidences of BIA as far as is practicable with the open source model for the initiative's rollout and local adoption.



4.0

Deep dive #3:
Super Searchers

Super Searchers is a Google-supported train-the-trainer media literacy programme. It aims to build end users' confidence to make use of online transparency tools.

The reported success factors include the flexible, localisable format and the approach of working with trusted intermediaries.

Formal evaluation would be beneficial, to test the efficacy of the model and to understand the essential conditions to pass-on skills to end users.

Case study overview

The third of the deep dives focuses on the Super Searchers initiative. Launched in 2022, and based on work of Professor Mike Caulfield at the University of Washington, Super Searchers is a comparatively more recent example of Google's partnership programmes. It adopts a train-the-trainer model, working with librarians and educators to develop end users' critical thinking skills alongside familiarisation with fact-checking tools and features. The case study compares and contrasts the development of the programme in these two different contexts and draws out the lessons learned.

The case study involved a review of programme documents and a workshop with Super Searchers developers to co-design a Theory of Change (see Appendix One). We also conducted a small number of interviews with Google representatives in the US and India, and with implementation partners in the US, Belgium, and Ireland. While it was not possible to speak directly with beneficiaries, the team interviewed educators who have been involved with the implementation of Super Searchers in India.

The data was analysed thematically to identify lessons learned from implementation, evaluation priorities, and the role of Super Searchers within a changing media literacy landscape in Europe.

4.1 Aims and origins

First developed in 2022, Super Searchers is a **Google-supported train-the-trainer media literacy programme for professionals.**

The programme was developed to strengthen information literacy skills – one of the key components of media literacy, to help navigate an increasingly complex online information landscape. Super Searchers is designed to help people to learn about existing tools and tactics that they can use to critically assess information online and access high-quality information from reliable sources, connecting with Google's product features in-product.

The **vision** of the programme is to create a world where people have the skills and confidence to critically engage with online information.

The programme provides a **systematic approach to improving the media literacy** of the public, and minimise the risks associated with low quality and unreliable information.

Target groups

As a train-the-trainer programme, there are two main intended audiences for Super Searchers:

- › **Professionals, including, library, school and non-governmental organisation (NGO) staff**, who receive the training in the first instance.
- › Trained professionals are then provided with a set of Super Searchers materials and resources to **deliver the training to the communities they work with**, such as library patrons and school students.

Geographical coverage

Super Searchers was **piloted in Europe initially**, in partnership with Public Libraries 2030.¹²⁷ The pilot was delivered in Ireland, Italy, Portugal and the UK, primarily to librarians and library staff. The programme has since been rolled out in the **US** to librarians and in **India** to schoolteachers. The training has also been delivered ad-hoc in a selection of **African countries** (Namibia, Kenya, Uganda, Ghana) to librarians and delivered at international conferences with participants from across various countries. At the time of the case study, Google were working with partners in **Brazil** to localise the training content, and due to start rollout to educators in 2024. Google's global partners and their networks are central to the cascading of the training to professionals and then onto the public.

Figure 6: Global reach of programme and partners

2023 Partners

In 2023, the Super Searchers information literacy program reached 12 countries with 6+ partners and train thousands of trusted info literacy leaders globally.

Asia

India: Google Developers Group (developers), Pratham Educational Foundation (youth, rural trainers), Social Paathshala (senior citizens), Mahatattva, Be Internet Awesome (school teachers), News Lab

Europe

UK, Ireland, Portugal, Italy, Germany: Public Libraries 2030 (librarians and library staff)

North America

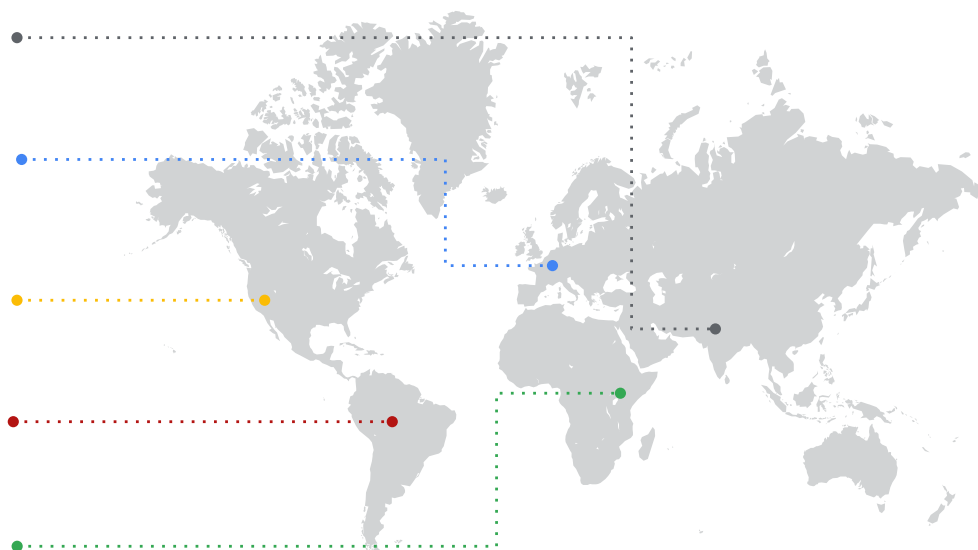
US & Canada: Public Library Association (librarians and library staff)

Latin America

Brazil, Argentina, Colombia, Mexico: Newslab (journalists), Educamedia (educators - tbd)

Africa

TBD Countries: EIFL (librarians and library staff), Africa Check (teachers, students)



Searchers design and content

The programme design and content were informed by information literacy experts and refined through a pilot with librarians. The training covers 5 main topics:

1. An **introduction** to the training.
2. An interactive quiz to generate discussion about **how the trainee searches online** and assesses content.
3. Tips on how to **search effectively** online.
4. Introduction to the **SIFT framework** and how to implement it, using Google's information tools.
5. Signposting to **Super Searchers resources**.

The Super Searchers training models the use of the **SIFT framework**,¹²⁸ developed by Mike Caulfield, a 4-step framework designed to assess the quality and reliability of an information source. The 4 steps are: Stop, Investigate the source, Find better coverage, and Trace the original context.

Trainees are shown how to apply the SIFT framework, using Google's tools and product features, including:

Figure 7: Training overview

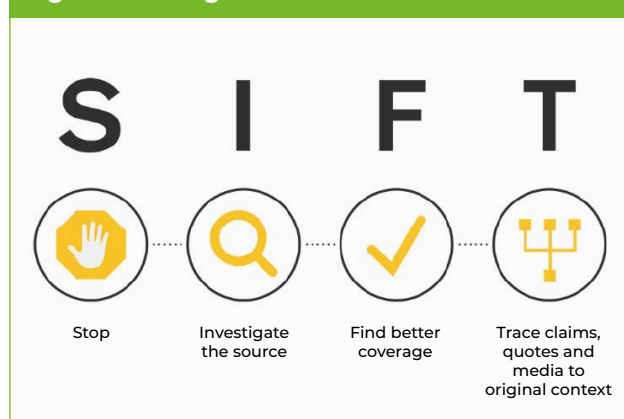


Figure 8: SIFT framework

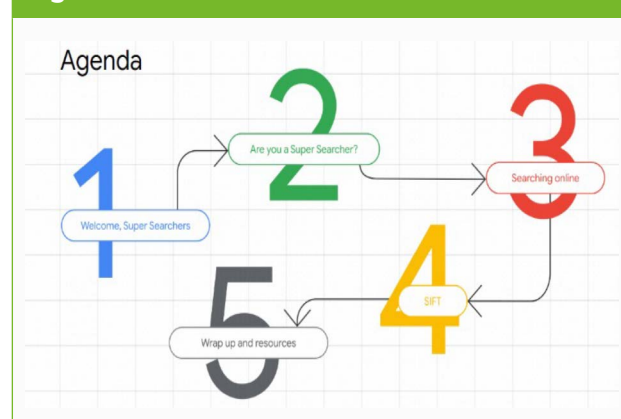






Figure 9. Google's information literacy features

 About This Result¹²⁹	Provides context about a search result, including more information about the site or when it was first indexed. This information can be found by tapping the three dots next to a search result, before visiting the web page.
 About This Page	Gives important context about a site – including a description and what other people say about it. In the Google app, swipe up from the navigation bar on any page to get more information about the source.
 Content Advisory	This alert notice recommends individuals to check again or try another search, when helpful or relevant information isn't available on the web.
 Reverse Image Search¹³⁰	This feature allows individuals to check and see if an image may have been altered or is being used out of context. It can help individuals to assess where and when the image has appeared online before, and how it was used.

An aim of the training is to help make people aware of, and use, existing information literacy tools, resulting in their effective online engagement. The full set of training slides are freely accessible.¹³¹

Delivery model

Four key features of the Super Searchers' delivery model, include:

- **Online or in-person delivery**, lasting between 45 and 75 minutes.
- **Interactive training** to engage audiences in discussion about online searches and media literacy.
- A **modelling approach**, demonstrating to professionals how they can deliver the content to beneficiaries.
- **Free to access training and accompanying resources.**

Training resources

The training resources include:

- **Super Searchers training deck.**¹³²
- **Guide for trainers** – two-page guide for trained professionals running the training.
- **Super Searchers booklet** – two-page accompaniment booklet for training participants.

The resources are currently available in English, Dutch, French, German, Italian, Portuguese, and Spanish.

4.2 Lessons learned from set-up and implementation

This section outlines lessons learned from the set-up and implementation of the Super Searchers programme, including the facilitators and barriers encountered. The implementation lessons have been separated into three themes: initiative design and content, partnerships, and resources. The findings are based on an analysis of the case study interviews with key stakeholders and beneficiaries and programme documentation.

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Super Searchers design and content

This section outlines stakeholder feedback on the Super Searchers design and training content.

Practicality and simplicity of the training materials and content

Key implementation stakeholders consistently reported that **the practicality and simplicity of the Super Searchers programme design and resource toolkit** has been key to its wide take-up. Delivery partners at Public Libraries 2030 and the Public Library Association (PLA) were both initially concerned that the content would be too simplistic for library staff. However, both reported that **training attendees responded positively to the Super Searchers content and toolkit's ease of use.**

Delivery partners said that the Super Searchers' **resources were well designed.** They did not report making changes to the training content or materials. However, **country partners and trained professional stakeholders did report developing additional posters and leaflets,** using the Super Searchers concepts and content, to help to promote the training and to provide trainees with materials to use in sessions or refer to after the training.

Stakeholders reported that **the programme works across multiple environments,** in libraries and schools, because it **demonstrates information literacy tools that are built into the Google search engine,** a commonly used search engine across target audiences. Stakeholders reported that having **5 key learning outcomes** (e.g. SIFT framework, and practical tools to check information using Google's inbuilt search tools) delivered in a short, one-off session, supported the relevance and useability of the training information in everyday online searches. Stakeholders liked that the training materials, particularly the slide-deck and video content, were **professionally produced and provided an off-the-shelf set of materials** to use going forward.

SIFT framework and Google information literacy tools

Implementation stakeholders representing library associations, reported that though **the SIFT framework** provided useful information for librarians to pass onto patrons, it was not very useful for this professional group. As part of their professional training librarians have a good grounding in how to search for and evaluate information. Stakeholders suggested that librarians would **benefit from additional content on advanced Google Search tools (e.g., assessing AI generated content).** They also suggested that more time could be spent on Google information literacy tools. Librarians were also interested to know what equivalent information literacy tools are available within other, non-Google search engines.

Teachers, however, reported that the SIFT framework was a useful tool to be made aware of. Though teachers too reported that the most useful aspect of the training was learning about Google's information literacy features.

Stakeholders agreed that it is key for the development of digital literacy skills in target audiences, to break down and demonstrate how tools and concepts work. As such, implementation partners suggested that more time allocated within the training to the practical activities within the Super Searchers sessions.

Localisation of the training resources

All Super Searchers training resources (slide-deck, information sheets) were initially developed in English. During the piloting phase of Super Searchers, in Europe, Public Libraries 2030 highlighted the **challenge of adapting the resources for use in non-English speaking countries**. While **language translation of the materials was relatively straightforward**, implementation teams in Europe, reported that **a key issue was finding relevant, non-political examples of low quality or fake information** that library associations felt were relevant and were comfortable to use. The training resources and case study examples of false information were designed to be relevant, relatable and politically neutral for training audiences. Local implementation teams said they had to find a balance between neutrality and relevancy when selecting country- and culturally-relevant examples. As one Super Searchers design team member noted:

“Being media literate doesn’t mean aligning with a certain ideological view. It means that no matter what the topic is, you should be engaging in certain practices.”

Public Libraries 2030 explained that enthusiasm for, and engagement with, the programme dropped off in countries where the training resources were not sufficiently adapted to the country and cultural context. In Portugal, for example, the examples of false information (such as the Cheeseburger Oreo¹³³) were not considered culturally significant or relevant. Google have taken this feedback onboard, and since the pilot, they work with country partners to identify and use localised examples in the training. As such, in India, the examples were successfully adapted. The same example was replaced with ‘Jalebi flavoured Lays crisps’ - culturally relevant in India. Super Searchers trained teachers in India, reported that their students were largely aware of this **real-world misinformation example**. They stated that their students were therefore able to relate to this example, and that it helped to generate a debate about seeing and checking online information.

Implementation stakeholders reported **challenges in finding suitable trainers to deliver Super Searchers in some languages**, for example, in Portuguese. Language capacity within Google and implementation partners, was an identified barrier to rolling out the training in some countries.

This finding highlights the **importance of making training resources locally relevant**, this includes language translation, and adapting the content to include culturally relevant examples, and sourcing suitable trainers with relevant language skills.

Delivery mode: In person vs online

Super Searchers is designed to be delivered online or in person. Stakeholders from partner organisations thought **both options were needed**. However, they stated a **preference for small in-person or online training**. Where Super Searchers had been delivered to a large group online using a webinar format, the training lead reported that it was challenging to cover the training content, model the programme’s content, and Google information literacy tools. In these large webinar formats, the training leads found that trainees were not engaging to the extent that they hoped they would.

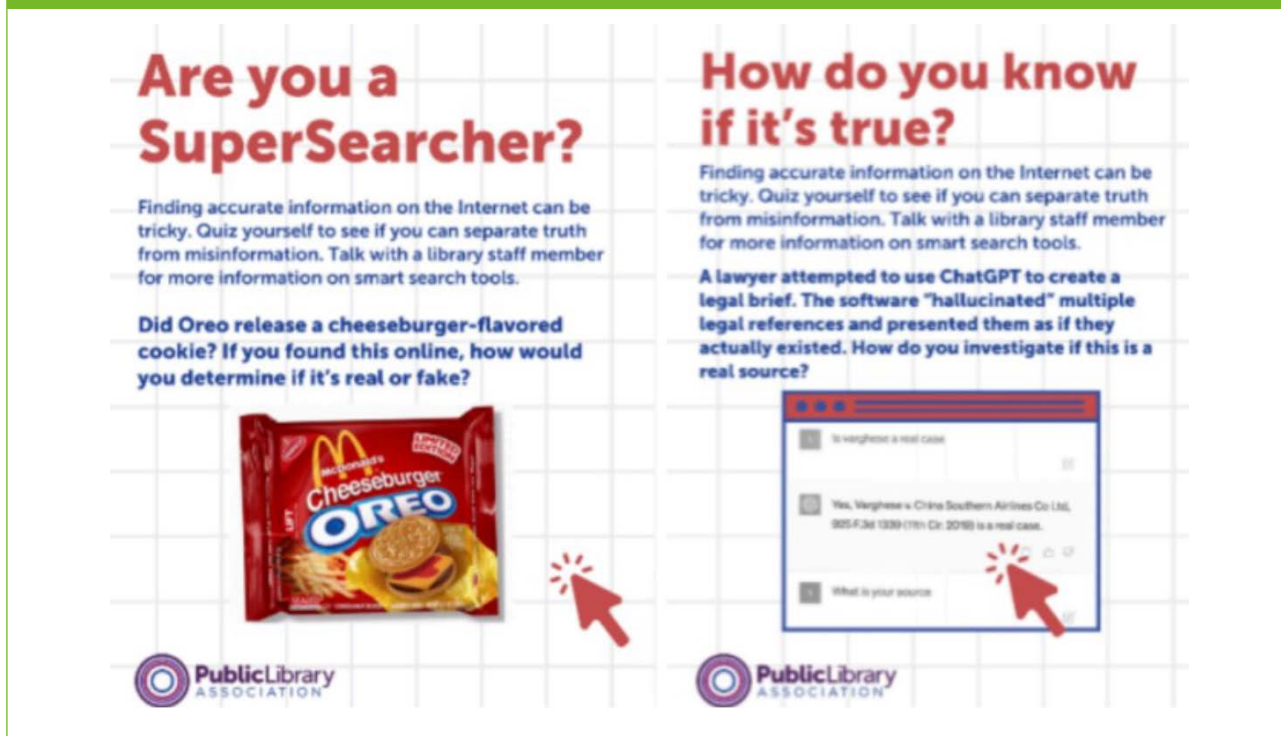
In India, the delivery partner Mahattattva¹³⁴ (an education improvement organisation based in India), ran Super Searchers’ training workshops by bringing all the teachers at one school together. However, they have since found that it is easier for schools to commit to a smaller number of teachers attending a session. They have now started delivering sessions to 5 teachers per school, from 20 schools at once. The idea being that the 5 teachers will subsequently take the content back to the rest of the teachers in their setting. It is also hoped that this will scale-up the programme at an increased pace. In India, it was essential to deliver the train-the-trainer sessions in person because many teachers were not familiar with online learning and schools in rural areas did not have the digital infrastructure to facilitate online training.

Training sessions with library patrons and school students were exclusively delivered in-person, and this format was reported to work well.

Increased length of train-the-trainer sessions for professionals

Super Searchers train-the-trainer sessions are designed to last 45-75 minutes. Implementation stakeholders reported that it would be beneficial for training sessions to be longer in length. Training leads reported that they did not have time to respond to all the questions that trainees had, when running shorter sessions. Most of the questions they did have were on using Google tools in the changing AI media literacy landscape.

Figure 10. Overview the PLA's Super Searchers pop quizzes



Source: PLA

Practicality of implementing training for library patrons and school students

The Super Searchers programme's rationale is that trained professionals cascade the training to the communities that they work with. In practice, implementation partners explained that this was not always happening systematically. Stakeholders involved with the pilot noted several barriers that impeded the ability of librarians to organise and deliver Super Searcher specific workshops. Librarians may **not have enough experience or confidence** in delivering educational workshops or **lack the capacity, time or the financial resources** to set up the Super Searchers' workshops. Instead, Super Searchers' content was being passed on to patrons **within existing training sessions**, such as IT support workshops for older people, or during one-to-one interactions with patron, within the context of individual search requests.

In response to these delivery barriers, the PLA **developed materials** (see over page) to help patrons to connect with librarians on the issue of media literacy. To ensure maximum reach, materials were available in both digital and print formats. They also developed information literacy prompts designed to initiate conversations between library workers and patrons.

In India, the extent to which Super Searchers' content was being cascaded to students has also been difficult to determine. To encourage teachers to deliver the training to students, the Google team, in partnership with the local delivery partner Mahattattva, developed **Super Searchers' certificates** for teachers, which confirm they have delivered Super Searchers to students. Certificates are awarded to teachers once they confirm they have delivered the training to five groups of students.

Consultations with trained teachers revealed that the training to students was delivered in two main ways. Teachers delivered Super Searchers **in a classroom** where students have access to a computer, or **via assemblies** to a full year group, where students do not have access to digital devices and use teacher-created handouts instead. The teachers we consulted were **keen to connect with teachers who had delivered the training** to students and see the adapted and additional resources they had created. This was with a view to take learning on how to best organise and deliver Super Searchers locally.

Stakeholders noted that trained professionals were also **sharing Super Searchers content with their colleagues and professional networks**.

Overall, implementation partners working with both library associations and schools reported that there was **not enough resource or capacity to track how often the Super Searchers training is delivered** by trained professionals. This was highlighted as a gap for monitoring and evaluating the programme. Google may wish to consider creating a platform or App for trained professionals to access Super Searchers resources, discuss implementation with peers, log the number of trainings they have delivered and access training certification.

Additional target audiences

Educators in India suggested that the programme should be **extended to parents/carers**, to complement the training students receive,, and support safe searches and to reduce the spread of misinformation within households. This approach reflects that much searching and online engagement is done privately and is beyond the immediate sphere of influence of educators or other intermediaries.

Partnerships

Google works closely with country and subject expert partner organisations to deliver Super Searchers. This section outlines stakeholder feedback on how the partnership model works in practice.

Country partnership leads and local specialist partners

Regional partnership leads within Google were key for implementation in each global region. Stakeholders reported that these leads helped to forge and drive the partnerships with local delivery partners, such as library associations or educational organisations. For example, Google's Asia-Pacific (APAC) partnerships lead was essential for the development of the partnership with Mahattattva in India. Having an established relationship with a local specialist partner was vital for engagement in India, and not having an established partnership with a local specialist hindered engagement with countries during the piloting of the programme in Europe.

Local delivery partners (external to Google) were required for the successful rollout of the Super Searchers programme. To engage libraries Google enlisted the support of library associations and to engage schools and teachers, Google enlisted the support of specialist education organisations. These local partners facilitated the implementation of Super Searchers in a few ways:

- › They helped with the localisation of Super Searchers materials and tailoring these to the professionals they worked with (e.g., librarians or teachers).
- › They promoted the Super Searchers training to their existing members and networks, who trusted them.
- › They organised and delivered training to professionals, usually delivered by a professional peer to the target audience.

Google provided small grants to partner organisations to support this work (discussed below).

Building trust to work with a large multinational

Google stakeholders were aware of partner concerns about working with a large multinational commercial platform provider. This was a further rationale for **working with trusted country partner organisations**, with aligned goals of building information literacy skills, **to help broker relationships with those who may be sceptical of a Google-funded programme or private sector organisations more generally**. For example, some country library associations declined involvement in Super Searchers, due to concerns about Google's privacy and data processing policies. They also did not want to promote a private sector brand or product. Conversely stakeholders also reported that in other countries, such as Portugal and India, the fact that Super Searchers was a Google designed programme, served as a stamp of approval.

Plugging a gap – motivation for organisations to take up Super Searchers

Implementation stakeholders reported that the take-up and implementation of Super Searchers worked well in contexts where there was an **existing ambition and identified need to design and roll out a media literacy programme**. For example, in Ireland, the Local Government Management Agency (LGMA) was looking to design and implement a media literacy programme, when they received the opportunity to implement Super Searchers. Every two years, the LGMA libraries team, puts together a workforce development package using a workforce skills audit. The audit outlined that Super Searchers would be relevant and that it would complement other necessary trainings (e.g., on leadership skills and communication skills). Super Searchers would not have been considered a core training on its own, so it was key that it was combined with a wider training programme for librarians. Whereas, in the UK for example, the library association had already developed their own content on misinformation and disinformation and were therefore not sure how the Super Searchers programme would add value and fit in with their wider workforce development training.

Teachers in India reported that **media literacy training is much needed** to update both the digital literacy skills of teachers and students. However, as media literacy falls outside of the core teaching curriculum, they explained that **teachers would not have had the time to develop and deliver such training in the absence of this Google provided training and resources**. Similarly, stakeholders within the library sector spoke of the limited financial resources of library associations and libraries to invest in media literacy training.

Resource and capacity to implement Super Searchers

This section outlines stakeholder messages about the need for sufficient recourse and capacity to implement Super Searchers.

Free to access training and resources

The Super Searchers training is **free to access**, and its resources are also freely accessible. This facilitated its uptake for professionals as well as for libraries and schools.

Budget and resources, internally within Google and for country partners

Stakeholders from the programme's design team explained that limited internal funding is a barrier to implementation. Additional resources would allow the team to expand the rollout of Super Searchers more widely and at pace, it would enable capacity to review and refresh the training content, as well as develop a more comprehensive monitoring and evaluation framework to measure the reach and outcomes of the programme.

Limited funding has also hindered the Google team's ability to support their local country partners to implement the programme more widely or at pace. As one Google representative commented:

"It [funding] is important for country partners because it helps them fund content localisation. It helps them to actively train their respective communities. And often we are working with non-profits or associations that are already resources constrained. Having dedicated resources to organise online or in-person workshops does take time and effort."

Implementation stakeholders, such as the PLA, reported that the small funding they did receive was vital for their ability to organise and deliver the train-the-trainer webinars to librarians across the US. This funding allowed them to hire an external consultant (with a background in training librarians) to run the training sessions. Libraries could be hesitant to work with Google due to concerns about its privacy frameworks, however, the consultant was able to talk through and alleviate individual's concerns. The expert was relatable for trainees, as they were a trained librarian and was therefore able to offer useful insights into how librarians could interact with patrons on the topic of media literacy. Furthermore, the expert helped the PLA to develop materials to engage library patrons on the issue of media literacy (see Figure 6). The funding also covered the PLA's associated costs to deliver Super Searchers, for example to cover web operating costs and overhead costs.

Implementation stakeholders involved in the pilot phase also reported that, though there would be demand for additional Super Searchers workshops, libraries would be reliant on an external organisation, such as Public Libraries 2030, to deliver them as libraries would not otherwise have the financial capacity to run the programme. Country partner organisations relied on Google funding because they are non-profits or associations that are resource constrained. The funding helped to allocate dedicated resource to drive the training forward.

4.3 Measuring effectiveness, impact and outcomes

This section outlines Super Searchers' current monitoring and evaluation arrangements, its strengths and limitations, as well as the challenges to implementing a robust framework. It also presents the perceived outcomes of programme participation from the consultations with key stakeholders and beneficiaries.

Strengths and limitations of monitoring and evaluation arrangements

The current Super Searchers **monitoring, and evaluation framework** focuses on collecting numbers of:

- › Country partners
- › Geographic location of training
- › Target audience – librarians, educators, other
- › Number of trainings delivered
- › Number of individual (professionals: librarians, educators) trained

Whilst this information provides programme reach numbers, it does not capture information on mode of delivery (in-person or online), participant experience, learning and outcomes. There are ambitions to collect the number of trainings and individuals trained by librarians and educators, but to-date, this information has been difficult to collect systematically.

The challenges to developing a monitoring and evaluation framework include:

- › **Monitoring and evaluation were not considered at the programme's outset.** Initially the team prioritised the design of the training content and delivering the pilot programme. Therefore, changes to monitoring and evaluation arrangements will have to be wrapped around the existing programme. One partner noted that:

“Unless we come in at the outset with some structure [around monitoring and evaluation] and some expectation-setting... it's hard for us to go back and say, you know, tell us what you did? Librarians, as I mentioned before, are really protective of patron privacy, and so they don't collect contact information for programmes either, usually. To get to that end user is a bit challenging.”

The training both for professionals and beneficiaries (library patrons and school students) is **a single, one-off intervention**, therefore measuring change in awareness, behaviour and outcomes, would have to happen immediately before and after the training; or involve longer-term follow-up, for which permissions to recontact individuals would be required¹³⁵.

- › **Partner organisations, supporting the rollout and implementation of Super Searchers, often have their own internal monitoring and evaluation arrangements**, and Google have not wanted to overburden partner organisations by asking them to duplicate or replicate this work. However, each partner organisation collates different types and quality of information, therefore making it unusable for systematic evaluation of intervention experiences and outcomes.
- › While the programme team and country partners have contact with the professionals trained, they do not tend to have direct contact with onward beneficiaries (library patrons and school students). They would therefore be **reliant on busy professionals to implement any monitoring and evaluation** with beneficiary groups.
- › As a global programme, delivered in several **languages**, all monitoring and evaluation tools, for example pre and post surveys, would have to be translated and **culturally sensitive**. This may also involve a piloting phase, to check that the tools are user-friendly and collect the information they intend to.

Strengthening the monitoring and evaluation framework

As part of the programme evolution and refinement, the Google team have sought to systematically strengthen their monitoring and evaluation arrangements. At the start of the programme development in 2022, there was no **appointed and dedicated monitoring and evaluation lead** for Super Searchers. However, a Trust and Safety Research Lead was appointed in 2024. Furthermore, Google has now developed and implemented a **post-intervention survey for professionals trained in India**. This tool collects feedback from educators on their experiences of and learning from the training. Google are currently working on **developing a short pre- and post-training questionnaire** for school students in India who take part in the training (see Appendix Three). Work is also in progress to develop a short set of age-appropriate questions linked to the programme outcomes.

Going forward, Google are working with their internal Trust and Safety Research Lead to review and strengthen the monitoring and evaluation framework. This work is in its very early stages. However, the ambition is to create a robust and proportionate monitoring and evaluation framework, to measure programme reach, experience, and learning outcomes. As with the other case studies discussed in the report, the question of consistency and comparability is an important one, to enable Google to gather and reflect on a body of evidence that allows for a robust assessment of barriers and enablers to implementation across settings and contexts.

Outcomes achieved

Super Searchers has achieved a wide reach to date. The Google team provided reach numbers of the programme for professionals trained in 2023. As outlined above, it was not possible to provide information on beneficiaries trained, as this information is not collected systematically. In 2023, Google worked with **12 partner organisations** to deliver Super Searchers; the training was delivered in **13 countries and 2711 professionals** were trained, across **26 training sessions**. The programme reached educators, librarians, and NGO and media professionals.

Through consultation with key stakeholders and beneficiaries, anecdotal feedback was gathered on programme outcomes. They cited a range of benefits of Super Searchers for trained professionals and beneficiaries. The benefits mentioned by stakeholders, listed below, are closely aligned to the intended outcomes set out in the Theory of Change (see Appendix One). None of the people consulted reported any unintended or adverse outcomes of the programme.

Outcomes for professionals

- › **Professional development opportunity** for librarians and educators, in digital information literacy. Educators in India valued the certification for training participation, to use as evidence of training.
- › Professionals reported **becoming aware of Google information literacy features** that they were not aware of prior to the training. They could use these in their personal and professional contexts, to improve their online searches and fact check information and sources. Professionals said that they **shared the Google information literacy tools** with their colleagues at work, wider professional networks, and family and friends. As one educator commented:

“When we used to ‘Google it’, we used to just read it. And we used to move ahead, and we used to just take the information, but now I have become so much aware after this workshop. I would now first check the source of the information and then move ahead. So that was a shift in my search pattern I would say.”

- › Professionals explained that it was **helpful to have a readymade set of training materials to share with beneficiaries, saving them time** if they had had to develop equivalent materials.

“Getting something handy and structured meant that, as we do not get any time beyond our curriculum, is really a boost for both the educators and the students.”

Table 8: Super Searchers formal training delivered in 2023 by partners

Partner	Geography	Target Audience	# Training sessions	# Individuals Trained
Public Libraries 2030	Portugal, UK, Ireland, Italy	Librarians and library staff	7	250
Electronic Information for Libraries (EIFL)	Uganda, Kenya, Namibia, Zambia, Cameroon	Librarians and library staff	2	80
Public Library Association	US, Canada	Librarians and library staff	5	1490
Mahattattva	India	Educators	4	620
4 partner organisations	12 countries	–	18 sessions	2440 professionals trained

Source: Super Searchers training delivered in 2023, Google

Table 9: Super Searchers one-off training delivered in 2023, at events and conferences

Partner events	Geography	Target Audience	# Training sessions	# Individuals Trained
Pratham.Org	India	Educators	1	11
APAC Trusted Media Summit	India	Educators Media and Platforms	1	100
UNGA Online Safety Workshop	US	IGO/NGO leaders	1	30
IFLA World Library and Info Congress	Global (Conference)	Librarians and library staff	1	50
UK Launch with Parent Zone Event	UK	Librarians and library staff	1	30
Manchester Be Internet Citizens	UK	Librarians and library staff	1	
International Fact Check Day with PLA	US	Librarians and library staff	1	30
Fighting Misinformation Online Summit	Belgium	Media and Info literacy experts	1	20
8 partner events	4 countries	–	8 sessions	271 professionals trained

- Educators in India, who were trained at the Google offices, valued the chance to visit the Google office, somewhere they otherwise would not have had a chance to visit. Some of the teachers consulted, were also trained in other Google media literacy interventions, for example Be Internet Legends,¹³⁶ for students. They explained that having both these trainings, supported one another, and build their confidence and capacity to support school students to be safe online and access reliable information.
- Library Association stakeholders did not believe that the SIFT framework would have been a new concept for librarians, as they are experienced in searching for information from reliable sources as part of their professional training. However, they did report it could be a useful and simple tool for librarians to share with patrons.

Outcomes for library patrons

Library Association stakeholders said that librarians and library staff generally would not run standalone Super Searchers training for library patrons, as this would not be practical for most libraries. Instead, they believed that they **supported library patrons on a one-to-one basis with individual search requests**, incorporating relevant information from Super Searchers as appropriate. They also thought that they may **incorporate** training on Google's information literacy tools into existing media literacy interventions or training. Whilst this approach allows for the Super Searchers content to be cascaded to patrons in different ways, it poses programme fidelity issues, as the training is being delivered in alternative ways to how it was intended.

Outcomes for school students

Educators in India explained that they shared (or intended to share) the training with students, a year group at a time. Teachers described two distinct delivery approaches:

- One approach involved teachers delivering the training in a classroom setting where students had access to a computer.
- Alternatively, teachers described delivering the training to a full year group in an auditorium, via an assembly, where students did not have access to a computer.

Teachers believed the learning outcomes for students were the same, regardless of the delivery approach. Teachers saw the **key mechanism of positive learning outcomes**, which students retained and applied, was the student-led **debate generated by the training content**, particularly using the case study examples to illustrate false information content. Teachers who had delivered the training to students, explained that the training encouraged and created debate among students about online searches, content they had seen online, and how they assessed its accuracy and made decisions of whether to share it with others.

Teachers hoped the training **raised student's awareness of how to critically engage** with information they find and engage with online. As one educator commented:

"The Super Searchers programme was an eye opener for many of the students as they were taught about techniques to filter out misinformation."

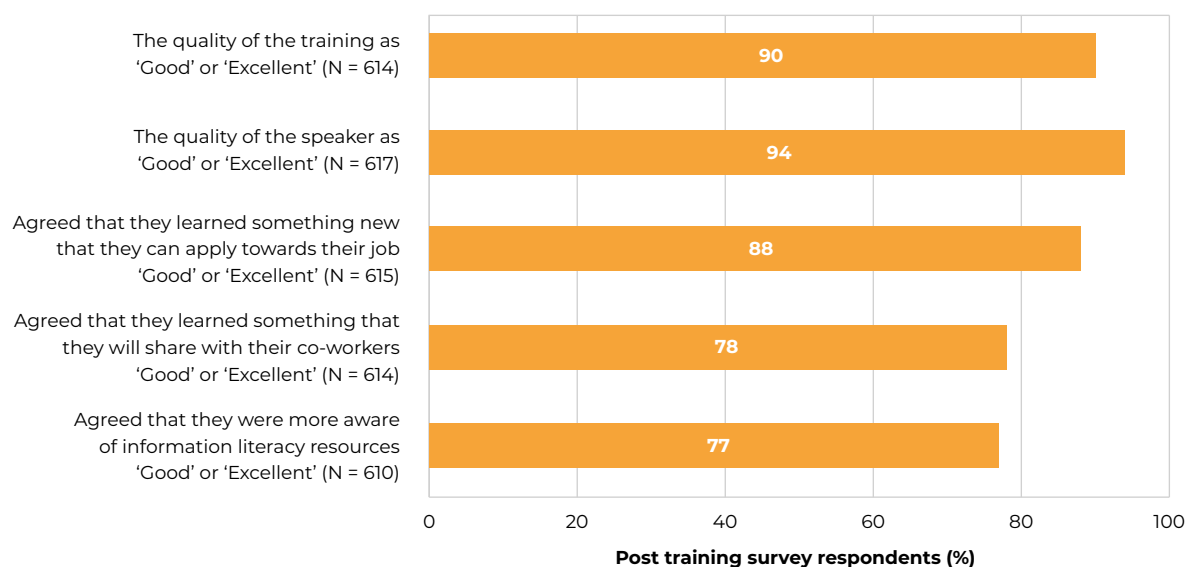
They also believed it would **help them in their educational activities**, for example searching and using information for academic work. They also hoped that the training benefited students within their **personal lives and information exchanges with family and friends across online platforms**. Teachers expected students to pass their learning onto parents, siblings, and peers outside of school. Above all, teachers hoped it equipped students to stay safe from misinformation online. One educator noted that:

"We need to tell them [the students] that when you are diving in such a big sea, you should know how to have a safe dive."

Ad-hoc, partner-led evaluation activity

Individual country partners have implemented ad-hoc evaluation exercises. For example, in the US, the Public Libraries Association (PLA) included a post-intervention questionnaire for participating library staff. Across the 4 Super Searchers training PLA delivered, participants consistently reported positive feedback on the quality of the training, and helpful learning outcomes regarding information literacy.

Figure 11. Key findings from PLA's post training survey with librarians and library staff



Source: PLA's post training survey 2023

4.4 Adapting to emerging media literacy challenges

This section briefly outlines stakeholders' views on the emerging future media literacy needs. Stakeholders suggested two main areas of emerging need for them, related to **assessing the validity of AI generated content and challenging the belief and spread of misinformation** among the communities they work with.

AI generated content

The Google team remain responsive to emerging media literacy needs, the changing information landscape, and informal feedback from country partners and training beneficiaries. At the time of the case study, they were reviewing the Super Searchers training content, and looking to add a new module on assessing the accuracy and reliability of **AI generated content**. This was an emerging area that all stakeholders, across libraries and educators, cited as needed training for to support their work. Professionals felt out of their depth in identifying and assessing the quality of AI generated content.

Challenging belief in misinformation

An additional emerging area for professionals (librarians and teachers) was wanting training and support on how to deal with a situation where someone believes a piece of misinformation. Librarians and teachers reported this to be a real area of challenge for them in their work with communities. One suggestion from teachers in India was to deliver complementary Super Searchers training sessions for parents and carers of students. They believed that this would help to upskill parents/carers in their digital and general information literacy skills, and help to prevent the spread of misinformation within households and social networks.

4.5 Conclusions for deep dive #3

Google's Super Searchers media literacy intervention covers five key information literacy strategies (SIFT framework) and tools (Google's in-built information literacy tools). The training was developed in 2022, and has two purposes:

- › Firstly, to help professionals (librarians, educators, NGO staff, etc) to efficiently and effectively search for reliable and truthful information, and critically assess its validity.
- › Secondly, trained professionals are provided with information and resources to cascade Super Searchers to the communities they work with, including library patrons and school students.

This case study sought to understand the Super Searchers programme's development, implementation, and monitoring and evaluation arrangements, to identify which aspects are working well and those that require improvement.

Super Searchers is meeting a media information literacy need

The key stakeholders and beneficiaries consulted as part of this case study consistently said that **Super Searchers was meeting a need to upskill individuals in media literacy**. They identified the mechanisms that facilitated uptake of and engagement with Super Searchers:

- › **Promoting and disseminating Super Searchers via known and trusted professional bodies**, such as library associations and educational training bodies, ensured targeted marketing and take-up of the training opportunity.
- › Busy professionals were able to meet the **time commitment** as the training was **one-off** and **free-to-access**. Furthermore, professionals were motivated to take part to **improve their media literacy knowledge, skills and confidence**.
- › Implementation stakeholders and beneficiaries valued the **simple and practical nature of the training**. They reported that the training was engaging and useful, due to its interactive approach, and as it focused on 5 clear messages and learning outcomes (the SIFT framework and Google information literacy tools). Beneficiaries reported learning something new through the training. They were generally not aware of Google's information literacy tools covered in the training, for example.

- › Trained professionals valued having **fully developed training and resources** to cascade the training to the communities they worked with.

Recommendations for delivery

The key stakeholders and beneficiaries recommended ways to improve and enhance the training. The key messages for improvement centre of the following:

- › **Full localisation of materials** is essential to ensuring that the cultural context and misinformation examples are relevant and engaging to the country-specific audience.
- › It was not clear from the case study evidence whether trained librarians were **cascading the training** to patrons, and how they organised this. However, educators in India reported to be delivering the training to school students in classrooms (small classes) or assemblies (whole year groups).
- › The Google team may consider ways to engage library associations to understand how librarians may be able to cascade the training to patrons. Teachers suggested value in running training for parents/carers to complement training delivered to school students, and support upskilling households.
- › The Google development team reported **a need for more long-term resources** to ensure sufficient capacity to oversee its rollout and implementation, refresh and refine Super Searchers content, and provide small funding pots to partner organisations to ensure appropriate localisation of materials and to sufficient resource for organisation and delivery of Super Searchers to professionals.
- › **Additional training content beneficiaries would like** Super Searchers to cover, included: how to assess the quality of AI generated content and how to challenge an individual's belief in misinformation.

Recommendations for monitoring and evaluation

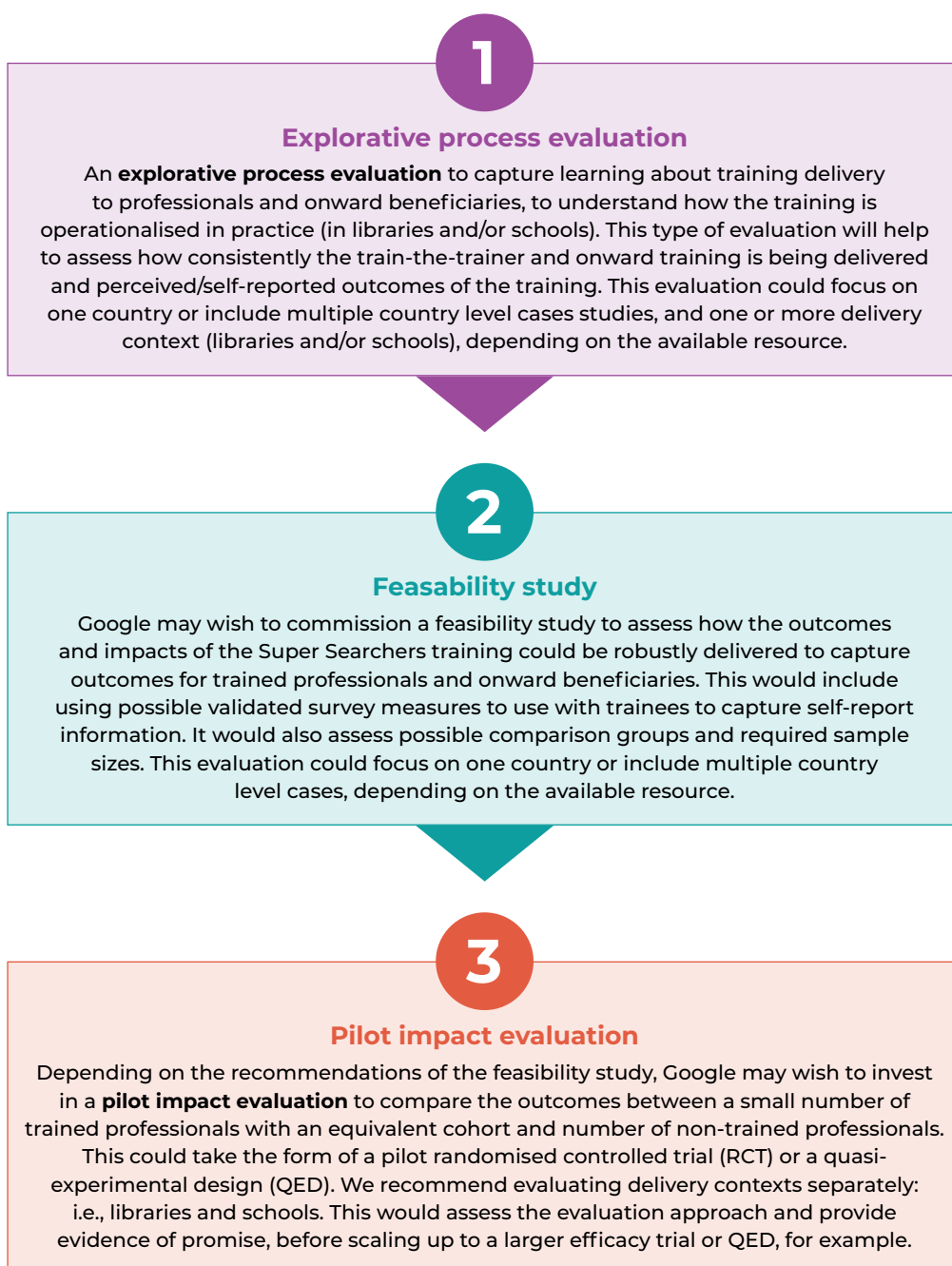
The case study identified that the monitoring and evaluation arrangements are limited to capturing **reach** numbers for the train-the-trainer sessions and individuals trained. However, there was no systematic collection of reach numbers of onward training sessions and individuals, delivered by trained professionals. Given the design of the trainer-the-trainer model, Google have a removed role from onward training delivered by trained librarian and educators, making it challenging to capture information on how onward training is organised and delivered as well as the numbers of individuals who receive the training. At the time of the case study, the Google development team were looking to strengthen the monitoring and evaluation framework for Super Searchers.

Possible ways to improve and monitoring and evaluation arrangements include the following, and were being considered by the newly appointed Super Searchers Trust and Safety Research Lead:

- **Reviewing what monitoring and evaluation information** the Google team would like to capture, and prioritising the most important information and mechanisms needed to collect this data. This would likely include, for example, individual level information on training received and outcomes for professionals, as well as outcomes for library patrons and/or school students.
- Including a **pre- and post, or post-only questionnaire for beneficiaries**, to capture information on: training experience, outcomes (covering those outlined in the Theory of Change in Appendix One), whether trainees believe they will make use of the training, feedback on what would make the training even better, and demographics. There could be two versions of the questionnaire, one for professional beneficiaries and another for onward beneficiaries. Surveying both groups would allow for an evaluation of the impact of Super Searchers on shorter-term (i.e., focussed on professional beneficiaries) and medium-term outcomes (i.e., focussed on onward beneficiaries) as defined in the Theory of Change. To ensure the Google development team capture this feedback systematically, and to boost response rates, an online questionnaire could be embedded into the training slide-deck or resources. Consideration would have to be given to:
 - **Questionnaire development**, and cognitive testing of the questions as well as the piloting of the questionnaire and data collection approach. It may need to include questions around the mode of delivery (in-person or online), information on training received in practice if this is not otherwise captured at an individual level, as this may mediate or moderate the relationship between Super Searchers and the outcomes measured.
 - **Translation** of questionnaires to ensure the language and cultural context is appropriate.
 - Consideration how this information could be systematically captured in contexts where digital tools may not be available (and therefore an online survey would not work), and **paper questionnaires** would be required.
 - **When to collect this information**: the options include a pre- and post- intervention or post-only questionnaire immediately before and/or after the training, post-post questionnaire to capture learning outcomes a set period after the training. However, to enable a post-post questionnaire to be issued to individuals, Google or its delivery partners would need to collect permission to re-contact individuals after the training and their contact details.
- As part of the **train-the trainer** information, the requirement and value of collecting reach information alongside any other monitoring and evaluation needs to be explicit, to ensure professionals are aware of the ask and the importance of capturing this information.

As there has been no systematic evaluation of the Super Searchers training to date, we recommend **proportionate evaluation activities to build the evidence base on the value of Super Searchers**:

Figure 12: Recommended evaluation activities for Super Searchers





5.0

Key messages
and future
priorities

Previous chapters presented findings from three deep dive case studies. This short chapter draws out crosscutting themes from the deep dives, and then presents the future priorities for Google's work in Europe, as reported by key stakeholders who took part in the study. We then examine emerging media literacy challenges, how the policy and practice landscape is changing, and how Google might respond.

5.1 Key messages from the deep dives

Deep dive case studies provide a snapshot of media literacy initiatives supported by Google in Europe. They were selected to provide well-established examples that have already been taken to scale, and to showcase diverse approaches and methodologies. They include: an open source educational programme for children of school age (Be Internet Awesome – BIA); a strategic communications campaign, using a psychological intervention to boost resistance to disinformation (Prebunking); and a train-the-trainer initiative supporting students and library patrons to navigate media information confidently online while making effective use of Google's transparency tools and features (Super Searchers).

Each of the deep dives showcased an initiative that has been adopted in multiple European countries, offering insights to the challenges and opportunities presented by the European context. Looking across the case studies, a number of crosscutting themes and learning points emerge, and they are explored below.

Tailoring initiatives to reflect diverse contexts, needs and circumstances

Having been implemented at scale across multiple countries in Europe, the initiatives in our case study deep dives underline the importance of context. They show that context changes outcomes. The same initiatives can achieve different results when transported between settings and target groups, presenting risks in terms of efficacy (the ability to achieve the intended results) or even causing unintended harms (the risk of boomerang effects where messages to refute misinformation do not land as intended). They illustrate how differences in cultural norms, media ecosystems and exposure to misinformation at a population level all require careful consideration at the design stage, and that controlled trials cannot reliably predict 'real world' complexity. At the same time, tailoring delivery also inevitably changes outcomes. In adapting initiatives it is important to establish how whether these adjustments have positive, negative or unexpected effects. Monitoring and evaluation is therefore integral to ensuring that media literacy initiatives are robust and evidence-based.

In the case of prebunking disinformation in Central and Eastern Europe (CEE), we considered how Google and Jigsaw took steps to avoid backfire or boomerang effects in audiences. In addition to drawing on peer reviewed research to inform the design, the initiatives included an element of test-and-learn, with adjustments based on feedback. The mode switched from a narrative level in the Czech Republic and Slovakia (drawing attention to specific stories or messages), to a technique level for the trial in Germany (making explicit the underlying manipulation techniques), to targeting a specific demographic in the Philippines (18–35-year-olds). These adjustments were based on monitoring and measurement to gauge the audience response and informed by consultation with networks of in-country partners and experts. In each case, modifications avoided losing a focus on the misinformation techniques to be addressed: decontextualising, fearmongering, and whataboutism.

The Super Searchers and Be Internet Awesome case studies also highlighted a need for adaptation. In both instances, cultural and linguistic specificity were important when scaling the initiative. While language translation was generally less problematic for Google (although more significant as reported by smaller resource constrained civil society organisations (CSOs)), it proved more challenging to source culturally relevant, non-political examples of low quality or fake information for training materials. Similarly, a degree of re-calibration was needed in response to levels of digital skills and media awareness among the target groups for the initiatives. The general introduction to Google's product features was initially pitched too low for tech-savvy librarians on Super Searchers, who wanted more challenging content on generative AI, and the importance was evident of tailored teaching resources within BIA to match the curriculum to the appropriate teacher competency frameworks.

Partnership and collaboration with trusted intermediaries and end users

Partnership and collaboration were also a recurring theme in the case studies. While leveraged in different ways, each of the initiatives has drawn heavily on local knowledge and expertise held by organisations within the target countries to engage and understand the needs of end users, sometimes also involving co-design.

In Jigsaw's prebunking initiatives, local input was essential to the co-design of each campaign, from the scoping research through to identifying resonant topics in the country context, co-branding, and alignment with ongoing efforts to tackle disinformation. The partnerships were configured to reflect the media ecosystem in each country and to secure the input of credible and trusted organisations. They were grounded in civil society organisations and independent foundations, institutes or think tanks putting end users within reach and drawing upon relevant networks, data and research. For Super Searchers, in-country partners were also important to tailor training materials and content, and to engage and build trust with the institutions and professionals in receipt of the trainer-training elements of the programme (libraries and schools).

For Be Internet Awesome, the partnership arrangements and philanthropic support reflect the open-source nature of the BIA curriculum and materials, helping the programme to scale while aiming to support the maintenance of good quality control. Google has adopted a multi-level governance structure to support the expansion of BIA, liaising and providing support to organisations leveraging BIA at national and regional levels. The case study underlined how this close communication between global, national, and local teams and organisations has allowed for its expansion, while the curricular format of BIA materials has facilitated their adaptation to educational settings.

For Google, partnership working has facilitated the localisation of its programmes, and has also served to maintain a critical 'buffering' function between end users and a large multinational platform provider. Stakeholder consultations showed that these commercial and ethical boundaries have been fundamental to gaining the trust of partners and end users. On BIA and Super Searchers, the introduction of the programme to new countries or settings invariably raised privacy concerns regarding the uses of data gathered by Google. On BIA, Google has addressed these concerns by abstaining from the collection of any personal data from students, avoiding the need for any logins, passwords or emails. The monitoring, evaluation and learning functions have been devolved to BIA implementing organisations and organisations leveraging BIA, their research partners, and independent evaluators. Ultimately this model has helped position Google in an enabling role, as a tech company rather than a media literacy education provider, facilitating expert organisations to meet their objectives for the populations served.

Work with trusted partners and intermediaries has also served a purpose of maintaining ethical walls on the Jigsaw prebunking initiatives. In this case, one of the considerations is to secure critical distance from government or public authorities. By working with CSOs, media and cultural associations the campaigns were able to preserve their neutrality and to avoid a public perception that they might be a form of covert political messaging on the one hand and commercial influencing from a major platform provider on the other.

These examples illustrate that large tech companies (including Google) are often best positioned to support media literacy efforts by providing tools, infrastructure and funding for expert organisations and education providers to advance their organisational goals for the populations whom they serve and know best.

Engaging the end user to activate critical thinking in the moment, using action learning

The case studies showcase the importance of engaging end users 'where they can be found' and providing challenge and support in-product online. These points of engagement were achieved using different modes and messages across the deep dives. In the case of Super Searchers, the initiative works by developing critical thinking skills in tandem with using Google's transparency products and features, such as About this Result, About this Page, Fact Check Explorer, and Reverse image search, and by directing end users towards accuracy priming nudges (e.g. the Hit Pause video campaign on YouTube).¹³⁷ For prebunking, exposure to small doses of education is managed via online platforms, upstream from encountering potential misinformation narratives. For the CEE prebunking initiative, the video was streamed across YouTube, Facebook, Instagram, and TikTok. This multi-channel approach achieved a combined reach of 38 million views through the CEE campaigns and was seen by an estimated one third of the Czech, Polish and Slovak populations.

The case study findings are consistent with the research literature on interventions designed to counter online disinformation and resonate with the stakeholder interviews and survey. There is strong evidence to support the effectiveness of interventions that aim to promote rational thinking (or 'System 2 thinking') for critical engagement with disinformation online,¹³⁸ including cognitive or behavioural interventions targeted at enhancing the agency of end users in digital environments, and those aimed at boosting competence and critical thinking skills.¹³⁹ There is also evidence that gamification may help to boost digital media and information literacy skills, through real time 'immersion'¹⁴⁰ in online experiences, including disinformation games.¹⁴¹ The stakeholder interviews highlighted the growing practice for fact checking organisations to deliver the fact-check in situ alongside the original source of misinformation in web or app, as a direct route to the end user.

More fundamentally, the case studies also showed that action learning (or 'learning by doing') can be a powerful component of media literacy initiatives. The BIA programme fused on and offline activities, with students participating in online games (the Interland¹⁴² digital citizenship game) alongside classroom activities. Local implementation partners have also developed activities ranging from theatre performances on BIA topics, to multimedia exhibitions, workshops with students and parents, online courses and webinars with teachers, online support communities, podcasts, radio shows, and escape games. There were also self-reported knowledge and awareness outcomes among educators involved in delivering the programme. This concurs with previous research, highlighting the skills benefits for professionals and volunteers involved in supporting media literacy initiatives, including those involving crowdsourcing and community moderation.

Optimising the reach and scale of initiatives

The deep dives highlight the importance of scale and scalability to build traction and maximise the impact of media literacy initiatives. All of the case study examples have balanced expansion with a need to test the model incrementally and consolidate learning.

BIA uses Google's open sourcing method to provide tools and templates forming the basis of campaigns and tools adapted locally for parents, teachers and youth workers across Europe. As we saw in the corresponding chapter, scalability has been assisted by making the BIA resources multilingual, universalised and free to access, while working with BIA intermediary organisations to understand specific messaging and to identify and remove country-specific barriers. This has enabled Google to address concerns among educators about the potential burden of 'yet another' professional development programme by streamlining the training requirements and placing an emphasis on time efficiency. The curriculum mapping activities in each country have also helped to ensure that the BIA programme is aligned with school curricula and offers a complementary resource to facilitate cross-curricular teaching and learning. Finally, the expansion of BIA had benefits in securing the kudos of the programme and the brand, albeit with a need to address privacy concerns.

The prebunking campaigns reflect Google Jigsaw's emphasis on promoting resilience to disinformation and preventing its spread, where the evidence base is strongest, and on achieving results that are scalable at a general population level. This shift in approach was signalled by evidence that de-radicalisation methods have mixed results, and a recognition of the need to move further upstream to deliver prebunking messages using channels that maximise their discovery and navigability. As discussed in the corresponding chapter, the seeding of the campaign across multiple platforms and carefully tailored communications campaigns engaging key stakeholders in-country were enabling factors in the subsequent levels of reach that were achieved by the campaigns in CEE.

Super Searchers, in contrast, works on the basis of diffusion and multipliers, using the train-the-trainer model as a platform to engage end users beyond the immediate reach of Google programme teams and implementation partners. Similar train-the-trainer models have been mobilised by the fact checking industry as a means to boost expertise beyond the finite capacity of fact checking organisations. By way of example, deCheckers delivers a programme of workshops and lectures to journalism students on how to recognise and address disinformation. The students then deliver a further tier of training to secondary schools and their students across Belgium. This model aspires to build a community of volunteers to support the organisational mission and to diversify how and by whom such messages are delivered at a local level.¹⁴³

Adaptability and resilience to social and technological change

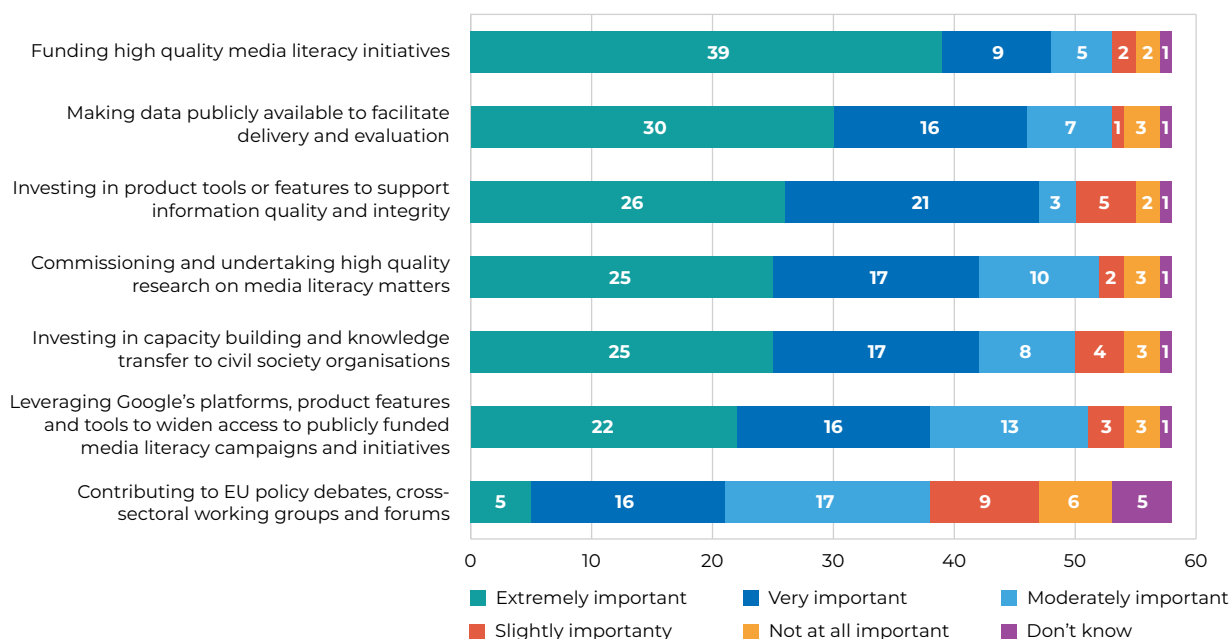
A final theme to highlight relates to the adaptability of the case study initiatives. Each of them has undergone a process of iteration to maintain their relevance in Europe's fast-moving policy and regulatory landscape. BIA started with a focus on primary school students and delivering online safety messages. Over time it has evolved to reach older (secondary school) and younger (early childhood) students, and the updated curricula address socio-emotional learning, media literacy and digital citizenship topics. The open-source model has also facilitated in-country efforts to tailor BIA to more specific target groups that are then re-shared with BIA programme teams. The resources developed through the Be Internet Legends arm of BIA in the UK for students with Special Educational Needs and Disabilities (SEND) provides one such example of this process. The agility of the model positions BIA as a readymade network through which to delivery AI literacy foundational knowledge, alongside Google's dedicated AI literacy programmes such as Experience AI in the UK.

The Hit Pause campaign on YouTube has similarly been adapted in consultation with Google's partners to appeal to specific target populations. The latest iteration of the campaign aims to appeal to YouTubers from Gen Z, covering different manipulation tactics and how to spot them. Available across all EU Member States and designed around short educational videos, the format is highly adaptable. According to the published statistics, Hit Pause was live in over 50 countries by the end of 2022, with over 180,000,000 impressions recorded in Italy, Spain, Poland, Romania, Czech Republic, France, Germany and Belgium.¹⁴⁴

Priorities for Google's work in Europe

The study provided an opportunity to seek feedback from key stakeholders on how Google might engage and support the development of Europe's media literacy ecosystem, within its jurisdiction. This topic was explored both qualitative through the interviews and formed a topic within the EU survey. As Figure 13 illustrates, a combination of funding for media literacy initiatives and continued investment in product tools and features to support information quality were among stakeholders' priorities.

Figure 13: What actions can Google take to help strengthen Europe's media literacy ecosystem, within its jurisdiction? Please indicate how important you think each potential action is.



Note: Base = 58

Views were rather more mixed on how visible Google should be within EU working groups and fora. This reflects a tension between the importance of having the major platform providers at the decision-making table at an EU level, while maintaining distance between policy-making and commercial interests. The availability of data for research and practice featured among the top three categories. This was also a recurring theme in the interviews. The qualitative evidence gathered for the study provides further context as we now discuss.

Transparency and choice for end users, media pluralism

There was a strong message that transparency and choice should be at the forefront of Google's design decisions. It was widely believed that exposure to diverse sources of information is a prerequisite for the acquisition of critical thinking skills. The interviews underlined the need to balance the suppression of harmful content (especially for vulnerable groups and in the context of age verification) with the ability for end users to make their own decisions about information quality. While tools such as About this Result were welcomed as a means of putting verification in the hands of the individual, there was unease about the use of AI-powered algorithms and the pre-determination of 'credible' sources of information by Google based on unknown criteria.

The role of Very Large Online Search Engines (VLOSEs) and Very Large Online Platforms (VLOPs) in curating political content received particular attention. There were some concerns that heightened sensitivities around elections may engender an overly cautious approach to suppressing political views, with implications for press freedoms and independent journalism. Attention was drawn to debates in the USA about how and whether content suppression may constitute a form of censorship, and the implications of the ruling for Europe.¹⁴⁵ Google has expressly addressed these concerns to date by maintaining a range of strategies ('reduce, remove or raise') to promote informed choice, facilitated by expert in-country partners, alongside measures to support up-skilling for content verification by the end user. The consultation feedback indicates that this strategy may benefit from additional steps to boost end user AI literacy so that there is a better understanding of the affordances and limitations of AI in filtering content.

In addition to algorithmic transparency, stakeholders identified a need for additional end user self-monitoring tools and prompts. This might include, for example, statistics and feedback on the amount of commercial (paid for) content they have consumed, and the amount of fake news they have been exposed to over a given period.

Finally, *access to data for research* was highlighted in the consultations. While the EU Code of Practice on Disinformation reports have been a driver for transparency as a co-regulatory code with industry, the statistics in these reports document actions taken by VLOSEs and VLOPs to fight disinformation. In addition to statistics shared for accountability purposes, the research community wanted to see better access to data to facilitate independent research into end user behaviours on proprietary platforms, and to advance the knowledge base on platform-based media literacy beyond data reported in the context of the Digital Services Act (DSA)/EU Code of Practice on Disinformation. While observing commercial and IP boundaries, this would entail a further opening-up of platform data in the public interest.

Sector support through grassroots and strategic collaboration

Consultation feedback from funded organisations showed that the ability to work at a greater scale and in a more sustained way were the principal ways in which Google's financial (or other) support added value over and above what might otherwise have been possible. Google-supported projects also widely valued the opportunity to develop or participate in cross-sectoral partnerships, to engage new or under-served groups, and to capture and measure the results of their work more systematically than they had done previously.

Perhaps unsurprisingly, therefore, stakeholders identified a priority for Google to continue providing funding and technical support to develop and scale media literacy best practices across Europe. The narrative feedback in the survey pointed towards a need for Google to balance strategic work at an EU level, with a deepening and strengthening of relationships within EU Member States through in-country teams. The CSOs in particular highlighted opportunities for Google to provide platforms and routes to funding for more grassroots micro-organisations for whom larger EU grant funded programmes have not always been within reach.

“Google can engage with community leaders and local organizations to deliver tailored media literacy workshops and training sessions, especially in underserved areas.”

National CSO

“Google should strategically prioritise meaningful long-term collaboration with media literacy organisations operating at an EU level... providing funding and discussing truly impactful measures.”

European Level Media Association)

There was an expectation that Google's support for flagship EU programmes should continue to be conducted at arms 'length, to ensure independence of decisions about project scope from Google's commercial interests. The **European Media and Information Fund (EMIF)** model was flagged as an appropriate one in this respect.

“Google should ensure it funds high quality initiatives without making decisions on which/how these are funded. The EMIF structure allows for decisions to be made without Google oversight and this is an important mechanism to ensure transparency of decision-making.”

National Regulatory Authority

5.2 Responding to emerging media literacy challenges

The stakeholder interviews and desk research offer insights to potential future challenges for delivering media literacy initiatives, along with suggestions of how Google might respond or take the initiative. They include:

- › **Actual and potential impacts of generative AI** – this theme was present throughout the study. It was widely recognised that the changes to the media landscape require more sophisticated media literacy awareness training and credibility cues to use across platforms. Stakeholders reported that the (mis)use of generative AI has resulted in disinformation narratives becoming more pervasive. The improved affordability of high-quality video production has also put these technologies within reach of a wider range of actors, resulting in the more rapid spread of disinformation during events such as election campaigns or in humanitarian crises. The consultations indicated a concern about next generation AI threats, such as those posed by artificial capable intelligence (ACI), and its application to disinformation campaigns.

At the same time, there was optimism that generative AI can be applied to assist with identifying and counteracting disinformation. Google's product mitigation strategy has incorporated the smart use of metadata and watermarking of AI generated content. Google has also invested in AI literacy education to make the public more aware of the affordances, strengths and limitations of AI for citizens, and to offer practical instruction on using AI for educational purposes (e.g. utilising Chat GPT, Gemini, or AI Tutors delivered within AI literacy programmes such as Experience AI). A priority was identified to continue to deepen and strengthen this work and to integrate AI literacy within Google's established initiatives.

- **Polarisation and news avoidance** – there is growing evidence of news apathy among audiences in Europe^{146,147}, alongside polarisation arising from high levels of political partisanship in some countries¹⁴⁸. Studies have shown that individuals with low levels of trust in news organisations have a greater propensity to draw on pre-existing beliefs and social cues to appraise news credibility and that they are more likely to make use of social media apps and search engines to verify facts¹⁴⁹. These audiences are less predisposed to engage with traditional media education initiatives, while also being more susceptible to how news is curated and presented on the platforms that they use¹⁵⁰. This presents an opportunity for Google, alongside other providers, to co-design initiatives that have the means of reaching more news-resistant audiences.

Furthermore, the interviews point to wider trends that Google, along with others, will need to address as part of the wider environment within which media literacy initiatives are funded and supported. These include:

- **Tackling verification-resistant narratives** – stakeholders noted the challenge of false narratives that may be hard to verify, but nonetheless are shared. Audience research indicates the factors may result in end users sharing information despite concerns about its credibility. These include a sense of civic duty or moral purpose, personal anxieties, such as those relating to employment or financial wellbeing, and individual belief systems or political affiliations. A need was identified to better understand whether psychological interventions might be designed to counter disinformation in these scenarios.

- **Problem of double encryption** – the challenge of how to deliver media literacy messages on encrypted apps was a shared concern among stakeholders and presents something of a blind spot for media literacy efforts. A priority was identified for regulatory and technological solutions, to counteract the effects of disinformation beyond reach of traditional psychological interventions on public platforms.
- **Systemic disinformation threats** – the study highlights a further challenge relating to the emergence of systemic threats to information integrity and security from state-enabled disinformation networks. Google's review of online threats in CEE following the Russian invasion of Ukraine reported on an emerging disinformation infrastructure in the region¹⁵¹. The report notes the heightened need for public awareness and resilience in response. Tackling disinformation has long formed part of national security strategies within EU Member States and indeed by NATO, and the heightened profile and significance of these threats is likely to assist with gaining support at a policy level to invest in population level measures to boost resilience to disinformation and to improve cyber safety, alongside initiatives with a focus on news integrity. As these malign influences ultimately play out across VLOPs and VLOSEs, Google and other large tech providers face evolving challenges in mitigating against the potential harms encountered on these infrastructures and in updating the business models that exist to create and maintain them.



6.0

Conclusions and recommendations

In this concluding chapter, we draw together the evidence, offering our overall conclusions. We finish by presenting Google with a set of recommendations for action.

6.1 Optimising Google's role in Europe

Overall, it is clear that Google continues to play multiple significant roles within Europe's media literacy ecosystem, holding the position of a significant provider of key infrastructure, and supporting the sector by supporting research and development, capacity building actions for civil society, and connecting with partners and key stakeholders through its programmes. With the implementation of the **DSA, AI Act** and **EU Code of Practice for Disinformation**, Google is responding to a rapidly changing regulatory landscape, along with other VLOPs and VLOSEs. This presents challenges and opportunities. **Google** is both the subject of emerging EU regulatory reforms targeted at industry, and a key stakeholder in cross-sectoral partnerships and EU policy dialogue. This report has shown that accountability, and clear boundaries are needed for Google to support media literacy initiatives in Europe, navigating the line between commercial and public interests. This balance is one that needs to be continually reviewed with regard to the level of influence that is appropriate to exert over what is funded, what types of data are gathered, how they are processed, and in respecting the primacy of public authorities and civil society within European countries in meeting the needs of their local populations.

We have also discussed in this report how the emerging challenges posed by generative AI and threats to European democracy have required an ecosystem-wide approach, and that solutions to Europe's media literacy challenges cannot be found solely through bilateral industry relationships. The **Code of Practice** signifies moves to align, standardise, and benchmark the operations of the VLOPs and VLOSEs, but this falls short of the more direct forms of collaboration and co-design that may be required to address challenges that transcend the specificities of individual proprietary platforms. The prospect of closer direct industry collaboration to tackle disinformation brings with it new IP and commercial considerations, which Google will need to address.

6.2 Making the best use of research evidence

The report has shown how Google has drawn on both theoretical literature and controlled studies to inform the design of its interventions¹⁵². This is a particular hallmark of Google's platform-based campaigns to tackle disinformation. In the specific context of tackling disinformation online, Google's work pulls on the psychology literature as a reference point for typologies of evidence-based tools and interventions¹⁵³. With this framing, 'media literacy tips' are categorised as one of nine types of intervention, with the aim of developing media literacy and social skills that equip citizens to identify and respond appropriately to dis/misinformation¹⁵⁴.

Beyond psychological interventions to tackle disinformation online, the media literacy literature includes important work from other disciplinary fields such as sociology, political science and ethnography¹⁵⁵. Looking ahead, it would be beneficial for Google to support interdisciplinary research and to extend and strengthen a dialogue with academics working in qualitative, citizenship oriented areas. Google should also be cognisant of emerging EU level tools and frameworks, including the work funded by the European Commission to establish EU Media Literacy Standards and Best Practices. This forthcoming framework aims to achieve greater coherency in the approaches taken to design and implement media literacy initiatives across Europe.

6.3 A strategic approach to Monitoring, Evaluation and Learning

This review has highlighted areas where Google might look to reinforce their arrangements for Monitoring, Evaluation and Learning (MEL). The strength of Google's current MEL arrangements resides in the scale at which data is gathered and reported on reach across programmes; from publicly reported statistics on in-product tools and features, to programme metrics to track implementation. On balance, however, these arrangements have a programme management orientation (serving to understand their reach, usage and functionality), while evaluations are infrequent (serving to measure behavioural and other outcomes and to understand the critical success factors for setting up and implementing initiatives alongside other societal level actions).

Given the scale of Google's operations, this would seem to represent something of a missed opportunity. There is a good case for Google to embed measures that allow for systematic capture of outcomes, alongside studies that allow Google to tackle media literacy challenges, getting beyond the limitations self-reporting and examining behaviour changes over time¹⁵⁶. Google might also look to find ways to work with implementation partners to gather and synthesise evidence from across country contexts, with active stakeholder engagement. These proposals are further outlined in the 'recommendations' section.

Google's prebunking trials demonstrate scientifically robust methods to compare outcomes between treatment and control groups, making effective use of large samples to ensure generalisability of the results. However, the brand lift survey method leaves questions unanswered regarding end user motivations, how or whether improved discernment translates into decision-making, and potential drop-off effects. The use of mixed methods evaluation would provide a means of triangulating the data to understand how prebunking messages are received in a real-world context, against the background 'noise' of media, cultural and peer influences. Google's models of technique-based prebunking warrant further exploration to understand how or whether this technique might be deployed to inoculate end users where the source and message are difficult to predict (e.g. in the case of electoral misinformation, humanitarian crises, and AI-generated content).

While Google's prebunking initiatives are supported by evidence from controlled trials, the evidence base is comparatively weaker for community-based media literacy initiatives. It is particularly important to understand the implementation science behind these types of initiatives, which diverge from the psychologically informed models that underpin Google's campaigns targeted at inoculating end users against disinformation. Super Searchers has been rolled out at considerable speed, for example, but with considerable variability in the type, mode and intensity of the training for intermediaries (online vs in person), the settings in which it is delivered (school vs library based), and the environments within which deliver takes place (school assemblies vs classroom based with device access, vs using teacher handouts). There would be merit in undertaking smaller-scale trials, to understand the conditions that are sufficient or necessary to support knowledge acquisition by the trainer, and the subsequent transfer to the end user. Such trials would allow for rollout with greater confidence and would assist with setting parameters for the adaptation of the model by country partners.

6.4 Getting the right mix – tools, initiatives, and system-strengthening

Google's media literacy efforts are multi-faceted, spanning educational programmes, campaigns, and work to engage and equip civil society actors with tools and expertise. Google is uniquely placed in hosting its commercial platforms and having the means to combine educational initiatives with product tools and features. This multi-strand approach is a particular strength of Google's portfolio. Nonetheless, the research reminds us that initiatives and campaigns are just one of a range of tools available to build citizen's resilience to disinformation and to foster active digital citizenship. The interviews and desk research underscore the importance of adopting a systemic approach, so that initiatives go hand in hand with measures to strengthen the media sector and media pluralism and to restore public confidence in media and democratic institutions.

At a practical level, it will be important for Google to consider what types of systemic measures are necessary to help programmes embed and sustain within European host countries. For prebunking, this requires close examination of how campaigns are aligned or delivered in conjunction with other media-strengthening measures in the national context, alongside the implementation of specific timebound campaigns. For Google's community-based initiatives there is an opportunity to review the collective reach from an equity perspective. The deep dives highlighted individual examples of effective engagement (e.g. with younger children, older citizens, rural populations, migrant communities, and end users with disabilities), but further data is needed to establish whether this work is currently scaled to meet levels of underlying need, and to identify where non-participation is an issue (i.e. those groups or populations that Google's initiatives have not yet engaged).

Beyond immediate actions for Google, we conclude that system-strengthening requires a coordinated effort between policy makers, regulators, journalists, educators, fact-checkers, and industry. Specifically, it concerns:

- › Regulatory reforms to restore transparency and accountability on commercial platforms.
- › Industry cooperation on the ethical design of choice architectures, tools, and platforms.¹⁵⁷
- › Tech-oriented measures to detect and neutralise disinformation across a multi-channel digital ecosystem.
- › Proactive support for content that promotes and strengthens active citizenship.
- › Sustainable business models for the fact checking industry, to bolster media quality and integrity.
- › Investment in raising the profile of journalism and journalistic professions to challenge preconceptions.

“We need a fact checking infrastructure – funding, structures, methods, and skills. An international fact checking network, and audits of fact checking organisations. There are reasons for hope and optimism if we can collaborate across borders.”

European level CSO

Finally, the research supports the need to build capacities upstream, so that media literacy is integral to ethical and citizenship education within school systems, and to strengthen the role of public responsibility in shaping online environments, through collective action and community content moderation. These responsibilities go hand in hand with the need for tech companies to be accountable for their business models and platform architecture, to mitigate against harms while empowering end users with fact checking tools. A closer examination of these elements at the national level is provided in the parallel report from this study.

6.5 Recommendations

This report concludes with a set of recommendations based on the evidence from the learning review. These recommendations reflect the conclusions drawn within the scope of the study aims and objectives and are intended for Google to consider at their discretion.

Recommendation 1

- › **Continue to provide financial and technical support to Europe's media literacy sector, with a dual focus on expanding outreach at a grassroots level to reach underserved areas and seldom heard groups, while maintaining strategic collaboration with partnerships at an EU level.**

The research has provided a strong message about the value of Google's programmatic support, including both arm's length contributions to the European Media and Information Fund (EMIF) and direct grants and partnerships. We recommend that Google continues to support high quality media literacy initiatives, looking to maximise impact and scalability while also prioritising the equity aspects of its programmes. This might be achieved by expanding and scaling work with vulnerable or underserved populations as well as Google's campaigns and programmes at a general population level and advocating a life course approach to media literacy. At the same time, Google should look to invest in partnerships and programmes that stand to achieve genuine EU-level reach and impact. This might include providing support, where appropriate to do so, to forums such as the European Digital Media Observatory (EDMO) and European Commission Working Groups. The recent collaboration ahead of the 2024 European Elections is one such example, where Google supported the work of the European Parliament, European Fact Checking Standards Network (EFCSN), EDMO and ERGA.

Recommendation 2

- › **Leverage Google's expertise in emerging technologies, and generative AI specifically, to embed foundational AI literacy across campaigns, initiatives, and educational programmes, and to work with CSOs to build technical capability to tackle disinformation threats posed by generative AI.**

As a leading authority in the field of generative AI, Google is positioned to determine how AI is utilised across its platforms, the rollout of new AI-powered tools and products (such as **Gemini for Teens**¹⁵⁸), and contributing to AI literacy development among Europe's citizens. Alongside dedicated programmes focussed on AI literacy such as Experience AI, we recommend that Google looks for the best opportunities to take this expertise to scale, incorporating foundational AI literacy within established programmes such as **Be Internet Awesome**.

We recommend that Google invest in media literacy training that includes collaborative content, problem solving, and immersive environments that allow end users to understand generative AI through 'learning by doing' in digital spaces that are relevant to them. We stress the importance of maintaining a strong equity dimension, to ensure that the media skills for creating, using, and critically reflecting on generative AI content are distributed across the population in Europe, including targeted work to engage vulnerable and underrepresented groups. This will require the use of impact assessments, monitoring and evaluation.

Regarding capacity building for CSOs, Google has already taken steps to transfer expertise in emerging technologies, including generative AI to fact checking organisations. This has included models such as training, secondments of engineers, and joint development of product solutions. Given the widening technology gap between civil society and industry, we recommend that this work is continued and expanded. Google and Google.org are excellently placed to build on the learning and insights from having already periodically funded incubator programmes, capacity building actions and training to equip CSOs with technical know-how.

Recommendation 3

- › **Adopt a strategic approach to monitoring, evaluation, and learning (MEL); developing a framework to articulate Google's media literacy objectives and to gather and report on standardised measures, while supporting partners to embed MEL at a country level reflecting their local objectives.**

The research strongly indicates that Google would benefit from investing in a strategic approach to monitoring, evaluation and learning (MEL), mapping the evidence requirements of its diverse programmes and partnerships and articulating these in an evaluation strategy that sets out mid and longer-term objectives, and makes explicit the priority outcomes, how and by whom these will be measured. We also recommend that Google reviews its programme management systems and key performance indicators to identify opportunities for systematically capturing learning and insights in ways that build on existing reporting requirements to avoid creating an administrative burden.

We would recommend that Google uses evidence-based frameworks for MEL, drawing on high quality interdisciplinary research, while also attending to relevant European strategies and guidelines for media literacy so that Google's work in Europe is aligned with wider efforts within the sector. This includes engagement with the EU **Media Literacy Standards and Best Practices** which have been developed by EDMO on behalf of the European Commission and will aim to provide greater standardisation at an EU level. In lieu of these new developments, Google should continue to draw on the considerable body of research and evidence curated by Google Jigsaw and to align with established European media literacy frameworks and policy tools.¹⁵⁹

The study showed that, for Google's programmes, it remains paramount that Google continues its policy of not being directly involved in collecting personal data. Given this consideration, a strategic approach to MEL would require active engagement of intermediary organisations. It would be necessary to maintain separation between data gathered by partner organisations on satisfaction, competences gained, learning outcomes, and so forth, and the subsequent aggregation of these data for inclusion in reports to Google. There may be administrative and technical support requirements to empower partners to play an expanded intermediary role in MEL.

Recommendation 4

- › **Collate and synthesise evaluation data and evidence across Google's portfolio of programmes and partnerships, and host communities of practice as a mechanism to share and reflect on insights with the stakeholder community.**

Google has amassed a considerable amount of monitoring data across its programmes, offering insights to the scale of delivery, reach, and participation, but these data remain dispersed across Google teams, partner organisations and countries. We would recommend that Google sets in place arrangements to collate, review and deep dive on the learning across its programmes, bringing internal teams together and engaging partners in this process. These periodic 'learning reviews' would help Google to get the best out of the available data and evidence, which in turn would be strengthened by adopting a strategic approach to MEL, as above.

The stakeholder feedback gathered through the study showed a real appetite among Google's partner organisations and grant holders to share learning and make connections with others undertaking similar work across Europe. Establishing a community of practice or online forum for partners and stakeholders would be one potential way to support this learning community to share learning and experiences on an ongoing basis.

Recommendation 5

- › **Widen access to data from proprietorial tools and platforms for scientific research**

Google should consider ways in which it can deliver a response to the demand for improved access to data for the purpose of scientific research. The need for higher levels of data access to support research projects in the public interest is ongoing, and data needs also evolve as technologies and infrastructures change. While IP and commercial considerations are clearly important, working with the research community to establish parameters for data access so that public interest research can be conducted more often and more effectively, would be a significant contribution to the field. It would help to close important gaps in current evaluation research relating to how users respond to media literacy initiatives under real-world conditions, and would enable more robust insights into individual-level and societal level outcomes of media literacy initiatives over time.

Recommendation 6

- › **Commission high quality independent research and evaluation, to strengthen the interdisciplinary profile of Google's research portfolio, and making further use of 'real world' evaluation approaches, including mixed methods evaluations and longitudinal studies.**

We recommend that Google should continue to commission independent research and evaluation alongside measures to review and update MEL arrangements internally.

- There is a priority to better understand the efficacy of **community-based programmes** supported by Google, where the evidence base is less well established. This includes the work of Google.org grantees or organisations whose programmes are supported through curriculum development and grants. The use of controlled trials would be beneficial, to evaluate and refine the models of trainer-training and understand the critical success factors.
- For Google's **initiatives tackling disinformation** where proof of concept has been established, there is a greater priority to make use of mixed methods evaluation. This would enable Google to delve deeper into participant experiences and outcomes, and to understand the conditions that support or hinder Google's initiatives in different country and cultural contexts.
- Finally, Google should re-prioritise initiatives that emphasise **citizenship and critical thinking measures**, alongside their programme of work focussed on tackling disinformation. The use of sociological and socio-cultural frameworks for analysis could add real value to the evidence base in this area.

Recommendation 7

- › **Commission a new ethnographic study, using observational methods to understand end user's media literacy strategies and outcomes 'in the moment', with attention to seldom heard populations.**

Google could consider funding a research study to enhance the evidence base for longer term behavioural changes and outcomes from media literacy initiatives. This might take the form of a (digital) ethnographic study, using a combination of interviews, video diary evidence and observational research following real-time interactions of end users with media content. This study would be longitudinal, to capture change over time and understand how media literacy competences are acquired and applied, alongside choice behaviours. It would require a purposive sampling design to identify and engage participants who are representative of key target groups (including seldom heard or vulnerable groups) with attention to coverage of the main EU regions and/or different systemic conditions within selected countries. It would require an interdisciplinary research team, combining sociological and ethnographic expertise.

Recommendation 8

- › **Realise further transparency across Google's platforms and apps, going beyond Google's current transparency and Code of Practice reporting measures to equip the end user with information about the use of algorithms, and lead ecosystem-level actions to tackle disinformation.**

We recommend that Google builds on existing transparency measures to provide clear and accessible public information about algorithms used across its platforms and apps, empowering the end user with knowledge of how information reaches them and criteria for personalisation. This might include additional product tools and features prompting end users on commercial (paid for) content they have consumed, and fake news they may have been exposed to over a given period, alongside Google's established fact checking tools and features. Additionally, we recommend that Google undertakes further awareness-raising and signposting to raise levels of awareness of, and engagement with, its established transparency measures. These include Google's Safety Centre information and articles explaining their policies, and the publication of transparency reports.

Finally, Google should note the stakeholder feedback challenging tech providers to go beyond the **EU Code of Practice** to initiate cross-industry collaboration on tools and tech to tackle disinformation. While this requires a collective effort and is not within the scope of Google to act unilaterally, the study draws attention to the demand from the sector for an ecosystem-wide approach. As noted above, this requires careful consideration of how transparency can be balanced with protecting IP and commercial interests across platforms and providers.

Appendix One: Theory of Change logic models for the deep dives

Theory of Change: Prebunking

Rationale

What and why?

Disinformation online employs a range of rhetorical and narrative techniques to confuse and mislead users. Disinformation can focus on specific narratives but is often employs common techniques regardless of the topic. Everyone can be affected by misinformation online.

Behavioural science suggests that a range of techniques can help build resilience on online harms such as disinformation. Pre-bunking can equip users to identify manipulative techniques or question information they encounter online.

These techniques can be more scalable than fact checking as they give users prior insight and knowledge. Two predominant kind of information can be pre-bunked, being misinformation narratives and misinformation techniques.

How?

Pre bunking is an online campaign that aims to raise awareness amongst users of typical misinformation techniques. Short videos are presented to end users outlining typical narratives or rhetorical techniques that are employed to mislead people online.

The campaigns has been developed as part of a programme of research and development into how behavioural techniques can enable approaches that help users identify disinformation online.

Google also assessed which areas in Europe were most likely to have higher number of refugees and suffer from misinformation and disinformation campaigns after the start of the war in Ukraine and applied two-stage pre-bunking campaigns Google conducted country **needs assessment** with country partners to determine how to better vehiculate the message in the short videos.

Strategic vision

Pre-bunking campaigns help to empower users by enabling them to identify and understand the types of manipulative techniques that they are liable to encounter online so that they can make informed decisions about how they interpret information. Pre-bunking campaigns can anticipate risks and reach large volumes of Google's and social media users in ways that help to combat different and evolving misinformation tactics in local social and political contexts.

Outcomes

Short term

Users

- › Users who have viewed pre-bunking videos are more likely to be able to identify manipulative mis and disinformation techniques

Media literacy stakeholders

- › There is a repository of lessons learned, and data on outcomes and results from the different experiments and campaign phases

Google

- › A tested pre-bunking campaign methodology that can be applied to evolving misinformation challenges
- › A tested methodology of working with local stakeholders to create context-specific misinformation challenges

Medium term

Users

- › Users can make more informed decisions when engaging with different types of information online
- › Media literacy stakeholders Heightened awareness of the pre-bunking approach in media literacy and disinformation strategies

Google

- › There is a strategic approach to deploying pre-bunking campaigns in anticipation of disinformation
- › There are established partnerships with local partners to develop and implement pre-bunking campaigns and supporting activities
- › There is integration between pre-bunking approaches and campaigns with other Media Literacy tools, curricula and methods

Longer term

Improving information literacy

- › Misinformation techniques have less traction and salience in online media
- › Media literacy stakeholders
- › Pre-bunking techniques are integrated into a broader media literacy ecosystem
- › Pre-bunking campaigns are strategically deployed in anticipation or in response to risky events.
- › Pre-bunking campaigns are supported by integrated local media literacy campaigns including capacity building initiatives

Google

- › Google's tools activities contribute to the broader media literacy system

Inputs

Partners (Development + delivery)

- › Google teams
- › Jigsaw team
- › Country partners
- › Central European Digital Media Observatory (CEDMO)
- › Implementing partners (Moonshot team)

Resources

- › 6 short videos
- › Online blog articles and guides
- › Scientific publications

Roll-out and Localising

- › Country needs assessments to identify partners and experts
- › Translation of the materials and adaptations to the different contexts

Funding

- › Google only funder

Activities

Engagement

- › Investment with local stakeholders and the central European Digital Media Observatory to identify the best partners for the roll-out
- › Investment in development of campaign materials with Country partners and experts (e.g. Demagog, One World in Schools, Correctiv) better suited to answer community needs

Localisation

- › Implementation of the roll out of the campaign, collaborating with implementation partners and creative agencies
- › Development of campaign materials (short videos)
- › Delivery of online campaign on YouTube, Facebook, Twitter and TikTok in the four target countries
- › Development of follow up campaigns in different territories

Monitoring and Evaluation (M&E)

- › Collection and analysis of results Independent studies examining the materials and campaigns Randomised control trials
- › Metrics collected on viewership, volume of end users intercepted, difference in discernment

Outputs

Information literacy resources

- › Build robust evidence base with experimental data for media literacy initiatives.
- › Create detailed reports/articles outlining adopted approach and methodologies.
- › Publish materials on pre-bunking and proactive strategies against misinformation, including country-specific campaign videos.

Pre-bunking campaign CEE and Germany

- › 42 million views across platforms – over 50% of the online audience (YouTube, Facebook and Instagram)- 21M unique views on YouTube;
- › In Germany, viewers were 5.4% better at identifying three manipulation techniques;
- › In CEE viewers were between 0 and 8ppts better at identifying one of two manipulation techniques.

Moderating factors

- › **Localisation:** Ability to identify relevant campaigns within the country context (e.g. Why it didn't work in Slovakia)
- › **Engagement:** Ability to identify and deliver salience and relevance of campaigns, targeting the different key demographics differently
- › **Resources:** Scalability is key for a better outcome – which means an increase in the resources for pre-bunking campaigns
- › **Capacity building:** Pre-bunking campaigns need to be contextualised in a wider Media Literacy landscape and can be more successful if accompanied by a wider range of programs
- › **Successful partnerships:** Partnerships are a strong assumption for the success of pre-bunking campaigns, as Google's position in the policymaking arena can result in mixed reactions
- › **Ecosystem:** Ability to link and support the ecosystem, which means being able to link with information prompts and fact checking partners on the ground so ensure the relevance of the messages and of the trends

Theory of Change: Be Internet Awesome (BIA)

Rationale

What and why?

Children/youth are highly active in digital spaces, often without fully understanding the associated risks and responsibilities. With cyberbullying, online hate speech and data privacy issues on the rise, there is a clear need to ensure that children are equipped with the necessary digital citizenship and online safety skills to navigate responsibly online.

These topics can be overwhelming for educators and parents, especially since young people often have a greater aptitude for technology. Educators and parents thus need easy-to-use guidance and resources.

How?

BIA is a free, multifaceted online safety and digital citizenship programme aimed at children/youth.

Educators, parents (and the wider public) are provided with free guidance and materials (including ready-to-teach ISTE-aligned curriculum & lesson plans), accompanied by an online interactive game. BIA is open-source, so organisations can amend/adapt content as needed.

It was piloted and produced by Google in partnership with established internet safety experts in the US. It has since been scaled up, localised, translated and adapted to new country contexts with the help of intermediaries and local organisations (also with support from Google.org).

Strategic vision

BIA aims to provide educators, parents and the general public with the tools to strengthen children/young people's digital citizenship and online safety skills, so they can explore the online world with confidence.

Outcomes

Short term

Educators and parents are:

- › **More aware** of key online safety and digital citizenship risks and considerations
- › **Better prepared** to integrate the principles of digital citizenship and online safety into their teaching and parental support
- › **More efficient** in preparing lesson plans and activities (teachers) and providing parental advice/guidance (parents)
- › **Confident** in their work to strengthening the digital citizenship/online safety skills of children and young people

Medium term

Students are:

- › **Better equipped** to identify and respond to online safety risks
- › **Better skilled** in critically analysing online information sources
- › **Better able to engage** in ethical decisions online, including thoughtful sharing/communication
- › **More cognisant** of when, and how, to raise online issues with adults
- › **More confident** in interacting, posting, or clicking online

Longer term

BIA provides:

- › A **systematic approach** to strengthening digital citizenship and online safety education across different country contexts
- › A **sustainable program** offering digital citizenship and online safety curriculum, activities, trainings and other resources to educators, parents and the wider public that can be rolled out globally
- › Risks of online harm (including cyber bullying, online hate speech, data privacy issues amongst others) are minimised

Inputs

Partners (development + delivery)

- › Google (including regional/country teams)
- › Established internet safety experts (including Internet Keep Safe Coalition, ConnectSafely, & the Family Online Safety institute)
- › Local partners & intermediaries

Resources

- › Curriculum including activities & lesson plans
- › Online interactive game
- › Trainings & guidance
- › Online/offline activities

Global roll-out

- › Local stakeholder & partner consultations
- › Translation of materials

Funding

- › Local organisations (also with support from Google.org)

Activities

Development

- › Curriculum themes/materials decided upon/developed with subject experts

Delivery

- › Curriculum and activities rolled out through intermediaries and partners

Scaling up/localisation

- › Country-level/regional partners identify needs
- › Resources and delivery adapted to different languages/country contexts & target groups (e.g. children of different ages)

Monitoring and evaluation

- › Quantitative statistics on reach (e.g. no. teachers that have received training, no. uses of online game)
- › Annual surveys (e.g. via School With Class)
- › One-off local evaluations/impact studies/reports conducted e.g. by Belgian NGO BSF, others
- › ISTE independent audit

Outputs

- › Curriculum packages developed and adapted
- › Trainings conducted
- › Users reached via online game
- › Activities and events conducted on and offline
- › Local partner organisations supported

Moderating factors

- › Success of local adaptation
- › Quality and consistency of training delivery (where delivered)
- › Teachers/parents buy-in, competences and availability (comfortability with materials offered, time to engage with materials)
- › Governmental endorsements to leverage partnerships and formal education potential

Theory of Change: Super Searchers

Rationale

What and why?

The public access a variety of information via online platforms. Information literacy skills are key to navigating an increasingly complex information landscape. There is a need to help people to understand the tools and tactics that they can use to critically assess information online, and access high-quality information from reliable sources.

Libraries are central information hubs for local communities. The role of libraries has changed over the years. They increasingly support the public to access reliable online information and deliver media literacy initiatives. Similarly, schools and NGOs play an important role in supporting media literacy training. Libraries, schools and NGOs therefore provide a suitable environment for the delivery of media literacy training to improve the information literacy skills of the general public.

How?

Super Searchers is a train the trainer media literacy programme. Professionals (library, school and NGO staff) are trained on good practices to critically assess online information and provided with resources to cascade the training, providing the public with information literacy skills and tools.

The programme has been informed by information literacy experts and refined through a pilot. It models the use of the SIFT framework and Google's in-built Information Literacy features (e.g. About This Result). The aim is to help people to use existing information literacy tools and engage with online information effectively.

Google conducts country needs assessments, with country partners to determine the professional groups to target. Super Searchers can be delivered as part of existing Media Literacy programmes and commitments (e.g., library information training).

Strategic vision

Super Searchers is a **Google-supported train-the-trainer media literacy programme** for professionals. Its vision is to create a world where people have the skills and confidence to critically engage with online information. The programme provides a systematic approach to improving the media literacy of the public, and minimise the risks associated with low quality and unreliable information. Google's global partner associations, share this vision, and networks are central to the cascading the training to the public.

Super Searchers aims to build the information literacy capacity of professionals first, giving them effective and safe search skills and approaches to critically assess the quality and reliability of online information and sources. Trained professionals then cascade the training to the public, using freely available resources. The pilot focused on delivery to libraries and librarians/library staff; the programme has since, been expanded to new environments - schools/educators and non-governmental organisations (NGOs) and their staff.

Inputs

Partners (Development + delivery)

- Google team
- ML expert - Mike Caulfield, Washington University
- Public libraries association Public Libraries 2030
- Country partners

Resources

- Training materials: (translated into 7 languages)
- Slide deck
- Mike Caulfield's SIFT framework/ methodology
- Google's Information Literacy Tools
- 4x Training videos
- Super Searcher's Booklet (for training participants)
- Two-page handout (public).
- All resources freely available online

Global roll-out/localising

- Country needs assessments to identify partners and professional groups/ networks

- Translation of materials

Piloting

- 5-6 rounds of piloting
- Needs assessments conducted with Public Libraries 2030; the International Library Association; country partners, Mike Caulfield

Funding

- Google (only funder) - development/ ongoing delivery
- Small funding pots for library associations to deliver the training

Activities

Marketing/initial engagement

- Engagement activities and relationship building with professional bodies and networks
- Train the trainer element promoted and delivered via professional bodies and networks

- Librarians/schools/NGOs promote and deliver training within their existing media literacy programmes.

Train-the-trainer for professionals

- Free to access, interactive training session (virtual 45mins or in person 60-75mins)
- The training takes a modelling approach (i.e., demonstrates to professionals how they can deliver the training to beneficiaries).
- The training content includes:
 - Introduction to SIFT framework
 - Information on Google information literacy features: Content advisory, About This Result, About This Page, and Reverse Image Search.

Beneficiary training

- Usually in person (can be virtual)
- Either 1-to-1 or group delivery
- Training delivered by trained professional, using training resources, with local adapted for group

Localisation

- Pilot resources adapted for different languages/country context, and for additional professionals (educators/NGO staff).

- External Country Partners localise training materials/delivery.

Monitoring and Evaluation (M&E)

- Light touch. Metrics collected on:
 - N. of train the trainer and beneficiary trainings
 - N. of professionals trained
 - N. of countries delivered in
 - India- train the trainer post-surveys
 - Google internally developing M&E framework

Outputs

Information literacy resources

- A set of Super Searchers train the trainer model and resources developed
- Freely accessible Super Searchers resources available online, in 7 languages

Pilot outputs (2023)

- 1k libraries in 10 European countries reached
- Number of:
 - Libraries/library associations signed up
 - Train-the-trainer sessions delivered
 - Librarians trained
 - Beneficiary sessions delivered

Global outputs (Phase 2)

- Rollout in X number of countries
- Number of:
 - Libraries/library associations signed up
 - Schools/educator associations signed up
 - NGOs/NGO associations signed up
 - Train-the-trainer sessions delivered
 - Librarians trained
 - Educators trained
 - NGO staff trained
 - Beneficiary sessions via libraries
 - Beneficiary sessions via schools
 - Beneficiary sessions via NGOs

Outcomes

Short term

Librarians, Educators, and NGO staff

- More **aware** of information literacy features to help critically analyse online information, including safe search skills and assessing search results
- More **skilled** at engaging critically with information seen online and assessing the quality and reliability of the information source
- More **efficient** at online search tasks
- Confident to **cascade learning** to build the information literacy capacity in the public/ groups they work with

Medium term

General public/Beneficiaries

- People more **aware** of information literacy features, how to use these to critically analyse online information
- People **better able** to critically analyse online information, including search results and information sources
- People make **more informed decisions** about the online sites they visit and what online information (including search results) will be most useful for them
- Improved **confidence** in online searches, fact checking and assessing reliable information sources

Longer term

Improving information literacy

- Super Searchers provides a **systematic approach to building information literacy skills** and confidence for professionals and the public, so that they can critically engage with online content
- A **sustainable set of tools and resources** for training professionals and the public
- The risks of accessing and sharing low quality/ unreliable information are minimised
- Google**
- Increased use** of in-built information literacy tools

Moderating factors

- Localisation:** Ability to deliver the 'Train-the-trainer' sessions in the required languages
- Engagement:** Assumption that training content is appealing/of interest to target professionals and beneficiaries
- Resources:** Librarians/schools/NGOs (and their staff) will need the capacity/resources to market and deliver the training
- Quality assurance:** Risks to trained practitioners delivering training to beneficiaries as intended
- Outcomes:** Outcomes assume behaviour change following a one-off training/intervention; assumption that trained professionals and their beneficiary groups will return to the training materials over time
- Google team:** Ongoing development and delivery requires internal funding and resources
- Monitoring and evaluation:** Challenges of assessing long-term outcomes for professionals and beneficiaries.

A2.1 Super Searchers – explanation for the Theory of Change diagram

Inputs

Development

The Super Searchers programme was developed in partnership between Google leads and media literacy expert Mike Caulfield (University of Washington). It was piloted in 2022 in Europe, in partnership with Public Libraries 2030. The training content was refined following 5-6 rounds of piloting with librarians. The Google development team created a set of resources, including a slide-deck which includes interactive training videos, information leaflets for trainers and beneficiaries. All resources are freely available in seven languages: English, Dutch, French, German, Italian, Portuguese, and Spanish.

Country assessments

Before rolling the training out in a country or region, Google conducts a country assessment to make decisions on how Super Searchers would be best delivered, specifically through which types of professionals and professionals partner organisations. Therefore, the training has been delivered to librarians in Europe and the US and to educators in India, to date. Ahead of country rollout, Google works with select partner organisations, usually a professional body, such as a library association of educational improvement organisation, to localise the training materials, this includes language translation and the inclusion of country and culturally specific misinformation examples. The partner organisation also organises and delivers the training.

Funding

Google has funded the development and implementation of Super Searchers. There is a small team within Google that oversee its ongoing development and implementation. Google also provides small grants for partner organisations to facilitate in-country delivery.

Activities

The activities can be divided into 1) train-the-trainer sessions for professionals and 2) training for onward beneficiaries (e.g., patrons and school students). All training and resources are free-to-access. As mentioned above under inputs, materials are localised for each country, ahead of country-specific rollout.

Train-the-trainer sessions

The Super Searchers training is promoted to professionals via partner organisations to their members and networks. The training is also organised and delivered by the partner organisation. Training is either delivered online or in-person but always in groups; the online training is generally shorter (45mins), whereas in-person sessions tend to be longer (60-75 mins). The training follows a standardised structure, covering the SIFT framework, and Google information literacy tools. The training is designed to be interactive, encouraging self-reflection on current practices, conversation and debate about (mis)information examples, and practical application of the Google information literacy tools. The training also includes a conversation about how to cascade the training to the communities they work with.

Onward beneficiary training sessions (e.g. library patrons, school students)

Trained professionals then promote, organise and deliver Super Searchers to the communities they work with. Professionals are expected to use the Super Searchers slide-deck and training resources. The training can be delivered as a 1-2-1 or group session and is usually delivered in-person (but can be delivered virtually).

Although the training for professionals and onward beneficiaries is one-off, the materials are available for individuals to refer back to as needed.

Monitoring and Evaluation (M&E)

The M&E arrangements for Super Searchers is focused on collecting reach information, including:

- › Country partners
- › Geographic location of training
- › Target audience – librarians, educators, other
- › Number of trainings delivered
- › Number of individual (professionals: librarians, educators) trained

The M&E does not currently capture information on mode of delivery (in-person or online), participant experience, learning and outcomes. There are ambitions to collect the number of trainings and individuals trained by librarians and educators, but to-date, this information has been difficult to collect systematically.

Outputs

- › A key output of Super Searchers is **a set of training tools**: slide-deck, information materials for training and beneficiaries.
- › Google sets annual targets for the programme reach for the train-the-trainer sessions. In 2023, Super Searchers engaged:
 - **12 partner organisations** to deliver Super Searchers
 - The training was delivered in **13 countries**
 - **2711 professionals** were trained, across **26 training sessions**
 - The programme reached **educators, librarians, and NGO and media professionals**

Unfortunately, equivalent numbers of trained library patrons and school students are not available.

Outcomes

The intended **short-term outcomes are focused on trained professionals**. As a result of the training, the Google development team intend for trained professionals to be:

- › **Aware** of the SIFT framework and Google's information literacy features presented in the training: About this result, About this page, content advisory, Reverse image search.
- › Using these tools, participants are expected to be **more skilled** at critically assessing online information and more **efficient** and effective at online searches to access good quality information.
- › Furthermore, through receiving the training and discussing how to cascade the training, it is hoped that the trained professionals feel **confident** to deliver Super Searchers to their peers and communities they work with.

The intended medium-term outcomes are focused on onward beneficiaries (trained by trained professionals). As a result of the training, the Google development team intend for these beneficiaries to be:

- › **Aware** of the SIFT framework and Google's information literacy features presented in the training: About this result, About this page, content advisory, Reverse image search.
- › Using these tools, participants are expected to be **better able** to critically assess the quality of online information and make **more informed choices** about the online information they access and make use of.
- › As a result, they are expected to feel **more confident** in their online search practices, to access reliable and good quality information.

Impacts

The intended impacts of the programme are:

- › The free to access training and accompanying resources provide a **systematic approach to build the media literacy** of trained professionals and the communities they work with.
- › Given the train-the-trainer model and freely accessible resources, it is hoped that Super Searchers creates a **sustainable media literacy intervention**, which can be rolled out to a large number of individuals, across a range of settings.
- › Ultimately, it is hoped that through the training, and upskilling individuals, that they are able to critically assess the quality of information, and access truthful and good quality information, therefore **reducing the risks associated with accessing misinformation**, which can be harmful at the individual and societal levels.
- › Finally, it is hoped that the Super Searchers programme raises the **awareness and use of Google's in-built information literacy features**.

Appendix Two: Further information on the selected initiatives

A2.1 Research and evaluation for BIA – key studies and their findings

Date	About the study (methods and approach)	Key findings
2023	<p>School with Class, Google.org's grantee in Central and Eastern Europe, produced an impact report based on data provided by BIA national partners from Croatia (Suradnici u učenju), the Czech Republic (Jules and Jim), Greece (FORTH), Romania (AdFaber) and Slovakia (Manageria), and themselves (School with Class) in Poland¹⁶⁰. Teachers who obtained BIA training and students who experienced BIA as a result of their trained teacher were asked to provide feedback through two online surveys. On average, the questionnaires were filled in four to six months after the completion of the program by the respondents. The delay was purposeful so that students and teachers had some time to experience the potential benefits of the program in their daily lives.</p> <p>Students self-evaluated the BIA program effects using the following five criteria: Usefulness in the daily utilization of the Internet; Confidence; Knowledge; Implementation of what was learned; and Communication with others online. The teachers participating in the programs provided information on their experiences using the following four criteria: Usefulness of BIA for the students; Reported follow-up inquiry on BIA topics by the students; Reported implementation of BIA knowledge/competencies by the students; The impact of BIA activities on other educational activities. Altogether, the impact report was based on data from 1845 high-quality questionnaires from students and 2372 complete and high-quality questionnaires from teachers.</p>	<p>This study found that the organisations leveraging BIA in CEE have reached more than 500,000 teachers and students in Central and Eastern Europe¹⁶¹. It found that overall, over 90% of the students agree that participation in the BIA program was useful in their everyday use of the Internet¹⁶². Almost 84% of positive answers in total indicate that after participation in the BIA program, students feel confident using the Internet. Almost 88% of students agree or strongly agree that their knowledge of how to be safe online increased as a result of participation in the BIA workshops. Over 86% agree or strongly agree that participation in the BIA workshops increased their knowledge of kind communication with others. Around 86.5% strongly agree or agree that they have implemented what they have learned in the BIA classes into everyday practice.</p> <p>The impact assessment also observed small but statistically significant differences between the answers of boys and girls ($p < 0.01$) (the differences were mostly 2–3 percentage points). Generally, boys slightly more often provide negative answers or use the “I don't know/hard to assess” option in the evaluation questions. The school location also played a statistically significant role in the answers provided by the respondents. Generally, students from schools located in villages and small towns evaluated the BIA classes higher than those from schools located in large cities. The differences here were not large (4–5 per cent points) but were statistically significant ($p < 0.01$). The reason for this result is not clear and requires further investigations. It is also important to address the gender differences. The program is slightly better evaluated by girls and female teachers. The factors influencing this situation will be discussed by the coordination teams in all the evaluated countries¹⁶³.</p>

Date	About the study (methods and approach)	Key findings
2023	There are numerous videos and impact stories of how BIA has affected teachers and their classes around Europe published by School With Class¹⁶⁴	For example in Poland, a pre-school director explains how they learned a lot about internet safety from the BIA curriculum, and that both students (as young as 4 years old) and teachers explore these topics together ¹⁶⁵ . The impact story video shows that even children as young as 4 are beginning to work with concepts such as kindness online and bravery against cyber-bullying, or being alert. The video shows teachers asking questions such as “what does it mean to be internet alert”, and a young child responds to say, “not clicking everything you see”. Lessons on online kindness also have translated into better classroom dynamics and friendships across the year. Children use some words they have learned from BIA to describe situations they are in ¹⁶⁶ .
2021	The Be Internet Awesome programme underwent a thorough evaluation by the University of New Hampshire’s Crimes Against Children Research Center¹⁶⁷ . The study used a cluster randomized control trial methodology (CRCT) to evaluate the impact of BIA on knowledge, attitudinal, and behavioural outcomes for 1072 4th–6th graders at 7 treatment and 7 control schools.	<p>The study found support for programme impact on children’s knowledge of new online safety concepts and self-efficacy for handling online problems relative to students in control conditions. However, no program impact was found for other outcomes including online privacy or civility, cyberbullying, and talking with parents about online problems. Findings highlighted the need for clarity on digital citizenship program goals, innovative approaches, and increased evaluation research. It should be noted that the media literacy and socio-emotional lessons that were later added to the BIA curriculum were being developed at the time of writing.</p> <p>However, the BIA programme developers clarified that BIA’s strategy since 2017, based on longstanding recommendations by the UNH researchers, is to engage subject matter experts in digital literacy and social-emotional learning and media literacy in ongoing content development. Google partnered with an established NGO called Committee for Children on social emotional learning lessons that were added while the UNH study was being developed.</p>

Date	About the study (methods and approach)	Key findings
2021	<p>The Belgian Google.org grantee Bibliotheques Sans Frontieres (BSF) developed an impact study of their work with BIA¹⁶⁸. Data collection tools included a series of surveys, evaluation forms, interviews, and simple case studies to test students' skills following their participation in a BIA activity. Teachers and parents who had participated in a training or workshops were offered the online survey, and a paper evaluation form was distributed to children who participated in activities. To test out the actual skills acquired by students on the 5 topic areas of the program, a quiz was designed by the external evaluator. For each pillar, students were put in a series of concrete situations (case studies) and asked questions to evaluate their understanding of the key learning points. In total, about 550 BIA participants shared their feedback and impressions (Students: 339; Teachers: 153; Parents: 52)¹⁶⁹.</p>	<p>There were 236 schools participating in BIA activities organised by BSF in 2021. 250 teachers have been trained and 700 have been involved via digital info sessions or webinars. The programme has reached over 39,000 students (through activities) and 19,010 parents (through webinars). The impact study found the following: 80% of the trained teachers now feel more comfortable to understand, discuss or address cybersecurity and/or digital citizenship in their classrooms; 76% of the reached children have increased their ability to identify danger online.</p>
2021	<p>Research was commissioned by Google and run by Ipsos among 1,638 primary school pupils in years 3-6 at 16 schools in the UK where Google has carried out Be Internet Legends training. Selected pupils completed a paper 'pre' questionnaire to understand their existing knowledge, prior to receiving Google online safety training. Some pupils subsequently received the Google training during the period of the research study (trained group), whilst others did not receive the training during this period (control group). All pupils were then asked to fill out a second 'post' questionnaire 2-3 weeks after the training period. Differences between children's understanding before and after the training were used to measure the impact of the training on understanding of online safety¹⁷⁰. To meet the criteria of 'understanding online safety' at an overall level, a pupil must agree with any statement in the questionnaire and not disagree with any statement. If a pupil didn't meet this criteria in the pre-questionnaire but did in the post-questionnaire, their understanding is said to have increased.</p>	<p>Following training, children are twice as likely to show an improved understanding of internet safety than those who hadn't received the training. The study found that understanding how to spot at least one clue that something may be suspicious, misleading or a scam online, increased threefold among children who received training. Around 7 in 10 of the children who participated in the training know how to spot Phishing online, an increase from 2 in 10 before the training. Twice as many children who received Google training spotted someone trying to trick them into sharing personal information by 'Phishing' compared to those who haven't received the training. Moreover, the study identified that two weeks after receiving Google training, half of the children in years 3 and 4 said they had changed their password online compared to just over a quarter who didn't receive the Google training; and two weeks after receiving Google training, 7 in 10 children in years 3-6 report having been kinder in the way they say things online¹⁷¹.</p>

Date	About the study (methods and approach)	Key findings
2020	<p>The Institute for Strategic Dialogue (ISD) carried out a study in 2020 about Be Internet Legends in the UK. They evaluated the delivery of the Be Internet Legends curriculum in four different primary schools across the UK, which are representative samples of the schools that have participated in the programme. In each of these four schools, they delivered pre- and post- surveys to all Key Stage 2 children, a selection of children participated in a qualitative focus group, and two teachers participated in semi-structured interviews about their experience with the curriculum. The surveys primarily consisting of self-assessed confidence measures. Here, children rated their own confidence between 1-7 on a Likert scale¹⁷².</p>	<p>In 2018, Be Internet Legends delivered over 800 assemblies in primary schools across the UK, training 120,000 children. Additionally, over 18,000 primary school teachers ordered the resources online, with 53% of them reporting they had used them with an average of 100 children, reaching over an estimated 955,000 children in total¹⁷³. Overall, 8 in 10 primary school children (83%) who completed the Be Internet Legends programme said that they would behave differently online as a result of having learned how to be more positive through the lessons. The largest increase in average confidence was observed in children in years 5–6 on how to build a positive digital footprint online. Other findings of the study include: approximately 9 in 10 children in years 3–4 (88%) reported being confident to speak to an adult about things they encounter online after the programme, compared with under 8 out of 10 (78%) beforehand; 8 out of 10 (81%) children in years 3–4 could name the key elements of a strong password after the programme, compared with less than half (47%) beforehand; approximately 4 out of 10 (44%) children in years 5–6 were able to identify scammers after the programme, compared with approximately 2 out of 10 (25%) beforehand, demonstrating improvements in their critical thinking skills in judging online content to be deceptive and unreliable.</p>
Date unspecified	<p>In Romania, the organisation leveraging BIA (AdFaber) visited 300 schools in the period of 1 month, with a branded BIA car. They visited schools which were delivering BIA and those who were unfamiliar with the programme, and tried to assess the impact of the programme by collecting informal stories from school staff and students. They collected a large number of stories and were able to get a glimpse into how the programme affected children.</p>	<p>AdFaber found that in primary schools delivering BIA children knew about the concept of digital footprints and they expressed that the BIA curriculum helped them understand this topic</p> <p>In Romania, AdFaber trained over 30,000 teachers with BIA.</p>

Date	About the study (methods and approach)	Key findings
Ongoing	<p>In Croatia, the organisation leveraging BIA (Suradnici u ucenju) conducts quantitative and qualitative data for their M&E of BIA. For example, the schools they work with publish articles about their work with BIA; they implement satisfaction surveys; they hold roundtable discussions with children; they take videos of their field visits to schools; and they also gather regular feedback from their BIA ambassadors (teachers who are committed to teaching BIA) through monthly meetings. They also gather data by asking children to create resources or responses to media literacy topics that they have learned about. For example, they recently gave children the task of “creating a podcast about what you’ve learned through BIA”. Furthermore, on Safe Internet Day, Suradnici u ucenju organised a round table with students, discussing the impact of different media on them.</p>	<p>Key results in Croatia show that during the first two years of implementation of the “Be Internet Genius” programme in 2021 – 2023: 12,498 students (about 50% of them in a disadvantaged position) were reached, 10,022 teachers were trained, 1150 schools were researched, and 100% of teachers ready to implement online safety activities</p> <p>The organisation noted that even 9 year olds produced reflective and meaningful responses to project prompts such as creating a podcast about BIA. Based on the information they received from these various inputs, they adapt their materials and create appropriate resources and also create different delivery modalities such as card games or drama workshops about BIA</p>
2017	<p>A Critical Analysis of Google’s Child-Focused Internet Safety Programme¹⁷⁴ by Jim Seale and Nicole Schoenberger critically examines the content and underlying messages of Be Internet Awesome to discover how it conceptualises and presents Internet safety threats.</p>	<p>This study revealed that although Be Internet Awesome was well designed and addresses common Internet safety themes, the awareness it aimed to help children gain was not comprehensive. Specifically, they argued that the programme failed to consider the usage of information past a surface level, ignores elements outside of the user’s control, and portrays Google as a benevolent and authoritative Internet expert . More specifically, the authors’ findings suggest that the language and central tenets of the program emphasize personal responsibility but fail to address elements of Internet safety outside of the user’s control. For example, the authors explain that the programme ignores risks incurred through organizational data breaches and portrays trust in organizations like Google as a sound Internet safety strategy . The program does focus on individual users and the ways in which they use and misuse information, but it remains silent on the role that organizations play in user privacy and information security.</p>

A2.2 Super Searchers Teacher post-training survey, India

What age are the students you teach? (select multiple age groups as needed)

<input type="checkbox"/> 5-7 years old
<input type="checkbox"/> 8-11 years old
<input type="checkbox"/> 12-14 years old
<input type="checkbox"/> 15-18 years old
<input type="checkbox"/> 19 to 24 years old
<input type="checkbox"/> 24+ years old

What subject do you primarily teach?

<input type="checkbox"/> English, Reading, or language Arts
<input type="checkbox"/> Social Studies, Civics, or Politics
<input type="checkbox"/> Literary or Information Sciences
<input type="checkbox"/> Debate Club
<input type="checkbox"/> Other (fill in)

Which of the following best describes how you currently teach each media or information literacy?

<input type="checkbox"/> I follow an existing curriculum for media or information literacy, created by someone else
<input type="checkbox"/> I've created/co-created my own media or information literacy curriculum that I use with my students
<input type="checkbox"/> I try to bring media and information literacy concepts into lessons I teach on other topics, when possible
<input type="checkbox"/> I don't currently integrate media or information literacy into my classroom
<input type="checkbox"/> Other (fill in)

How easy or hard was this programme to understand?

Very hard 1	2	Neither easy nor hard 3	4	Very easy 5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How confident do you feel in your ability to teach students this material?

Not at all confident 1	2	Somewhat confident 3	4	Very confident 5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How much do you agree or disagree with the following statement: The workshop activities were engaging and interactive.

Strongly disagree 1	2	Neither agree nor disagree 3	4	Strongly agree 5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What worked really well about today's Super Searcher training?

What **didn't work** well about today's Super Searcher training?
What are you still confused about, or didn't understand?

What is your biggest challenge in teaching information and media literacy to your students?

In your opinion, what would most help you address this challenge?

Do you teach any specific tools or tactics to help students practice information literacy?
If so, check **all** the options below that closest represent the tools or tactics you use.

<input type="checkbox"/> Read the 'about' section of a website or source
<input type="checkbox"/> Look for typos or design flaws from the source
<input type="checkbox"/> Look for primary sources
<input type="checkbox"/> Look for additional evidence elsewhere
<input type="checkbox"/> Ask a friend or family member
<input type="checkbox"/> Use Reverse Image Search to find out more
<input type="checkbox"/> Use Google Search to find out more
<input type="checkbox"/> Use YouTube to find out more
<input type="checkbox"/> Use a social media platform (Facebook, TikTok, etc.) to find out more
<input type="checkbox"/> Find more perspectives on the same topics
<input type="checkbox"/> None of the above
<input type="checkbox"/> Other (fill in)

How confident are you in your students' current ability to evaluate the trustworthiness or credibility of information they find online?

Not at all confident 1	2	Somewhat confident 3	4	Very confident 5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How confident are you in **your own** ability to evaluate the trustworthiness or credibility of information **you** find online?

Not at all confident 1	2	Somewhat confident 3	4	Very confident 5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix Three: Research tools

Topic guide for key stakeholder interviews Case studies (mini-evaluations) of media literacy initiatives

Interviewer note

This source topic guide is intended to form the basis of interviews for the evaluations of specific (types of) media literacy initiatives. The questions are mapped to the study framework from the inception report and are designed to allow a degree of generalisability and comparability between the selected MLIs. Separate topic guides are available for beneficiary interviews and for Theory of Change workshops.

Prior to the interview, the sub-teams overseeing each mini-evaluation should tailor the topic guide to reflect the specifics of the MLI and its characteristics, e.g. by adding further prompts and adjusting the terminology. The interviews should last between 45 minutes and 1 hour, and recorded with respondents' permission, to complement written notes. Write-ups should be added to the analysis grid.

Respondent ID	
Respondent job title	
Organisation	
Date and time of interview	
Researcher	

Introduction

Thank you for agreeing to speak with me today. As outlined before the interview, Ecorys is carrying out a media literacy policy study on behalf of Google. The study aims to assess the current media literacy landscape in Europe, explore how this is changing, taking into account emerging technology such as generative AI, and to make policy and practice recommendations.

Our discussion today is one of a number of interviews with key stakeholders who are involved in the design or delivery of [insert type of MLI]. The interview is confidential. We will be using the data to write a final report for publication, but we will not name or otherwise identify individuals who took part.

With your permission, I would like to record for my own notes only. Is that OK?

Do you have any questions before we start?

*** Begin recording ***

Professional and organisational background

- › Can we start with an overview of your role and professional background?
- › How did you come to be involved with the initiative?
- › What type and level of involvement have you (and your organisation) had in it's development?

Background to the initiative

What were the origins of the initiative and what did it set out to achieve?

- › Aims
- › Target groups
- › Geographical coverage
- › Activities
- › Intended outcomes

How and when was it first developed, and who was involved?

- › What came before and how did it build on this?

What changes have been made to the initiative over time?

- › What prompted these changes?
- › How and by whom were they made?
- › What has been learned (what works, but also what does not work)?

Lessons learned from set-up and implementation

What have been the main barriers and success factors for implementation?

How and where has the initiative been established with greater or lesser success?

- › Why might this be the case?
- › What is the supporting evidence for this?
- › Strengths and limitations for scalability/replicability?

What are the specific lessons learned and insights with regard to:

- › Capacity building for civil society organisations
- › Working with intermediaries to reach 'seldom heard' groups.
- › Adapting MLIs to specific needs or vulnerabilities (e.g. SEND, trauma)
- › Building resilience to manipulation for different audiences (older, younger, political orientation, etc)
- › Reaching and engaging citizens who don't trust institutions (e.g. influencers, crowdsourcing or peer-to-peer)

Monitoring and evaluation arrangements

What use has been made of monitoring and evaluation for this initiative?

What is measured, how and by whom?

- › What kinds of metrics and KPIs are used,
- › What are their strengths and drawbacks?

What are the main (e.g. skills/resource/practical) challenges for monitoring and evaluation?

How have they been (or might they be) overcome?

Impact and outcomes

How, specifically, are media literacy outcomes defined and measured for this initiative?

What evidence is there for the impact or outcomes from the initiative? *Probe the following:*

- › What do we know/has been measured?
- › What don't we know/hasn't been measured?
- › Any examples of evaluation and if so (how) have they been validated?

What has Google's funding and in kind support achieved that would not otherwise have been possible?

Based on the available evidence, what factors have enabled or hindered the outcomes achieved?

To what extent have outcomes differed...

- › Between country or regional contexts?
- › Between target groups?
- › What factors might explain these differences?

What further research, monitoring or tracking might be undertaken to better understand the behavioural changes accruing from the initiative?

What are the key takeaways for others involved in designing and implementing ML initiatives?

Responding to the changing media literacy landscape

Looking at current developments in Europe and on a global scale, how is the media literacy landscape changing? *Probe the following:*

- › The impact of new technologies (such as Gen AI)
- › Changing regulatory frameworks at national and EU levels, and
- › Other political or social changes (including wider patterns of media consumption)

What are the new or emerging opportunities?

What are the new or emerging risks? *Probe the following:*

- › News avoidance and mistrust in the media.
- › Malign influences such as extremism, hate speech or misogynistic content
- › Concerns about the misuse of AI (e.g. deep faked content to spread mis or disinformation in the context of elections, conflicts or emergencies)
- › Concerns about the loss of critical thinking or research skills

To what extent are these opportunities and risks moderated by different policy or regulatory responses?

Probe the following:

- › How or whether the legality of harmful content differs across Europe (and with what consequences)
- › Similarities and differences in the profile of online risks or harms encountered between countries, and what factors drive these variations, e.g.
 - public awareness
 - education policies
 - base levels of media literacy within the general population, etc

How have Google and partners responded to capitalise on the opportunities and address the risks?

The future of media literacy initiatives

What types of media literacy initiatives are most needed in future, and what is their potential role?

Probe the following:

- › Education-focussed programmes
- › Community programmes
- › Campaigns and behavioural interventions
- › Product tools and features
- › Fact-checking networks
- › Crowd-sourcing or community moderation (e.g. Wikipedia, Reddit)

Are there any types of ML initiatives that you consider to be less effective?

Or major evidence gaps requiring further research?

What future actions are needed to improve the quality and effectiveness of media literacy initiatives and how they are funded and delivered in Europe?

What roles should be played by:

- › Public authorities
- › Industry
- › Civil society
- › General population

What governance arrangements might support these actors to collaborate effectively?

How might Google optimise it's reach and engagement in Europe to build and maintain trust?

Closure

Are there any other key messages not covered during the interview?

Thank respondent and close the interview.

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- 4 For further analysis of different types of psychosocial interventions see: Kozyreva, A., Lorenz-Spreen, P., Herzog, S., Ecker, U., Lewandowsky, S., Hertwig, R., ... & Wineburg, S. (2022). Toolbox of interventions against online misinformation and manipulation. Available at: <https://osf.io/preprints/psyarxiv/x8ejt>
- 5 Further information available at: <https://blog.google/around-the-globe/google-europe/supporting-elections-for-european-parliament-2024/>
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- 7 It should be noted that Google also provides fact check labels in Search outside of elections and supports global and EU fact check funds outside of the context of elections. For example, this includes the IFCSN Global Fact Check Fund.
- 8 The initiative was supported by Libraries without Borders, Debating Europe and BBC Media Action for EU wide videos; AFP, Conspiracy Watch, Génération Numérique, Mouvement Européen France, Square in France; Alfred Landecker Stiftung, Alfred Landecker Foundation, Das Netz, German Dream, Klicksafe, Neue deutsche Medienmacher:innen in Germany; Italian Digital Media Observatory in Italy; and Demagog in Poland.
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- 18 Study on media literacy and online empowerment issues raised by algorithm-driven media services (SMART 2017/0081)
- 19 The survey was promoted via the Media and Learning Association newsletter, social media channels, and shared with representatives of the European Digital Media Organisation (EDMO) regional hubs.
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- 53 English, Español, Portuguese, Italian, French, Turkish, Hebrew, Arabic, Thai, Indonesian, Dutch, Ukrainian, Polish, Japanese, Korean, Mandarin, Vietnamese, Urdu. Based on evidence provided by Google representatives on 12/04/2024.
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- 61 Spreadsheet shared by Google Marketing Managers on BIA launches in Europe.
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tomorrow's
challenges
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Albert House
Quay Place
92-93 Edward Street
Birmingham
B1 2RA

T: +44 121 827 9151

E: birmingham@ecorys.com

ecorys.com