



# EVIDENCE BRIEF LEARN TO DISCERN

Learn to Discern (L2D), IREX's media literacy training program, is a human-centered solution to prevent the spread of the manipulative information, disinformation, hate speech, and propaganda that appears across today's information sources.

L2D equips individuals to recognize disinformation and think critically about the sources from which they receive information. In doing so, this training advances communal resilience against disinformation as well as hate speech and promotes decision-making based on more trustworthy information.

## The L2D Approach

To build resilience against manipulative information, L2D trains individuals who engage with media and information on how to navigate these spaces in a safe, critical, responsible, healthy, and empathy-driven way. L2D empowers individuals, communities, and institutions (including school systems) to protect their own and others' well-being, dignity, and humanity in digital spaces by teaching them to:



Identify and use good quality information in making decisions



Recognize and mitigate the impact of manipulative information



Curb the spread of such information

L2D recognizes that the roots of vulnerability to disinformation and hate speech are in the human brain and in the media and information infrastructure. Therefore, trainees first learn how to practice emotional control, cognitive reflection, critical and analytical thinking, empathy, and other mental habits to overcome intuitive—yet addictive and highly manipulative—features of today's informational ecosystem. Only after trainees learn this are they taught how to build technical skills (such as cross-checking information and verification techniques) to identify misinformation. Trainees also learn techniques for overcoming social incentives (e.g., the desire for validation or belonging) which can lead to engagement with untrustworthy information.

Since its launch in 2015, L2D has been adapted with local partners and audiences in more than 20 countries in all regions of the world.

Across each country, L2D was delivered in formats as diverse as its audiences, and every iteration offered multiple pathways to long-term resilience while also addressing immediate threats to information integrity.

L2D adaptations have included in-person and virtual peer-to-peer workshops, blended and self-directed online learning, integration into secondary and higher education, gamification and play-based methods, and broadcast and social media “inoculation” campaigns.

Throughout each adaptation, L2D has been shown to be effective in:



Building resilience against state-sponsored disinformation



Inoculating communities against public health misinformation



Promoting inclusive communities by empowering their members to recognize and reject divisive narratives and hate speech



Improving individuals' ability to navigate increasingly polluted online spaces



Enabling leaders to shape decisions based on facts and quality information

## The Evidence Behind L2D

Multiple ways exist to effectively tackle the problems of disinformation, propaganda, and malign influence—from strengthening the supply of and access to credible content to attacking malign narratives to engaging the technology sector in AI and media literacy solutions.

L2D methodology is based on a strong foundation of evidence from a variety of relevant fields, including media and information literacy, psychology, and behavioral science.

IREX's L2D teams are continually evolving L2D methodology to incorporate findings from research and external evidence as well as lessons learned through L2D implementation. In fact, many aspects of L2D—from its human focus to the competencies that it builds—are informed by what has been proven effective when building resilience to manipulative influence.



Given the wealth of this evidence that the propensity to believe and share manipulative information goes beyond fact checking ability or knowledge of news media, IREX intentionally integrated disciplines beyond traditional media literacy into the L2D approach to create a more comprehensive and impactful response to the threat of manipulative information.

### **Insight from Media and Information Literacy**

L2D methodology is informed by scholarship on media and information literacy, which has been proven effective across different contexts as a response to disinformation (Huguet et al. 2019) and studies on the integration of media literacy into school curricula have found a range of positive effects, from resilience to disinformation to improved critical thinking skills (Charlton 2019; Forsman 2019; Helmus and Kepe 2021; Huguet et al. 2019; Helmus et al. 2020; Duran et al. 2008; Vraga et al. 2012; Jeong, Cho, and Hwang 2012; Kahne and Bowyer 2017). Moreover, some studies have shown that the effects of media literacy interventions persist over time (Bergstrom, Flynn, and Craig 2018) and that training remains effective when delivered in different ways and by different groups (Kong, 2014; Kong et al. 2012). In Europe, critical media literacy has emerged as one of the top policy recommendations for addressing disinformation alongside designing a better information ecosystem, strengthening democratic resilience, and improving platform regulation (Bayer et al. 2021).

### **Insight from Psychology and Behavioral Science**

In addition to media literacy, IREX drew on human-centered approaches on building resilience to information manipulation in the initial design of the L2D training that was implemented in Ukraine in 2015. The evidence shows that a range of cognitive, social, and affective factors influence the formation of false beliefs—including factors like a lack of analytical thinking, emotional state, and personal world views (Ecker et al. 2022). Other studies have found similarly that excessive reliance on emotion promotes belief in false narratives, leading researchers to advise that counter-disinformation interventions incorporate strategies to make the public less emotional consumers of news media (Preston et al. 2021; Martel et al. 2020).

Researchers have found that approaches which incorporate emotional regulation and identification through empathy can be used to counteract fake news (Joachim et al. 2021). Cognitive reflection skills have been found to be critical, too; several studies have found that those who practice these skills are more discerning in their use of social media, including in the types of accounts followed and the reliability of news shared (Pennycook and Rand, 2019; Stecula and Pickup, 2021; Mosleh et al. 2021). Other factors, including stress response, mental health, strength of personal identity, and more, have also been associated by researchers with the ability to inoculate oneself against manipulative narratives (Bermes 2021; Chang et al. 2019; Ecker et al. 2022).



## L2D's Impact in Various Environments

IREX has evidence of L2D's effectiveness in three main types of programs: resilience building through education systems, leveraging community-based trust networks, and providing a rapid response to threats to information integrity.



### Building long-term resilience through education systems

IREX has worked with schools to integrate L2D into instruction methodology; with universities, to enrich existing courses and create new ones; and with schools and universities to add high quality extracurricular options. In all of these instances, IREX has used a combination of online and blended learning delivery methods. Across all these instances, we see improvements in critical engagement of media ranging from 24% in an online self-learning environment to 70% in a program where a Ministry of Education has integrated L2D competencies in public schools.



### Peer-to-peer training through community-based trust networks:

To reach out-of-school audiences, IREX works with local community networks to build skills through peer-to-peer formats. For example, in Jordan, youth-led peer training supported young people in improving their skills and abilities to analyze information in their traditional and social media streams by 97% and their confidence and sense of control in navigating these spaces by 41%.

In Ukraine, IREX's local key influencer led trainings that reached more than 90,000 people in nine months. An assessment 18 months after the trainings occurred demonstrated that L2D has imparted a long-lasting ability to recognize disinformation. Participants continued to be 25% more likely to check multiple news sources and 13% more likely to discern between disinformation and a piece of objective reporting (Murrock et al. 2018).



### Rapid and at-scale campaigns to curb the spread of manipulative information and trigger resilience habits:

When the threats to the information space are immediate and the time to address them is short, IREX has found that online campaigns are an effective way to quickly reach audiences at scale. We have utilized online campaigns to curb the spread of manipulative content in Serbia, Sri Lanka, and Indonesia.

In addition, a 2020 randomized control trial conducted by the RAND Corporation tested IREX's media literacy social media materials in the U.S. and found them to be effective in reducing engagement with Kremlin propaganda by even the most partisan news consumers (Helmus et al. 2020).

## How to Build a Context-Responsive L2D

L2D initiatives have been adapted with local partners in every context where they are implemented and no two L2D projects are the same. Below are some common types of questions that IREX has found useful in the process of co-designing L2D training with local stakeholders.

### Where can you effect change?

This is a big picture question that focuses on adaptation in terms of scope. It's the question IREX and its partners ask to identify which level of the system can be addressed with available resources, capacities, and connections. Some partners are well positioned for building resilience among individuals through training programs, while others can better contribute to system-level change through civil society and government engagement.

### What's possible in your information environment?

It is important to assess what is possible, productive, and effective in each political, regulatory, and structural environment. Borrowing solutions across contexts without understanding how they play out in different environments could not only be ineffective or counterproductive, but it could also be dangerous.

### What are the needs and challenges of your target audience?

Whether your target audience is the general population, vulnerable individuals attacked by hate speech, voters, policy makers, youth, etc., you need to adapt L2D to their information engagement habits and content that resonates with them. What narratives are directed at them? What are their values and emotional triggers? Where do they place their trust and what motivates them?

### What is the manipulative information “value chain” in a context and which part of it can we address?

This question can be answered through use of tools (e.g., [the Vibrant Information Barometer \(VIBE\)](#)) and media and social media monitoring) that assess the context, how different players

interact within it, how manipulative information manifests itself, and the impact it has. Questions to consider include: where does it originate (foreign, domestic, or both); who is behind it; where does it spread and how (e.g., broadcast, digital media and information, word of mouth, etc.); who does it target and why; and what is its impact? Answering these types of questions will provide insight into which links of the chain you can address and allows you to tailor your response.

#### Vibrant Information Barometer (VIBE)

VIBE is an annual study that tracks how information is produced, spread, consumed, and used. It aims to account for the reality that many people are simultaneously producers, transmitters, consumers, and users of information. It includes four principles of information vibrancy:

- ☑ Information Quality
- ☑ Multiple Channels: How Information Flows
- ☑ Information Consumption and Engagement
- ☑ Transformative Action: How Information Drives Behavior

### Which trusted stakeholders and partners can understand the context and implement responses?

Information engagement is a very personal, often identity-tied and formative experience. Engaging trusted actors—individuals, organizations, local news outlets and even systems (such as media and education, where they are trusted)—makes an L2D adaptation more enduring and cost-effective.



## Interested in Learning More?

Dive deeper by checking out the resources listed below. You can also find additional resources and contacts for the [L2D team on IREX's L2D webpage](#).

### IREX L2D resources:

#### Manuals:

- [Learn to Discern \(L2D\) - Media Literacy Training | IREX](#)
- [Learn to Discern: Media Literacy Trainer's Manual | IREX](#)

#### Articles:

- [What we learned about building resilience to manipulative information from Learn to Discern | IREX](#)
- [Winning The War On State-Sponsored Propaganda: Results From An Impact Study Of A Ukrainian News Media And Information Literacy Program \(uri.edu\)](#)
- [Randomized control trial finds IREX's media literacy messages to be effective in reducing engagement with disinformation | IREX](#)
- [What we learned about building resilience to manipulative information from Learn to Discern | IREX](#)
- [Online games and activities can help people recognize COVID-19 disinformation | IREX](#)
- [Stopping Disinformation | IREX](#)
- [How IREX can help communities respond to COVID-19 or prepare for future pandemics | IREX](#)
- [Strengthen Media Literacy to Win the Fight Against Misinformation | Stanford Social Review](#)
- [IREX and the Great Courses launch online course to fight misinformation and disinformation | IREX](#)

#### Public Service Announcements:

- [Ukraine PSA - A public service announcement as part of a media and information literacy campaign in Ukraine](#)
- [Keluarga Anti Hoax - Sitcom Style PSAs from Indonesia](#)

#### Free Online Courses:

- [Very Verified](#) - An online L2D course in English for adult learners in Ukraine
- [Jordan Learning Management System](#) - An online L2D course for youth in Jordan
- [The Great Courses online course](#) - IREX partnered with The Great Courses online to create this online course tailored to a US context
- [Very Verified Baltics](#) - An online L2D course for high school and university students that is open to the public and available in 5 languages
- [Gali Fakta](#) - An online information literacy course and game for Indonesian residents
- [Very Verified Kosovo](#) - An English language adaptation of the original Very Verified for Kosovo
- [Very Verified Albania](#) - An adaptation for Albania and Albanian audiences in the Balkans
- [Very Verified North Macedonia](#) - An adaptation for North Macedonian audiences

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