Building Resiliency: Media Literacy as a Strategic Defense Strategy for the Transatlantic

A Report by

Tessa Jolls
Fulbright-NATO Security Studies Award
Visiting Scholar, UCLouvain
President, Center for Media Literacy

September, 2022

Page Intentionally Left Blank

Building Resiliency: Media Literacy as a Strategic Defense Strategy for the Transatlantic

A State of the Art and State of the Field Report

Tessa Jolls
Fulbright-NATO Security Studies Award
September, 2022

Contact Information:
tjolls@medialit.com
www.medialit.org

Acknowledgements

Table of Contents

This report is intended to give an overview of the state of media literacy and media literacy education in an era where the field is finally coming out of the shadows and taking its place as an important global discipline. Because media literacy addresses cognitive processing, including decision making and the resulting expressions or actions that follow such thinking and feeling, it is a difficult arena to describe easily. Media literacy processes – the abilities to access, analyze, evaluate, create and participate through media -- apply to all content, anytime, anywhere – which can be an elusive idea in a world where more concrete subject matter is typically the focus of study. Technology, too, plays a major role in the field, since it is through technology that most media messages today are channeled, affecting all who engage with it.

Although the media literacy field is more than 50 years old, it is very new to most people. For that reason, this report provides a bit of history on the development of media literacy, as well as where media literacy currently stands and where it seems to be going at present. Snapshots of current activity, and resources for the field, are also included.

The report is divided into 5 Parts, to make the volume more accessible:

Part I: The Underpinning for Media Literacy. Here, the reasons for the new emphasis on media literacy are explored, as well as the development of the foundations for the field, exploring the notions of studying the representations that media shows rather than the media itself.

Part II: Undercurrents of Change: The Context Driving Media Literacy Growth. The context animating the growth of media literacy is explored, with a focus on human agency, disinformation and misinformation, culture and identity, and education needs. All of these factors, along with the development of the internet and the democratization of media, have propelled an interest in the need for common educational tools for exploring how media work as a global symbolic system.

Part III: Where Media Literacy Fits as a Strategic Defense Strategy in NATO Countries. Today, resiliency is a quality that governments and defense organizations must encourage. The constant change and disruptions, the complexity of modern societies, demand that citizens become a first line of defense in understanding how information can be weaponized and misused, and how using media and information are essential in addressing the crises of the times, whether that comes from pandemics, financial meltdowns, or natural disasters. Helping provide human security is a primary aim for NATO and other defense organizations, and in today's world, that aim applies to food security, shelter security, information and cyber security, health security and a host of other considerations that may be impacted naturally and through hybrid warfare. Media literacy is a way to help insure resiliency and problem solving-skills, providing people with the agency they need as active participants in the online and offline worlds.

With that goal in mind, Part III addresses media literacy philosophies and practices, and how media literacy might become part of the cultural fabric of every member State. Media literacy tools as well as barriers to media literacy education are discussed, along with the need for solid research and evaluation.

Part IV: Recommendations, which address systemic needs, so that media literacy may be spread, institutionalized and sustained.

Part V: The Ecosystem for Media Literacy in NATO Countries. Part V provides snapshots of examples of tools, and indexes that are useful for sizing up how media literacy may be measured in terms of impact. These graphic depictions are helpful in getting a quick picture of where media literacy activity is most frequent in NATO countries or in partner countries.

Reports and specific country overviews provide information about specific regions in NATO and some partner countries. Global efforts towards media literacy list sample programs and references for a quick look at programs and practices. The same type of overview is provided on Regional Efforts, and highlights from

a sampling of NATO countries give a quick look at organizations and programs.

Part VI: Part VI gives an analysis from a small survey conducted in first quarter, 2022, to learn about the journals, conferences, seminars and institutes, and organizations that researchers and practitioners in the media literacy field support and typically engage with. This survey was comprised of 63 people whom Tessa Jolls personally interviewed and requested information in a short survey form; 24 participants responded to the survey, and results were compiled and reported based on these responses.

My hope is that this report is useful and motivational from the standpoint of how far the field has come, and the promise that media literacy holds for human security and resiliency in the future.

Tessa Jolls
September, 2022

For further information:
tjolls@medialit.com
www.medialit.org

Executive Summary

Part I:
The Underpinning for Media Literacy
With the proliferation of disinformation campaigns and misinformation playing such an important role in public opinion and actions, media literacy has been identified by NATO and its allies as essential to defense (NATO, 2017).

When it comes to media literacy, citizens are truly the first line of defense: citizens must possess knowledge and skills to deploy a societal capacity for strategically utilizing media literacy as a way to combat the propaganda – both beneficial and not -- that permeates civil society. Not only citizens, but all agencies of government – Defense, Culture, Communications, Education, Justice, Treasury, Health, Energy – depend upon the knowledge and understanding of citizens to help the wheels of government, society and business to turn in all arenas.

The stakes are high, both economically and socially: the digitization of economies mean higher rates of economic growth and opportunities for individual and social benefits, as well. The World Bank reported in 2022 that, "The numbers speak for themselves: the digital economy is equivalent to 15.5% of global GDP, growing two and a half times faster than global GDP over the past 15 years. Research shows that a 10% increase in mobile broadband penetration in Africa would result in an increase of 2.5% of GDP per capita."

But this growth doesn't happen automatically – it takes an educated and experienced population to function effectively in the virtual world. Education needs to be structured for a networked, connected world, but it is typically stuck in so-called factory models that rely on transmitting information rather than preparing students with lifelong learning skills. With the growing need for upskilling, reskilling, and lifelong learning, the availability and quality of basic education and continuing education should be greatly scaled up and be attuned to changes appropriate for navigating the online world. But education systems have not kept up.

Although content is seemingly infinitely available online from a host of organizations and media companies, the process skills and competincies of digital and media literacy are scarcely taught. Media literacy is not a new discipline: it has existed for well over 50 years and has an academic research base that has helped establish and demonstrate its effectiveness in teaching skills of discernment to disparate populations. Media Literacy is a global movement, as well as a field of research study with a solid academic base; and a pedagogy for teaching and learning.

The pedagogy of media literacy rests on inquiry, based on underlying concepts that media literacy researchers throughout the world have generally acknowledged. The core concepts of media literacy address both content and context, which are tools of analyses that inform understanding when consuming or producing media messages -- whether aural, verbal, visual or linguistic.

With practice over time, everyone can acquire skills of discernment that help people become more adept risk managers, who have more resiliency in the face of the inevitable challenges that life presents. It is this resiliency that NATO is seeking through its media literacy efforts, so that media literacy becomes part of a cultural fabric that can empower citizens while helping them respond to life's uncertainties. Democracy demands educated citizens, and democracy is not just a political system, but a way of life, propelled primarily by ways of thinking. Media literacy, too, is attained through habits of mind and ways of thinking – ways that uncover and reveal the world through unlimited vistas.

Today, collaboration and participation in both the online and offline worlds are imperative. Media literacy can provide both an individual and a group process, and the Core Concepts can provide a common understanding that has emerged through global researchers who pioneered the field. With the internet and social media, a global participatory culture has emerged that is unique to the online world – and with new technologies, it is constantly being expanded, with ambitions by companies like Second Life or Meta to create an online universe where people can live.

These challenges have encouraged media literacy researchers and practitioners to explore more ways to

incorporate character formation and identity, values, and online relationships to the menu of needs for addressing with media literacy, building on the foundation of the Core Concepts which are still essential for a deeper understanding of the media system at work, and a contextual understanding of how media plays a role in a democratic society. Instruction should start with preschool and continue through the years. Having media literacy frameworks as common denominators give powerful tools of analysis and expression for learning, discussion and for informal learning settings, as well. These tools help users understand their own role in the online world, which starts with a continuous, lifelong learning cycle of Awareness, Analysis, Reflection and Action.

Additionally, technology has made a whole new world of media analysis open through innovations such as the use of big data and natural language processing. Data is the currency of today; it is the essence of the enormous financial success that social media platform companies and others have thrived, and personal data drives the type of information that is displayed to people during internet searches and in news feeds. With natural language processing, it is possible to identify narratives as they emerge through media, and to track these narratives as they grow or die. Since narratives drive the stories of yesterday, today and tomorrow, these new ways of critically analyzing them is essential in understanding what people are responding to at the grassroots. Also, the combination of linguistics and natural language processing provide new avenues for identifying key words that instigate action or stir emotional responses on a mass basis.

Education Role

Professional development is essential to help practitioners learn more about media literacy basics, the technology, and how to handle challenging and divisive subjects of discussion and debate.

Media literacy programs are highly variable in school environments, where media literacy is often a new discipline. As a field that revolves around symbolic systems (and semiotics), having a pedagogy that succeeds in making the conceptual something concrete, and exploring representation – which is also a bedrock of democratic systems – are important leaps for all citizens to make. How media literacy addresses the representation of citizenship, governance and democracy are all essential for students' understanding their own role as media users/producers, participants and as voting citizens, online and off.

As content proliferates, citizens are overwhelmed and often taken in by disinformation and misinformation. Citizens must have the skills and tools with which to cope and to navigate and to use media in a way that enhances their lives. Media literacy provides an internalized filtering system that is reliable and ever-present. This is why, after many years of being in the shadows, media literacy is now being recognized as a central focus for resiliency.

Having evidence-based media literacy frameworks as common denominators give powerful tools of analysis for learning, discussion and for informal learning settings, as well. Reaching adults with media literacy education is a different challenge, and one that the media itself can be employed as a teacher.

On a formal level, adult education is scarce and an urgent need. If citizens cannot access online information, they are effectively disenfranchised, and this presents equity issues. Clearly, although media literacy education is a powerful cognitive intervention, media literacy is not a short-term fix or the answer to every social problem. Embedding media literacy as a people-first, thoughtful alternative to autocracy is a generational process that must be intentional and nurtured for the future, so that media literacy is part of the cultural fabric. That is a very ambitious goal, requiring long-term systemic change as well as short-term, strategic interventions.

Part II:
Undercurrents of Change
The Context Driving Media Literacy Growth

Technology has united the world and divided the world as never before. In every case, new media technologies have resulted in empowerment to audiences, to everyday people. These individual media, and combinations of media and processing power, serve as the nexus for discovery and learning for individuals and organizations alike. Although robots and artificial intelligence (AI) continue to gain usage online, it is important to remember

that these technologies are still driven by human agency – human choices and decisions are behind the formulas used in algorithms; humans drive the use of bots and of machine learning and natural language processing. Through technology, the science of prediction has exploded – with being able to process almost incomprehensible amounts of data -- and the tools of analysis have grown as well through new developments in artificial intelligence (AI).

NATO's Centre for Excellence in Strategic Communication (2020) is an example of the type of think tank that provides research and analysis on new technology developments affecting media, and narrative analysis helpful in understanding people's understanding and attitudes regarding important issues of the day. Also, the impact and effect of messages and technologies on audiences is a key area of research, becoming more and more important. NATO has increased its work on emerging and disruptive technologies in recent years, including developing an implementation strategy to ensure NATO's competitive advantage in seven important disruptive technologies (artificial intelligence, data and computing, autonomy, quantum-enabled technologies, biotechnology, hypersonic technology, and space).

Technology has impacted media profoundly, with social media – built on powerful technology platforms – leading the way as a social and cultural phenomena. Although people tend to think of social media as being comprised of individual "profiles" that feature user-made or shared content, these platforms are really huge databases that are fed by users' content and personal data, which is then sold to advertisers. Big Data and the information it provides allows the sorting of people into various categories or silos, with this valuable data on each person participating in a platform being sliced and diced, sorted and filtered to help advertisers and the companies understand consumer desires and behaviors. This understanding results in algorithms that target individuals by showing them information that is likely to appeal to them; they are not shown a full range of information on a given subject in a google search, nor does their search result in the same content as someone else's.

That social media has upended traditional news organizations is an understatement. Social media has eroded the business model of traditional media outlets, with the result being smaller journalist staffing and less original and investigative reporting. The democratization of media and information has shaken institutions of media and indeed, governments, to their roots, causing: Power shifts, Trust and Distrust, Surveillance and Privacy Concerns, Property and Monetization Disputes, Access and Quality Issues, Polarization, Education and Library Systems Upset, Fact Checking and Bias, Democratization, Legal Compliance problems and Gamification.

With social media – or any media – content analysis alone is inadequate. Context is needed: Propaganda – beneficial or not – and misinformation has proliferated since people started telling campfire stories. To gain readership, journalists are now blurring the distinction between fact and opinion by mixing opinions or emotional word descriptions into basic news stories. These changes are one more avenue for persuasion to a particular point of view.

Essential to critical analysis is an understanding of narratives and framing. Narratives are the stories of our time; they have lead actors both good and bad; they have beginnings, middles and ends. How a narrative is framed has more to do with what is omitted rather than what is included in the narrative; after all, stories have points of view and there is neither nor the time nor appetite to be totally representative. Through natural language processing and deep learning, it is now possible to track narratives as they emerge, as they grow or as they die. More voices have meant more cacophony, with few paths to consensus or respect for the opposition. To be cohesive, common ideals must come first as the unifying force behind governments or organizations.

People need media literacy to help them navigate the fraught media landscape. Parents, too are supportive of media literacy for their children. Discussing current events covered in media, and cooperating in the production of information, videos and podcasts -- can provide excellent models for applying media literacy principles and practices. Media literacy efforts focus on the users and audiences, in encouraging self-awareness and knowledge-building. This approach is more bottoms-up than top-down. With the emphasis on the audience's understanding, the emphasis is less on the author's rhetoric than on how the audience responds to the rhetoric. The audience may be one person, or a multitude of people.

Young people do not discriminate between the online and offline worlds – they navigate both seamlessly. Media genres serve as cultural ambassadors, introducing new ideas and new societies into every-day awareness. Influencers are important new persuaders.

With the popularity of influencers, the result is that there are more shared products and shared understandings throughout the world, with uses for such commonality demonstrated through video, music, or other media that have global audiences, as well.

Geography is no longer always a limiting factor in one's knowledge, attitudes or even behavior. The instantaneous and accessible nature of this connected world offers more wealth, more health, and more choices than ever before. But for every action, there is an equal and opposite reaction. With increased freedom comes more attempts at control and authoritarianism. With more permissible and boundary-less cultures comes a backlash of more restrictive laws and tribal customs.

The convergence of technology, media and culture is a trinity that greatly affects education systems. Education systems are typically laggards in terms of moving with the times, and inherently conservative when it comes to change.

The need for media literacy is driven by the demand for a new approach to education in society – the need for habits of mind and skills that teach people to learn to learn, throughout life. These are transferrable skills, that can be applied in a multitude of situations to a multitude of texts. With content infinitely available through the internet, there is usually no need to transmit content through memorization or drilling.

This is not to say that content knowledge is unimportant – quite the contrary – but process skills in the global village must be consciously identified, labeled and taught in ways that encourage transmissible skills and knowledge. Content can come from a smartphone or a spreadsheet – and it must be accessible anytime, anywhere to be truly useful. In the moment, a media literacy process must be quick, simple yet informed, and internalized through habits of mind.

Process skills – like the ability to access, analyze, evaluate, create and participate with media -- count as part of the education mix, and process skills are within all humans' capacity. This means that process skills and competencies must be valued, articulated and taught systematically, and they can be taught globally.

Part III:
Where Media Literacy Fits as a Strategic Defense Strategy in NATO Countries

NATO's 2030 report (NATO, 2020) and NATO 2022 Strategic Concept succinctly outlines NATO's priorities and plans for human security in this decade. Today, human security goes well beyond traditional notions of warfare, and extends to pandemics and health and food security, and the safety, security and reliability found in the digital global village as well. In sectors critical to Allied security, the Alliance must likewise improve its ability to assist, protect and shape the rules-based international order. Today, alliances are based not only on common boundary lines and political alliances, but more importantly, upon countries' values and governance systems.

It is this commitment to the ideas and values that unify people, along with laws adopted through democratic systems, that lends itself well to media literacy as a way of encouraging independent, critical thinking amongst citizens. It is through common ideals that people can unite, rather than through parties or geographic or ethnic identities. People must understand the often-complex systems within which they operate, so they may ensure that these systems are responsive and flexible, and stand the test of time. People must be equipped to explore and question, and to understand whether the values they see in operation reflect democratic standards. They must also be equipped with the information, knowledge and skills to judge for themselves what is true and what is false, and what they think is in their own best interests, and that of their families, communities and countries.

Democracy stands or falls on people. The challenge for democracies is to find ways to preserve the freedoms that come with more access to information, while protecting against the threats that come with it. The most democratic way to address this challenge is teaching society to be wiser information consumers and producers through critical thinking and a pedagogy that empowers them to evaluate, analyze, and choose critically whether to act on information. Media literacy education facilitates this critical thinking and thereby, risk management.

Media literacy processes of inquiry are impossible to learn, conduct and discuss when freedom of speech and expression are not tolerated. Yet, what better way to understand representative systems of government than to understand media literacy principles, which revolve around the idea of representation and what representation means? The skepticism that democracy should encourage in citizens, is embedded in media literacy principles and practices; the ongoing learning and inquisitiveness that comes with freedom to be and to pursue dreams is a process that media literacy can help ignite, by providing new ways of seeing the world.

Furthermore, because the process skills of media literacy are global – while the issues and topics of discussion are more often local – media literacy provides a common denominator for addressing issues and for education in the 21st century, regardless of geographic boundaries. Media literacy provides a global metaframe for learning.

Resiliency
By opening new ways of seeing the world, and by encouraging discussion and dialogue with the understanding that others will undoubtedly see things differently, media literacy also encourages flexibility and respect – both qualities essential in democratic societies. Democracy is rooted in consensus and consent of the governed, and with more educated citizens today, people are more inclined to consent and work together when they perceive that their opinions have been heard and considered with respect.

Often, these are slow processes, not well-suited to earthshaking events that call for immediate reactions: natural disasters, wars, pandemics. Yet ironically, it is by having solid foundations and trust in democratic institutions that people are best suited to having the resiliency they need in the face of major challenges. They can more willfully and easily unite and rally.

Generally, media literacy is an outcome, a result, a set of habits, skills and competencies that can be identified and measured. Media literacy education is a continuing process, that is highly variable, depending upon a person's interests, skills and capacities. There are many ways through which to educate a population: mass media, social media, schools and libraries, museums, cultural organizations, and artistic endeavors such as movies or the visual arts. Resiliency has long been a topic of interest for media literacy researchers, with civics and health researchers, particularly, interested in whether media literacy encourages resiliency. Results are encouraging, and tied to how media literacy encourages critical thinking. Increased technological ability to facilitate interchange between institutions and the people whom they serve has encouraged much more feedback from the grassroots in influencing policy and decision-making at institutional levels. Furthermore, it is possible to conduct extensive research amongst statistically significant panels globally with days, not weeks.

This decision-making process of Awareness, Analysis, Reflection and Action takes labeling and practice, so that people understand how to apply their own values, social values and priorities to the decision-making at hand. The model, also known as "Action Learning," has proven to be an effective method for initiating a spiral of inquiry that leads to better comprehension, critical thinking, and the ability to make well-informed decisions.

Media literacy has continued to grow globally and has some common characteristics: First, media literacy helps individuals explore deep and lasting relationships with the media. Understanding the relationships between text, production, users and culture is the basis for understanding the power dynamics between these four elements. Second, the focus of media literacy is on processes, not content. Third, media literacy education extends the concept of text and is used to develop ideas and share them between people, whether the messages are verbal, auditory, or visual (or a combination of all three). Discussion is central to understanding these relationship characteristics of media literacy, and learning from peers through discussion is essential in understanding that others will often disagree or see things differently. This is human, and, if empathy is encouraged, can be a constructive process.

Media literacy lends itself to teaching with or without technology tools – photos, billboards, logos on shirts, merchandising displays at stores or product packaging; these are all examples of media that students can engage with. But regardless of how well media literacy fits with online curricula or in-school curricula with the characteristics outlined above, this approach requires fundamental changes to teaching and learning., which often challenges and frightens teachers used to traditional teaching strategies. Teaching media literacy is something that should be part of every-day life. But teachers and librarians and community health educators cannot teach what they do not know for themselves. To be effective, they first need training and professional development to be able to easily integrate media literacy into everything they teach. Teachers also need support and training in how to address difficult and contentious topics with children and youth who are vulnerable, since media literacy education often address current events and emotional topics.

Assessment for media literacy education, too, is a work in progress. Standardized tests do not lend themselves easily to media literacy, since critical thinking, the application of contextualized knowledge and media production are important to acquiring media literacy process skills. Portfolios, individual deconstructions or constructions of media artifacts, and rubrics can be important assessment tools for media literacy class work. The barriers to change are high and in some cases, nearly insurmountable. Information on policy implementation and evaluation is hard to come by, because such studies barely exist. A common denominator is that, in determining how to get the best value from a media literacy program, it's most important to take the competencies and the needs of the people that are going to deliver the program into consideration, rather than the desires of the donor or the implementer. Collection of appropriate data for evaluation should be a priority.

The hope for more media literacy education is high, as it appeals to students and adults who have smartphones in their hands, and who understand that their needs have profoundly changed in making meaning and contributing to their families and communities.

Part IV:
Recommendations
1. Be prepared. Commitment and will are called for; constituents will be encouraged to question.
2. Identify principles and values that animate the media literacy program in advance.
3. Establish an independent department in government or organizations or schools to shine a spotlight on media literacy and encourage and coordinate others' efforts.
4. Decide early-on the intent and purposes of any media literacy intervention.
5. Institutionalizing media literacy requires a significant and ongoing investment in systemic change – see it through and tackle the many layers involved.
6. Commit to high-quality evaluations to ensure quality and accountability.
7. Encourage and support the grassroots.
8. Educate, educate, educate.
9. Use media to teach media literacy!
10. Support and nurture media literacy communities and coalitions.
11. Convene influencers who can impact policy, regulation, think tanks, and public opinion.
12. Measure overall public awareness and progress.

Part V:
Highlights of the Ecosystem for Media Literacy
- Examples that Illustrate Media Literacy
- Media Literacy Indexes and Maps
- Specific Media Literacy Reports and Overviews for Specific Country Ecosystems
- Examples of the Global Effort Toward Media Literacy
- Examples of Regional Efforts for Media Literacy
- Examples of Some Country Efforts for Media Literacy

Part VI:
Resources for Participation
This survey provides more information about the journals, conferences, seminars and institutes, and organizations that researchers and practitioners in the media literacy field support and typically engage with.

PART I: The Underpinnings for Media Literacy

Introduction

With the Ukrainian conflict with Russia, and the flood of disinformation campaigns from authoritarian regimes, including Russia, China, Venezuala, and Iran, the role of strategic communication and media literacy as defense priorities has increased apace. The establishment of the NATO Strategic Communication Centre of Excellence in Riga, Latvia, in 2014 attests to the importance that strategic communication can play in governmental defense tactics, and media literacy has been identified by NATO and its allies as essential to defense (NATO, 2017).

When it comes to media literacy, citizens are truly the first line of defense: citizens must possess knowledge and skills to deploy a societal capacity for strategically utilizing media literacy as a way to combat the propaganda – both beneficial and not -- that permeates civil society. Not only citizens, but all agencies of government – Defense, Culture, Communications, Education, Justice, Treasury, Health, Energy – depend upon the knowledge and understanding of citizens to help the wheels of government, society and business to turn in all arenas.

The stakes are high, both economically and socially: the digitization of economies mean higher rates of economic growth and opportunities for individual and social benefits, as well. The World Bank reported in 2022 that, "The numbers speak for themselves: the digital economy is equivalent to 15.5% of global GDP, growing two and a half times faster than global GDP over the past 15 years. Research shows that a 10% increase in mobile broadband penetration in Africa would result in an increase of 2.5% of GDP per capita."

But this growth doesn't happen automatically – it takes an educated and experienced population to function effectively in the virtual world. Education needs to be structured for a networked, connected world, but it is typically stuck in so-called factory models that rely on transmitting information rather than preparing students with lifelong learning skills. With the growing need for upskilling, reskilling, and lifelong learning, the availability and quality of basic education and continuing education should be greatly scaled up and be attuned to changes appropriate for navigating the online world. But education systems have not kept up.

Although content is seemingly infinitely available online from a host of organizations and media companies, the process skills of digital and media literacy are scarcely taught. As Siim Kumpas, now at the European Action Service (EEAS) in Brussels, and formerly an Estonian policy-maker charged with strategic communication has said (Consortium for Media Literacy, 2019):

Part V
Highlights: The Ecosystem for Media Literacy in NATO Countries

These Highlights provide quick snapshots of:

- Examples that illustrate media literacy fundamentals
- Media literacy indexes and maps illustrating media literacy presence
- Major reports giving overviews of media literacy
- Examples of global media literacy efforts
- EU and regional media literacy efforts

The complexity and multiplicity of programs and actions are impossible to capture in a short report; these Highlights are designed to give a flavor of media literacy efforts and overall insight into the nature and scope of current work in the field.

Also, Part VI provides a 2022 survey of media literacy researchers and practitioners in NATO countries. These individuals identified their preferred membership NGO's, conferences and seminars, and educational resources, which are listed in the survey report.

Examples that Illustrate Fundamentals for Media Literacy

Guiding Principles for Media Literacy Education
United Nations Declaration of Human Rights
https://www.un.org/en/about-us/universal-declaration-of-human-rights

United Nations Declaration of Rights of the Child in a Digital Environment
https://blogs.lse.ac.uk/medialse/2021/02/04/childrens-rights-apply-in-the-digital-world/

Nations 2006 Convention on the Rights of Persons with Disabilities (CRPD)
https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html

NATO Values (2030 Report and Madrid Strategic Concept 2022):

"We remain steadfast in our resolve to protect our one billion citizens, defend our territory and safeguard our freedom and democracy. We will reinforce our unity, cohesion and solidarity, building on the enduring tranatlatntic bond between our nations and the strength of our shared democratic values. We reiterate our steadfast commitment to the North Atlantic Treaty and to defending each other from all threats, no matter where they may stem from. We will continue to work towards just, inclusive and lasting peace and remain a bulwark of the rules based international order. We will retain a global perspective and work closely with our partners…"-- Madrid Strategic Concept, 2022;

A New Set of Lenses: A Different Way of Looking at the World through Media Literacy

What size are various land masses, with a scale that

"We simply don't have the human resources available with the know-how to teach and spread media literacy, and most people don't know what media literacy is."

Divina Frau Meigs, Professor, Sorbonne Nouvelle University, UNESCO Chair, Savoir Devenir, also cites action steps for addressing digital media literacy:

"At the moment, media literacy is a cross-cutting field, but we need to focus on Media and Information Literacy (MIL) as a discipline unto itself. There is an urgent need for Research & Development (R&D) in this emerging field."

This research and development takes a number of directions: on how individual media and technology platforms and techniques such as deep fakes affect users, even in terms of brain activity; and on how to best teach and implement media literacy, with evidence-based approaches that rely on implementation science. Media literacy researchers and practitioners come from many backgrounds and disciplines: communications, education, cultural studies, sociology, computer science, data science, pediatrics, health. Yet knowing about media literacy and knowing how to teach and spread media literacy are two different tasks.

Media literacy is not a new discipline: it has existed for well over 50 years and has an academic research base that has helped establish and demonstrate its effectiveness in teaching skills of discernment to disparate populations. UNESCO has supported media literacy since its early inception, and numerous conferences and organizations have sprung up globally (See Part VI).

Among other efforts, the European Union and the U.S. State Department's Global Engagement Center and USAID (USAID, 2022) support media literacy, and the European Commission (European Commission, 2022) is active. The European Union and European Commission have two substantive directives – one on audiovisual communication and one on disinformation/misinformation, respectively -- that call for media literacy in member countries (EUR-LEX, Register of Commission Documents, 2022), while within the U.S., the Department of Homeland Security is seeking to encourage media literacy within the United States (DHS 2021). The Nordic Council (Nordicom Media Reports, 2022) and the British Council (B&FT TV 2021), too, have funded media literacy efforts, particularly in the Baltics. UNESCO has long supported media and information literacy (UNESCO & Baktria Press, 1970), and numerous conferences and organizations have sprung up globally to help develop capacity in the field. Yet media literacy implementation programs, generally of short-term duration, are sparsely funded and not institutionally supported. This means that at the end of a grant, the media literacy program and experience and learning typically fades and eventually disappears.

shows a realistic depiction of sizes relative to each other? In this clever map. the lighter blue color shows the typical sizes shown on a Mercator map; the darker blue color shows the actual sizes of land masses relative to the Mercator map:

This all-in-one map quickly shows how media can easily re-present and distort views, given different purposes for media texts, and why the inquiry and critical analysis skills of media literacy help people come closer to the truth. What questions do you have as you peruse this map?

MERCATOR PROJECTION VS THE TRUE SIZE OF COUNTRIES

@neilkaye

Source
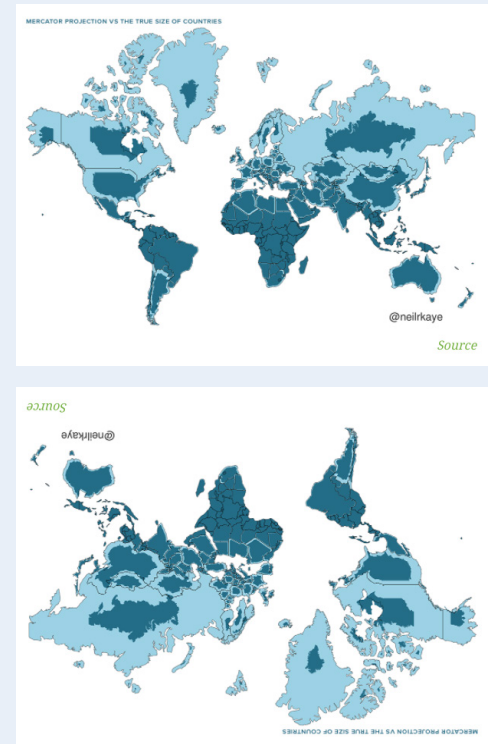
What are reactions to seeing the world depicted in another – yet valid – way?

CONTENT + CONTEXT = MEDIA MESSAGE

Foundations for Media Literacy: The Basics are Necessary for Building and Scaling

"Representation — re-presentation — in media is the central idea behind media literacy…To get beyond basic decoding, media literacy – literacy – is about detecting (or depicting) ambiguity, satire, point of view and reading between the lines – a sophisticated set of processes. Whereas, when using a camera to create media, there is always a literal, physical point of view:

WHAT IS MEDIA LITERACY?

| A movement growing around the world | A field of research study with a solid academic base | A pedagogy for teaching and learning |

Media literacy is a movement growing around the world; a field of research study with a solid academic base; and a pedagogy for teaching and learning. Perhaps for this reason, the term "media literacy" is often confused and contested. Many terms have evolved: media education, media literacy, digital literacy, digital citizenship, news literacy, financial literacy, online safety. Regardless of the terms, media literacy is an outcome of study and practice, and a process of study and practice, as well. Media literacy provides a foundational understanding of how media operates as a global symbolic system. This conceptual system, like the physical world, operates according to rules based on patterns of human knowledge, attitudes and behaviors. As people like Mark Zuckerberg, CEO of Meta, predict that people will increasingly live their lives in a virtual metaverse (Jordannovet, 2022), it is more important than ever to understand how this global symbolic media system operates, especially since media play such a vital role in democratic societies.

"How we are seen determines in part how we are treated; how we treat others is based on how we see them; such seeing comes from representation," Richard Dyer, the Matter of Images: Essays on Representation, 1993

The pedagogy of media literacy rests on inquiry, based on underlying concepts that media literacy researchers throughout the world have generally acknowledged. These concepts apply globally and they help frame inquiry, to give citizens a way to more easily access an understanding of the wide media world they are navigating. With practice over time, everyone can acquire skills of discernment that help people become more adept risk managers, who have more resiliency in the face of the inevitable challenges that life presents: natural disasters, country conflicts, pandemics, and economic crises. It is this resiliency that NATO is seeking through its media literacy efforts (Sanchez, 2021), so that media literacy becomes part of a cultural fabric that can empower citizens while helping them respond to life's uncertainties. Democracy demands educated citizens, and democracy is not just a political system, but a way of life, propelled primarily by ways of thinking. Media literacy, too, is attained through habits of mind and ways of thinking –

the camera must be positioned somewhere." – Len Masterman, Emeritus Professor, Nottingham University (UK)

The foundations for media literacy have seldom been laid in any country-wide context, yet these foundations are essential to having a common cultural understanding and infusion of media literacy into the cultural fabric of everyday life. This discussion illuminates how more advanced understandings of media literacy depend upon the fundamentals:

https://www.medialit.org/reading-room/how-do-digital-media-learning-dml-and-media-literacy-communities-connect-why-it

A Model for Media Literacy: Definition, Philosophy, Evidence-Based Frameworks

A Definition and More:

Media Literacy is a 21st century approach to education. It provides a framework to access, analyze, evaluate, create and participate with messages in a variety of forms — from print to video to the Internet. Media literacy builds an understanding of the role of media in society as well as essential skills of inquiry and self-expression necessary for citizens of a democracy.
Center for Media Literacy: https://www.medialit.org/media-literacy-definition-and-more

Empowerment through Education

18 Principles for Media Education

1. Media Education is a serious and significant endeavor. At stake is the empowerment of individuals, especially minorities, and the strengthening of society's democratic structures.
2. The central unifying concept of Media Education is that of representation. The media mediate. They do not reflect but re-present the world. The media, that is, are symbolic sign systems that must be decoded. Without this principle no media education is possible. From it, all else flows.
3. Media Education is a lifelong process. High student motivation, therefore, must become a primary objective.
4. Media Education aims to foster not simply critical intelligence, but critical autonomy.
5. Media Education is investigative. It does not seek to impose specific cultural or political values.
6. Media Education is topical and opportunistic. It seeks to illuminate the life-situations of learners. In doing so it may place the "here-and-now" in the context of wider historic and ideological issues.
7. Content, in Media Education, is a means to an end. That end is the development of transferable analytical tools rather than an alternative content.
8. The effectiveness of Media Education can be evaluated by just two criteria:
    (a) the ability of students to apply their critical thinking to new situations, and
    (b) the amount of commitment and motivation displayed by students.

ways that uncover and reveal the world through unlimited vistas.

Achieving an internalized understanding of media literacy concepts and an application of these concepts to any and all media (including news, of course) are the criteria helpful in assessing whether a media literacy program is truly an effective intervention. Research conducted to date shows that media literacy is highly promising and effective in positively changing people's knowledge, attitudes and behaviors in many settings, whether addressing health, news, history, science or governance (Jeong, Cho, Hwang, 2012).

The core concepts of media literacy address both content and context, which are tools of analyses that inform understanding when consuming or producing media messages -- whether aural, verbal, visual or linguistic. Although different organizations have differing versions of the core concepts, the Center for Media Literacy, a pioneering U.S. organization that first introduced its frameworks in 2002 (Center for Media Literacy, 2002), uses the following research-based iteration of the Core Concepts for media literacy (Fingar and Jolls, 2013):

All media messages are constructed.

Media messages are constructed using a creative language with its own rules.

Different people experience the same media message differently.

Media have embedded values and points of view.

Most media messages are organized to gain profit and/or power.

CORE CONCEPTS OF MEDIA LITERACY

Newer forms of technology, including social media and algorithms, can all be addressed through the core concepts because they are human inventions, requiring human agency. These core concepts are not partisan or ideological; they are tools through which to identify motivations or biases or framing of issues. Media literacy provides a cognitive process for

9. Ideally, evaluation in Media Education means student self-evaluation, both formative and summative.
10. Indeed, Media Education attempts to change the relationship between teacher and taught by offering both objects for reflection and dialogue.
11. Media Education carries out its investigations via dialogue rather than just discussion.
12. Media Education is essentially active and participatory, fostering the development of more open and democratic pedagogies. It encourages students to take more responsibility for and control over their own learning, to engage in joint planning of the syllabus, and to take longer-term perspectives on their own learning.
13. Media Education is much more about new ways of working in the classroom than it is about the introduction of a new subject area..
14. Media Education involves collaborative learning. It is group focused. It assumes that individual learning is enhanced not through competition but through access to the insights and resources of the whole group.
15. Media Education consists of both practical criticism and critical practice. It affirms the primacy of cultural criticism over cultural reproduction.
16. Media Education is a holistic process. Ideally it means forging relationships with parents, media professionals and teacher-colleagues.
17. Media Education is committed to the principle of continuous change. It must develop in tandem with a continuously changing reality.
18. Underlying Media Education is a distinctive epistemology: Existing knowledge is not simply transmitted by teachers or "discovered" by students. It is not an end but a beginning. It is the subject of critical investigations and dialogue out of which new knowledge is actively created by students and teachers.

Media Awareness Education: 18 Basic Principles, Len Masterman (1989)
https://www.medialit.org/reading-room/results?keys=18+principles

Action Model: The Empowerment Spiral Awareness, Analysis, Reflection, Action

https://www.medialit.org/reading-room/empowerment-spiral

AWARENESS REFLECTION ACTION ANALYSIS

CML's 5 Core Concepts and 5 Key Questions for Critical Analysis:

Questions/TIPS for Evidence-based Deconstruction and Construction
https://www.medialit.org/sites/default/files/QTIPS%20CHART_1_0.pdf

CML (Center for Media Literacy)

people, giving them a heuristic, or habit of mind, that helps them challenge and question media content through a cultural lens. Like any level of knowledge and skills, media literacy exists on a continuum – people have varying skills and knowledge, whether technical or cognitive, using quantitative or qualitative information.
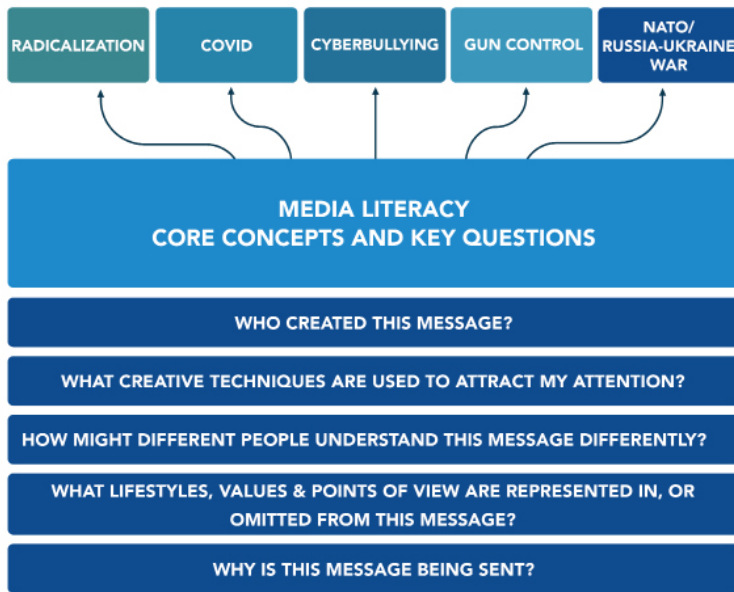
Center for Media Literacy

The core concepts of media literacy address, overall, the notion of representation: how the world represents – re-presents -- itself to people, and how people represent themselves to the world. Basically, the Core Concepts provide a systems-based approach. The Concepts serve as an "operating framework," while the topics or subjects being addressed – regardless of the nature of the messages or the medium – serve as "applications" that provide the content to process. The Core Concepts explore representation by addressing authorship and the constructedness of media; techniques, technology and format; audience diversity and targeting audiences; framing (choices on what is included and excluded), bias, values and worldview; and purposes of profit and/or power. Additionally, media literacy addresses issues such as media "diets" and online safety and security, and the role of media literacy in a democratic society.

"There are no simple answers to "are screens good or bad? And 'How much is too much?" – Dr. Michael Rich, Boston Children's Hospital; Harvard University; Digital Wellness Lab US

To be able to use and apply the Core Concepts as a pedagogy, practitioners typically use a process of inquiry to help people be able to discern how the media message exemplifies the concepts. This process of inquiry is central to media literacy, because it enables more neutrality and exploration, rather than directive answers. Digital citizenship – because it is directive in terms of how to be a "good citizen" in different cultural

https://www.medialit.org/literacy-21st-century

Media Literacy Indexes and Maps
Why Media Literacy is Urgently Needed

Edelman Trust Index/Barometer
This annual survey has provided data and analyzed trends on a wide scope of topics for 22 years. Findings for 2021-2022 focus on how government and media fuel a cycle of mistrust:
https://www.edelman.com/sites/g/files/aatuss191/files/2022-01/2022%20Edelman%20Trust%20Barometer%20Global%20Report_Final.pdf

Media Literacy Index 2021 for 35 European countries
The European Policies Initiative (EuPI) of the Open Society Institute – Sofia produces this Index, which assesses the resilience potential for fake news using indicators for media freedom, education and trust in peo-

or national contexts – is an application of the media literacy inquiry process. So is news. Media literacy teaches questioning and skepticism; it is not a pedagogy that is partisan or tells people what to think or believe, or how to feel. Instead it is a self-directed, explorative process that helps people learn to think critically, for themselves, to take their emotions into account while not engulfing judgment, and to make decisions independently.

"Our perceptions are determined by our goals. We don't live in a world of facts – we live in a landscape of relevance,"-- Jordan Peterson, Maps of Meaning, Canadian clinical psychologist, professor emeritus at the University of Toronto Canada

In applying media literacy concepts and questioning, citizens learn to be risk managers rather than just fact-checkers. It is a strong foundation for democracy for all citizens, who rely on their information ecosystem to inform their decisions. At the same time, cultivating this increased knowledge and inquiry on the part of citizens requires an understanding of values, lifestyles and points of view or bias. Especially when using social media, users need empathy and sensitivity towards others, which impacts their relationships through social media. They may not always have a lot of time to check sources or do lateral reading; some decisions require fast analyses and fast action, and having engrained practices can be a time saver and an intuitive guide, based on prior knowledge and informed habits of mind.

Furthermore, this increase of informed and inquiring citizens requires institutions that are capable and comfortable with answering tough questions and keeping the public informed. When there is a gap of information, it is much easier for misinformation and even disinformation to spread. Trust can only be maintained by having open, honest dialogue with citizens. No information is perfect, no organization is perfect, and no citizen is perfect – and both citizens and institutions alike must be prepared for this imperfection and be able to acknowledge it. Online access has intensified the information demands to an unprecedented level, while at the same time causing information overload that results in people ignoring essential communication or cynically dismissing it.

Today, collaboration and participation in both the online and offline worlds is imperative. Media literacy can provide both an individual and a group process, and the core concepts can provide a common understanding that has emerged through global researchers who pioneered the field (Voices of Media Literacy, 2012).

This common understanding is essential to collaboration, just as an understanding of the fundamental laws of physics help scientists collaborate from all over the world. Recently, a group of highly respected media literacy researchers came together from disparate places (Europe, North America, South America,

ple. Finland (1st), Denmark (2nd), Estonia (3rd), Sweden (4th) and Ireland (5th) are at the top of the 2021 ranking: https://osis.bg/?p=3750&lang=en

Media Literacy Index 2021 for 35 European countries and 9 additional countries: Australia, Canada, Colombia, Israel, Japan, Korea, Mexico, New Zealand, and the United States
This Index uses, overall, the same methodology as that of the Open Society Institute of Sofia (listed above), but adds in nine additional countries. These rankings show Canada, New Zealand and Australia in the top 10.
https://medialiteracynow.org/a-new-index-shows-that-the-us-scores-low-on-media-literacy-education/

DW Media and Information Literacy (MIL) Index for African Nations: Ghana, Burkina Faso, Kenya, Namibia, Cote d'Ivoire, Uganda
The MIL Index for African Nations is DW Akademie's largest-scale MIL study to date. This overview provides details on the guiding principles and findings of the MIL INDEX study in Africa:
https://www.dw.com/en/mil-index/s-54253270

GLOBSEC Vulnerability Index: Central European and Western Balkan Countries
This index was developed with eight partners, and it analyzes the vulnerabilities of eight Central European and Western Balkan countries towards foreign malign influence in 5 dimensions: public attitudes, political landscape, public administration, information landscape and civic and academic space. On a scale of 1-100 it reveals soft spots toward the Kremlin's and Beijing's influence in each covered country.
http://www.vulnerabilityindex.org/

Media Literacy NOW Map of Legislative Standing in U.S. States
This map dates to 2020, but it still gives a quick picture of where various U.S. States stand in regards to legislation. Media Literacy NOW ranks States according to Leadership, Having some policy, Demonstrating some progress, and taking various routes to providing media literacy:
https://medialiteracynow.org/your-state-legislation-2?

Media Literacy Reports and Overviews
Specific Country Ecosystem Status and Comparisons

Canada
"Mapping Digital Literacy Policy and Practice in the Canadian Landscape," Media Smarts (2015):
https://mediasmarts.ca/sites/mediasmarts/files/publication-report/full/mapping-digital-literacy.pdf

Europe
"Truth Decay in Europe: Exploring the Role of Facts and Analysis in Everyday European Public ," RAND (2022): https://www.rand.org/pubs/research_reports/RRA112-22.html

Africa, Australia, Asia), and they were immediately able to form a consensus around the Core Concepts that would serve as a basis for a Global Kids Online media literacy survey under development, of children aged 9-17 (Livingstone et al., 2019). This is an example of the kind of understanding that can be achieved with the necessary knowledge, which, unfortunately, is scant at the present time.

With the internet and social media, a global participatory culture has emerged that is unique to the online world – and with new technologies, it is constantly being expanded, with ambitions by companies like Second Life or Meta to create an online universe where people can "live." Henry Jenkins, lead author of the landmark report "Confronting the Challenges of Participatory Culture: Media Education for the 21st Century," (Jenkins et al, 2005) first identified expanded forms of participatory culture that the internet and social media have greatly empowered, including Affiliations, Expressions, Collaborative Problem-Solving, and Circulations. Additionally, as social media has exploded, this 2005 report identified some concerns that world leaders and educators are facing with increasing urgency: the Participation Gap, with unequal access to technology; the Transparency Problem, which addresses the opacity of media and how people mistakenly think media is a "true" representation; and the Ethics Challenge, where the breakdown of traditional social norms has shown itself acutely through the polarization encouraged through social media.

These challenges have encouraged media literacy researchers and practitioners to explore more ways to incorporate character formation and identity, values, and online relationships to the menu of needs for addressing with media literacy, building on the foundation of the Core Concepts which are still essential for a deeper understanding of the media system at work, and a contextual understanding of how media plays a role in a democratic society. Beyond analyses of media messages, online users must understand their own role in the online world, which starts with a continuous, lifelong learning cycle of Awareness, Analysis, Reflection and Action, an evidence-based framework originally based on work by Brazilian educator Paulo Freire (Freire Institute, 2022). More research is needed to build out tools for people to use in taking each of these steps, giving them ways to be thoughtful in their choices and their relationships online and off.

Norwegian Population Survey on Media Literacy (2021):
https://www.medietilsynet.no/nyheter/aktuelt/nye-op-pdrag-for-medietilsynet-nrk-utredning-og-gjennom-gang-av-mediestotten/

European Union
"Public Policies in Media and information Literacy in Europe: Cross-Country Comparison," edited by Divina Frau-Meigs, Irma Velez and Julieta Flores Michel, (Routledge, 2017):
https://gsole.org/olor/rolereviews/2020vol3no1.rev9

"Mapping of Media Literacy Practices and Actions in EU-28," a report on media literacy outside of schools, by the European Audiovisual Observatory, Strasbourg and the Council of Europe (2016):
https://rm.coe.int/1680783500

"Media Sector Mapping in Georgia, Latvia, Moldova and Ukraine," Baltic Centre for Media Excellence (2021):
https://www.bcme.eu/en/our-work

"Regulatory Authorities for Electronic Media and Media Literacy: Comparative analysis of the best European practices, Council of Europe (2018):
https://rm.coe.int/regulatory-authorities-for-electronic-media/1680903a2a

ALFAMED:
European and Latin American Network on Media Competencies. This group is exploring how media literacy might be taught in different country contexts:
https://www.redalfamed.org/

Latin America:
"Media Education in Latin America," edited by Julio-Cesar Mateus, Pablo Andrada, Maria Teresa Quiroz (2019)
https://www.routledge.com/Media-Education-in-Latin-America/Mateus-Andrada-Quiroz/p/book/9780367199555

Nordic Countries:
Two 2020 NordMedia Network webinar series featured one series on Nordic Countries and one series on selected European Countries. Additionally, the NordMedia Network has addressed media literacy for older people, marginalized groups, and early childhood issues, among other.

Nordic Countries:
https://nordmedianetwork.org/media-education-in-the-nordic-countries-lessons-learned-from-the-neighbours/

Selected European Countries (Flanders, Baltics, Croatia, Poland, Greece, Ireland, Italy, and France:
https://nordmedianetwork.org/mil-europe-webinars/

Norwegian Media Authority Report to EPRA, Oct. 2021 (including results of 2021 Norwegian population/media literacy survey):
https://www.medietilsynet.no/globalassets/engelsk-dokumenter-og-rapporter/epra-countryreportnorwayocto-ber2021.pdf

Additionally, technology has made a whole new world of media analysis open through innovations such as the use of big data and natural language processing. Data is the currency of today; it is the essence of the enormous financial success that social media platform companies and others have thrived uopn, and personal data drives the type of information that is displayed to people during internet searches and in news feeds. Yet citizens have few or no personal property rights when it comes to their own data, these vital units of monetization. There is no legal framework based on personal property rights, which have fueled the success of countries world-wide. There is a need for a coherent and cohesive legal system to govern the use of data, the monetization of data, and data privacy. Instead, policy typically emanates from data privacy considerations or on the basis of solving crises of the day, whacking down issues as they occur rather than having a broad philosophy behind regulation. Tim Berners Lee, a founder of the internet, has called for a "Magna Carta" for the internet, to define an overarching legal framework and personal property rights, yet there is no consensus to date on doing so (Sample, 2018).

With natural language processing, it is possible to identify narratives as they emerge through media, and to track these narratives as they grow or die. Since narratives drive the stories of yesterday, today and tomorrow, these new ways of critically analyzing them is essential in understanding what people are responding to at the grassroots. Stories are powerful motivators, and they evoke a highly diverse human response. Ukrainians illustrated the power of stories by sharing their individual stories on social media; this sharing outweighed the propaganda machines of Russia as a way of gaining global support. Now, it is possible to analyze stories on an individual level, a group level and a cultural/societal level. Some stories are local; some regional; some national; some global. Those whose stories prevail have a power that everyone needs to understand; this is part of citizens' understanding of the role of media in society, in how media helps influence policy and governance through the representation of citizens' views and narratives.

"We need narrative theory, to understand how narratives work and how we are influenced by them. We need to understand the media waters we all swim in," – Ben Hunt on the Power of Narrative, hosted by Vasant Dhar, Brave New World Podcast, Episode 40, June 9, 2022

Also the combination of linguistics and natural language processing provide new avenues for identifying key words that instigate action or stir emotional responses on a mass basis. Although individuals have little control over the use of such questionable techniques, it is highly important that people realize that it is they who are responding emotionally. Users must learn to recognize and to question such reactions as they occur, to determine if they may be reacting to emotional manipulation. The text itself is static; it is people who bring their emotional responses to the text.

The Media Barometer:
Sweden has conducted an annual "media barometer" since 1979 through Nordicom and the University of Gothenberg. This Barometer has been regularly expanded and now, will extend globally through a new program.
https://www.nordicom.gu.se/en/media-barometer/about-the-media-barometer

Other reports from Nordic Countries are cited here:
https://www.nordicom.gu.se/en/statistics-facts/media-reports

UK
"Mapping Exercise and Literature Review: Online Safety-Media Literacy Strategy, Department for Digital, Culture, Media and Sport" provides a review of programs and evaluation criteria (2021):
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1010027/2021-02-25_DCMS_Media_Literacy_Phase_2_Final_Report_ACCESSIBLE_v2.pdf

"Media Literacy in the Time of COVID," reviews evidence for effectiveness of media literacy in addressing misinformation in general, and the urgency of a rapid response to misinformation about the virus. Centre for Excellence in Media Practice, Bournemouth University, London School of Economics (2021):
http://eprints.bournemouth.ac.uk/36125/3/ML%20in%20the%20TIme%20of%20Covid%20Final%20REVISED.pdf

"Rapid Evidence Assessment on Online Misinformation and Media Literacy, Final Report," (9 June 2021). OfCom commissioned a comprehensive report to address media literacy practices:
https://www.ofcom.org.uk/__data/assets/pdf_file/0011/220403/rea-online-misinformation.pdf

"Online Media Strategy,"Department of Digital, Culture, Media and Sport (July 2021).
https://www.gov.uk/government/publications/online-media-literacy-strategy

"A Missed Opportunity: the new national media literacy strategy of DCMS," by Sonia Livingstone, London School of Economics, (Nov. 10, 2021)
https://blogs.lse.ac.uk/parenting4digitalfuture/2021/11/10/media-literacy-strategy/

US
"Snapshot 2019: the State of Media Literacy Education in the U.S.," National Association of Media Literacy Education (2019):
https://namle.net/wp-content/uploads/2020/10/SOML_FINAL.pdf

"Confronting Health Misinformation: The Surgeon General's Advisory on Building a Healthy Information Environment (2021)
https://www.hhs.gov/sites/default/files/surgeon-general-misinformation-advisory.pdf

"Exploring Media Literacy as a Tool for Mitigating Truth Decay," RAND (2019)
https://www.rand.org/pubs/research_reports/RR3050.html

Since these technologies exert such influence on people everywhere, it is highly important for media literacy education to address them, and help citizens understand how algorithms and bots work, how news feeds work in targeting people, what business models govern platforms and how this influences content, and how some media affects people negatively, with personal safety, health and conflicts. Because these issues are often contentious, people need guidelines and practice on how to have a civil and respectful discussion. An experimental online platform, ThinkAlong, developed by Connecticut Public, provides an example of combining media literacy along with addressing recent news and debate, and providing constructive tools for educators, librarians and media literacy practitioners to help youth learn to apply critical analysis and discussion skills to media. Professional development is essential to help practitioners learn more about media literacy basics, the technology, and how to handle challenging and divisive subjects of discussion and debate.

Media literacy programs are highly variable in school environments, where media literacy is often a new discipline. However, there are some elements where consensus is emerging about what makes for a good program, which should:

- Use a process of inquiry to explore content; this process should be nonpartisan yet allow free and respectful discussion.
- Be *about* media – not just using media. Media literacy is about thinking and understanding, not just clicking buttons. Media literacy is not media bashing or about admonishing people to avoid media; instead, media literacy is about engaging with media and enjoying it, too.
- Apply the core concepts of media literacy as a research-based, shared framework for understanding and ethical decision-making. Help people identify their own values and ways of making their own conclusions about the media they consume and produce.
- Provide both content and contextual analysis. Skills of analysis need to be practiced over time, like learning to swim or tie shoes, since this is not an "automatic" digestion of content, but instead, an applied process that unfolds and expands learning.
- Have content appropriate, fresh and localized, not "one size fits all."
- Include methods for assessment, with people learning to assess their own work and that of others, as well.
- Incorporate some production elements, so that participation and contributions may be expressed and captured and shared.

Len Masterman, a UK professor who helped launch the media literacy field internationally, suggested 18 Principles for Media Education in 1989, and his principles are just as relevant today (Masterman, 1989). All of the Principles are important qualifiers,

"Final Report of Commission on Information Disorder," Aspen Institute, (Nov. 2021): https://www.aspeninstitute.org/wp-content/uploads/2021/11/Aspen-Institute_Commission-on-Information-Disorder_Final-Report.pdf

"Learner at the Center of a Networked World," Aspen Institute, (2014). This report provides an overview of actions to be taken by various societal institutions to embed media literacy into education systems: https://www.aspeninstitute.org/wp-content/uploads/files/content/docs/pubs/Learner-at-the-Center-of-a-Networked-World.pdf

SpeakUp Survey of U.S./Project Tomorrow
The annual SpeakUp Survey provides U.S. teacher and student insights that are useful and timely, into using media and technology in K-12 U.S. Schools: https://tomorrow.org/speakup/

"Investigating Risks and Opportunities for Children in a Digital World: A rapid review of the evidence on children's internet use and outcomes," Unicef, London School of Economics, End Violence Against Children, (2021): https://www.unicef-irc.org/publications/1183-investigating-risks-and-opportunities-for-children-in-a-digital-world.html

Scope and Sequence Analyses for Curricula available from these countries:

France:
https://www.clemi.fr/fr/formation-parcours-emi.html

Belgium:
https://eacea.ec.europa.eu/national-policies/eurydice/content/flanders-introduces-new-attainment-targets_en

Global Efforts toward Media Literacy

Atlantic Council: Digital Forensic Research Lab
Focused on disinformation with eight research hubs internationally, the Lab is dedicated to identifying falsehoods and election interference, and building resiliency in an age of misinformation and disinformation: https://www.atlanticcouncil.org/programs/digital-forensic-research-lab/

Corona Showcase:
A Global Festival of Children's Expressions in a Time of Pandemic: http://www.CoronaShowcase.org

Daughters of St. Paul:
The Pauline Institute of Communication in Asia and the Pauline Center for Media Studies, USA, comprise a Roman Catholic institute of religious women founded in Italy in 1915 are now located in 52 countries worldwide. The Pauline Center for Media Studies' mission statement is "to develop and encourage media mindfulness within the context of culture, education and faith formation." A 60-hour advanced certificate in media literacy is available for teachers, clergy, parents and catechists, with the certificate recognized for cat-

but the first two especially reinforce the importance of media education:

1. Media Education is a serious and significant endeavor. At stake is the empowerment of individuals, especially minorities, and the strengthening of society's democratic structures.
2. The central unifying concept of Media Education is that of representation. The media mediate. They do not reflect but re-present the world. The media, that is, are symbolic sign systems that must be decoded. Without this principle no media education is possible. From it, all else flows …

As a field that revolves around symbolic systems (and semiotics), having a pedagogy that succeeds in making the conceptual something concrete, and exploring representation – which is also a bedrock of democratic systems – are important leaps for all citizens to make. How media literacy addresses the representation of citizenship, governance and democracy are all essential for students' understanding their own role as media users/producers, participants and as voting citizens, online and off.

As content proliferates, citizens are overwhelmed and often taken in by disinformation and misinformation. Citizens must have the skills and tools with which to cope and to navigate and to use media in a way that enhances their lives; media literacy provides an internalized filtering system that is reliable and ever-present. This is why, after many years of being in the shadows, media literacy is now being recognized as a central focus for resiliency.

A Subject for All, Anywhere, Anytime

Since media literate citizens can address all subjects, anytime, anywhere -- by having an internalized method for filtering media, sharing and producing – the question arises about whether, in teaching media literacy, the subject should be integrated into all subjects or taught as a separate class. Another question always

echists in the Archdiocese of Los Angeles and elsewhere. The program features the following model for media literacy and faith:
https://media.pauline.org/Resources/Blog/ArticleID/637/Sr-Rose-contributes-to-Media-Encyclopedia-with-a-history-of-faith-based-Media-Literacy
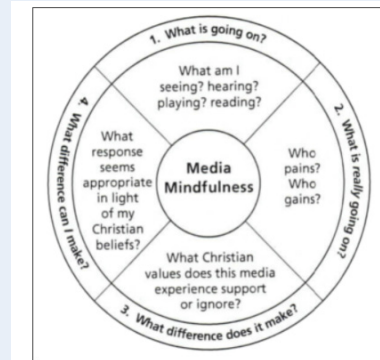
e 1 The Media Literacy Wheel. Source: Hailer & Pacatte (2007).

Global Gateway:
A new European strategy to boost smart, clean and secure links in digital, energy and transport and strengthen health, education and research systems across the world. Sponsored by European Commission and the High Representative for Foreign Affairs and Security Policy.
https://ec.europa.eu/commission/presscorner/detail/en/ip_21_6433

Global Internet forum to Counter Terrorism:
Brings together the technology industry, government, civil society, and academia to foster collaboration and information-sharing to counter terrorist and violent extremist activity online.
https://gifct.org/

Global Kids Online:
Through surveys on digital safety and media literacy, Global Kids Online gathers global evidence on children's online rights, opportunities and risks. New media literacy modules are under development.
http://globalkidsonline.net/

IFLA (International Federation of Library Associations and Institutions:
https://www.ifla.org/

NATO Strategic Communication Centre for Excellence (STRATCOM):
This Centre provides timely and noteworthy research on technology developments and media-related subjects.
https://stratcomcoe.org

Riga StratCom Dialogue, Annual Conference, brings together strategic communications community:
https://rigastratcomdialogue.org/

Salzburg Academy on Media and Global Change.
Primary directed at media professionals/media producers, but also addresses media literacy:
https://www.salzburgglobal.org/multi-year-series/media-academy

arises about when to start teaching media literacy to children, and whether media literacy should be taught to adults who are no longer "in school".

The second question is easier to answer: children should be taught media literacy ideas and concepts from birth. Children are surrounded by media – whether music, videos or podcasts, or radio in a car. Understanding how to identify colors, shapes, music, for example, are important pre-reading skills and also a start for critically thinking about media and how the world is represented. Children also are learning about how they represent themselves to the world, and these are essentials in understanding the world of media. Parents have a significant role to play in educating their children about media; they are the most important teachers (Singer, 2015).

But formal instruction should start with preschool and continue through the years. Children's data and profiles are collected from before birth (for example, think of social media advertising appeals to pregnant mothers.) Having media literacy frameworks as common denominators give powerful tools of analysis for learning, discussion and for informal learning settings, as well. Children are attracted to media; it *is* their culture; they have a natural curiosity to learn about how the media world works, and how it presents itself to them. Because media is interesting to children, levels of children's engagement with media literacy programs are encouraging.

Adults, too, benefit from media literacy education and need the skills and tools to navigate the media world. Increasingly, the online forums provide government forms, registrations, and all manner of purchasing and participating in everyday life. Adults often lack these skills – but regardless of ages and stages, and education levels, media literacy is a unifying and essential skill for participation today. For those with low or no reading levels, media literacy provides a way to interrogate visual and video messaging in ways that contribute to critical thinking, and also provide paths to overall literacy. For those who are operating at more sophisticated levels, media literacy provides a common vocabulary and tools for seeing the world through others' eyes, and there is no end to learning; media literacy provides a lifelong learning process.

Reaching adults with media literacy education is a different challenge, and one that the media itself can be employed as a teacher. On a formal level, adult education is scarce and an urgent need. If citizens cannot access online information, they are effectively disenfranchised, and this presents equity issues.

Estonia is an outstanding example of this issue and how to meet the demand for education. The country has prioritized technology development, and the government operates on a system powered through block-chain technology. Citizens have an ID number that they can use for online access to all available

UNESCO
UNESCO sponsors Global MIL Week annually
https://www.unesco.org/en/media-information-literacy-week

UNESCO Regional Offices support MIL efforts (see Poland below, for example).

UNESCO's Global MIL Alliance is a volunteer-driven UNESCO project that holds an annual conference:
https://en.unesco.org/themes/media-and-information-literacy/gapmil/join

UNESCO/UNAOC MILID Network: Information and Media Literacy and Intercultural Dialogue University Network:
https://en.unesco.org/themes/media-and-information-literacy/milidnetwork

UNESCO's Grunwald Document of 1982 was instrumental in launching more coordinated media literacy efforts globally:
https://www.medialit.org/reading-room/challenge-media-education-grunwald-document

UNICEF
Unicef sponsors research on children's rights in a digital age:
https://www.unicef-irc.org/

United Nations Alliance of Civilizations:
UNAOC maintains a clearinghouse for media and information literacy, and conducts annual youth film festivals.
https://milunesco.unaoc.org/

US AID:
US AID supports digital and media literacy programs throughout the world, to help international development and inspire action.
https://www.usaid.gov/usaid-digital-strategy

US State Department:
The US Public Diplomacy Department and the Global Engagement Center lead U.S. inter-agency efforts to proactively address foreign adversaries' attempts to use disinformation and propaganda to undermine U.S. interests.
https://www.state.gov/wp-content/uploads/2020/08/Teaching-Public-Diplomacy-and-the-Information-Instruments-of-Power-in-a-Complex-Media-Environment-2020.pdf
https://www.state.gov/bureaus-offices/under-secretary-for-public-diplomacy-and-public-affairs/global-engagement-center/

U.S. Embassies through the world support media literacy programs, primarily to counter disinformation/misinformation.

International Visitors program supports exchange of those interested in media literacy.
https://2017-2021.state.gov/media-literacy-and-press-freedom-in-the-21st-century/index.html

government information, enrollments in social programs, and managing their taxes and filings. Although the government has an official media literacy mandate, it offers a case for reaching all citizens with digital and media literacy skills, especially those who are older or in rural areas (Wallace, 2020).

As to whether media literacy should be integrated into all subjects, or taught as a separate class, many practitioners are finding that the answer is both. Since media literacy is still not taught in many schools, the quickest and most efficient way to introduce the subject is through a class with a qualified teacher or teacher librarian, where practice in applying concepts to content in any and all subjects can be steady and illuminating. This way, the responsibility for the subject and the teaching is clear and there is accountability for learning. Ideally, media literacy should be integrated into all subjects, because the skills of analysis apply to all subjects. For example, shouldn't a history textbook be critically analyzed? The stories and narratives that are told come from a particular point of view, with inherent bias and purpose. Sometimes the emphasis in classrooms is only on content analysis, focused only on accuracy and credibility, rather than being able to conduct a broader contextual analysis that is more useful in making decisions such as purchasing or voting.

As some practitioners are finding, the emphasis only on facts and "truth" can lead to cynicism rather than a healthy skepticism about information that, at best, is never perfect. Sometimes more is less; sometimes something is better than nothing, and sometimes it isn't. If students learn to analyze information through a media literacy lens, they are more equipped to identify the context of any narratives and the values embedded, and to decide whether these values are in line with their own and with societies'. Media literacy invites people to think and decide, rather than be told what to think and what to do. This is a far more engaging approach, and a learned approach, which encourages an embrace of democratic values through thoughtful analysis and reflection. Adults often take these values for granted, but youth need to learn and relearn them, and take them as their own. As post-Soviet societies have learned, democracy, rule of law and freedom require an educated population capable of understanding personal rights and responsibilities that come with open societies.

There is an urgent need for media literacy programs and approaches to be consistent, replicable, measurable and scalable – and non-partisan -- so that media literacy can be effectively and strongly deployed within the NATO Alliance sooner rather than later. This need can be met, and the citizens/communities mobilized with appropriate planning, implementation and support. Although information and media content itself is local and nearly infinitely available through the internet, media literacy processes and skills are globally applicable for acquiring, contextualizing and applying content knowledge. Media literacy processes can be applied to any

World Health Organization:
The World Health Organization overview of digital health literacy provides a brief overview:
https://www.who.int/global-coordination-mechanism/working-groups/digital_hl.pdf

International Media Literacy Research Conferences
Global Media Education Summit, sponsored through the Centre for Excellence in Media Practice (Bournesmouth University) in conjunction with other host universities globally.
https://blogs.bournemouth.ac.uk/research/2022/04/04/global-media-education-summit-2023/

International Media Literacy Research Symposium, organized by Belinha De Abreu, Ph.D.
https://www.imlrs.net/about

Regional Efforts

Two European Union Directives Requiring Media Literacy:
• The Audiovisual Media Services Directive (AVMSD)
https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM%3Aam0005
EU country states must report on media literacy activities and programs every three years; an Expert Committee provides continuing feedback

• Tackling Online Disinformation: a European Approach
https://ec.europa.eu/transparency/documents-register/detail?ref=COM(2018)236&lang=en
These directives drive EU-Wide requirements for all member states, and have helped establish awareness of media literacy throughout the EU.

Significant Updates to Audiovisual Media Services Directive (AVMSD)
(Under remit of Audio Visual Authorities in each EU Country, typically Ministries of communication or culture)
Media Literacy Definition (revised in 2018):

'Media literacy' refers to skills, knowledge and understanding that allow citizens to use media effectively and safely. In order to enable citizens to access information and to use, critically assess and create media content responsibly and safely, citizens need to possess advanced media literacy skills. Media literacy should not be limited to learning about tools and technologies, but should aim to equip citizens with the critical thinking skills required to exercise judgment, analyse complex realities and recognise the difference between opinion and fact. It is therefore necessary that both media service providers and video-sharing platforms providers, in cooperation with all relevant stakeholders, promote the development of media literacy in all sections of society, for citizens of all ages, and for all media and that progress in that regard is followed closely.

Member States report on media literacy activities every 3 years. By 2020, EU countries required to implement a media literacy program. Platforms must

content, anywhere, anytime – which is especially beneficial for mobile learning with ubiquitous smartphones.

In recent years, primarily since the U.S. elections of 2016 and 2020 and the Russian invasion of Ukraine, media literacy is taking its place center-stage as an essential element for sustaining a democratic society. The Ukrainian-Russian war has clearly demonstrated NATO's role in defense in an era of hybrid warfare, including disinformation and cyber attacks. Yet, for media literacy to thrive amongst all people, stakeholders must understand:

- What are the current factors that are animating the need for media literacy and propelling its growth?
- What is the existing ecosystem for supporting and expanding media literacy globally?
- And, although there have been some breakthroughs in global awareness about the importance of media literacy to the well-being of democracy and democratic societies, why is the institutionalization and systematization and wide-spread adoption of media literacy education taking so long to establish?
- What are the opportunities for broadening, deepening, strengthening, supporting and sustaining the ecosystem that supports media literacy in democratic societies?
- What are the barriers to embedding media literacy in culture and institutions, so that media literacy empowers citizens, helps them effectively manage risk and is part of the everyday fabric of life in a democracy?
- What might be done?

Clearly, although media literacy education is a powerful cognitive intervention, media literacy is not a short-term fix or the answer to every social problem. Embedding media literacy as a people-first, thoughtful alternative to autocracy is a generational process that must be intentional and nurtured for generations to come. That is a very ambitious goal, requiring long-term systemic change as well as short-term, strategic interventions. Yet this essential effort to educate all citizens to effectively navigate their world is not a new one: as needs change, so must educational goals and systems. Multi-media campaigns for social change have been instituted and worked in the past – environmental; and smoking cessation campaigns, among others -- and there is every reason to hope that society can adopt and deploy media literacy as a cornerstone of education and therefore, a strategic defense for maintaining democratic values, if the political will supports it.

To institutionalize media literacy, an entire ecosystem must be developed and supported, addressing every aspect of democratic societies. This ecosystem includes an infusion of media literacy into education, defense, health, transportation – all aspects of life today, since technology permeates every aspect of life. Research and development, and implementation

promote media literacy and implement measurement instruments, and report.

EU Digital Education Action Plan 2021-2027:
https://digital-skills-jobs.europa.eu/en/actions/european-initiatives/digital-education-action-plan-2021-2027#:~:text=The%20Digital%20Education%20Action%20Plan,period%20from%202021%20to%202027

DG Connect: Under DG Connect's program Media Education for All, about 18 projects funded over five years, each with at least 3 EU countries and multi-stakeholders. Projects featured media literacy, critical thinking and disinformation. Focus on safety and risk management more than creativity and participation. DG Connect has joined forces with DG EAC (Education and Culture) to created a high level expert group on combatting disinformation and promoting digital literacy (2021-2022). It will come up with recommendations and implementation suggestions, focused on schools all across Europe.
https://ec.europa.eu/info/departments/communications-networks-content-and-technology_en

EEAS - European External Action Service.
EEAS has a specific mission to focus on disinformation and foreign information manipulation and interference.
https://www.eeas.europa.eu/_en

Erasmus Plus:
The EU's program to support education, training and youth and sport. Extensive Erasmus + programming - such as E-Twinning, an online community for schools in Europe encouraging cross-country collaboration - provides a wide variety of outreach initiatives and scholarships.
https://erasmus-plus.ec.europa.eu/

European Platform of Regulatory Authorities (EPRA): this group of broadcast regulators regularly discuss media literacy, with meetings devoted to the subject every other year (EPRA meets 2/year).
https://www.epra.org/#:~:text=Created%20in%201995%2C%20the%20European,of%20relevant%20topics%20to%20regulators.

Media and Learning:
An international, not-for-profit association set up in 2012 under Belgian law to promote and stimulate the use of media as a way to enhance innovation and creativity in teaching and learning across all levels of education in Europe.

Country Efforts
Highlights of Sensible Practices and Notable Programs
The number, variety and quality of media literacy efforts that offer services is impossible to capture in a timely and accurate way. These efforts listed below represent a snapshot of programs of note in various countries, to give a quick picture of the wide variety and nature of activities in NATO Countries. Most National Libraries in European Countries promote media literacy education, and a host of NGO's are also active in every country. Few countries have media literacy integrated into their education systems. These exam-

of practices and programs, drive this infusion, and this effort, too, must be systemically supported.

This starts by gaining consensus around what media literacy is and what media literacy educational practices are, and providing support for the media literacy community of researchers and practitioners: peer-reviewed journals, organizations devoted to the field, conferences, university programs supporting research and practice, ongoing training and development opportunities, educational resources for parents, teachers, librarians and community organizations, direct outreach to youth and adults, and financial and technical support from government, philanthropy and private industry. Media literacy requires a deep and sustained effort to become part of the cultural fabric of every country and all citizens.

"In one sense, NATO has been focused on media literacy for decades – we just haven't defined our efforts that way. The NATO press office was set up in the '50's; the public information program was started in the 60's. We are building upon decades of experience, which gives us credibility. Our communication has focused on journalists and opinion makers; now, we are reaching out more to the broader public and we are now able to have more feedback on how people are engaging with and processing the information we provide." – Barbora Maronkova, Communications Advisor on NATO's Strategic Concept, Policy Planning Unit, Office of the Secretary General, Brussels, Belgium.

This ecosystem is populated with active citizens throughout the NATO Alliance. In the past, NATO communications was focused primarily on the defense community; now, with information processing being seen as a key to resiliency (NATO, 2020), all citizens in the Translatlantic need to have the skills and critical thinking capacity needed to address the issues of the day. With more educated citizens overall, every citizen has a stake in media literacy and media literacy education, because in a democracy, decisions rest ultimately with individual citizens and their communities. For this reason, media literacy can impact individual and community decisions in all arenas of life, whether health, family, politics, finance, or communities. The recent coronavirus crisis and vaccine resistance is an example of how misinformed health decisions threaten society; such pandemics are a serious threat, indeed, and such world-wide threats illustrate the need for NATO and other governments to work together as partners in a virtually and physically connected world (See Part V, The Ecosystem for Media Literacy).

Today, the ecosystem for media literacy is present but hardly populated or supported systematically. For example, in the past few years, some Western governments have supported media literacy with local programs throughout the EU and North America, to support researchers and practitioners in their quest to spread media literacy. These programs have usually called for short-term research or training programs within some local schools and libraries and youth organizations to introduce media literacy education; however, these programs are typically

ples, though notable, are typically not system-wide. France and Portugal have the most integrated education systems. Although there are many grassroots efforts in the US and Canada (which does require media literacy in its language arts national curriculum), there are no current coordinated national governmental efforts to address media literacy.

Belgium
Belgium has a unique approach to media literacy education in that, in 2008, the Higher Board of Media Education was started and a government office for media literacy was established that is independent from any other Belgian government department. The focus is on how people integrate media into their day to day lives and how to use media in a positive way. This office takes a grassroots approach, primarily providing small grants to local schools and organizations. In its most recent Strategic Action Plan, the Media Literacy Department identified 60 initiatives for schools and libraries, youth and social work. These come under the review of the HIgher Group for Good Media and Information Literacy.

Belgium offers a robust ecosystem for media literacy, although there is still work to be done in embedding media literacy into education policies and practices. Many NGO's thrive in Belgium. EAVI, for example, provides Media Literacy for Citizenship, as well as a series of online conversations on media literacy, with experts, practitioners, researchers, policy makers: https://eavi.eu/

Because of the various languages spoken in Belgium, the ecosystem for media literacy is complex but growing. In French-speaking Belgium, UCLouvain has a research team devoted to media literacy, and offers one of the few masters programs, as well as a Doctoral Seminar annually on Digital/Media/Information Literacy. https://www.redmil.info/

The Knowledge Center for Media Literacy - Mediajis – in Flanders is one of the largest and best known providers of media literacy research and education in Europe. Now with 130 researchers, the Knowledge Center is scientifically-grounded and funded by the government. The Center provides guides and resources for parents, with funding from the media industry. Additionally, the Knowledge Center works with the public broadcaster to produce 10-minute episodes on media literacy, which are part of a soap opera series. Seniors are also served with special programs.

Curriculum has to be created within government frameworks, or attainment goals, and media literacy is one of the attainment goals. Trainings are held for teachers, librarians, cultural workers, heritage community and administration, in person and online, with a Train-the-trainer approach. Much of the emphasis is on safety and prevention. About 100 teachers per year participate, with volunteers for the training. 90% of teachers do so because they consider media literacy as important. Also, the Free University of Brussels and Vrije University Brussels (VUB) now incorporate digital and media literacy in a pre-service course for teachers.

not institutionally supported nor widespread.

Media literacy is now more embedded in the education systems of countries such a Portugal, France and Finland and, although other agencies of countries are investing heavily in media literacy – such as OfCom in the United Kingdom, or the Department of State in the U.S. – integrating media literacy into education systems remains a tall order for most countries.

Media literacy has long survived through the grassroots: the dedicated teachers and librarians, parents and community organizations who have seen first-hand the need for such education. Marshall MacLuhan was the first researcher to attain global recognition for the importance of the media itself as a key understanding of the world. Other pioneers – Len Masterman from the UK, Jean Pierre Golay from Switzerland, Ismar De Oliveira Soares from Brazil, Barry Duncan from Canada, Thierrey de Smedt from Belgium, Barry McMahon and Robyn Quin from Australia, among many others – provided common foundations for media literacy theory and practice. Today, the demand for media literacy has grown to the point where some say that having access to media literacy education is a human right, necessary for survival in today's world. The UN Committee on the Rights of the Child (London School of Economics, 2022) and the 5Rights Foundation (2022), as well as a separate AdHoc Committee for the Rights of the Child by the Council of Europe (2009) have focused on children's digital rights, as well.

The path to embedding media literacy in culture is still evolving, and unclear. In some cases, media literacy advocates have been able to secure legislation to call for media literacy education, but sometimes this legislation is inadequate or tangential to needs. There is debate about whether a goal for media literacy proponents is to seek legislation and/or continue to advocate at the grassroots, where media literacy has long lived and grown through the efforts of NGO's and grassroots practitioners. These grassroots efforts, in turn, may pressure changes in education systems, where it is vital that media literacy be a central component of educational policies and practices. Legislation undoubtedly puts pressure on education systems and calls for action, and utilizing legislation and grassroots support are both tools for effecting change.

Part II: Undercurrents of Change: The Context Driving Media Literacy Growth

Technology: Systemic Empowerment to Audiences

Technology has united the world and divided the world as never before. New technology developments have long driven major societal and culture shifts, and media, too has contributed such shifts and has been impacted as well. In every case, new media technologies have resulted in empowerment to audiences, to everyday people.

Each year, Mediajis sponsors a contest to recognize the "most media savvy school." Last year, the contest reached 36,000 students. A Platform with refreshed and new content allows for reaching more people and for scaling. To help embed media literacy into all facets of culture and daily life, Mediajis has a concept called "The Media Nest," which has grown with outreach for media literacy. The Media Nest encompasses children and families – and family members of all generations – with the idea of how the family relates to the media permeating the nest that everyone lives within. This concept emphasizes how media is intertwined with the lives of every citizen, and the comfort of the nest often depends upon the comfort and knowledge of its inhabitants.

Canada
Canada has long held a reputation as a leader in media literacy education. Encouraged by its historical connections to the UK and through Quebec, its connections to France, the Province of Ontario is where national curriculum first included media literacy. The media literacy strand was created in English/Language Arts, through the efforts of the Association for Media Literacy (AML). Founded in 1978, the AML continues its role as the official Subject Association for Media Literacy.
https://aml.ca/

The National Curriculum requires media literacy as a graded subject, which helps provide accountability for teaching. However, there is currently no national strategy for digital media literacy, and teacher training at university, for pre-service teachers, is not widely available. Other notable organizations in Canada include:

MacLuhan Foundation:
https://mcluhanfoundation.org/
Media Smarts:
https://mediasmarts.ca/

Croatia
The Association for Communication and Media Culture (DKMK), with their most recognized project DJECAMEDIJA.ORG, is an NGO established 10 years ago. DKMK has conducted 1500 workshops for 35,000 people, including kindergarten through university, teachers, librarians, adults and seniors, and ompleted 20 projects in 2021 alone. DKMK receives regular support by public institutions, and is supported by Ministry of Science and Education.

According to research done by the European Values Survey, in Croatia, the military and army are the most trusted institutions by the public, followed by police, doctors, scientists and teachers. Media and Propaganda, and Public Relations are taught at the War College, and at the Military Diplomatic Academy. The objective of the course is to familiarize students with how media, propaganda and public relations function, and to prepare them to understand these phenomena and to communicate with media, especially in times of crisis. Many additional topics are addressed – advertising, commercialization, critical awareness – so long as

INDUSTRIAL REVOLUTION

Beginning with the industrial revolution, people's focus shifted from agriculture to factory production, with mass production printing allowing mass media through newspapers and magazines available more inexpensively to all

PHOTOGRAPHY

Photography revolutionized the visual world, with family portrait photos becoming so ubiquitous that families have years of photos documenting every phase of their lives

TELEGRAPH

The coming of the telegraph brought instant communication across the miles, with geography less relevant to communication

TELEPHONES, RADIOS AND TELEVISION

Telephones, radio and television brought more realism instantly, with audio that reaches the far corners of the earth, and moving pictures into people's homes that opened unimaginable vistas and lifestyles

COMPUTER

The invention of the computer supported reams of data processing and began the transformation of the concrete to the digital

PERSONAL COMPUTER

The introduction of the personal computer provided distributed networks and liberation from central control, democratizing the availability of digital power

INTERNET

The invention of the internet meant a revolution in the capturing, cataloguing and retrieval of massive amounts of information and knowledge

EMAIL AND SOCIAL MEDIA

Email and social media have unbound affiliation and assembly from geography, time and space, and allowed for each individual to have the opportunity to gain voice globally

PLATFORMS

Platforms offered opportunities to communicate, to shop, to trade, to buy and to sell virtually anything imaginable

SMARTPHONE

The invention of the smart phone has put massive computer power in individual hands, connecting everyone, anytime, everywhere

VIRTUAL REALITY

Now, virtual reality has brought a new sense of place in mediated worlds

Beginning with the industrial revolution, people's focus shifted from agriculture to factory production, with mass production printing allowing mass media through newspapers and

the discussions are not put in a political context, which tends to cause disruption due to Croatia's history.

Media Literacy in Croatia:
https://onlinelibrary.wiley.com/doi/10.1002/9781118978238.ieml0144

Czech Republic
Media literacy is not robust in the Czech Republic. Most media literacy trainings are done through NGO's, with the result that trainings are not systematic or institutionalized.

Through EU support, a new strategy is to train teachers, so that a train-the-trainer model can be followed. With Centers in Prague and Taipai, the European Values Center for Security Policy organization identifies, tracks and addresses propaganda from Russia and China.
https://europeanvalues.cz/en/

Finland
Finland is frequently cited as an outstanding example for media literacy being most advanced country-wide, since teachers are expected to integrate media literacy throughout curricula. Children in Finland start media literacy education in preschool. Finland also has media literacy programs reaching adults, seniors and the disabled.

KAVI, the National Audiovisual Institute (https://kavi.fi/en/) incorporates the Department for Media Education and Audiovisual Media (MEKU), responsible for the promotion and coordination of media education at a national level, and the supervision of the provision of audiovisual programmes in Finland from the perspective of protection of children. Under the auspices of KAVI, a Council of Ministers from each governmental department (defense, education, communication, etc.) gather together to discuss media literacy and current needs. All department Ministers participate under Chatham House rules.

1970: First Core Curriculum for Comprehensive Education National Policy Guidelines for Good Media Literacy: 2013-2018
https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/75280/OKM13.pdf

Media Literacy in Finland:
National Media Education Policy, 2019
https://medialukutaitosuomessa.fi/mediaeducationpolicy.pdf

University of Lapland:
Media Education Hub, with 15 years experience in carrying out research and education:
https://www.ulapland.fi/EN/Units/Media-Education-Hub

European Centre for Excellence for Countering Hybrid Threats, begun by EU and NATO in 2017:
https://www.hybridcoe.fi/about-us/#:~:text=The%20European%20Centre%20of%20Excellence%20for%20Countering%20Hybrid%20Threats%20(Hybrid,international%20organization%20countering%20hybrid%20threats

magazines available more inexpensively to all. Photography revolutionized the visual world, with family portrait photos becoming so ubiquitous that families have years of photos documenting every phase of their lives. The coming of the telegraph brought instant communication across the miles, with geography less relevant to communication. Telephones, radio and television brought more realism instantly, with audio that reaches the far corners of the earth, and moving pictures into people's homes that opened unimaginable vistas and lifestyles. The invention of the computer supported reams of data processing and began the transformation of the concrete to the digital. The introduction of the personal computer provided distributed networks and liberation from central control, democratizing the availability of digital power. The invention of the internet meant a revolution in the capturing, cataloguing and retrieval of massive amounts of information and knowledge. Email and social media have unbound affiliation and assembly from geography, time and space, and allowed for each individual to have the opportunity to gain voice globally. Platforms offered opportunities to shop, to trade, to buy and to sell virtually anything imaginable. The invention of the smart phone has put massive computer power in individual hands, connecting everyone, anytime, everywhere. Now, virtual reality has brought a new sense of place in mediated worlds.

These individual media, and combinations of media and processing power, serve as the nexus for discovery and learning for individuals and organizations alike. What's next is undoubtedly in the heads of unknown teenagers from all corners of the globe. People are inundated with information through multi-media. All these media continue to impact people's perceptions and desires and most importantly, relationships in an expanded world that often has no physical boundaries. In some remote mountainous villages of Peru, radio continues to be the primary carrier of information; in some places in Siberia, people use their mobile phones from their tents – with no plumbing -- on the plains. In the slums of Tijuana, people live in huts with no plumbing, along with satellite dishes next to each home, with electric wires strewn over the grounds for connection. Countries like Iceland have prioritized speedy internet connections amidst previous economic turmoil, and in North America and in many places in Europe, 5G networks are becoming ubiquitous and the race to keep up is ongoing, with China and its ability to harness data through its networks being a prime consideration. Children in the U.S. have smartphones: More than one in two (Robb, 2019) reported that they have access to these powerful handheld computers by the time they are 11 years old, while 85% of U.S. adults also have smartphones (Pew, 2021). Access to technology remains an issue of great importance, since lives are circumscribed without this access. All of these sometimes-incongruous combinations of technology and lifestyle must be accounted for in reaching audiences and empowering citizens to use technology for bettering their lives.

"We've seen through examples like the protests in Russia over the Ukraine-Russian War, and the Arab Spring, that unrest often starts on social media," --– Philip Seib, Professor Emeritus, University of Southern California, US

Although robots and artificial intelligence (AI) continue to gain usage online, it is important to remember that these technologies are still driven by human agency – human choices and decisions are behind the formulas used in algorithms; humans drive the use of bots and of machine learning and natural language processing. Through technology, the science of prediction has exploded – with being able to process almost incomprehensible amounts of data -- and the tools of analysis have grown as well through new developments in artificial intelligence (AI).

This access to a wealth of data leads to new capabilities that provide a new way to see society. Cars are now data-collection machines that can drive themselves. Big data fuels business models for platforms. It fuels shopping online. It also fuels the stories of the day, the narratives, on a massive scale. Now, with access to millions of documents and news stories, data services such as Lexis-Nexus can analyze news, trends and narratives as they emerge, and track them over time (NexisNewsdesk, 2022).

An example is the tracking of the COVID story and its impact globally, where Lexis Nexis provided graphs updated daily for the public to be able to check changes in the emerging stories and narratives around the pandemic (2020). This type of analysis takes researchers and everyday people well beyond local stories and guesswork on trends, and enables a more comprehensive analysis of cultural, national or societal narratives that reflect current thinking. Additionally, linguistic analysis is yielding insight into emotional or action words that spark reactions from audiences, giving media makers the power to manipulate feelings and behaviors on a massive scale. This type of manipulation relies on psychological analysis that most people are unaware of, and the audience's understanding of such techniques is not enough to ward off such experiments or attacks on populations. This psychological approach is of great concern for defense agencies.

NATO's Centre for Excellence in Strategic Communication (2020) is an example of the type of think tank that provides research and analysis on new technology developments affecting media, and narrative analysis helpful in understanding people's understanding and attitudes regarding important issues of the day. Also, the impact and effect of messages and technologies on audiences is a key area of research, becoming more and more important.

"Politics is war without bloodshed while war is politics with bloodshed," – Mao Zedung, Founding President, People's Republic of China, Founding Chair of Chinese Communist Party

In addition, new technologies are altering the nature of peace,

TV5MONDE: the French public television international branch also produces resources for classrooms, in partnerships with schools
https://enseigner.tv5monde.com/articles-dossiers/articles/semaine-de-la-presse-et-des-medias

Libraries are well positioned for MIL, with 3 elements identified for training: Media, documents and data.

In civil society, some major organizations deal with MIL and are considered as partners of Ministry of Education, with funding from the Ministry of Culture:

Alliance Pour l'Éducation aux Médias : journalists for fact-checking in schools.
https://www.alliancepresse.fr/

Cartooning for peace: cartoonists go to classrooms in an international network to promote freedom of expression (connected to Charlie Hebdo's massacre).
https://www.cartooningforpeace.org/

CEMEA; one of the oldest federations of youth popular education (non formal), has a rich repository of training modules, Yakamedia
https://yakamedia.cemea.asso.fr/

Fédération Léo Lagrange; one of the oldest associations in youth popular non formal education, focuses on 7-11 year olds and on cybercitizenship
https://lespetitscitoyens.com/

Ligue de l'enseignement: one of the oldest federations of non-formal « laique" education, has many initiatives
https://laligue.org/tag/education-aux-medias-et-a-linformation/

Savoir*Devenir: a five-year old association, to train decision-makers in ministry of Culture with EMILE program and reaching out to librarians, archivists, museum directors… and to conduct international MIL projects dealing with fact-checking (youverify.eu) and algo-literacy (Crossover.social)
https://savoirdevenir.net/projects/

Disinformation Step by Step, a MOOC with Open Badges and Certification available at
https://hub5.eco-learning.eu/course/disinformation-step-by-step-2/ This program is promoting media literacy education and fighting visual disinformation. The MOOC was developed in France by Savoir*Devenir, within the EU Funded YouVerify project (savoir-devenir.net/you-verify and youverify.eu). It is available in French, English and Spanish. It has reached more than 2,500 librarians, educators and journalists across Europe, with a success rate of 50% (compared to the usual 15% or less.)

Agencey France Presse (AFP) provides a portal called AFP Fact Check that debunks current disinformation, providing background and pictures that are helpful in classrooms.
https://factcheck.afp.com/

Wikipedia: Wikipedia Foundation has developed a project encouraging young students in classrooms to

crisis, and conflict. NATO's technological advantages can no longer be taken for granted. In the coming decade, China, for example, plans to surpass the United States as the world's main artificial intelligence power. NATO is resolved to stay ahead of the curve as the vital venue for transatlantic collaboration on the security dimensions of emerging and disruptive technologies (NATO). NATO has increased its work on emerging and disruptive technologies in recent years, including developing an implementation strategy to ensure NATO's competitive advantage in seven important disruptive technologies (artificial intelligence, data and computing, autonomy, quantum-enabled technologies, biotechnology, hypersonic technology, and space). The Defense Innovation Accelerator for the North Atlantic (DIANA) (NATO, 2022) will allow the Alliance to more swiftly adapt and adopt new technologies, while also strengthening its industrial base and bridging gaps.

Media: Content at work

Technology has impacted media profoundly, with social media – built on powerful technology platforms – leading the way as a social and cultural phenomena. Although people tend to think of social media as being comprised of individual "profiles" that feature user-made or shared content, these platforms are really huge databases that are fed by users' content and personal data, which is then sold to advertisers. Like Las Vegas being built on gamblers' losses, social media platforms are built with "free" access to the platforms which builds huge audiences, and the contributions of data and content that users then sign over to the platform companies. With these platforms, users are the content/data being sold, just as with television and traditional news organizations, eyeballs are the data being sold to advertisers. But today, biomedical information, DNA, facial recognition, and a host of information tags unique to each individual can be shared and even monetized, while the content of the profiles or ancestral trees or commentary are the lures for users' voluntary participation.

Big Data and the information it provides allows the sorting of people into various categories or silos, with this valuable data on each person participating in a platform being sliced and diced, sorted and filtered to help advertisers and the companies understand consumer desires and behaviors. A Wall Street Journal report (Smith, 2021) cited teens as saying that TikTok seemed to be able to read their minds – and looking into why and how this is so, it is evident that TikTok understands its users very well. A Stanford data scientist commented that with as little as three "likes," a social media company is able to characterize a person's political views and personal preferences, and as these analyses become more and more sophisticated, it is likely that social media companies know more about people than the people know about themselves (Dong, 2015).

This understanding results in algorithms that target individuals

write for Wikipedia.
https://education.wikimedia.fr/

The French media literacy community has close relationship with practitioners in Quebec, Canada and other French-speaking countries:

In Africa, Organization Internationale de la Francophohie (OIF) has recognized MIL as a priority since 2021. It has several projects with associations such as Benevoles de l' EMI (Ivory Coast), Eduk-Media (Cameroon)
https://www.francophonie.org/6-initiatives-francophones-de-lutte-contre-la-desinformation-soutenues-2040

In Belgium, CSEM (Conseil supérieur de l'éducation aux médias en Fédération Wallonie-Bruxelles (Belgique) is an operator created by government in 2008. It provides MIL to schools and for longlife learning, it makes reports and monitors the evolution of MIL projects and initiatives.
http://www.csem.be/

In Canada, Habilomédias: non-profit organization, civil society, dealing with media and digital literacy since 1996. Works with schools and communities (parents in particular).
https://habilomedias.ca

Germany
Digitization of schools is a priority; Information and Media Literacy are also implemented in the decentralized school system, but technology is prioritized over education, while teacher training is still inadequate.
Informal education – for example, maker spaces at libraries and youth centers – is also incorporated in media literacy efforts, encouraging cross-generational programs

Deutsche Welle (DW) is a German public, state-owned international broadcaster funded by the German federal tax budget. DW Akademie provides one of the largest media development and media and information literacy programming efforts globally. DW Akademie has worked extensively in Africa as well as other developing nations. DW Akademie uses the following model to inform its respected MIL efforts, and sees media literacy as needing to be embedded in culture – not just learning to fact check.
https://www.dw.com

German Press Agency has a program on news literacy:
https://www.dpa.com/en/company/usethenews#project

by showing them information that is likely to appeal to them; they are not shown a full range of information on a given subject in a google search, nor does their search result in the same content as someone else's. Searches using the same key words by different people seldom if ever provide similar results. The assumptions behind search algorithms are highly suspect and individuals must be aware of these inherent biases.

"Youth are going to YouTube, Instagram and TikTok for their news. Don't expect them to look at vetted publications – it's not going to happen!" -- Melda Yildiz, Associate Professor and Chair of Department of Instructional Technology at the New York Institute of Technology US

That social media has upended traditional news organizations is an understatement. Social media has eroded the business model of traditional media outlets, with the result being smaller journalist staffing and less original and investigative reporting. As advertising revenue has dried up and print media has died globally, nationally and locally, the media industry has scrambled to go digital, to learn how to appeal to readers, and to survive on a different mix of content (World Economic Forum, 2022). There is increased reliance on public relations firms for content, as well as on news services such as AP, Bloomberg or others whose content is available for licensing and distribution. Local media and magazines have struggled financially and often disappear, unable to compete with the social media platforms for advertising reach and value. As all citizens have become journalists, there are fewer professional journalists. With these changes, social media has created a power shift that is still emerging and settling; the democratization of media and information has shaken institutions of media and indeed, government, to their roots.

"There is an incentive system in place that manufactures information disorder, and we will not address the problem if we do not take on that system, nor will we improve if we fail to address the larger societal issues that continue to divide us," Letter from Co-Chairs, Aspen Digital, Commission on Information Disorder Final Report (2021)

Here are some considerations that have emerged from the changes to the media landscape:
- *Power.* Democratization inevitably leads to shifts in power that many find uncomfortable, contentious, and even dangerous and subversive. Given technology today, voices can be heard that were previously silent or ignored or even disrespected – and those voices don't always emit messages that those who currently hold power want to hear or recognize or act upon. Democracy is known for being messy and often slow, but there is no question that the new representation of voices of more than a billion people is upending media power structures and traditional means of finding, sharing and creating news and all forms of media and information. For sustaining democracy, it is essential

Greece
Like many countries, media literacy started with a protectionist approach and has developed toward a multidisciplinary approach. Within the Ministry of Education, media literacy is not included as an autonomous object of study; it exists as mainly optional and cross-curricular, in thematic projects, workshops and under 21st century Skill Labs by the Institute of Educational Policy.

The new National Thematic Network of Media Literacy, addressing Television, Cinema and the Internet 2021-2024, has been approved by the Ministry of Education. The network is co-organised by EKOME, EduTV Department of the MinEdu and by Serres Primary School Education Department. It aims at Continuous Professional Development of the teachers and educational community in Greece (all school levels) through online and physical training workshops and hands on seminars on media education. (only in Greek)
https://www.edu4media.eu/

Ekome: National Centre of Audiovisual Media and Communication. Ekome is devoted to encouraging and preserving the national audiovisual heritage of Greece. https://www.ekome.media/ Based in Athens, EKOME is a public entity under the auspices of the Hellenic Ministry of Digital Governance with the aim to support and enhance media entrepreneurship and community in Greece and abroad through a threefold strategic mission: a) to create the proper infrastructure for attracting foreign direct investments in the Greek audiovisual sector b) to operate as a center for the creation of the national audiovisual and digital archives policy and c) to develop a framework for Audiovisual Education and Media and Information Literacy (MIL) in Greece. Within its 3rd pillar, Educate, EKOME places an emphasis on Media and Information Literacy, developing actions and policies to empower users in all forms of expression and engagement in the digital environment towards a competitive creative industry and knowledge society.
https://www.ekome.media/audiovisual-literacy-educate/

NGO's are active, including:

KARPOS addresses formal education, as an example - https://karpositheweb.org/?lang=en and Kids Films Festival, such as Olympia International Film Festival for Children and Young People.

EDUMEDIATEST is used for assessing media and digital literacy skills among Secondary students https://www.ekome.media/education/edumediatest-open-european-tool-in-mil/?pag=cat

For a brief overview of media literacy policies in Greece:
https://cdn1.media-and-learning.eu/files/2021/03/Media-Literacy-Policies-in-Greece.pdf

Hungary
The Media Authority has responsibility for media literacy; the government nominates members of the Media Authority. Media literacy is incorporated in national curricula, but implementation is not enforced. There are perceptions that there is not enough focus on the

to understand new power dynamics playing out in media without resorting to outdated, disproven and repressive Marxian or Fascist theories and solutions. At the same time, responsibility for defining and enforcing new media norms should not be the sole purview of media corporations.

- *Trust and Distrust.* With more access to information, and to data breaches that have undermined trust in the handling of their data, citizens are undergoing a tsunami of mistrust, fueled by dis- and mis-information, conspiracy theories, anarchists and other actors who now have bigger voices, with the ability to reach global audiences. Also, as citizens have the opportunity to be more informed through more channels of information, they raise more questions and interactive communication becomes much more important. Trust is built and earned – and as author Haruki Murakami said, "It takes years to build up; it takes moments to destroy." Organizations must be prepared for this new information environment that requires more communication with constituents, and to be able to tolerate and stand up to the serious questioning and scrutiny that will inevitably come their way. Transparency is called for, but media are not transparent – they are filtered and opaque, and this understanding is essential to understanding citizens' media relationship.

- *Surveillance and Privacy.* People are realizing the extent they can be tracked by others through technology. People have seen how their emails, their phone calls, their household connections, and "the internet of things" connect and serve them – yet erode their privacy to unprecedented limits. In the US, services such as Fair Isaac track people's credit scores, which govern their borrowing and financial lives, and the tracking system is inescapable. In China, a social credit score is now given, which tracks "good deeds" and any violations of rules, and if a score is undesirable, a person may be prohibited from traveling on public transportation or fined. Children, too, are often being tracked through school databases or through commercial platforms, and this is of great concern to parents as being dangerous and possibly detrimental to a child's future.

- *Property and Monetization.* Today, not only social media uses people's data for monetization with advertisers, but people's data can be used for real estate, through such tools as Zillow, and particularly banking functions. The US Internal Revenue service proposed tracking every financial transaction of over $600 for Americans; fortunately, that suggestion was not adopted but the very fact that such tracking is possible is a shocking surprise to many (Ivanova, 2021). NFT's, blockchain technologies and cryptocurrencies are but two other examples of how data can be used to create digital art for sale, enforce contracts and generate currency.

- *Access and Quality.* Although journalists lament people's propensity to check less legitimate news sources – including neighbors and friends – most quality journalism today lies

promotion of critical thinking. US AID and National Endowment for Democracy help fund media literacy programs, for seniors and for schools.

Most media outlets are currently governed or controlled by the government, with independent media and freedom of expression seen as threatened.

Italy
The Italian Association of Media Education is a non-profit established in Rome in 1996 by academics interested in promoting media literacy: https://www.rcmediafreedom.eu/Tools/Stakeholders/MED-media-education-Associazione-Italiana-per-l-Educazi-one-ai-Media-e-alla-Comunicazione

Freedom of expression is curtailed, primarily due to media ownership and government control. Educational poverty is predominant in some parts of the country: low access to technology, broadband and libraries/cultural institutions.

There is high access to smartphones, often with little media literacy instruction. An emphasis on Digital Citizenship has opened up some opportunities for teaching media literacy in formal and informal settings. Media literacy is being integrated into curricula rather than taught as a separate subject; support for media literacy tends to come from the bottom up. A National Plan for Digital School was adopted in 2015: https://oerworldmap.org/resource/urn:uuid:771e2e3f-2b84-4951-96b1-f26e50268186

When technology is absent, teachers focus on game playing strategies, logical thinking, and media literacy using physical media such as packaging, logos on clothing, etc. These media literacy strategies provide transferable skills.

Latvia
Latvia's experience living as a democratic society is still in transition; it exemplifies a post-Soviet environment. The Ministry of Culture developed Media Policy Guidelines for 1016-2020 with 6 strands:

1. Support for media literacy projects in media
2. Research and Analysis
3. Work with media literacy mentors and development of learning
4. Support for media literacy activities for school children
5. Activities in wider society.
6. Capacity building of the media literacy development system

The Ministry of Education is responsible for education, but the Ministry of Environment responsible for internet and internet safety. Budgets for media literacy are very small; change is slow and takes time.
The National Library actively promotes media literacy, but still, media literacy is project-based, coming primarily from the grassroots.

Russian media predominates in Russian-speaking areas. A National Survey of children (aged 9-16) and adults was conducted by Ministry of Culture in 2017 to inform decisions about educational needs of the

behind paywalls on the internet, requiring subscriptions. Instead of paying for this quality, many people – in fact, most people – go to free internet sources for news of interest, and share information they find important or interesting, if they have the technology tools to do so. Since many local news outlets have been forced out of business, unable to compete with the social media platforms who are able to attract the needed advertising revenue to operate, there are now "news deserts." People are going back to the neighborhood gossip that they can find on social media, and share, as well.

- *Polarization.* As news media have sought to slow down the abandonment of traditional news vehicles and tried different methods of attracting an audience, news outlets have increasingly become polarized, left and right. Ironically, to be trusted or noticed by a particular audience, this polarization is necessary for success in attracting an audience. Users are also sorted into silos according to their political leanings, with little intersection with people with divergent viewpoints. An example of this in the U.S. is CNN and Fox News; or the New York Times and the Wall Street Journal. Polarization has progressed to the point that certain words signal particular biases and/or positions: University of Southern California researchers running Civic Imagination Workshops (2017) have learned that, to attract a bi-partisan audience, they need to change the language of invitations to appeal to different demographics. The ownership of traditional media has also changed, with individual moguls such as Amazon's Jeff Bezos owning the *Washington Post.* Recent research revealed that social media has driven some of this polarization; if a media outlet is more polarized, it attracts more clicks on social media which drives more consumption which drive more revenue (Mims, 2020). So long as social media algorithms favor polarization, it is here to stay.
- *Education and Libraries.* Audiences today are generally better educated than their predecessors. *In fact, the 2021 Edelman Trust Barometer indicated a significant change in the demand for media and information literacy amongst audiences: a 46% net increase over the prior year indicated they wished to increase their media and information literacy (Edelman Trust Barometer, 2022).* More education typically means that people want more information about subjects they are interested in, and a deeper level of information; they are more demanding and often more skeptical. But such audiences are still subject to heuristics such as confirmation bias, where people seek information that reinforces their previously held attitudes or beliefs; or the third party effect, where people think that they are not affected by media, but others are. Researchers are currently engaged in brain research and how the brain interacts with media messages; this research is highly important in helping people better understand their decision-making process in regards to media, but also, such knowledge

social media/internet generation:
https://www.km.gov.lv/en/media/1357/download

Netherlands
Schools are in midst of digital transformation; every school needs a plan for implementation of media literacy, and students should be included in the planning process. Media literacy is now part of curriculum; equitable participation is a major issue, while covering a history of media is also considered an important aspect to include.

Some specific projects include:

"Letter to the King:" a media literacy project with 8 school boards: students, teachers, publishers cooperated

MediaMasters: a serious game played by half of primary education school children:
https://www.d-tt.nl/en/blog/welcome-mediamasters

Norway
The Media Authority has the national coordinator role for media literacy. Norway established, in 2011, a national cooperation network on media literacy, with 30 member organizations comprised of NGO's, broadcasters, media and tech platforms, universities and ministries. Meetings are two times/year. The Media Authority has sponsored special meetings of all Ministries; the Education Ministry was the only ministry that declined an invitation.

A Task Force was formed specifically for media and information literacy;   the Task Force is considering the utilization of all media channels including games, movies, advertising, education outreach to vulnerable populations and youth

Two research studies have been conducted on the Norwegian populations' skills, one in 2019 and one in 2021. Plans call for creating an MIL Index for Nordic Countries, in cooperation with other Nordic countries. 9% of population do not have access to the internet: vulnerable groups are seniors over age of 80, disable, citizens outside of a working life, and some immigrants. The Ministry of Modernization has a national program for digital inclusion and participation.

Poland
A new national initiative, Safer Internet, is funded by the EU. There is Declaration and Coordination of Actions by national broadcasting, the Ministry of Education, the Ministry of Digital Affairs, which is now implemented through the Chancellery of the Prime Minister.

The Polish National Commission for UNESCO: has an Expert Committee on media and information literacy; the Commission published two books on media literacy; organizes conferences, workshops, seminars. Furthermore, the Commission coordinates with UNESCO internationally through relationships with other national Commissions.

Many NGO's conduct activities in Poland.

can be misused (Meshi et al., 2015). Libraries, too, are in a profound state of change. As knowledge and content shift to the digital, extensive bookshelves in homes or libraries will be unneeded. The duties of librarians, whether in public, university or school libraries, are changing, as well, from that of content experts and information seekers to advisers and facilitators for identifying and understanding ways to better utilize information. Some libraries see themselves now as community centers or maker spaces that attract citizens and provide ongoing education and opportunities for community-building. *Media and information literacy frameworks will continually move towards being the central means through which people acquire, contextualize and apply digital content knowledge.* Interrogating media and information is the pathway to knowledge and action.

- *Fact Checking and Bias.* As trust in news has deteriorated over time, with fake news concerns at 76%, an all-time high (2022), fact checking organizations have risen to help people judge the quality and reliability of news. These fact checks tell people, based on the judgment of trained fact checkers who have a set of guidelines to follow, whether a news item is true or false, or questionable. Different organizations have different criteria; this in itself is an indication of judgments being made about what is included as a fact or what is omitted, and therefore subject to bias. Who checks the fact checkers? Fact checking presents other opinions, based on other people's guidelines. Although these opinions and guidelines may be based upon highly informed processes, they still encompass another journalistic effort to uncover truth. The same applies to rating systems for media content, such as children's programming, gaming, television or movie content. It's helpful to have some advice to consider, but it is still up to individuals to decide whether to accept others' judgment about the content, based on the information provided.
- *Democratization and Legal Compliance.* The internet and social media have taken news-making out of the hands of a privileged few, and into the hands of the many at the grassroots. Producing media – video, aural or print – is exponentially easier than a decade ago, and the technology is available on a smartphone. Today, everyone is a citizen-journalist, with the attendant responsibilities that many are unaware of. That is the blessing and the curse, and the wails of the now-dethroned news anchors and star journalists and media institutions are still ringing. The news media landscape is forever changed, with new memes and emojis carrying quick, often visual messages, and sources such as Wikipedia, YouTube, TikTok, and online academic journals here to stay. Everyday people are contributing their own ideas and expertise; this rich mix is overwhelming but also exhilarating, that the voices of people everywhere are now unleashed and accessible. The production and capturing of knowledge is multiplying faster than anyone can keep up – but at the same time, new technology tools are emerging

Through EU DigiConnect, researchers conducted a longitudinal study, begun in 2021, done in three phases (only the First Phase is completed). The First Phase has shown that nearly 50% of participating students have low levels of digital competencies, including critical thinking, communication, operational and technical:

- 57% Communication and interaction skills
- 50% Technological and operational skills
- 35% Content creation and production skills
- 34% Information and Media reflection skills
- Boys have higher level of skills overall than girls
- 90% of students have smartphones
- 40% of public believes public television content, which is exclusively controlled by government
- 50% of population vaccinated as of Nov. or Dec., 2021

https://ec.europa.eu/regional_policy/en/atlas/programmes/2014-2020/poland/2014pl16rfop002

Portugal
Newspapers in Portugal first introduced media literacy to increase credibility and readership. Media education entered the national curriculum in 1988. More rapid progress has been made since 2007.
Media education is part of citizenship and development. Portugal has a new national strategy for citizenship education, with 17 domains:
https://cidadania.dge.mec.pt/sites/default/files/pdfs/national-strategy-citizenship-education.pdf

National guideline books are available, but local school groupings can localize this content. Student profiles are required on each student; these profiles include school projects that each student is required to do, which often entail media literacy and media production projects. Importantly, teachers are evaluated on the media literacy projects.

A new platform provided by Ministry of Education: lists resources for media literacy and basic literacy: LEME - Literacia e Educação Mediática em Linha - https://leme.gov.pt/

"We the Journalists" is a program with 46 journalists certified as teacher trainers in media literacy. These journalists have worked with 230 teachers to date, and have developed media literacy activities with approximately 2000 preschool children and K-12 students. These journalists are available to help teachers and students with required school project work. Website shares resources and training dates:
https://associacaoliteracia.pt/

Rádio e Televisão de Portugal (RTP) produced media literacy vídeos for advertising in 2022:
https://ensina.rtp.pt/explicador/literacia-dos-media/

Portugal maintains close ties with other Portuguese-speaking countries, including Brazil. There are 600 million people in the Iberian World.

The Calouste Gulbenkian Foundation, commonly referred to simply as the Gulbenkian Foundation, is a Portuguese institution dedicated to the promotion of the arts, philanthropy, science, and education. This

to make meaning from the jumble. These new capabilities mean that the very ease of usage, of copying and pasting and distributing globally, presents challenges to protecting copyrights and trademarks that is unprecedented, with remixing and reusing and recirculating being common and encouraged. New considerations must inform revisits to laws geared to the age of print, since the digital world has changed the rulebooks. Pirated movies, copied books and photos, and the flood of creative products all undermine the ability of creators to sustain themselves and be rewarded for their work. The creative economies of major centers of production, such as Los Angeles and Seoul, are thriving and yet changed forever. These consequences come directly from the "creative destruction" of old models, that technology affords. Now, with audiences being producers as well, people need the knowledge and skills to make wise and legal-compliant choices possible in the new media world. The laws and regulations governing the digital world need to reflect the needs of today, not yesterday.

- *Gamification*. Although the Discord platform originated as a platform for gamers, it has evolved into more of a social media platform as the gaming community has matured, expanded and found friends from all over the world, online (Browning, 2021). People watch others play games; they socialize and share common interests, whether gaming or not. And whether using a platform like Discord or not, playing games online proved to be a social arena that helped many youth survive the social isolation of the COVID pandemic, when many young people were confined to their homes for months. Games, in spite of their often violent content, also provide rules of engagement and social norms that are commonly understood globally. As the audiences for games grow and mature, their impact and the impact of "gamification" on how people organize and collaborate will undoubtedly grow, too.

Human Agency: Disinformation, Misinformation and Why Content Analysis Alone Is Inadequate

"We have seen that Russia and China not only conduct disinformation campaigns in the Czech Republic, but also interfere economically, culturally and with other types of influence operations. The Chinese have more money; they make direct investments or appeal to politicians; Russians do not have as much money, but they have an intimate knowledge of culture in the post-Soviet countries, and they use this knowledge to their advantage. We have low levels of media literacy here; we need media literacy, from grassroots on up, throughout society." -- Veronika Vichova, Deputy Director for Analysis & Head of Kremlin Watch Program, European Values Center for Security Policy, Czech Republic

The US elections of 2016 and 2020, as well as Brexit and the infowar conducted in Ukraine, Russia and elsewhere, created a moral panic globally that will reverberate for years to come.

Foundation is the administrator for a major media and information literacy grant from Google.

Romania
According to the Europen Commission's Education and Training Monitor Report (2019), Romania is an impoverished and education-poor country, with only 2.8% of GDP allocated for education, the lowest in European Union:
- Nearly 40% of enrolled high school students face functional illiteracy
- 33% of the working population earn only minimum wage, which is less than 300 euros per month.

These statistics are telling in the current attitudes of the people:

30% of those aged 30 and below find the current state of affairs in Romania as being worse than in 1989. There is a pool of more than 50% nationalistic voters in Romania.

Levels of social distrust are at the lowest in 30 years 80% of respondents on the General Trust survey trust the church the most.

There are reports of narratives of Romania being economically colonized and exploited by other Western nations, and also, narratives that claim that "deep state" interests dominate the political system.

This environment calls for media literacy. Two recent examples include:

Teen FactChecking Network, based on a model developed through the Poyntner Institute MediaWise, teens learned to debunk misinformation and teach others media literacy skills so they can fact-check on their own, using the International Fact-Checking Network's Code of Principles.

Disinformation Step by Step, a (see listing under France above) MOOC with Open Badges and Certification, is being used to promote media literacy education. The MOOC was developed in France, and is available only in English, but it has proved popular in Romania.

Spain
Spain reportedly has a traditional and rigid education system, which is decentralized into 17 regions. Plans call for integrating media literacy throughout the curriculum through Formal and Non-formal education, with MOOCS television, and internet platforms. Spain uses, along with Latin America, an "Educommunication approach," maintaining strong ties with Central and Latin America due to language and traditions in media literacy. Three years ago, a Task Force was created with the International Association for Media and Communication Research (IAMCR) to explore similarities and differences between European and Latin American approaches to media literacy and to find ways to collaborate more closely. Media Literacy is divided in academia between education and communication. With depopulation in rural areas; technology and broadband may be difficult to acquire.

Propaganda – beneficial or not – and misinformation has proliferated since people started telling campfire stories. The old "telephone" game, where children sit together and start with one person giving some information to pass along to the next, is an amusing way to see where a story begins and where it may end, with often astonishing results. Multiply the telephone game by the millions and millions of people using social media, passing along information to each other, and the results are predictable. Society is back to passing gossip to neighbors over the fence, only with ramifications that even malicious gossips never anticipated or wished for.

Then, there are those who, due to ideology or hate or pandering to addictions, infect the global village with malignance, and attempt to poison the minds of the vulnerable, to grow their own ranks. To the horror of the world, ISIS demonstrated this behavior to the worst, showing videos of beheadings on YouTube and conducting recruitment campaigns to have women and fighters leave their homes and join the cause. This earlier use of social media galvanized the world.

"Media literacy is not a silver bullet for fixing social ills. You can be media literate and use it in a very bad way. So, what we need is a joined-up approach that helps people to develop media literacy and then use it for good things," – Julian McDougall, Professor in Media and Education, Head of the Centre for Excellence in Media Practice, Bournemouth University and Co-Editor of the Journal of Media Literacy Education, UK

Criticism erupted globally, and attempts to control such malignant information – which research has shown spreads faster than benign information (Dizikes, 2018) – have grown and become ever more demanding, reactions have proliferated: fact-checking organizations have sprung up from various sources and in various languages, trying to verify sources and provide insight into a story; social media platforms are using AI to identify suspicious key words and eliminate such posts, resulting in private companies being made responsible for censorship in societies where free speech is embedded in law. Community leaders on all levels decry misinformation and disinformation, encouraging their cohorts to be mindful of postings and to check sources before sharing posts – and though these are all worthy efforts with the best of intentions, the problems remain and are proliferating as arguments have sprung up about what is misinformation or disinformation, depending upon one's worldview.

An essential part of critically analyzing disinformation and misinformation is in understanding the difference between fact and opinion. Not only are users often unable to discern the difference, but journalists are now blurring the distinction, as well, by mixing opinions or emotional word descriptions into basic news stories. While these techniques often gain more attention or loyalty from a like-minded audience, they are one more avenue for persuasion to a particular point of view.

The Atros Media Group, a major Spanish media company with interest in television, radio and cinema, has established new goals for its Fundacion Atresmedia to help provide students and teachers with media and information skills, and to ensure that children and young people play an active role in the media environment. The Fundacion Atresmedia sponsors a free.annual conference for teachers in October.

Türkiye
The Supreme Council supports media literacy, in alignment with religious doctrine.

The Association for Media Literacy is supported by the Higher Council. A new Media Literacy Forum was started in 2018, with encouraging participation. The first Media Literacy Conference was held in Turkey in 2005.

Open Source documents on media literacy are available, with about 223 Abstracts, and 105 titles, while Coursera is offering a new class on media literacy.

Be Youthful Media is a forward-looking media literacy platform project with a consortium of 20 partners from schools in various countries, including two high schools from Turkey (Gaziantep, and Eskisehir). This is an e-Twinning project sponsored through Erasmus+ directed at ages 15-17.

United Kingdom (UK)
Media literacy has many roots in the UK, going back to researchers active in the field from the 1970's. The British Film Institute took a serious interest in media literacy and the moving image. The early 2000's brought another wave of activity when OfCom, the UK's regulatory authority, began a drive for media literacy, spurred by internet usage, that continues today. The most recent developments in the UK address digital media literacy, with OfCom's approach to online media literacy being outlined for the public, stating that Media Literacy is fundamental to inclusion and for people being able to live safe and savvy lives. Media Literacy is as much about what platforms and services do as it is what users do.
https://www.ofcom.org.uk/research-and-data/media-literacy-research/approach

OfCom has conducted in-depth research on media usage both qualitatively and quantitatively, for a rich picture of the British' populations' adoption of the internet, social media and platform usage. The Making Sense of Media website contains research that OfCom has undertaken through the years, as well as OfCom's current media literacy priorities and model (see model below) for online media literacy, as well as five areas of focus for OfCom: Engage, Initiate, Establish, Evaluate, Research. OfCom offers a Networking opportunity to join and gives an overview of Panel participation, which the Dept. of Education contributes to; however, Media Studies remains an optional subject in the UK.
https://www.ofcom.org.uk/research-and-data/media-literacy-research

"Younger journalists often rebel at the notion that they shouldn't express their opinions in a news story; social media provides them an outlet for their own point of view, and they don't always make a distinction between news media and social media."—William Freivogel, Gateway Journalism Review; Director of School of Journalism, Southern Illinois University, Gateway Journalism Review, US

Also, an essential to critical analysis is an understanding of narratives and framing. Narratives are the stories of our time; they have lead actors both good and bad; they have beginnings, middles and ends. How a narrative is framed has more to do with what is omitted rather than what is included in the narrative; after all, stories have points of view and there is neither nor the time nor appetite to be totally representative. Natural language processing and deep learning enable tracking narratives as they emerge, grow or die Large organizations like Reuters or LexisNexis have access to billions of documents, allowing them to be able to track stories such as the Russia-Ukraine War, financial upturns or downturns, or pandemics. These narratives provide a snapshot of cultural attitudes or behaviors that are highly informative for those who can impact the narrative, or profit from it in some way – either through influence or money -- or in the case of censorship, quash it.

Issues and crises of the day drive narratives: recent examples include immigration; the global COVID pandemic; the Ukraine-Russia War; the storming of the US Capitol on Jan. 6, 2021; and climate change. All of these issues propelled competing and often warring narratives that have proven divisive, raising essential questions of right or wrong, agree or disagree, ignorance or enlightenment. They have provoked unprecedented censorship and regulation to enforce codes of belief and conduct; they have tested journalistic integrity and sometimes resulted in journalists being shut down and even jailed.

More voices have meant more cacophony, with few paths to consensus or respect for the opposition. Leading traditional news channels, whether newspapers or television or cable, have bifurcated along partisan lines to get the clicks and viewership they desperately need in an era where their business models are threatened and their survival is at stake. This, along with the fact that social media algorithms have also favored polarization as a way to encourage engagement and clicks, has created a situation where polarization of the public is inevitable. It is impossible to separate the media information from the media creators: no one can separate the dancer from the dance.

"Clickbait and sensationalized headlines use linguistic and psychological techniques designed to attract audiences and achieve specific goals, making them one of the most effective monetization modes today. Exploiting the reader's emotions and curiosity, these headlines can lead to dangerous manipulation, both social and political, enraging or encouraging citizens to act and react to misleading information --in antithesis to democratic values." - LT. M.

Many NGO's are active in the UK, as well as library institutions and media institutions. Some prominent examples include:

Media and Information Literacy Alliance.
Established in 2021 by Library
and Information Association:
https://mila.org.uk/

BBC Digital Media Literacy (DML) Toolkit:
https://www.bbc.co.uk/rd/work_streams/cat

BBC Media Action, the charity arm of the BBC. Sponsors some media literacy programs:
https://www.bbc.co.uk/mediaaction

News Literacy Network:
https://literacytrust.org.uk/blog/the-governments-media-literacy-strategy-what-do-schools-need-to-know/

Realizing Children's Rights in the Digital World:
https://www.lse.ac.uk/Research/research-impact-case-studies/2021/realising-childrens-rights-in-a-digital-world

United States (US)
The United States is a hotbed of projects, research and innovation in media literacy – but these projects are not systemic nor has the US education system been very open to integrating media literacy throughout curricula in a systematic way. This is a particularly difficult challenge, since the country is so large and the education system is decentralized and controlled through 50 States and approximately 13,800 School Districts. Consequently, it is also a challenge to provide a cohesive and simple picture of organizations and activity.

US Federal Level: Government and Education
U.S. Senators Amy Klobuchar (D-MN) and Michael Bennet (D-CO) and Representative Elissa Slotkin (D-MI) introduced two pending pieces of bicameral legislation in early July 2022 to strengthen media literacy education to teach Americans the skills to identify online misinformation and disinformation. The Digital Citizenship and Media Literacy Act would create a grant program at the Department of Commerce to teach students digital citizenship and media literacy skills to help them think critically about online content. The Veterans Online Information and Cybersecurity Empowerment (VOICE) Act would create a grant program at the Department of Veterans Affairs (VA) to teach veterans digital and media literacy skills as well as cybersecurity best practices to identify disinformation and online scams:

Hanley, US NAVY, US

At the same time, this polarization has encouraged the type of tribalism that undermines the idea of having nations and alliances that are based on common ideals rather than partisan, racial, ethnic, or sexual identities. To be cohesive, common ideals must come first as the unifying force behind governments or organizations; if other considerations come first, then it is nearly impossible to have the consent of the governed. Disinformation campaigns are proliferating, and can be targeted more and more closely, with different messages appealing to different audiences who are now reachable through a multiple of channels: TikTok, television, Instagram, radio, YouTube, newspapers, podcasts and magazines – these examples are online and off. Strategic communication and marketing expertise for targeting messages are more important than ever.

"We've been seeing that if we emphasize disinformation and misinformation too much, that young students often become cynical and dismissive, thinking that all information is false or deceptive. The line between cynicism and skepticism is a fine one, and educators must be very careful to also emphasize the positive about media and news." Anaïs Adriaens-Allemand, Former Head of International Projects at CLEMI, Le Centre pour l'éducation aux médias et à l'information CLEMI, France

https://www.smith.senate.gov/klobuchar-bennet-slotkin-introduce-bicameral-legislation-to-strengthen-media-literacy-education-and-improve-personal-cybersecurity/

At the federal level, the US Department of Homeland Security, the National Institutes of Health, the US Education Department, the Federal Trade Commission and the Centers for Disease Control are all among the agencies that have funded media literacy, primarily through intermittent projects.

US Education: Common Core Standards
In the overall US Education system, the Common Core standards come closest to providing national guidance on attainment goals, although not all States have adopted these standards. Some media literacy skills are contained in these standards, the content standards and the process skill standards are not delineated, and it is sometimes difficult to sort out how media literacy fits: https://www.nmlegis.gov/handouts/ALESC%20102417%20Item%203%20f%20-%20NAMLE%20Media%20Literacy%20Guide.pdf

State Legislation
The States of Washington and Illinois have some of the most comprehensive legislation passed, calling for media literacy (see Media Literacy Now for a more comprehensive view of US legislation: https://medialiteracynow.org/
Though legislation has not been passed, the State of Wisconsin is an example of a State with a solid program for integrating digital media literacy throughout the State: https://dpi.wi.gov/imt/it-literacy-standards

District Policy
The Los Angeles Unified School District has mandated media literacy; this effort is in very early stages. Also, the Chicago Public Schools have included media literacy in its civic education efforts. Typically, media literacy has survived at the grassroots in the US, and it has been fostered by NGO's who were early pioneers prior to 1990., such as the National Telemedia Council (now the International Council for Media Literacy) and the Center for Media Literacy.

NGO's and Organizations
A wide range of NGO's and organizations – a wide range of universities (too numerous to mention), museums, libraries, NGO's and for-profit organizations – have supported media literacy education through the years. Prominent organizations that focus on media literacy include:

The most prominent national media literacy membership organization in the US is the National Association for Media Literacy Education (NAMLE): www.namle.net

A List of NAMLE Organization members, with a wide range of participants nationally and locally, including public media, support media literacy initiatives. These organization include the most prominent groups active: https://namle.net/organizational-partnership/organizational-partners/

Social media has also had positive effects on engagement with media and with stimulating young people's interest in politics and news. Discussions about current events in the classroom are very important, especially if such discussions are related to the interests of the students. A study on participatory politics found some revealing results: As shown in the chart above (p. 38), in classes where students frequently discuss current affairs, 61% said they were interested in politics, compared to 32% in classes that did not discuss current affairs (Kahne et al., 2012). Curriculum that gives students the opportunity to find and analyze different perspectives on the same topic or problem was also invaluable. Students who had more opportunities to participate tended to favor the idea that everyone should participate in the political process (68%) than those who said they did not have participation opportunities (43%). Not only what is learned, but also the type of learning plays a role in encouraging civic engagement: 36% of students who had frequent classroom opportunities to participate in role-playing games and simulations that modeled democratic processes were interested in politics, compared to just 13% of students who did not have these classroom opportunities. One of the educational strategies that proved to be particularly effective was to include students from different backgrounds to work on projects together. Of the students who had this opportunity, 54% agreed that they were responsible for being involved in national and local issues, while only 29% said they were not. These experiences are also associated with increased voting motivation, increased political knowledge, and increased interest in general politics.

Such educational approaches to civics -- discussing current events covered in media, and cooperating in the production of information, videos and podcasts -- can provide excellent models for applying media literacy principles and practices. Most importantly, digital media literacy education is associated with increased online political engagement, increased exposure to diverse perspectives and increased commitment to voting.

Parents – who research has shown are of prime importance in encouraging their children to be interested in civic life – are also supportive of media literacy education, which helps make up the information life of a family. An example of this support lies in a 2020 survey of California parents (Consortium for Media Literacy, 2020), who live in the most diverse State, with one of the highest rates of poverty in the U.S. (Keith, 2021). While parents supported their children's receiving media literacy instruction, 60% also reported overall satisfaction with school/teacher performance during the mostly online instruction due to COVID 19 in the spring semester of 2020, with few efforts being made to teach children to think critically about messaging regarding COVID 19. Demand for media literacy education increased as parents' income levels increased, and parents with children at parochial and private schools reported the most satisfaction with school/teacher performance. 84% of parents reported

Importantly, NAMLE has formed a network, the National Media Literacy Alliance, comprised of major education organizations in the US, which address subject areas and overall education needs, particularly teacher training:
https://namle.net/community/national-media-literacy-alliance/

The American Association of School Librarians (AASL):
https://www.ala.org/aasl/ AASL is supportive of media literacy and has many librarians trained to be teaching librarians as well as school librarians; these trained teachers often are the "teachers of teachers" of media literacy in their school settings.

The Family Online Safety Institute (FOSI):
www.fosi.org FOSI membership focuses on online safety and cybersecurity, and is comprised of technology, Internet, IoT or telecommunications companies and related trade associations. See the membership list of Tech/Media Companies supporting safety, media and information literacy efforts:
https://www.fosi.org

Children and Screens:
Institute of Digital Media and Child Development, focuses on understanding compelling questions about the impact of media on child development through interdisciplinary dialogue, public information, and rigorous research bridging the medical, neuroscientific and social science, education, and academic communities.
https://www.childrenandscreens.com/

The Digital Wellness Lab, at Boston Children's Hospital, https://digitalwellnesslab.org/, helps parents raise healthy, smart and kind children, and this center for research and development undertakes a wide range of vital projects, including brain research on the impact of media on children.

Major media research centers such as Pew, Harvard Berkman Klein Center, and Data and Society provide research on the impact of media upon audiences and usage of media, although they seldom directly address media literacy's role in the media environment. Common Sense Media, which primarily offers a database of evaluations of children's media and a focus on digital citizenship, has provided surveys periodically to track children's media use, with a Census of Media Use by Children Aged 0-8 (2017):
https://www.commonsensemedia.org/research/the-common-sense-census-media-use-by-kids-age-zero-to-eight-2017

Foundations and Corporate Funders
The George Lucas Foundation, Knight Foundation, MacArthur Foundation and McCormick Foundation are examples of those who have all contributed significantly to media literacy programs.

Comcast Corporation and AT&T are examples of companies that have invested heavily in digital media literacy, as have major technology/platform companies such as Twitter, Facebook, Tiktok, Google, and Trend Micro. The US Public Broadcasting Service (PBS) has also provided programming on media literacy through its KQED, Rhode Island and Connecticut Public mem-

discussing media with their children, yet only 31% were aware of the passage of California Senate Bill 830, which called for the State Education Department to provide a website listing media literacy resources, nor did the parents see any difference in instruction after passage of the bill in 2018.

2020 SURVEY OF CALIFORNIA PARENTS

60% Overall satisfaction with school/teacher performance during online instruction due to COVID 19 in spring of 2020

84% of parents discussed media literacy with their children

31% of parents aware of passage of California Senate Bill 830

Parents' Income Level

Demand for Media Literacy
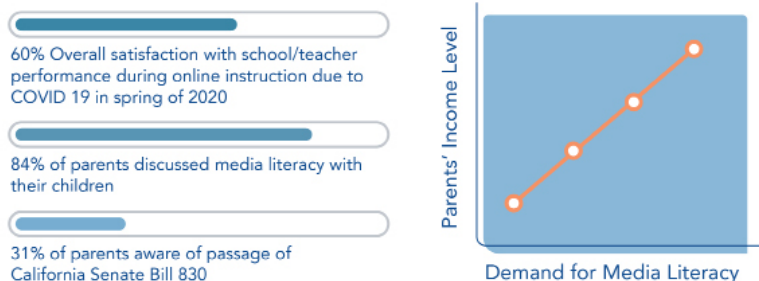
At the same time, the notion that social media is news is causing major upheavals in trust in information. The tensions arising from how to control levels of disinformation and misinformation in a free society have inevitably called for more education, since well-meaning citizens are the most frequent perpetrators of misinformation, particularly and unfortunately, the elderly. Yet, based on the success of pro-social information campaigns on climate change and tobacco effects, it is clear that systemic, societal change is possible through educational information efforts. Media literacy programs are encompassing, both broader and deeper in their quest to enable individual understanding and to identify and analyze broader narratives.

"Little is known about the measurable effects of misinformation, and even less is known about the impact of interventions to it, particularly when conducted via digital media," Alicia Wanless, Director of the Partnership for Countering Influence Operations, Carnegie Endowment for International Peace US

Media literacy inquiries incorporate content and context when analyzing a message; this takes into account the prior knowledge of the user and also, what the user "brings" to the message – values, lifestyles and points of view. It is the user who brings meaning to the message and decides whether the message suits his/her own needs or desires, while the message or content is simply a representation of something that once published, is static, unchanging and an intrusive attempt to tell or sell. It is not the inanimate picture or video or music that has emotion or intelligence or personality – it is the users who bring their feelings and their thinking and their individual ways of being to the media messages; it is the users who react and decide whether to act or not.

CONTENT + CONTEXT = MEDIA MESSAGE

ber stations (among others). KMOX/1120 News Radio in St. Louis has a regular segment on media literacy called Audacity:
https://www.audacy.com/kmox/news/local/introducing-the-kmox-media-literacy-project

Noteworthy Projects
The number of media literacy projects undertaken are too numerous to mention. These projects are among the most current and sustained projects available:
The Atlas of the Civic Imagination (Henry Jenkins, University of Southern California), bringing together diverse voices and bridging theory to practice in participatory culture:
https://www.ciatlas.org/

Checkology (News Literacy Project), provides free lessons and activities appropriate for classes through an online platform:
https://get.checkology.org/

Connected Learning Lab (CLL) is an Organized Research Unit of the University of California, Irvine, to study and mobilize learning technology.
https://connectedlearning.uci.edu/about/

Cyberwise Learning Hub (Cyberwise), addresses a wide range of topics and provides direction to educational resources:
https://www.cyberwise.org/media-literacy-hub

Getting Better Foundation: "Trust Me: How do you know what to believe?" Documentary film, 90 min., available for classroom use with guide.
https://gettingbetterfoundation.org/

Learn to Discern (IREX), provides lessons and activities to help people engage with information and develop health habits:
https://www.irex.org/project/learn-discern-l2d-media-literacy-training

MediaWise (Poynter Institute), offers a Teen Fact-Checking Network and Campus Correspondents Network, as well as a Seniors Program:
https://www.poynter.org/mediawise/programs/

Mind Over Media: Propaganda Education for a Digital Age (Renee Hobbs) is a platform developed in 2015 by the Media Education Lab featuring numerous examples of propaganda and ways to address it:
https://propaganda.mediaeducationlab.com/node/1

NewseumED: a project of the Freedom Foundation, NewseumEd provides free resources and training for news and media literacy:
https://newseumed.org/medialiteracy

Onramp to Media Literacy (Center for Media Literacy) is a free online course giving a comprehensive overview of foundational media literacy:
https://www.medialit.org/global-ramp-media-literacy

Project LookSharp (Ithaca College) provides lessons and curricula on a wide variety of searchable subjects:
https://projectlooksharp.org/subject-guides.php

Media literacy efforts focus on the users and audiences, in encouraging self-awareness and knowledge-building. This approach is more bottoms-up than top-down. With the emphasis on the audience's understanding, the emphasis is less on the author's rhetoric than on how the audience responds to the rhetoric. The audience may be one person, or a multitude of people.

"People can be manipulated through their emotions – it's highly important that they know themselves, so that they can identify emotional triggers that affect their thinking." – Igor Kanisaj, Professor, University of Zagreb, Faculty of Political Science, Croatia

Human agency and human decisions animate media literacy, whether the individual is highly media literate or not. For example, it is an easy out to blame algorithms or bots or artificial intelligence for disinformation or for discriminating against certain groups of people, or targeting them with ill intentions, or being out of control with no consequences – but all of these media devices are invented and programmed by humans. There are authors and programmers and data scientists who propel these software programs, individually or in teams. They hold responsibility for their actions, despite some attempts to obscure this fundamental understanding, and tools must be developed to identify and regulate the perpetrators of such fraud. But as the saying goes, censorship is a slippery slope and it is difficult to draw lines.

"Journalists are human. We make judgments on what we cover or write; we're not robots." – Gilbert Bailon, Editor in Chief, St. Louis Post Dispatch, US

With the audience also being social media participants, a more effective approach to media literacy incorporates a more sophisticated acknowledgement of the importance of self, of others, and of the culture at large; it is an application of critical thinking and a risk-management strategy that takes the user's priorities into account. Encouraging this deeper awareness and understanding on the part of the users – who, after all, are the voters in a democracy -- makes for (hopefully) different sharing and wiser choices. Media literacy is foundational for navigating the deep media waters that people are faced with, and that help make media literacy part of the cultural fabric of every-day life. With advertisements and political messages bombarding people every day, these habits of mind and habits of analysis are essential and not built instantly; children and adults alike need practice in "learning to learn" from birth, and throughout life.

The advertising industry spends billions to influence attitudes and behaviors, yet education systems spend little if any effort in helping citizens discern their own interests. Violent and sexual content – especially pornography, take their toll. The Wall Street Journal revealed that brain research is showing how youth are impacted by porn, with more than 80% of teens having seen

RAND Corporation has provided a range of research reports and some educational resources, from teaching media literacy to online extremism, for its Truth Decay Campaign:
https://www.rand.org/topics/media-literacy.html

Part VI. Listing of Professional Media Literacy Resources Cited by Researchers and Practitioners

The following recommendations were captured as a result of a spring 2022 survey sent to 63 active researchers and practitioners internationally, with 24 respondents. Although there are numerous resources available, it is nearly impossible to capture them all in a timely way (apologies to those not mentioned – please keep up the great work!). The results are categorized by:

- Media Literacy/Education Academic Journals
- Media Literacy/Education Conferences
- Media Literacy Institutes or Seminars
- Media Literacy/Education Membership Organizations

Media Literacy/Education Academic Journals

Most Referenced Journals
- Journal of Media Literacy Education (JMLE)
- The Journal of Media Literacy (JML)

Other Academic Journals
- British Journal of Educational Technology
- Digital Education Review
- Educational Media International
- International Journal of Critical Media Literacy
- International Journal of Digital Literacy and Digital Competence (IJDLDC)
- International Journal of Media and Information Literacy
- International Journal of Transmedia Literacy (IJTL)
- Journal of Alternative & Community Media
- Journal of Digital and Media Literacy
- Journal of Educational Multimedia and Hypermedia
- Journal of Information Literacy (JIL)
- Journal of Interactive Media in Education
- Journal of Media and Communication Studies
- Journal of Media Literacy (JML)
- Kultura-Media-Teologia [Culture-Media-Theology] (Poland)
- Kwartalnik Nauk o Mediach [Media Science Quarterly] (Poland)
- Learning, Media and Technology
- Media and Communication (Portugal)
- Media Education (Mediaobrazovanie - Slovakia)
- Media Education Research Journal (MERJ)
- Media Literacy and Academic Research: MLAR (Slovakia)
- Media Practice and Education
- Media Psychology 101
- Media Psychology Review
- Media, Culture and Society

porn online. These effects are important to understand, as only one example of the impact that media has on brain function and brain development (Jargon, 2022).

"Tobacco and alcohol have come back as major health concerns, and media is playing a role. Smoking and drinking alcohol are very prevalent in streaming media, and sexual relationships are often depicted as being casual and with no protections," -- Barbara J. Walkosz, senior researcher at Klein-Buendel. Inc., US

Such effects are often well beyond the control of users, but the responsibility for any harmful outcomes for users is disputed, as media producers shrink from such responsibility, and in fairness, harmful outcomes can be highly individualized and even unknown, or present research may be inadequate to help determine causality. The default reaction is to expect users to cope, with their engagement being seen as a sign of consent. These major concerns remain as ongoing issues that must be negotiated.

As technology has proliferated and as educational demands are shifting as well, many educational efforts have sprung up in recent years world-wide, focusing primarily on content analysis or fact-checking news. These programs aim at improving the content of the media to reduce misinformation and disinformation, and rely on users' ability to discern fact from opinion or fiction. The emphasis on content and fact-checking takes the focus from users – who bring their own priorities, beliefs, emotions and attitudes to media content. While perhaps effective in raising awareness and providing some skills of analysis, these programs are not synonymous with building a society's capacity for overall media literacy. News literacy programs are generally focused on being able to identify the information source or being able to identify and verify facts quoted in the message, or on lateral reading skills, involving cross-checking information.

Skills such as checking website domains or perhaps, ignoring how many "followers" a so-called expert has, are all among the tips and tactics used to take news apart. These tactics often take time which people are unwilling or unable to give as they access news. Rather than expecting that people will always check sources, it is more feasible to expect that people will make their judgments based on the importance of the content to them, and that they will devote the time needed if the content is important enough.

Sets of skills and habits of mind are needed, with news being a key application of the media literacy deconstruction process. Media literacy offers a richer way of addressing the search for truth in news, and for enabling risk management with information that speaks to each individual, who ultimately makes the decisions in a democratic society.

- MedienPädagogik. Zeitschrift für Theorie und Praxis der Medienbildung [Media Pedagogy. Journal for theory and practice of media education] (Germany)
- New Media and Society
- Nordic Journal of Digital Literacy
- Nordic Journal of Media Studies (NORDICOM)
- Revista Comunicar (Spain and International)
- Social Media + Society
- Teaching Media Quarterly (TMQ)
- Youth Media Reporter

Media Literacy/Education Conferences

Most Referenced Conferences
- UNESCO Global Media and Information Literacy Week Annual Feature Conference
- National Association of Media Literacy Education (NAMLE)

Other Conferences
- Association for Education in Journalism and Mass Communication (AEJMC)
- Canadian Communication Association
- Centre d'Etudes sur les Jeunes et les Médias - CEJEM [Center for Youth and Media Studies] (France)
- Congresso Literacia Media e Cidadania [Media Literacy and Citizenship Conference] (Portugal)
- Critical Media Literacy of the Americas
- Człowiek - Media - Edukacja [The Man - Media - Education] (Poland)
- Deutsche Gesellschaft für Erziehungswissenschaft - DGfE [Section Media Education by the German Association of Educational Research]
- Człowiek - Media - Edukacja [The Man - Media - Education] (Poland)
- Deutsche Gesellschaft für Erziehungswissenschaft - DGfE [Section Media Education by the German Association of Educational Research]
- Człowiek - Media - Edukacja [The Man - Media - Education] (Poland)
- Deutsche Gesellschaft für Erziehungswissenschaft - DGfE [Section Media Education by the German Association of Educational Research]
- Education & Culture by the Ministry of Education (Greece)
- European Communication Research and Education Association (ECREA)
- European Conference on Educational Research (ECER)
- European Conference on Information Literacy (ECIL)
- European Media and Information Literacy Forum by UNESCO
- Global Kids Online (GKO)
- International Association for Media and Communication Research (IAMCR)
- International Communication Association (ICA)
- International Conference on Critical Media Education
- International Media Literacy Research Symposium
- Italian Association for Media Literacy

Culture and Identity: Context at work

There is always a dispute about whether culture is reflected in media or media is reflected in culture – but from the standpoint of media literacy, media *is* culture. Young people do not discriminate between the online and offline worlds – they navigate both seamlessly. Teens, for example, are sometimes called screenagers because of their preoccupation with media, and the influence it has upon their dress, their music, their attitudes and their behaviors. They sometimes have more in common with each other than with older adults, and the adults who decried rock and roll weren't wrong: rock and roll *did* change the world, as young people in communist countries were able to compare lifestyles and music and realize that they were being left out and left behind as they helplessly looked on. Each generation embraces its own version of media, and with the globalization of media, other genres such as K-pop or Anime or Salsa or the blues or a host of other pop phenomena have emerged and are known by youth and adults everywhere.

Media genres serve as cultural ambassadors, introducing new ideas and new societies into every-day awareness. They ignite curiosity about the unknown, about the origin of these new and compelling media products and those who create them. Often, these phenomena emerge from the grassroots, and with the internet as everyone's playground, it is possible to bring attention to new media forms and content quickly, with wide and disparate distribution. Although billions of people use the internet and participate in the global village for enjoyment, pleasure, and work, less desirable outcomes are also present, typically emerging in waves of fear and moral panic: violence in media, sex in media, cyberbullying, school shootings, anorexia and bulimia, copycat crimes or suicides, and political/election malfeasance.

Influencers, who are internet stars on social media, such as Instagram or YouTube, are able to earn their living by spreading ideas of interest to their immense audiences. These influencers hold great sway over young audiences. Kim Kardashian alone has 320 million followers on instagram (2022). Brand recognition – whether personal or product – is a commodity to be sold. Whether fashion, produce or new home accessories, buyers and sellers quickly find each other, share new innovations, and look for the next wave – and with video streaming online, they can watch for the next wave in real time. The result is that there are more shared products and shared understandings throughout the world, with uses for such commonality demonstrated through video, music, or other media that have global audiences, as well.

Identification with social media influencers, brands, celebrities and issues of the day forge both cultural identities and individual identities. Today, there are programs which allow users to change their appearance on social media, or make videos about themselves that have fake settings, avatars to represent them,

- Kongres Edukacji Medialnej [Media Education Congress] (Poland)
- Magdeburger Theorieforum [Magdeburg Theory Forum] (Germany)
- Media & Learning - Wednesday Webinars on Teacher Education in Digital & Media Literacy in Europe
- Media a Edukacja [Media and Education] (Poland)
- Media and Learning Conferences
- Media Education Conference (MEC, University of Lapland)
- Media Education Summit (MES)
- Media Literacy Forum (Turkey)
- Mediawijs [Mediawise] (Belgium)
- NATO Centre of Excellence on Strategic Communications (Latvia)
- Nieuws in de Klas dag [News in the Classroom] (Belgium)
- NordMedia Conference
- Northeast Media Literacy Conference
- OFCOM Conferences
- Pan-Hellenic and International Conference "ICT in Education" (Western Macedonia University, Greece)
- The European Association for Viewers Interests (EAVI): Media Literacy for Citizenship
- The Institute of Media and Communication at the University of Oslo
- UNESCO Youth Agenda Forum
- Vytautas Magnus University Conferences (Lithuania)

Media Literacy Institutes or Seminars

Most References Institutes or Seminars
- Mediawijs
- Summer Institute in Digital Literacy, University of Rhode Island

Other Institutes or Seminars
- Department for Digital, Culture, Media, and Sport (UK)
- Digital Citizenship Education, The Council of Europe
- Educação para os Media [Media Education], The Directorate-General of Education (Portugal)
- European Commission (EC) (Media Literacy Expert Group)
- European Platform of Regulatory Authorities (EPRA): Media Literacy Networks; Guidelines
- European Regulators Groups for Audiovisual Media Services (ERGA) National Network on Media Literacy
- Gesellschaft für Medienpädagogik und Kommunikationskultur - GMK [Society for Media Education and Communication Culture] (Germany)
- Hans Bredow-Institute for Media Research (Germany)
- Institut für Medienpädagogik (JFF) [Institute for Media Pedagogy] (Germany)
- Institute for Language and Communication, GREMS, UC Louvain (Belgium)
- International Council for Media Literacy (IC4ML)
- International Media Literacy Research Institute

or a host of other techniques to attract attention. The quest to identify and to belong is a cultural effort on a mass scale. A simple example illustrates the point: when visiting Europe about 10 years ago, it used to be easy to identify Americans by their shoes. Americans had flocked to global brands sneakers or running shoes – Nike, Adidas, New Balance, for example – that were considered as being comfortable and stylish, too. Since Europeans hadn't yet taken to this idea, Americans stood out easily on the streets and could easily be identified.

Today, that has changed; Europeans now wear as many athletic shoes as Americans, and now, lacking such an easy symbol, it is harder to tell the differences in identity. New attitudes breed new behaviors and new signaling about how a person presents an image to the world. The same principle of identification applies individually.

Each person has a private self, a public self and a mediated self. The private self is exactly that – the person one is when no one else is engaged. The public self is the side of people that shows in interpersonal engagements in the offline world. And the mediated self is the person who appears online, or who makes choices (and everyone does) that come from commercialized information or advertisements or a desire to affiliate with a brand or a cause.

This affiliation to brands can be signaled by carrying a Birken bag costing a small fortune, by wearing a hoodie, by wearing a national flag pin, or by indicating that Fox News, MSNBC or the Washington Post are the only sources of information one trusts. Organizations and companies spend fortunes building their brands and consequently influencing attitudes and behaviors, yet society spends little in helping citizens learn to navigate this torrent of influence directed their way, every day.

PRIVATE SELF	PUBLIC SELF	MEDIATED SELF
The person one is when no one else is engaged	The side of people that shows in interpersonal engagements in the offline world	The person who appears online and makes choices that come from commercialized information or advertisements or a desire to affiliate with a brand or cause

Culture isn't always driven from the top down, as it often was in the era of mass communications; instead, culture is also driven more quickly from the bottoms up. Although there are still some distinctions made between "high culture," often emanating from educated, traditional origins such as attendance at opera

- Media Literacy Institute, University of Washington/Center for Media Literacy
- Media Literacy Seminar (Belgium)
- MediaSmarts (Canada)
- Mediawijs [Mediawise] (Belgium)
- MIL webinars at NordMedia Network: De-Westernising Media Literacy: Perspectives on Pedagogies, Practices and Theories of Media Education
- OFCOM (UK)
- Project Looksharp, Ithaca College
- The Council of Europe - Digital Citizenship Education
- The UNESCO Chair on Media and Information Literacy (MIL) for Inclusive Knowledge Societies established at Vytautas Magnus University (VMU)
- UCLouvain Annual Fall Digital/Media/Information Literacy Doctoral Seminar (Belgium)

Media Literacy/Education Membership Organizations

Most References Membership Organizations
- National Association for Media Literacy Education (NAMLE)
- UNESCO / UNESCO MILID Network / GAPMIL / UNESCO MIL Alliance

Other Membership Organization
- Association for Communication and Media Culture (DKMK), (Croatia)
- Association for Media LIteracy (AML) (Canada)
- Associação Literacia para os media e Jornalismo - ALPMJ [Association Media and Journalism Literacy] (Portugal)
- Association for Education in Journalism and Mass Communication (AEJMC)
- Bilgi University Media Studies (Turkey)
- Center for Media Literacy Affiliate/Associate Network (CML)
- Centre d'études sur les jeunes et les médias (CEJEM) [Center for Youth and Media Studies] (France)
- Deutsche Gesellschaft für Erziehungswissenschaft [German Society for Educational ScienceDivision 12: Media Education] (Germany)
- Deutsche Gesellschaft für Publizistik und Kommunikationswissenschaft - DGPuK [German Society for Journalism and Education Sciences] (Germany)
- Diji Vatandaş [Digital Citizen] (Turkey)
- EU Media Literacy Expert Group
- European Association for Viewers Interests (EAVI)
- European Platform of Regulatory Authorities (EPRA): Media Literacy Networks; Guidelines
- Europenan Children's Film Association (ECFA)
- Gateway Media Literacy Partners, Inc. (US)
- Global Kids Online (UK)
- I Am Not the Media
- I Speak Media

or ballet, and "low culture," coming from the masses through movies or dance. This distinction is rapidly breaking down in a world where lifestyles and values are quickly changing due to the never-ending search for what is new and what will sell. Young people typically no longer want to amass silver trays or crystal glasses; instead, they want a far more carefree and mobile lifestyle where their smartphone takes them anywhere they wish to go, and shows them anything they wish to see.

This new attitude is permeating families, workforces, communities, countries and the world: geography is no longer always a limiting factor in one's knowledge, attitudes or even behavior. The instantaneous and accessible nature of this connected world offers more wealth, more health, and more choices than ever before.

But for every action, there is an equal and opposite reaction. With increased freedom comes more attempts at control and authoritarianism. With more permissible and boundary-less cultures comes a backlash of more restrictive laws and tribal customs. With more progress comes attempts to regress to illusions of safe havens or storied pasts. These reactions, too, play out in media, in freedom of speech and expression, in freedom of assembly on the internet and in content that is allowed or not. During the Ukraine conflict, Russia cut off the major US-based platforms such as Twitter, Instagram, and Facebook, imposing a new Iron Curtain made of bits and bytes (Soldatov & Borogan, 2022). China has built a digital "wall" (Economy, 2018) with restrictions on internet usage outside the country. Schools often have content walls to keep students away from internet sites deemed to be offensive or inappropriate. This is not to say that there should be no regulation of media; but it is to say that every action has consequences, unintended or otherwise, and the choices must be made carefully and revisited frequently as technology and culture change.

Education: preparing the users for life

The convergence of technology, media and culture is a trinity that greatly affects education systems. Change comes slowly to such big and vital systems, or, as in the case of the COVID 19 pandemic, which called for a massive shift to online education, change came quickly and painfully, along with a profound reminder that parents are ultimately their children's educators as well as their guardians. And, with little or no training for teachers to convert to online instruction, it's no surprise that many students fell behind in their learning.

The need for media literacy is driven by the demand for a new approach to education in society – the need for habits of mind and skills that teach people to learn to learn, throughout life. These are transferrable skills, that can be applied in a multitude of situations to a multitude of texts. With content infinitely available through the internet, there is usually no need to

- International Association for Media Education (IAME)
- International Council4Media Literacy (US)
- International Social Media Association
- Media and Learning Association / MEDEA Awards – Media & Learning (EU)
- Media Education Association (MEA)
- Media Education Lab (US)
- MediaSmart
- Mediawijs [Mediawise] (Belgium)
- National Media and Information Literacy Network
- NORDICOM
- Polskie Towarzystwo Edukacji Medialnej [Polish Society for Media Literacy/Education]
- Polskie Towarzystwo Technologii i Mediów Edukacyjnych [Polish Society of Educational Technologies and Media]
- Sekcja Kultury Popularnej Komitetu Nauk Pedagogicznych Polskiej Akademii Nauk [Section of Media Pedagogy and Section of Popular Culture of the Committee of Pedagogical Sciences of the Polish Academy of Sciences]
- The Finnish Society on Media Education (FSME)
- The Polish Association for Media Education
- UK Literacy Assocation (UKLA)
- Youth IGF (Turkey)

transmit content through memorization or drilling. Quoting a memorized poem or speech or verse can be charming at the right moment, but ultimately unnecessary with a smartphone which can produce the quotations immediately. It is impossible to learn everything in the world and about the world; choices must be made about what is important for all citizens to be able to know and do, and what areas of learning may be individually tailored. Yes, reading, writing and arithmetic are basics which are essential to literacy – but today, these skills have expanded to the visual, the aural and the digital realms accessible to everyone through media (Allred, 2022).

Instead, technology and media today are enabling people to be much more flexible in learning, by being able to access a wide variety of information resources, and the skills they need – built through practice over time – to focus more on discerning or producing quality information, critically analyzing it, and deciding whether to act, or not. Learning is more self-directed, and games often incorporate this self-directed learning that increasingly feels like a simulation for real-life.

This is not to say that content knowledge is unimportant – quite the contrary – but process skills in the global village must be consciously identified, labeled and taught in ways that encourage transmissible skills and knowledge. Content can come from a smartphone or a spreadsheet – and it must be accessible anytime, anywhere to be truly useful. In the moment, a media literacy process must be quick, simple yet informed, and internalized through habits of mind. One way to achieve this is for users to employ evidence-based frameworks, which use heuristics that inform knowledge, attitudes and behaviors. To the extent that an individual is interested in a topic, it's possible to explore as deeply as wanted or needed.

With COVID 19 driving global emergency changes in teaching and learning, the comparisons shown above between learning conditions in the Local Village – versus the virtual Global Village – demonstrates the upheaval that many have experienced in the past few years. This upheaval is only the beginning as the technical, cultural, media and educational changes underway take deep root in societies globally. We are moving to integrate the conceptual, symbolic virtual media world with the print-based, concrete, physical world. We are mixing high tech with high touch, and it is a challenging time; the beginning of the beginning. Here are some quick comparisons between the Local Village and the Global Village:

COMPARISON BETWEEN LOCAL VILLAGE & GLOBAL VILLAGE

LOCAL	GLOBAL
Local Narratives	Global Narratives
Adult Guidance Plentiful	Adult Guidance Scarce
Local Representations	Global Branding
Information Access Scarce	Information Access Plentiful
Information Aquisition	Information Sorting
Content Knowledge Transmitted	Process Skills Practiced & Applied
Granular Content Knowledge	Research-based Framework
Isolated Content Silos	Integrated Problem Solving
Production by Few	Production by Many
Access to Best Teachers Scarce	Access to Best Teachers Plentiful
Physical Location of Schools	Virtual School Locations

What was scarce in the past, is now plentiful – and what was plentiful is now scarce, causing a revaluation of what is important and why. Content – in books – was scarce and only physically available, and now on the internet, is plentiful and digital. Teachers were the center of learning; now, online curricula provide engaging content. Collaboration amongst many people was scarce due to geographical distance, time and expense, while today, collaboration is easily arranged, almost instantly. Technology is the driver of these changes and their impact on how people work and play.

Many of the unique cultural identifiers – modes of dress, music, videos – have become globalized, with teenagers in Europe looking much like teenagers in Canada, China or Africa. Education systems are no exception. Although education is one of the ultimate means of cultural transmission, more and more knowledge acquisition and knowledge generation have become globally accessible. Research labs addressing complex subjects like biomedical engineering are in the UK and in China, in the US and in Brazil. Media labs, too, are proliferating – the MIT Media Lab, the Cornell Social Media Lab, the Arizona State New Media Innovation and Entrepreneurship Lab in the Cronkite School of Journalism are all examples. The Media Education Hub at the

University of Lapland, Finland, and the Media Education Lab at the University of Rhode Island, US, are two of the only university media labs focused on media literacy education – hopefully these educational offerings will grow.

"…We find that the specific media literacy abilities people identify as important are generally closely allied with the underlying values they prioritize in their lives. Furthermore, people's values offer more predictive power than sociodemographic characteristics when it comes to understanding the importance people place on specific media literacy outcomes…" – Simon Chambers, Tonya Notley, Michael Dezuanni, and Sara Park, Australia. *"Values and Media Literacy: Exploring the Relationship Between the Values People Prioritize in their Life and Their Attitudes Toward Media Literacy"*, International Journal of Communication (2022)

Process skills – like the ability to access, analyze, evaluate, create and participate with media -- count as part of the education mix, and process skills are within all humans' capacity. This means that process skills must be valued, articulated and taught systematically, and they can be taught globally. The goal of teaching children the problem- solving skills they need in life must be grounded in a process of value-based inquiry. It is these values -- coupled with skills of analysis, expression and self-representation -- that provide the cultural context to inform and guide their decisions throughout life (Chambers, Notley, Dezuanni, Park, 2022).

Although individuals are responsible for their own choices and provide the bedrock for all decisions, many of the same process skills also apply to groups, whether small or large. This group decision-making is all the more important in the age of social media, where people can reach each other globally and congregate and act around common issues or causes. The hope (backed by media literacy research) is that media literate people become more able to make wise choices, demonstrating the positive effects of media literacy education on knowledge, attitudes and behaviors.

In today's global society, citizens need the skills to access, analyze, evaluate and create media information 24/7. Close analysis skills, and an understanding of the context of media, enable citizens to process information efficiently and effectively, with the goal of becoming:

EFFICIENT INFORMATION MANAGERS	WISE COMSUMERS	RESPONSIBLE PRODUCERS	ACTIVE PARTICIPANTS
People need to access information quickly and be able to store information effectively so that they can access it again.	Citizens need to understand the messages that come their way and make healthy and wise individual decisions, using the information they have. Critical thinking and risk management are the goals.	Today, everyone can be a producer on social media, and in producing, it is important for everyone to consider empathetically and inclusively the society they live in, to provide an enlightened approach to media production.	Users ultimately have the power in a democratic society, where votes, purchases and social media determine political, economic and social survival. Users see ubiquitous advertising and communications, and they also determine whether they accept the worldview that is represented to them.

- *Efficient information managers.* People need to access information quickly and be able to store information effectively so that they can access it again.
- *Wise consumers.* Citizens need to understand the messages that come their way and make healthy and wise individual decisions, using the information they have. Critical thinking and risk management are the goals.
- *Responsible producers.* Today, everyone can be a producer on social media, and in producing, it is important for everyone to consider empathetically and inclusively the society they live in, to provide an enlightened approach to media production and social media.
- *Active participants.* In using media, in deciding to buy products or to cast or ballot, people are sending

messages and voting and participating in society. They not only buy a product or a service, but they buy an organization's advertising and communications, and they buy the worldview that the organization's communication represents. Votes count, and so does each person's own expression. Where would an influencer or a company or a university or a nonprofit or an entertainer or an executive or a politician be the users, and without the user' expression of their needs?

PART III: Where Media Literacy Fits as a Strategic Defense Strategy in NATO Countries

The NATO Context For Defense and Peace

NATO's 2030 report (NATO, 2020) and NATO 2022 Strategic Concept succinctly outlines NATO's priorities and plans for human security in this decade. Today, human security goes well beyond traditional notions of warfare, and extends to pandemics and health and food security, and the safety, security and reliability found in the digital global village as well. These profound digital challenges extend beyond country boundaries, with no way to halt intrusions. To remain successful and secure in the Trans-Atlantic Region, NATO, which is made up of 30 – and with Sweden and Finland's accession, 32 -- allied countries committed to defending each other, is taking a more global approach to challenges to Allied human security. As financial systems, travel and communication systems, energy and utility systems become increasingly digitized and intertwined, it is difficult if not impossible to separate out the impact of dysfunctional systems, cyberattacks or land attacks.

In sectors critical to Allied security, the Alliance must likewise improve its ability to assist, protect and shape the rules-based international order. The integration of formerly Soviet countries and satellites has posed challenges to ensuring that democratic values, rule of law, personal property rights, and human rights are widely understood in a way that informs everyday life. Authoritarian countries like Russia and China, which do not share democratic ideals, are putting pressure on the rules-based international order, which underpins the security, freedom, and prosperity of Allies. Europe is experiencing its first land war in decades with the conflict between Russia and Ukraine. This has serious consequences for the security, values, and democratic lifestyles that NATO countries and their citizens have long enjoyed. Now, NATO is implementing the NATO 2030 decisions, which were adopted during a NATO Summit in Brussels in June 2021 (2021), and affirmed in a 2022 Summit in Madrid, to:

- Form like-minded partnerships and forge new engagements in Latin America, Africa and Asia;
- Strengthen cooperation with the European Union and those neighboring countries aspiring for NATO membership; and
- Continue to emphasize defense and deterrence, particularly in regards to challenges from authoritarian regimes such as Russia and the People's Republic of China.

Although Ukraine is not formally a NATO ally, the international support that Ukraine received from individual NATO countries -- and even traditionally-neutral countries like Switzerland -- in the face of the Russian invasion clearly illustrates the interdependence of all countries, and the many hybrid forms that warfare takes today. NATO country allies isolated Russia politically, economically and even socially by attacking financial, energy, and communications infrastructure, crippling Russia and also sanctioning the wealthy supporters of Russia's invasion. Even sports entered the picture, as Russians were barred from international competitions at the request of the International Olympics Committee. The use of media by leaders of both Ukraine and Russia stoked resistance and support, with their styles and attitudes shining through their digital images. The overwhelming messaging on all sides of the conflict fueled a tsunami of disinformation and misinformation, but people sorted through these messages and came to an overwhelming public support for Ukraine, and even causing revisions to policies on importing Russian gas and oil.

Today, alliances are based not only on common boundary lines and political alliances, but more importantly, upon countries' values and governance systems. The NATO Treaty has affirmed their member countries' commitment to safeguarding "the freedom, common heritage and civilization of their peoples, founded on the principles of democracy, individual liberty and the rule of law" (NATO, 2019). Over NATO's more than 70-year

history, even when Allies' interests have diverged, values still tie the Allies together.

It is this commitment to the ideas and values that unify people, along with laws adopted through democratic systems, that lends itself well to media literacy as a way of encouraging independent, critical thinking amongst citizens. It is through common ideals that people can unite, rather than through the tribalism of the past. If, as in the U.S. Declaration of Independence says, government is "of, by and for the people," then people need to understand their common values and their commitment to those values in every-day life.   People must understand the often-complex systems within which they operate, so they may ensure that these systems are responsive and flexible, and stand the test of time. People must be equipped to explore and question, and to understand whether the values they see in operation reflect democratic standards. They must also be equipped with the information, knowledge and skills to judge for themselves what is true and what is false, and what they think is in their own best interests, and that of their families, communities and countries.

"…The 2021 Edelman Trust Barometer reveals an epidemic of misinformation and widespread mistrust of societal institutions and leaders throughout the world. Adding to this is a failing trust ecosystem unable to confront the rampant infodemic, leaving the four institutions – business, government, NGO's and media – in an environment of information bankruptcy and a mandate to rebuild trust and chart a new path forward…" 2021 Edelman Trust Barometer, Introduction to Global Report.

Yet today, distrust is endemic. Institutions are newly challenged to find ways of communicating with their publics, and finding ways to meet their needs and respond to concerns. In an era when issues and problems often call for multi-faceted solutions and networking across various functions, institutions must emerge from their silos and find ways to connect with each other.

"…the key lesson is that as the world becomes more interconnected and interdependent, aided by decentralizing technology, command and control management is a poor fit for delivering change. Instead, governments should see themselves as conductors and convenors of the wider economy and society, setting the direction and creating the conditions for progress and change," Tony Blair, former Prime Minister of the United Kingdom. Forward "Transforming Government for the 21st Century", published by the Tony Blair Institute for Global Change (2019) UK

Democracy stands or falls on people. The challenge for democracies is to find ways to preserve the freedoms that come with more access to information, while protecting against the threats that come with it. The most democratic way to address this challenge is teaching society to be wiser information consumers and producers through critical thinking and a pedagogy that empowers them to evaluate, analyze, and choose critically whether to act on information. Media literacy education facilitates this critical thinking and thereby, risk management.

Media literacy processes of inquiry are impossible to learn, conduct and discuss when freedom of speech and expression are not tolerated. Yet, what better way to understand representative systems of government than to understand media literacy principles, which revolve around the idea of representation and what representation means? The skepticism that democracy should encourage in citizens, is embedded in media literacy principles and practices; the ongoing learning and inquisitiveness that comes with freedom to be and to pursue dreams is a process that media literacy can help ignite, by providing new ways of seeing the world.

Furthermore, because the process skills of media literacy are global – while the issues and topics of discussion are more often local – media literacy provides a common denominator for addressing issues and for education in the 21st century, regardless of geographic boundaries. It is a tool for integrating and interrogating multiple subjects and issues. Media literacy provides a global metaframe for learning.

Resiliency

By opening new ways of seeing the world, and by encouraging discussion and dialogue with the understanding that others will undoubtedly see things differently, media literacy also encourages flexibility and respect – both qualities essential in democratic societies. Democracy is rooted in consensus and consent of the governed, and with more educated citizens today, people are more inclined to consent and work together when they perceive that their opinions have been heard and considered with respect. Often, these are slow processes, not well-suited to earthshaking events that call for immediate reactions: natural disasters, wars, pandemics. Yet ironically, it is by having solid foundations and trust in democratic institutions that people are best suited to having the resiliency they need in the face of major challenges. They can more willfully and easily unite and rally.

Research shows that trust in people and institutions is enhanced when honest acknowledgements of uncertainty are acknowledged. People – even preschoolers – may initially trust an authoritative, confident voice, but people understand uncertainty, and they trust someone who admits ignorance more than someone who is confident but wrong (Bondar, 2022). Living with ambiguity, responding to uncertainty and recovering from upsets requires resiliency for individuals and society.

Resiliency is defined as "the capacity to recover quickly from difficulties," or "the ability to spring back into shape." Resiliency provides a combination of tenacity and flexibility; of elasticity yet formed, capable of returning to a previous state or shape. Media literacy is a cornerstone of resiliency. It encourages habits of mind that inspire exploration and creativity, it enhances exploring simulations of reality and yet fantasy, and it informs an inborn skepticism that requires subtlety and flexibility.

To achieve the resiliency desired in society, it is important to identify the context within the defense community that is lending urgency to a media literacy approach to resiliency, strategic communication and defense. It is also important to identify the policy context in which media literacy researchers/practitioners operate, since they must guide and implement media literacy within their own communities, and support the grassroots needs. NATO is encouraging this dialogue between policy makers and the grassroots, and is now exploring best practices and resources within the media literacy community.

"It's a relief to know that NATO cares about people being able to cope, beyond providing soldiers and conducting warfare." -- Carmen Marta Lazo, Catedratica de Periodismo, Universidad de Zaragoza, Spain

NATO has identified requirements for resilience along eight key domains to guide capability requirements more holistically. In 2030, the domains of resilience should be: (1) internal resilience - underpinned by Allied solidarity and shared values; (2) societal resilience – a society's ability to withstand and react to threats; (3) democratic resilience – ability of democratic institutions and processes to withstand shocks and attacks from internal and external sources; (4) climate resilience – climate-proofing policies and operations to be able to better anticipate, prepare for, withstand, respond to, and recover from climate-related shocks; (5) defense spectrum resilience – ability of defense apparatuses to adapt to a new threat environment and

2030 DOMAINS OF RESILIENCE

1 INTERNAL RESILIENCE
Underpinned by Allied solidarity and shared values

2 SOCIETAL RESILIENCE
A society's ability to withstand and react to threats

3 INTERNAL RESILIENCE
Ability of democratic institutions & processes to withstand shock & attacks from internal & external sources

4 CLIMATE RESILIENCE
Climate-proofing policies & operations to be able to better anticipate, prepare for, withstand, respond to, and recover from climate-related shocks

5 DEFENSE SPECTRUM RESILIENCE
Ability of defense apparatuses to adapt to a new threat environment and withstand shocks

6 CRITICAL INFRASTRUCTURE
Protecting the systems vital for a government and society's core functions and ensuring shock recovery

7 ECONOMIC RESILIENCE
Shaping safe economic interdependencies and economic systems able to withstand shocks by reducing vulnerabilities to economic coercion

8 SPACE RESILIENCE
Ensuring space assets cannot be compromised and promoting the peaceful use of space as a global common good

withstand shocks; (6) critical infrastructure – protecting the systems vital for a government and society's core functions and ensuring shock recovery; (7) economic resilience – shaping safe economic interdependencies and economic systems able to withstand shocks by reducing vulnerabilities to economic coercion; and (8) space

resilience – ensuring space assets cannot be compromised and promoting the peaceful use of space as a global common good (NATO, 2021).

NATO sees media literacy as part of deep efforts to build resiliency in societies, beginning with its own forces. NATO soldiers receive training in media literacy (Singer & Johnson, 2021), and NATO also responds to requests for armed forces training from NATO member countries. Past security-related incidents have reinforced this need, as armed forces need to understand how GPS works, or how personal devices like FitBits or Apple watches can be identified and tracked by enemies (Sly, 2018), perhaps giving away locations or important information. NATO is now undergoing a digital transformation for its education programs, and has now adopted a Strategy for Distance Learning Support to help military organizations adapt to new education demands and learning environments.

Generally, media literacy is an outcome, a result, a set of habits, skills and competencies that can be identified and measured. Media literacy education is a continuing process, that is highly variable, depending upon a person's interests, skills and capacities. There are many ways through which to educate a population: mass media, social media, schools and libraries, museums, cultural organizations, and artistic endeavors such as movies or the visual arts.

Ceci n'est pas une pipe.

By Renee Magritte

Resiliency has long been a topic of interest for media literacy researchers, with civics and health researchers, particularly, interested in whether media literacy fosters resiliency. Results are encouraging, and tied to how media literacy encourages critical thinking.

"Ultimately, if we teach our students to create media and use the power of information and communication to advocate for meaningful social change, it will happen," Renee Hobbs, Professor and Founding Director of the Harrington School of Communication and Media at the University of Rhode Island, US

Additionally, there are now "vulnerability scores" to identify countries most susceptible to falling for disinformation and misinformation, as well as "media literacy indexes" (DW Akademie, 2020) that measure the levels of media literacy competencies and skills in various countries. The report from the 2021 Sofia Institute Index, produced by the European Policies Initiative, states that "The index cluster analysis shows certain geographic patterns as the best performing counties are located in clusters in Northwestern Europe and the worst performing countries are located in the Southeastern part of the continent. The changes in clusters when the indexes of 2021 and 2019 are compared seems to point to a deterioration in the situation as a number of countries backslided to lower-tier clusters" (EuPI, Sofia Institute, 2021). The reliability and contents of these scores are contested, but the intention and outcomes are clear: it is possible to quantify and influence media literacy measures in regions throughout the globe (See Part V).

"Media literacy is part of general literacy, and learning should start in kindergarten. It's a never-ending learning process, because we cannot foresee what will happen regarding technology, but we can foresee that media technology will be changing all the time." -- Sandor Orban, Director, Center for Independent Journalism, Hungary

Since media literacy principles and practices can be applied to all subjects and domains – whether global or local -- it is a capacity that all citizens may benefit from in applying a continuum of knowledge around the subjects most important for them. Media literacy originated at the grassroots, and has been sustained primarily through the grassroots. This makes for stronger educational underpinnings, since this type of education is sought after by everyday people, and allows for more shared understanding and vocabulary that enables discussion.

Increased technological ability to facilitate interchange between institutions and the people whom they serve has encouraged much more feedback from the grassroots in influencing policy and decision-making at institutional levels. Today, strategic communication is as much about public opinion and feedback as it is about targeted messaging. Furthermore, it is possible to conduct extensive research amongst statistically significant panels globally with days, not weeks. Emails, texts messages, social media platforms – all have given voice to

people who have interest in upcoming legislation or new platform policies. This type of feedback was literally impossible – and often untimely – in the days of mailed paper surveys or telephone polls.

"We idealized the West, and when we became a part of the West again, we discovered that it's not perfect, that it is made of people who are real and not perfect. It's easier to focus on frustrations after a disenchantment; it's easier to be distrustful and even to forget the reasons why we were attracted to the West – yet those reasons are still valid and realistic. It's the people who have forgotten... Media literacy can help people sort through their emotions as well as reinforce the freedom of thought, speech and action that was unattainable in communist times. There is no perfection in this life: no perfect people, no perfect information, no perfect mastery of knowledge, no perfect judgment. We need a free media, and a free people, where everyone is able to make their own decisions." -- Tomasz Komorowski, programme manager, Polish National Commission for UNESCO

Today, the demand for media literacy is coming both from the "bottoms up" and the "top down," with policy makers and governmental legislatures increasingly recognizing the importance of bringing people together while still having individual and group autonomy. In recognizing media literacy as part of resiliency in populations, policy makers and citizens alike can respond to changes and to risk, by understanding that all information and institutions are human constructions that contain human flaws. Whether an evaluation is quantitative or qualitative or both, emotional or reasonable, when making decisions, people must make a leap of faith and make decisions on the basis of information that they have assessed to the best of their abilities, within the time they have.

This decision-making process of Awareness, Analysis, Reflection and Action takes labeling and practice, so that people understand how to apply their own values, social values and priorities to the decision-making at hand. The model, also known as "Action Learning," has proven to be an effective method for initiating a spiral of inquiry that leads to better comprehension, critical thinking, and the ability to make well-informed decisions (Fingar and Jolls, 2018).
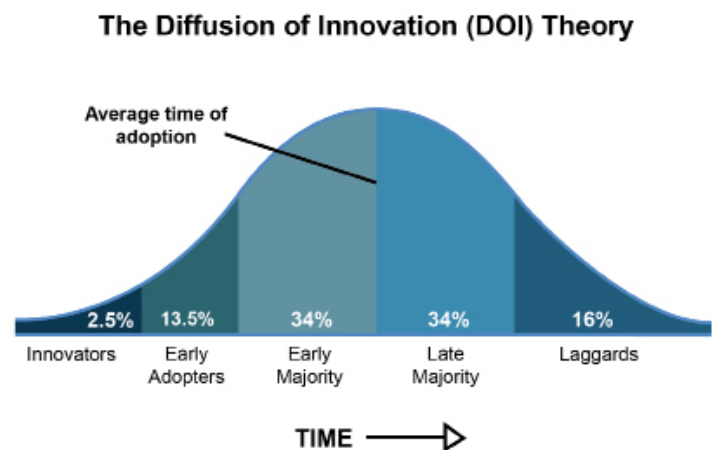
Media literacy lends itself to other theories of action and change, as well. The Diffusion of Innovation Theory (DOI), developed by E.M. Rogers in 1962, is one of the oldest social science theories (Rogers, 1995). It originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system. The end result of this diffusion is that people, as part of a social system, adopt a new idea, behavior, or product. Consciously planning actions that follows particular theories allows for more targeted measurement, since the goal at the beginning of the project can be measured at the end by following the steps in the theoretical process.

The Diffusion of Innovation (DOI) Theory

Although the DOI theory of change wasn't intentionally followed, a study of the State of Washington's efforts to pass media literacy legislation shows that the activist community modeled the DOI through their change process, which successfully produced legislation sponsoring media literacy education. Increasingly, government grants that encourage media literacy call for the grantees to identify a theory of change and a logic model (which identifies inputs, outputs and outcomes) that their project illustrates; this is an encouraging aspect of research in a field where implementation science is just beginning to make an impact.

Connecting Media Literacy to Resiliency
Cognitive Processes that can be taught and learned
Media Literacy Philosophies: protectionist vs. empowerment
Although media literacy fundamentally employs a cognitive process to enhance understanding of media mes-

sages, media literacy does not reflect a monolithic field in terms of philosophies and approaches: there are a variety of conceptual beliefs that drive the design and implementation of programs. The illustration below represents the "big tent" of media literacy education, developed by Michael Robb Grecco, then a Ph.D. student at Temple University in 2013, and based on an organizing idea for the field developed by Renee Hobbs, Professor at the University of Rhode Island (RobbGriecco, 2013).

The blue flag on the left categorizes "protectionism" and the orange flag on the right characterizes "empowerment" philosophies.

Protectionist approaches include: Critical Media Literacy, Digital Ethics/Online Safety, Media Reform and Media and Public Health. These approaches typically start with a philosophy that people need to be "inoculated" or "vaccinated" or "cured" against the negative effects of media, and that media literacy is part of the solution.

Critical media literacy concerns itself with with how power is exercised through structures or groups considered to be oppressive for other groups in society. Typically critical media literacy practitioners advocate for remedies to perceived societal ills through activism, which is often politically slanted. Digital Ethics and Online Safety are essential for treating others with respect and for security, but programs typically give direct instruction on how to behave online. For example, digital citizenship criteria vary from one country to another – China may require different behaviors and attitudes to be a "good" citizen, while Canada may see things quite differently. Laws protecting intellectual property and governing the ethical use of media, vary from country to country, as do some standards of behavior. Although there are some immutable human values at work in using media, there are also differences that are important to acknowledge and consider.
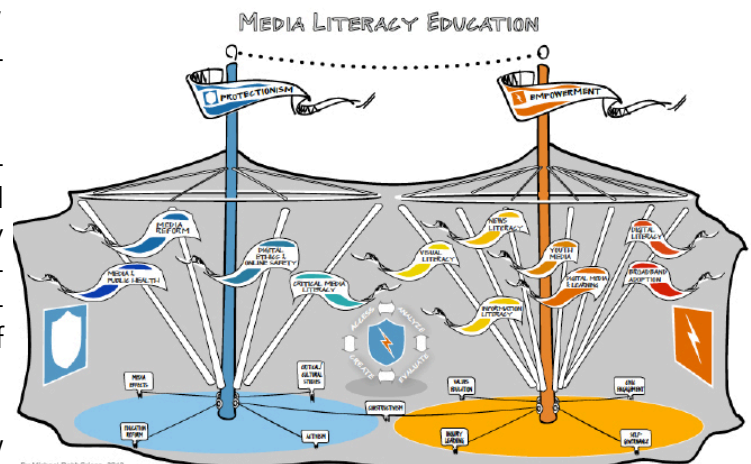
Media Reform concerns itself with the ownership of media companies and how corporate media companies control messaging. In the case of Public Health, the content of programs often relies on scientific claims that influence policy and programs to improve health, based on the current science, which must be revised as more evidence is accumulated. The COVID 19 vaccination messaging is an illustration of how divisive messaging and attitudes toward messaging can be, and how "science" can be interpreted differently, with people adamantly broadcasting their point of view.

"The more you are protected, the more you are in danger. The world is not secure. Life is not secure – we are always in danger. But we have choices to make. If we choose for the maximum protection, we lose our freedom. We must engage with media. We must increase our abilities to live life on life's terms," Thierry de Smedt, Professor Emeritus, UCLouvain, Belgium.

Although all of these protectionist approaches can provide some credible arguments, the hallmark of these approaches is that they are directive: advocates are committed to converting others to solutions or beliefs that animate their actions, and they often want to influence media content. This politicized or advocacy approach can endanger perceptions of media literacy as a non-partisan educational intervention. Transparency on the purpose and intention of such programs is one way to at least acknowledge the framing and bias of such programs, which can be beneficial or not.

The empowerment approaches to media literacy include: Visual Literacy, News Literacy, Information Literacy, Youth Media, Digital Media and Learning, Digital Literacy, and Broadband Adoption. These approaches begin with a philosophy that media offer unprecedented opportunities for advancing individuals and societies' capacities; they rest on an educational foundation that encourages a process of inquiry that is non-partisan, and is focused on how learners gain skills to apply to their own consumption and production of media. It is up to people to apply their media literacy skills to news or other applications, like science or history. Learners learn

to use various media and a process of inquiry for their research, and they make up their own minds about how they perceive issues of the day, societal governance, or health decisions, as well as determining where they get their news.

Visual literacy seeks to extend critical inquiry processes beyond the printed word. As a UNESCO statement said in 1982, "We must prepare young people to understand a world of powerful images, words and sounds." In a world where YouTube and Wikipedia are the most referenced sources of news and information for youth, visual literacy is an essential component of media literacy.

News literacy is also of great importance, yet it should not be conflated with media literacy, because the news, especially political news, is only one application for media literacy inquiry: science, charts and graphs, environmental concerns, books, magazines, billboards, logos – all are media messages pertinent to deconstruction and construction. Information Literacy is a term primarily used in the library world; it is a highly important aspect of general media literacy that typically focuses on access and retrieval of credible information. Librarians have developed frameworks for media and information literacy that encourage an understanding of information in a digital world (ACRL, 2022).

Youth Media is the province of schools and informal learning organizations which encourage youth voice and focus on media construction, while also helping youth gain skills around deconstruction of messages. Digital Media and Learning, and Digital Literacy, became more in use when it became clear that the internet and digital communications were the new and prevalent way that people are using media; however, whether the label is digital literacy or media literacy, the common denominator is literacy for today's world. Digital Literacy tends to focus more on use of digital devices and on how to use such devices, while media literacy focuses on meaning-making and also extends to the offline, non-digital world – examining logos on tee shirts or purses, direct mailers, and other physical aspects of media that surround citizens. There are many situations, especially in developing countries, that call for Digital Literacy programming, since technology use may be more unfamiliar, and people need help in learning to adapt the technology itself.

Unquestionably, Broadband Adoption (Goodchild et al., 2022) is a necessary and vital service for citizens everywhere; the tools of the internet must be available and it is now a serious handicap to have limited or no internet access through broadband. The World Bank reports that by the end of 2021, nearly 3 billion people remained offline, the vast majority concentrated in developing countries. And the usage gap remains a challenge. Close to half (43%) of the world's population are not using mobile internet, despite living in areas with mobile broadband coverage. Such lack of access amounts to disenfranchisement today (World Bank, 2022).

The Institutionalization of Media Literacy

Although there have been breakthroughs in global awareness about the importance of media literacy to the well-being of democracy and democratic societies, the institutionalization and systematization and wide-spread adoption of media literacy education are taking many years of effort. Part of the slowness in adoption has been that it has taken time to develop consensus around media literacy as a discipline. It is not an easy process for a field to emerge and gain legitimacy, especially when the emergence of that field coincides with a major technological disruption that upends how education should happen, changing from an industrial age factory model to a digital age networked model.

The emphasis of media literacy is on users and how they make meaning from content, rather than only the content of information itself. An understanding of this shift is fundamental and emphasizes the infinitely variable and imperfect nature of both humans and content, and how they interact. This type of understanding requires a way of sorting and categorizing that rest on powerful and reliable ways to analyze, and insights as to how best to view meeting the new challenges. With media literacy, the key is understanding that what we strive to understand is how media *represents* reality – and ways to analyze this fundamental insight. The goal is not seeking to understand a particular media genre, like texting or videos or music, but instead, to consciously examine *how* these genres re-present the subject at hand. These understanding and skills of analysis and production rest on a continuum; different people have different levels of knowledge and skills, from high to low, and this range

applies to technical knowledge, content knowledge and all the aspects of interacting with media. An individual may be highly competent in technical skills of using digital devices, but low in competency related to analytical skills, for example. Media literacy education does not seek mastery or perfection; rather, the goal is a continual improvement throughout life on all aspects of making meaning through media.

"At the heart of media literacy is a process of inquiry. We have the questions – not the answers – and that means that media literacy offers not just a new subject to teach, but a new way to teach all subjects." – Elizabeth Thoman, Founder, Center for Media Literacy, US

Demonstration projects have shown that acquiring media literacy is not an insurmountable hurdle, and that acquiring media literacy is more about education than about media. A major longitudinal research study in 17 diverse California middle schools (Fingar & Jolls, 2013) showed that students' knowledge, attitudes and behaviors regarding violence in media are positively affected after only ten media literacy lessons, with aggression levels and critical thinking also positively impacted. Adults, too, can benefit from short, half-day media literacy trainings, whether those trainings happen in schools, museums or libraries. And trained teachers can integrate media literacy into course subjects, such as the arts and language arts, to create lessons in as little as 20 minutes. As technology has proliferated and as educational demands are shifting as well, some informal education programs, such as Newspapers in Education, are also shifting to become media literacy programs rather than strictly focusing on topics like news literacy, which journalists understandably favor. Although both sets of skills and habits of mind are needed, with news being a key application of the media literacy process, media literacy offers a richer way of addressing the search for truth that speaks to each individual, who ultimately makes the decisions in a democratic society.

News, science reports, and history books inevitably tell stories that inherently have a point of view, since it is impossible to represent all viewpoints. A recent article by journalist James Fallows (Fallows, 2022) acknowledged this by saying that, for example, journalists should be more concerned with the process of framing news stories – through techniques such as emphasis, and omission – than with bias and fairness. This reflective process indicates a high level of media literacy, since media literacy addresses these stories of today, and the narratives that often drive decisions, policy and action.

People derive identification and deep meaning from stories, and from how they perceive protagonists and antagonists and relationships amongst the players. Each media story adds up to a cultural narrative that can be deconstructed – and constructed – as well. Understanding how stories are framed, how they are told through many persuasive techniques, and how narratives unfold and take hold or not, for what purpose, is the bedrock of media literacy. Understanding narratives, and being prepared to undertake quests to understand the words, pictures, sounds and numbers that express the story and the relationships within it, are the challenges for citizens of today. Narratives are being identified in the news media. The call for critical thinking skills is being amplified, but parents, teachers and community leaders are still faced with the dilemma of HOW to help children learn the habits of mind that lead to critical thinking.
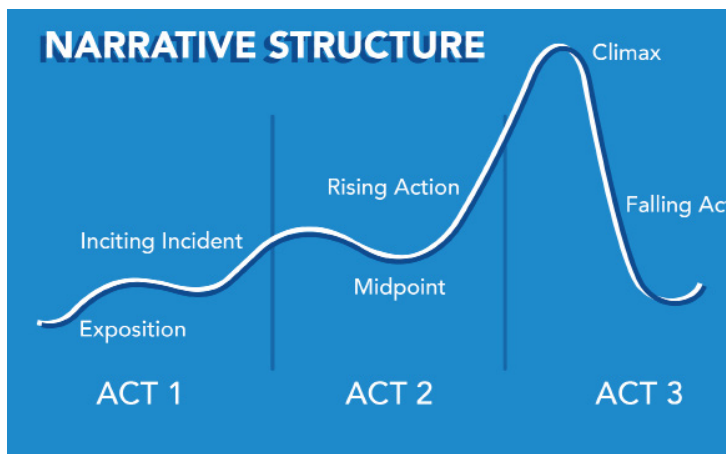
Media literacy provides a metaframe for addressing authorship, techniques, audience, framing and purpose, and this metaframe complements the overall frameworks for individual learning disciplines, such as social studies or science. Metaframes give teachers a readily-accessible, elegantly simple methodology, and a "short-cut" to 21st century skills.

For example, in retrieving information on a smartphone, it is easier to think about criteria around keywords – such as authorship, techniques, audience, bias and purpose – than it is to have a blog or textbook describing how to access and evaluate infor-

mation. Since metaframes are easier to recall, they are core to teaching and learning – not peripheral. They are in keeping with a systems-based, modular, non-sequential approach that complements the digital world that is based on underlying systems that categorize and make information and software programs useful. Frameworks can be internalized and highly suitable to today's mobile world.

Many parents, health advocates, librarians, teachers and community leaders have called for media literacy through the years, seeing how media is playing a pivotal role as an important teacher of children. How can children be taught to filter all the media messages? It is impossible to deny media to children, but nevertheless, the goal of making wise choices, in accordance with acceptable community norms is also challenging. Media literacy offers some promising ways of teaching children to filter media in various arenas, and to self-select.

Health has been a prime focus of media literacy research, due to funding possibilities: anorexia and bulimia, body image, vaping and tobacco use, addictions, sexual imaging, violence prevention, cyberbullying – all are prime subjects of media literacy explorations and effective interventions. As scientific discoveries inform new insights and treatments, information is updated accordingly. For example, in seeing alcohol advertising, children are less likely to be influenced if they have media literacy skills to refute such messages. Furthermore, if they have received media literacy training in analyzing alcohol advertising, their decision-making process can be positively affected in other risky situations (Knorr, 2017). Once children master a decision-making skill, they can apply it to a variety of contexts.

In this new way of teaching and learning, media literacy skills represent a constant and consistent process that can be applied to an infinite variety of content. For long-term benefits, then, it seems more valuable to concentrate on helping children develop media literacy skills than to teach them which specific decisions to make (Austin & Johnson, 1997). Formal education in media literacy, not just censorship or control, is an avenue to help young people understand their choices and to help question the values represented through the media. In addressing how broadband and digital information is affecting communities and democratic societies, top researchers have identified media literacy as having a key role in communities and schools today (Turner et al., 2017; Knight Commission, 2010).

Media literacy has continued to grow globally and has some common characteristics:
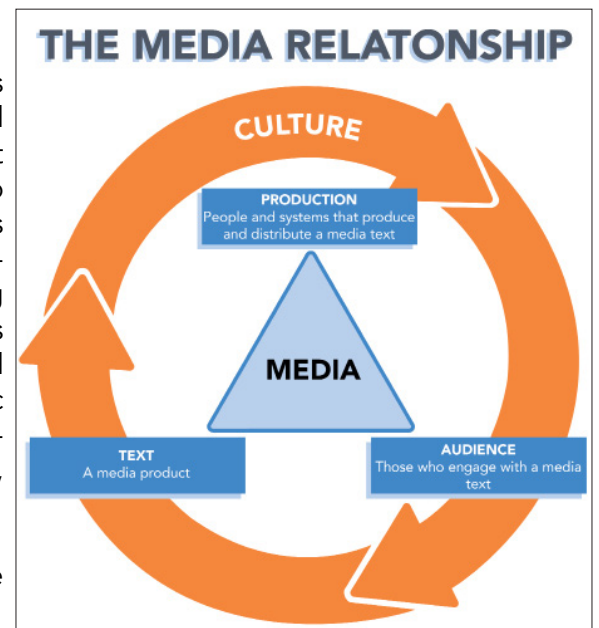
THE MEDIA RELATONSHIP

First, media literacy helps individuals explore deep and lasting relationships with the media. Understanding the relationships between text, production, viewers and culture is the basis for understanding the power dynamics between these four elements. For example, looking at a common brand identity or logo shows that users have a common understanding of the text (logo) created by a particular organization. Users aren't necessarily "seeking" this understanding, but because of repeated exposure to the brand, people have internalized an understanding of what the brand means and how they have interacted with the brand in the past. The producer establishes a relationship with the user through the text, which is the logo. Still, the user exerts the ultimate decision on the relationship when consciously choosing whether to engage or not.

A New Look at the ABC's

Second, the focus of media literacy is on processes, not content. The goal of media literacy is not to remember facts about the media, to shoot videos, or to design websites. Rather, it is about investigating the questions that arise when critically examining a transmitted message, including facts and other content (printed or digital). It involves posing problems that exercise higher

order thinking skills – learning how to identify key concepts, make connections between multiple ideas, ask pertinent questions, identify fallacies, and formulate a response. It is these skills, coupled with engagement with factual knowledge, that form the foundation of intellectual inquiry and workplace productivity, and that are necessary for exercising full citizenship in a democratic society and a global economy (Thoman & Jolls, 2004).

Such skills have always been essential for an educated life, and good teachers have always fostered them. But they too often emerge only as a byproduct of mastering content areas such as literature, history, the sciences and mathematics. Seldom are process or learning skills explicitly taught, providing practice over time. However, in order for society to generate graduates who can take responsibility for their own ongoing learning in the media culture, learning skills must be taught, along with the critical thinking skills that enable individuals to make meaning.

Third, media literacy education extends the concept of text and is used to develop ideas and share them between people, whether the messages are verbal, auditory, or visual (or a combination of all three). To fully understand such texts, deconstruction activities to dismantle existing messages, as well as construction activities to express opinions and ideas, use a wide range of multimedia tools available to young people growing up in the digital world. New forms of text constantly emerge: witness memes or texting.

THE INFORMATION PARADOX:
Drowning in information, starved for knowledge.

We are living in an age of information. Staggering amounts of information are collected, stored, and widely disseminated. Yet, we may be less informed and less knowledgeable than ever. This paradox of increasing information, yet decreasing knowledge and insight, has many possible causes, some of which are subtle and difficult to identify, and even more difficult to remedy. The fundamental issue is quantity crowding out quality, leading to an abundance of poor-quality information which may not be a good substitute for scarce but high-quality information. Information is not unique in exhibiting this paradox. There are many other goods that exhibit this unusual characteristic of more being worse than less. Those who eat the most food are rarely the healthiest people, and they may actually be severely deficient in some nutrients. Those who have the most Facebook friends are often the loneliest people. Those who are the busiest are not the most productive. Those who read books and watch television the most are sometimes the least knowledgeable. All of these examples point to the pervasiveness of this paradox, but it is most insidious with information, critical in an information economy, and most difficult to overcome in a modern society dominated by communication technologies. In an information economy, we may be shipwrecked, surrounded by an ocean of water, yet dying of thirst (IEEE, 2017).

Fourth, media literacy is characterized by the principles of inquiry: that is, learning to ask important questions about everything one sees, hears, creates, and works with.

- Is this new scientific study of diet and weight valid?
- Who are influencers and how do they earn a living?
- What are the implications of sharing likes on social networking sites?

Although these questions aim to encourage healthy skepticism rather than cynicism, the challenge for teachers (or parents) is not to provide answers, but to encourage more questions-steps to find answers, to guide, teach and challenge learners to understand the text, whether the text is a social media post or a movie. The fallback question is: "I don't know: how can I find out?"
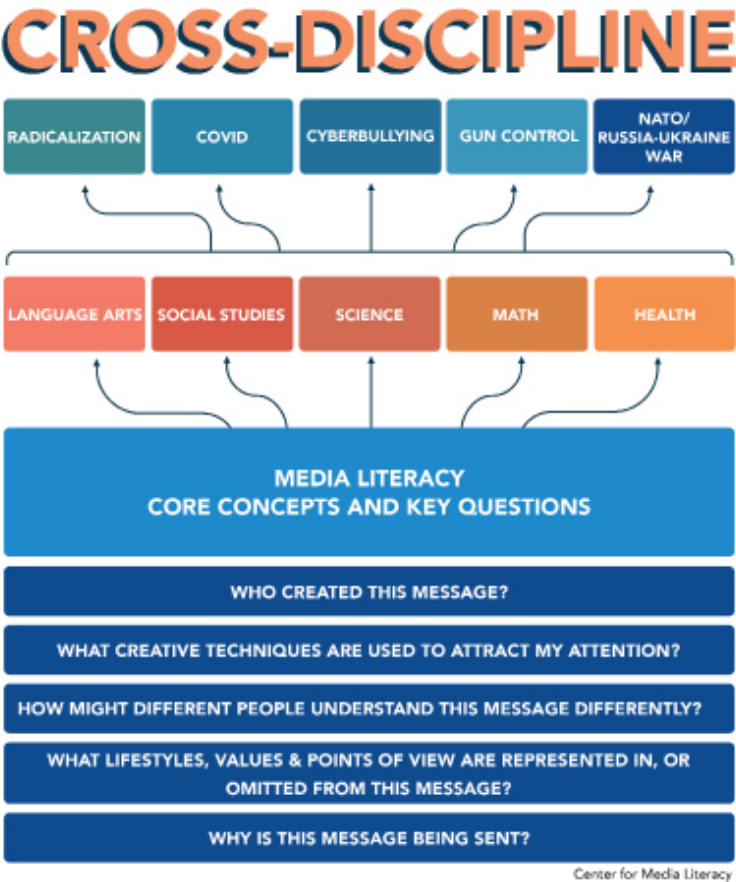
Discussion is central to understanding these relationship characteristics of media literacy, and learning from peers through discussion is essential in understanding that others will often disagree or see things differently. This is human, and, if empathy is encouraged, can be a constructive process.

Production of media content and constructions are also an essential part of media literacy, going well beyond writing a reflection or paper to easily producing videos or podcasts. This increase in student voice undoubtedly causes some upset in school environments where students typically aren't allowed to voice opinions or circulate commentary; many issues arise regarding censorship and appropriateness as students learn how to participate responsibly and effectively (and notions of responsible and effective paths may vary greatly between administrators, teachers, parents and students – quite a mix to navigate.)

CROSS-DISCIPLINE

| RADICALIZATION | COVID | CYBERBULLYING | GUN CONTROL | NATO/ RUSSIA-UKRAINE WAR |

| LANGUAGE ARTS | SOCIAL STUDIES | SCIENCE | MATH | HEALTH |

MEDIA LITERACY CORE CONCEPTS AND KEY QUESTIONS

WHO CREATED THIS MESSAGE?

WHAT CREATIVE TECHNIQUES ARE USED TO ATTRACT MY ATTENTION?

HOW MIGHT DIFFERENT PEOPLE UNDERSTAND THIS MESSAGE DIFFERENTLY?

WHAT LIFESTYLES, VALUES & POINTS OF VIEW ARE REPRESENTED IN, OR OMITTED FROM THIS MESSAGE?

WHY IS THIS MESSAGE BEING SENT?

Center for Media Literacy

"Media literacy is foundational. It informs us of all of the other subjects, and since it is multidisiciplinary, it also synthesizes and brings together all media subjects in a way that nothing else does," -- Irene Andriopoulou, co-Secretary General of the International Steering Committee for UNESCO MIL Alliance and Head of Research, Studies & Educational Programs, Department, EKOME, Greece

To achieve this new approach to education – with a focus on process rather than content, and on inquiry and collaboration rather than only individual learning – the process skills of media literacy can be learned and applied to every subject. This chart illustrates the process at work: (see chart to the left)

CURRICULUM CHARACTERISTICS

OLD MODEL, PRE-INTERNET	INTERACTIVE, COLLABORATIVE MODEL
Closed classroom experience	Open to world, sharing with others
Teacher delivered	Teacher assigns task, sets parameters & guides toward results
Teacher-led focus	Student-led focus with peers
Uniquely authored	Collaboratively authored
Individual learning in class setting	Differentiated learning in collaborative setting
Information not timely	Information as of today
Linear, Sequential	Modular, Interchangable
Directive	Explorative
Master content knowledge	Strengthen process skills to advance content knowledge
Focus on facts and content	Focus on facts, content and process
Student artifacts typically written or physically constructed	Student artifacts digitally created, project-based
Limited distribution of learning	Unlimited distribution of learning globally
Assessment by teacher	Assessment by teacher, student, experts, peers, parents and/or others
Assessment limited and untimely	Assessment/feedback 360 degrees and instant if desired
Forced adoption of materials Statewide	Customized resources meeting state standards/local needs
Often not research-based	Research-validated frameworks for inquiry and process
Access limited to print	Easily accessible
Distribution limited	Easily scalable through online
Few Games or Puzzles	Gamification often embedded

While individuals or group may employ a media literacy process to understanding the subject at hand, it is important, in education systems, to understand the shifts that are occurring in education, that need to be encouraged for media literacy education to find a comfortable and supportive home. This chart (at right) shows characteristics of curricula that reflect current values needed in education, and echoing new demands for education:

Even in 2022, most classroom learning today does not reflect these values and characteristics. The needs of learning support a media literacy approach, where the process of inquiry can be applied to any subject, any time, anywhere. Ideally, these processes and metaframes should be integrated across all academic disciplines. However, experience by many media literacy practitioners has shown that it

is ideal to have a separate class on media literacy, so that students can learn the basics and be able to practice applying concepts and questions to a full range of subject matter (science, math, history, language arts, etc.). Students become proficient in the deconstruction process and with the practice needed, they can easily and quickly deconstruct an advertisement or report. Additionally, there have been academic issues raised through the years on whether media literacy or media studies are a "vocational subject," and though media literacy should be part of every student's education, media literacy addresses the concepts and ideas behind media messages as well as the digital skills for making media, whether producing images, words, music or sounds.

Media literacy lends itself to teaching with or without technology tools – photos, billboards, logos on shirts, merchandising displays at stores or product packaging; these are all examples of media that students can engage with. Some teachers and students use physical media because they do not have broadband or because they ban the use of cellphones during class time; others confine their media literacy practices to digital media. Both approaches have their strengths: students can learn foundational media skills in either mode. Without the benefit of smartphones or computer access, students can still be creative and also learn to listen and focus, with focus being a skill lacking for many students today. With the benefit of smartphones or computer access, students learn how to manage the technology at their fingertips, search and research through online resources.

"Students in poorer areas, with no broadband access, are very resilient in solving problems and figuring out ways around the limitations they have. Students in richer areas, who have easy access to technology and broadband, sometimes don't know what to do if their technology tools are taken away" – Alessandro Soriani, Adjunct Professor, Department of Education Studies University of Bologna Unibo, Italy

Barriers to Media Literacy Education

But regardless of how well media literacy fits with online curricula or in-school curricula with the characteristics outlined above, this approach requires fundamental changes to teaching and learning.

School systems are based on traditional notions of educational attainment: the focus is on a one-size-fits all regarding what to learn and retain during a school career, with a broad spectrum of subjects; rather than on having some basic knowledge and skills that can then inform a process of inquiry for learning for life, alone and with others (Levitt and Severts, 2022).

"We want to see a mandate that calls for all high school graduates to not only have the skills of news and media literacy, but also know how to apply these skills in their daily lives. This requires systemic changes to education, which we are advocating for, as well as working with university schools of education to provide training for new teachers and the credentials which they need." -- Charles (Chuck) Salter, President, News Literacy Project, US

Teaching media literacy is something that should be part of every-day life. But teachers and librarians and community health educators cannot teach what they do not know for themselves. To be effective, they first need the training and professional development needed to be able to easily integrate media literacy into everything they teach.

Teachers also need support and training in how to address difficult and contentious topics with children and youth who are vulnerable, since media literacy education often address current events and

TRAINING STAGES FOR TEACHING MEDIA LITERACY

5 Support
4 Resources
3 Coaching
2 Practicing and learning new teaching methods
1 Understanding for one's self

emotional topics. This training is achievable, but currently not something that is accessible, even to those who would be interested in such training. Schools of education at university generally do not provide media literacy
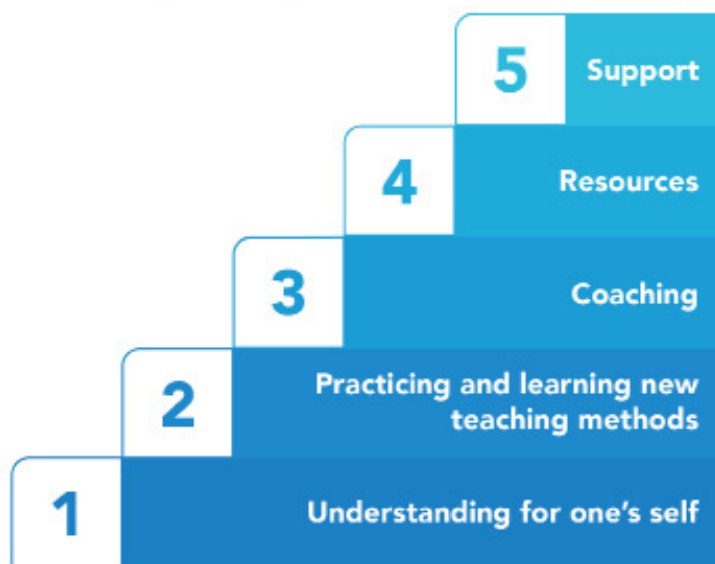
education, depriving young teachers of such knowledge and practice in applying media literacy concepts and pedagogies. Library schools do not address the integration of media and information literacy, and health educators most often are unaware of the role of media literacy in health until they see the media effects present. These gaps reflect the state of education today, and the outmoded environment in which young professionals are being prepared for their professional lives.

"Media literacy should start with every-day experiences. Lectures by academics aren't the way to learn media literacy – experience with applying media literacy principles is best," Iveta Verse, Executive Director, IAC, Latvia

Prior to teacher training, it's essential that administrators provide support, and that the school itself – students included, are part of the process in introducing media literacy. Then, training for teaching media literacy generally comes in two stages: the first stage is for people to learn the basics about what media literacy is – to know for themselves, to experience media literacy and the aha! moments that often accompany the understanding that media are not transparent; media are opaque and it's important to see behind the interfaces and the words, images and sounds to understand how media truly work. Once this understanding is achieved, the second stage of practice is highly important – practice in learning new teaching methods, new ways of exploring topics with students, and finding practical ways of being open to other opinions and experiences, non-judgmental and non-partisan. Often, coaching can serve as an important support during this crucial stage, when theory gets translated into pedagogy and teaching methods that are often uncomfortable initially for those used to a traditional teaching style.

"School leaders need to create a working group amongst teachers to develop a vision for media literacy and to identify the values that teachers see as important for the students, and then a plan for how to introduce media literacy into the school culture. Students should participate, too. If a leader assigns someone else to take responsibility for this task, the effort will likely fail." Jon Lublinski, Head of Department, Policy and Learning, DW Akadamie, Germany

Implementation strategies for introducing and nurturing media literacy need to be carefully thought through. Currently, the research on implementation strategies for media literacy is scarce; implementation science from the public health arena is very informative and helpful in looking towards models (Epik, Deliberate Digital, Impero, et. al, 2019). Schools and settings for media literacy vary in access to technology, but regardless, media literacy can be taught with or without technology tools. However, some barriers to implementation and sustainability of media literacy programs are that the curricular content and media examples become quickly outdated, and it is highly important that the content be language-appropriate and culturally-appropriate. This means that the content, if it is centrally provided, needs to be maintained on an ongoing basis, which is best done through online curricula that can be easily disseminated and kept consistent.

To keep current without the expense of accessible online curricula and media examples, training teachers to integrate media literacy concepts and relate it to their particular subject area is the best way to keep things fresh and relevant. Some teachers have the skills to be able to take a current YouTube video, and to work with their students to deconstruct the video, using their media literacy process skills, "on the spot." This is the strength of using a media literacy approach in a rapidly changing world, since the text being used in the classroom isn't an outdated textbook.

"What's important is that students learn the thinking strategies: Media literacy isn't about the technology, it's about the processes that apply to everyday life. What about stereotyping? Or hate speech? How do we see it? How do we respond to it? How do you read and write the world?" Silvia Ferreira Mendes, Centro Zaffiria, Italy

Assessment for media literacy education, too, is a work in progress. Standardized tests do not lend themselves easily to media literacy, since critical thinking, the application of contextualized knowledge and media production are essential to acquiring media literacy process skills. Portfolios, individual deconstructions or constructions of media artifacts, and rubrics can be important assessment tools for media literacy class work. At national levels, the PISA testing has made advances in assessing critical thinking and problem solving, but so long as standardized tests focus primarily on content knowledge – which is less expensive to test at a mass scale – the goal of evaluating media literacy at scale is elusive. Global Kids Online is introducing an ongoing assessment of media literacy, with a module to complement the basic GKO survey, and another module that can be ad-

ministered independently, but these instruments are still undergoing testing. The basic GKO survey, however, is available to measure online safety and security, primarily, and it has been widely administered throughout the world, providing a chance to compare data and also to generate normative data (Livingstone et al., 2019).

Additionally, the recognition that professionals receive for their media literacy work – both in compensation and performance – is nearly non-existent. Systems around education standards and performance, teacher certification and evaluation, and cross-disciplinary means of educating children and youth do not incorporate media literacy formally, or often, even informally. Learning environments no longer depend on seat time in factory-like school settings. Learning happens anywhere, anytime, and productivity in the workplace depends on digital and media literacy. Yet teachers of media literacy are often alone – they are often the only teacher or practitioner in their local environment because media literacy is not systemic, required or encouraged. To create the human capital necessary for success and sustainability in a technology-driven world, societies must invest in the literacy practices of our youth, with media literacy education being front and center rather than an educational backwater (Turner et al., 2017).

Evaluation

The barriers to change are high and in some cases, nearly insurmountable. Information on policy implementation and evaluation is hard to come by, because such studies barely exist. The U.S. State Department and U.S. AID have undertaken evaluation studies in 2021 – 2022 on the effectiveness of various projects in many disparate European geographic locations, and a commonality of both studies, ironically, is that consistency is hard to find. These evaluations are targeted at projects that generally have no underlying theory or practice to guide them; they were welcomed experiments to see whether such programs – any media literacy programs – were useful and effective.

There were a number of conundrums in an evaluation undertaken by US AID, focused on interviews with researchers and practitioners in post-communist countries: "Media literacy is a phrase that's both understood by everyone and no one," Jonathan Solis, Senior Research Analyst and AidData Research Lab at the College of William and Mary, said. Some people describe media literacy as a tool to use for construction or deconstruction of media. Others see it as a worldview based in skepticism. Some see media literacy as only focused on deconstruction; others insist that production should be included. Some see media literacy as related to age, with either the very young or the very old "believing everything they see" and needing to improve their skills. Others see media literacy as rational; some see emotional manipulation as the main focus. Researchers want data on media literacy, but they are highly critical of data and indexes currently available, seeing them as inadequate for the task. Also, although some see that media literacy curricula can be inserted into other contexts (such as different countries with different education systems), others find that such attempts are culturally inappropriate, with media examples that are outdated or not applicable to the situation.

The U.S. State Department evaluation, conducted by Mateusz Pucilowski, vice president, Impact Evaluation, focused on nine media literacy projects, with four categories of media literacy interventions: standalone trainings, school-based instruction, library instruction and games. Because the projects had a wide variety of data collection methods, it was difficult to compare results or to be able to measure outcomes for direct beneficiaries or indirect beneficiaries of trainings. However, most projects involved cascaded training, where a train-the-trainer approach was taken. Although teachers, more than librarians, were able to reach many indirect beneficiaries, the outcomes for the indirect beneficiaries are unclear due to constraints of available data.

Some findings of interest are important to note: first, schools and teachers are undoubtedly the most fruitful target for cascade-type trainings, particularly if the school system/Ministry of Education incorporates media literacy into curriculum and training for teachers. Such integration provides the most sustainability for media literacy, and yields the best opportunity for ongoing programs and consistency. Second, though libraries are community service agencies, current user populations consist of certain subsets of the population: the elderly, the young, and the low-income. Librarians typically have a lower level of media literacy competencies than they self-report, and librarians are not pedagogues. In community-type settings, the study found that the best training combination is to have a media literacy expert and someone from the community as an ambassador.

Third, standalone trainings do not provide sustainable results, since shorter-term interventions lose steam when funding disappears. This is especially true for teachers in rural areas, where communities of practice are rare if available at all. At the same time, there were reports of some standalone trainings changing the trajectory of a journalist or teacher's life, with the individuals devoting themselves to media literacy. And finally, though only one game was available for evaluation, the game proved to be highly engaging and effective, even with a short time span for play. This is encouraging for those who advocate that games should be a focus for instruction and integrated into other offerings.

A common denominator is that, in determining how to get the best value from a media literacy program, it's most important to take the competencies and the needs of the people that are going to deliver the program into consideration, rather than the desires of the donor or the implementer. Collection of appropriate data should be a priority, especially in regards to identifying the beneficiary populations, both direct and indirect. With these beginning steps taken for evaluation, further study will be required to draw conclusions on effectiveness and to make guidelines for future programs and actions.

Such systemic change takes time – even generations, especially in reaching the general public. Parents are often more comfortable with sticking with the way of learning with which they themselves were taught; schools of education do not include media literacy as a requirement for preservice teachers; teacher credentialing and ratings and education standards do not call for media literacy education; administrators may not be knowledgeable about media literacy or insist upon including it; teachers often have no training or the ability to transform their teaching practices – they are used to being the center of learning, rather than a co-learner or a "guide on the side;" and students are trained to be students who passively receive information rather than actively seek it. In remote areas of the world, smartphones may be the only access that children have to technology, assuming that adequate broadband is available, and their educations and curricula need to be integrated with the technology at hand. Testing and accountability systems reflect a traditional content-centered approach, but the drop-out rates in the U.S. hovering at a status dropout rate in 2019 of 2 million young people aged 16-24 who have not received a high school diploma, testifying to how the education systems are failing many children in an era where education is the ticket to more earning power and a better life (ICES 2019).

It remains to be seen whether the effects of the COVID pandemic on education – and the resulting revelations to parents and educators, alike – become permanent, with more flexibility and online learning, and more accountability to parents for the content and the subjects being taught. Reinvention is underway at a faster pace, as demands for relevant education and the scrutiny that comes with such demand, create the needed pressure for re-evaluating society's educational responsibilities. Parents are realizing more than ever the impact of media on their children's lives, and they are voicing demands that education responds accordingly. In response to these calls, in June 2022 the US Department of Education has established a National Parents and Families Engagement Council, with representation from a variety of grassroots organizations. (US Department of Education, 2022) In the European Union, a major report with policy recommendations for future educational efforts addressed school life after the COVID pandemic shutdowns (Directorate General for Internal Policies, Policy Department for Structural and Cohesion Policies, European Union, May 2021). The report acknowledged that parents have the undeniable and unique responsibility for responding to the pandemic and helping their children educationally, and that the digital divide and digital and media literacy programs need to be strengthened to accommodate the need for resiliency in the face of unpredictable crises. The report also included youth participation, which, ironically, is often overlooked.

The EU report calls to:

> Support Member States to institutionalise representation for the youth sector, or develop youth sector strategies in line with EU strategies for youth. This includes the integration of youth into risk and crisis management strategies for future crises, as well as the creation of more resilient youth work structures, encompassing long-term thinking and strategy-based youth work (rather than project-based).

The hope for more media literacy education is high, as it appeals to students who have often grown up with smartphones in their hands, and who understand that their needs have profoundly changed in making meaning and contributing to their communities.

Given their influence in society as parents, employees, and voters, adult education should also be prioritized.

It can be harder to reach adult populations with education outreach, but a strategic use of resources can be effective in reaching adults through media, through libraries, through senior centers, and through parent education. Other cultural outlets include museums and film festivals, and church programs. What is needed for media literacy adult education is the will and the support to make a difference.

Threats to human security are more varied and lethal than ever, from pandemics to infodemics, from cyberwar to boots-on-the-ground. Media literacy's importance to democratic societies is a common denominator to advance human security in an uncertain world.

Part IV: Recommendations

These recommendations are but few suggestions for addressing the following questions:

- What are the opportunities for broadening, deepening, strengthening, supporting and sustaining the ecosystem that supports media literacy in democratic societies?
- How might media literacy be institutionalized into the fabric of every-day life?

There are no simple answers to how media literacy might be supported and strengthened to become part of the fabric of democratic societies – but there are some actions that may be taken that can facilitate change. These recommendations emanated from interviews with more than 60 policy makers from NATO countries, NATO personnel, and media literacy researchers and practitioners from a wide set of NATO countries and partners.

1. **Commitment and will are the first calls for a successful integration and strengthening of media literacy into society.** Because of the nature of inquiry, media literacy can open contentious topics that must be addressed and negotiated. Ambiguity is a notion that many people find intolerable, but it is an important attribute when it comes to being media literate – people must learn to understand that with complex problems, simple or quick answers often won't do. The opportunities or fallout from such encounters, and whether trust is built or maintained, depend upon people's perceptions of honesty, responsibility and perhaps most importantly, caring intentions. At the same time, proponents of media literacy, regardless whether such advocates are an organization or individual, must accept that questioning wil be directed to them – and they must have the will, the stamina and the means to be answerable. This is never an easy path to negotiate. Yet democracy demands openness and accountability, in addition to adherence to rule of law for governments and institutions that are of, by and for the people. This is the basis of trust between all.

2. **For media literacy initiatives aimed at systemic change, it is important to set out principles and values that animate the media literacy initiatives.** For example, the United Nations Declaration of Human Rights, or the Declaration of the Rights of the Child, as well as the values that NATO states in its Strategic Concept 2022 are excellent foundations for clarifying common ideals for awareness, analysis, reflection and action that media literacy encourages. These ideals apply to all life in society, in all aspects of governance and every-day actions. When the values incorporated into systemic efforts are clear, trust is encouraged.

3. **Establish an independent agency in government or within organizations for Media Literacy.** This signals the importance of media literacy, and provides a focal point for the discipline; also it serves as a coordinating agency for policy and programs that are suited to the priorities, the needs and the funding levels. Given the beginning stages of development that media literacy reflects in most countries, it is imperative that full support be provided so that this development can be deepened and accelerated, as well.

4. **Decide early-on the intent and purposes for media literacy interventions.** State these purposes in a strategy plan or project plan. Is the intent to provide understanding of foundational concepts and applications, perhaps addressing themes like narratives or bias or framing? Or is the program using a media literacy approach to address a particular social problem or behavior or ideology? Is there a directive message – such as "COVID vaccines are effective and necessary" or "Media violence has effects on individuals and society?" – that the intervention is intended to illuminate through a media literacy interrogation? Is the message based on credible research available at the time? Generally, specific media literacy programs address

a particular societal issue or conflict, but although people may learn about the messaging presented, they still have the prerogative of making their own decisions.

Along these same lines, it is important to identify the philosophy of education to be used in media literacy programs. At what point on the spectrum of philosophies – from protectionist to empowerment – should the program be placed? On the protectionist end, media literacy can be used to present an argument for consideration using media; on the empowerment end, media literacy can be used collaboratively to explore an argument for consideration using media to investigate, contemplate and debate.

5. **Institutionalizing media literacy requires a substantial and ongoing investment in systemic change, particularly in education systems.** Media literacy provides a 21st century approach to education, which emphasizes critical thinking, collaboration, creativity and communication abilities. This approach ultimately requires a re-think on the structure of education systems, which are now constructed to facilitate primarily directive, content-heavy instruction, dependent upon teachers for knowledge transfer and assessment. Such change tends to come slowly, and yet to meet today's needs, they must be speeded up. As some have said, "All hands on deck!" An all-out effort needs to be supported politically and financially, with funding and programming from all corners: government, foundations, and the private sector (tech and media companies, other corporations.)

6. **Especially now, when media literacy norms and evidence-based approaches are being tested, it is essential to incorporate high quality evaluations in media literacy initiatives.** Research is needed in two major domains: in understanding the impact of new media technology on people, such as with deep fakes or with artificial intelligence; and also, in understanding how to best spread and teach media literacy to all citizens. NATO has responsibility for more than 1 billion people, and there is no one solution to how to best provide media literacy systemically Moreover, there has traditionally been far more investment in understanding the effects of new technology than in exploring how best to prepare people for resiliency through media literacy. Evaluation helps establish whether an investment was successful or not, and whether to continue investing in such interventions going forward. Often, this accountability is not provided for.

7. **Media literacy has successfully survived at the grassroots, and this grassroots support needs to be nurtured and grown.** NGO's are excellent providers of such grassroots support, but they need the training, resources and financing to be able to offer rich and sustained programs. Moreover, parents, librarians, educators and university researchers are amongst the most important grass-roots supporters of media literacy, and ways must be found to better support them and provide them with the resources they need. There is a need for bottoms up and top down support that encourages change. As experience in implementation is gained at the grassroots, policies, regulations or laws can be better informed and based on implementation experience and appropriateness at the local level. Implementation should inform policy, so that policy is better suited to the needs at hand. Implementation science can inform plans for implementing programs through theories of change that are appropriate to the situation; this field is fairly new for media literacy but it is highly relevant when scaling.

8. **Education, education, education.** From the ministry level to the smallest of schools, administrators, teachers and school librarians all need systemic support and professional development on media literacy. It is impossible to support a subject that has seldom if ever been taught in formal schooling – and the education workforce of today was educated in yesterday's mode of operation. The COVID crisis uncovered the depth of this crisis, and teachers were often left to cope entirely on their own.

Education systems have embedded reward systems – teaching credentials, ways of gaining more salary or seniority – and standards or attainment goals, curricula and requirements for teaching subjects that must also reflect media literacy as a priority. Only by being part of the every-day system and fabric of education can media literacy thrive.

Schools of education at universities bear some responsibility for this challenge: seldom do schools of education incorporate media literacy as a pre-service topic for new teachers, nor do schools of education support professional development for teachers. This must change. The priority for media literacy education – and

the consequent system-wide training called for – needs to be made loud and clear.

Additionally, library personnel and community service staff, such as at senior centers or youth programs, also benefit from training. It is impossible to teach a subject without understanding the subject first.

Journalists, media managers and others who are in the media industry can also benefit from media literacy trainings. These are people who reach hugs audiences, in some cases, and their insight and assistance in helping others gain media literacy skills are invaluable.

In recent years, military officers and soldiers have learned that media literacy education is important to their work. Being able to be tracked through cellphones or fitbits is a danger to the troops; also, understanding how messaging can be manipulated on social media is another facet to be aware of. Many military units are consequently receiving training in media literacy, including at NATO.

Corporations and governments spend billions of dollars annually to influence consumers and constituents, yet the allocations for media literacy education are few and far between. It's no wonder that citizens cope with the media deluge as well – or as poorly – as they do.

9. **Use media – mass media, media aggregators such as AP, Reuters and LexisNexis, social media and influencers – to teach media literacy.** For example, apps or a Sesame Street for media literacy could go a long way to hastening understanding of this new way to look at the world. The media industry has a responsibility toward their users to help promote media literacy and further understanding of citizens' relationship with media. Public media companies have, to date, been more responsive in providing more comprehensive media literacy programs. Certainly, the reach of media companies in addressing adult audiences is far greater than that of small programs – and the success of the tobacco cessation campaigns and environmental campaigns are excellent examples of how media can make a difference in helping users become aware of major changes needed.

   A more media literate audience is a more educated and discerning audience, and though this may present challenges in terms of providing quality content, it may help solve some problems of people's susceptibility to deliberate disinformation campaigns, particularly.

   Also, most media companies are reluctant to engage with media literacy programs that honestly explore the users' relationship with media, including understanding the company ownership or business models that involve monetizing people's profiles or individual data. This is unfortunate, because understanding the business relationship that citizens have with media, as well as seeing the role media play in helping to maintain democracy through timely and credible information, are essential for all citizens. Users will inevitably catch up to the idea that their media use isn't "free," and ultimately, users have the power to make their choices and influence the regulation of media industries.

10. **Support and nurture the media literacy communities.** Help establish coalitions for media literacy, consortiums for research, action committees for local change. Find ways to identify these advocates and mobilize them – special needs such as known disinformation campaigns or health information that is urgently needed.

    Nurture grassroots efforts and don't count on legislation as being the only way to bring change. Sometimes, legislation can be counterproductive and backfire: if it is too narrow in scope, such as only focusing on online safety or digital citizenship, or when the intention behind the legislation is to punish "bad media" with sexualized or violent content, or to misdirects the efforts to only purchasing technology equipment for schools, rather than supporting teachers with professional development.

    Certainly, regulation, policies and systemic programs can also be very helpful, as with the EU directives on media literacy, or the requirement that EU member countries report on media literacy activities every three years. Or the State of Illinois requiring that all high schools have a unit on media literacy instruction beginning with the 2022-2023 school year.

But growing grassroots movements – by supporting coalitions and NGO's working in the field – can also capture attention and press for change, with, for example, more calls for the education system to include and institutionalize ways that media literacy can work within the system. Without grassroots support, it is difficult to effect and sustain change, and this media literacy movement calls for major policy change that is more relevant for generations to come.

Finding ways to help for coalitions, for knowledge communities, for research and evaluation, for training and efforts by NGO's – all are ways to keep the grassroots working toward the institutionalization of media literacy.

11. **Regularly convene influencers who can make a difference with policy, regulation, think tanks, ministries, and media:** For example, in Finland, KAVI, the National Audiovisual Institute (https://kavi.fi/en/) incorporates the Department for Media Education and Audiovisual Media (MEKU), CAVI invites all ministries to meetings addressing media literacy strategies, priorities and actions. This signals the importance of media literacy and also furthers the exchange of knowledge and ideas for action. These key contributors can help promote media literacy as well as help embed it. Furthermore, such convening helps bring awareness and peer pressure, as people see what their contemporaries are doing and the impact that such measures have. This is an investment in the marketplace of ideas, where media literacy must take its place outside of its present bubble. Social media influencers and thought leaders from think tanks are other key influencer groups to reach and meet with. These convenings can be done in partnership with other organizations, at conferences or at other events, as well as invitational venues.

12. **Measure overall awareness and progress.** Today, with natural language processing and analysis, it is possible to see whether the support for media literacy is growing or not, and by how much. This is helpful in assessing awareness and the success of aggregate efforts or if desired, regional or country-wide efforts. Indicators like the Edelman Trust Barometer are encouraging, with reported interest in learning more about media and information literacy steadily rising (Edelman, 2022). Additionally, populations that need special assistance or who are dealing with targeted disinformation campaigns can be identified and supported.

References

2022 Edelman Trust Barometer. Edelman. (2022). Retrieved June 28, 2022, from https://www.edelman.com/trust/2022-trust-barometer

5Rights Foundation. (2022). *Building the digital world that young people deserve.* 5Rights. Retrieved June 28, 2022, from https://5rightsfoundation.com/

ACRLL. (2022, February 16). *Framework for Information Literacy for Higher Education.* Association of College & Research Libraries (ACRL). Retrieved July 3, 2022, from https://www.ala.org/acrl/standards/ilframework

Allred, Z. (2022, July 12). *Improving science literacy means changing science education.* The Conversation. Retrieved July 13, 2022 from https://theconversation.com/improving-science-literacy-means-changing-science-education-178291

The Aspen Institute. (2009). *Informing - Knight Foundation.* Knight Foundation.org. Retrieved June 29, 2022, from https://knightfoundation.org/wp-content/uploads/2019/06/Knight_Commission_Report_-_Informing_Communities.pdf

B&FT (Dec. 2021). *British Council launches Skills4Success project to improve digital literacy.* Retrieved July 1, 2022 from https://www.thebftonline.com/2021/12/02/british-council-launches-skills-4success-pro20ject-to-improve-digital-literacy/

Bondar, M. (2022, March 9). *Trust can drive performance on multiple fronts.* The Wall Street Journal. Retrieved June 28, 2022, from https://deloitte.wsj.com/articles/trust-can-drive-performance-on-multiple-fronts-01646248867

Browning, K. (2021, December 29). *How discord, born from an obscure game, became a social hub for young people.* The New York Times. Retrieved June 29, 2022, from https://www.nytimes.com/2021/12/29/business/discord-server-social-media.html

Brussels Summit Communiqué issued by the Heads of State and government participating in the meeting of the North Atlantic Council in Brussels 14 June 2021. NATO. (2021, June 14). Retrieved June 28, 2022, from https://www.nato.int/cps/en/natohq/news_185000.htm

Center for Media Literacy. *Questions/TIPS.* Retrieved June 28, 2022 from https://www.medialit.org/questionstips-qtips

Center for Media Literacy (2002) *CML Framework: Empowerment Spiral.* Retrieved June 28, 2022, from https://www.medialit.org/cml-framework

Center for Media Literacy (n.d.). *Five key questions form foundation for media inquiry.* Retrieved June 28, 2022, from https://www.medialit.org/reading-room/five-key-questions-form-foundation-media-inquiry

Chambers, S., Notley, T., Dezuanni, M., Park, S. (2022) *Values and Media Literacy: Exploring the Relationship Between the Values People Prioritize in Their Life and Their Attitudes Toward Media Literacy.* International Journal of Communication. Retrieved July 3, 2022 from https://ijoc.org/index.php/ijoc/article/view/19415/0

Consortium for Media Literacy (2020, October). *Covid 19: Shaking up education and family life.* Retrieved July 3, 2022, from https://www.medialit.org/covid-19-shaking-education-and-family-life

Council of Europe. (2019). *CAHENF 2019 LD1 6th CAHENF meeting* . rm.coe.int. Retrieved June 28, 2022, from https://rm.coe.int/cahenf-2019-ld1-6th-cahenf-meeting/168094d72a

Courchesne, L., Ilhard, J., and Shapiro, J.N. (2021). "Review of social science research on the impact of countermeasures against influence operations." Harvard Kennedy School (HKS) Misinformation Review. Retrieved on Sept. 13, 2021 from http://www.misinforeview.hks.harvard.edu/article/review -of-social-science-research-on-the-impact-of-countermeasures-against-influence-operations

Directorate General for Internal Policies, Policy Department for Structural and Cohesion Policies, European Union (May 2021). *Education and youth in post-COVID-19 Europe – crisis effects and policy recommendations.* Retrieved June 5, 2022 from https://www.europarl.europa.eu/RegData/etudes/ STUD/2021/690872/IPOL_STU(2021)690872_EN.pdf

Dizikes, P. (2018, March 8). *Study: On Twitter, false news travels faster than true stories.* MIT News l Massachusetts Institute of Technology. Retrieved June 28, 2022, from https://news.mit.edu/2018/ study-twitter-false-news-travels-faster-true-stories-0308

Dong, C. (2015, August 26). *Stanford scholar finds social media reveals much about the human condition.* Stanford scholar finds social media reveals much about the human condition . Retrieved June 28, 2022, from https://news.stanford.edu/pr/2015/pr-social-media-kosinski-082515.html

DW Akademie (2020). *Introducing the MIL Index Study.* Retrieved June 25 from https://www. dw.com/en/introducing-the-mil-index-studt.a-56356531

EPIK, Deliberate Digital, Impero Software,Digital Citizenship Institute, and Educate Empower Kids (2017). Retrieved July 2, 2022, from https://epik.org/wp-content/uploads/2017/12/Whiteper-A-Framework-For-Positive-Digital-Citizenship.pdf

Economy, E. C. (2018, June 29). *The Great Firewall of China: Xi Jinping's internet shutdown.* The Guardian. Retrieved June 28, 2022, from https://www.theguardian.com/news/2018/jun/29/the-great-firewall-of-china-xi-jinpings-internet-shutdown

NATO. E*merging and disruptive technologies.* NATO. (2022, June 15). Retrieved June 28, 2022, from https://www.nato.int/cps/en/natohq/topics_184303.htm

Department of Homeland Security (2021). *Media Literacy and Critical Thinking Online.* Retrieved July 4, 2022 from dhs.gov/publication/media-literacy-and-critical-thinking-online

EuPI, Sofia Institute (2021). *Media Literacy Index 2021.* Retrieved June 28, 2022 from https://osis. bg/?p=3750&lang=en

EUR-LEX (2022): the AudioVisual Media Service Directive and Tackling Disinformation: A European Approach. Retrieved June 28, 2022 from https://www.https://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=LEGISSUM%3Aam0005 and www.ec.europa.eu/transparency/documents-register/de- tail?ref=COM (2018)236&lang=en

European Commission Education and Training Monitor, Romania (2019). Retrieved Aug. 20, 2022 from https://education.ec.europa.eu/sites/default/files/document-library-docs/et-monitor-report-2019-romania_en.pdf

Fallows, J. (2022, February 10). *'framing the news': An update.* 'Framing the News': An Update - by James Fallows. Retrieved July 3, 2022, from https://fallows.substack.com/p/framing-the-news-an-update

Fingar, K. R., & Jolls, T. (2013, August 16). *evaluation of a school-based violence prevention media literacy curriculum.* group.bmj.com. Retrieved 2022, from https://www.medialit.org/sites/default/files/Injury%20Prevention%20Journal%202013.pdf

Fingar, K.R. & Jolls, T. (2018-2019). *Evidence-based frameworks: Key to Learning and Scaling Globally.* Retrieved July 4, 2022 from https://medialit.org/sites/default/files/MILIDYearbook2018=29%20copy%202.pdf

Freire Institute. (2022). *Concepts used by Paulo Freire.* Freire Institute. Retrieved June 28, 2022, from https://www.freire.org/concepts-used-by-paulo-freire

Global report - Eedelman Trust Barometer. edelman.com. (2022). Retrieved June 28, 2022, from https://www.edelman.com/sites/g/files/aatuss191/files/2022-01/2022%20Edelman%20Trust%20Barometer%20Global%20Report_Final.pdf

Goodchild, C., Hill, H., Kalmus, M., Lee, J., & Webb, D. (2022, February 3). *Boosting Broadband adoption and remote K–12 education in low-income households.* BCG Global. Retrieved June 28, 2022, from https://www.bcg.com/publications/2021/accelerating-broadband-adoption-for-remote-education-low-income-households

IIE, Technology and Society (2017, June 29). *Information paradox: Drowning in information, starving for knowledge.* IEEE Technology and Society. (2017, June 29). Retrieved July 3, 2022, from https://technologyandsociety.org/information-paradox-drowning-in-information-starving-for-knowledge/

Ivanova, I. (2021) *US Treasury Amends Proposal to track nearly all bank accounts*, CBS News. Retrieved July 2, 2022 from: https://www.lexisnexis.com/community/insights/legal/practical-guidance-journal/b/pa/posts/lexisnexis-provides-free-access-to-coronavirus-news-analysis-across-the-globe

Jargon, J. (2022). *What Porn Does to Teen Brains—and How to Keep It Off Their Devices*, Wall Street Journal. Retrieved July 5, 2022 from https://www.wsj.com/articles/what-porn-does-to-teen-brainsand-how-to-keep-it-off-their-devices-11656718199

Jenkins, H. (2009). *Confronting the Challenges of Participatory Culture.* library.oapen.org. Retrieved June 28, 2022, from https://library.oapen.org/viewer/web/viewer.html?file=%2Fbitstream%2Fhandle%2F20.500.12657%2F26083%2F1004003.pdf%3Fsequence&isAllowed=y

Jolls, T and Wilson, C. (2014). *The Core Concepts: Fundamental to Media Literacy Yesterday, Today and Tomorrow.* Journal of Media Literacy Education, Vol. 6, Iss 2. Retrieved June 28, 2022, from https://digitalcommons.uri.edu/jmle/vol6/iss2/6/

Jordannovet. (2022, June 23). *Mark Zuckerberg envisions a billion people in the metaverse spending hundreds of dollars each.* CNBC. Retrieved June 28, 2022, from https://www.cnbc.com/2022/06/22/mark-zuckerberg-envisions-1-billion-people-in-the-metaverse.html

Kahne, J., Lee, N.-J., & Feezell, J. T. (2012, January 1). *Digital Media Literacy Education and online civic and Political Participation: Youth & Participatory Politics.* Digital Media Literacy Education and Online Civic and Political Participation | Youth & Participatory Politics. Retrieved June 29, 2022, from https://ypp.dmlcentral.net/publications/46.html

Keith, M. (Sept. 14, 2021). *California has the highest poverty level of states in the U.S.*, according to US Census. Business Insider. Retrieved July 2, 2022 from https: www.businessinsider.com/california-has-highest-poverty-level-in-the-us-census-bureau-2021-9

Kim Kardashian Instagram stats and analytics: HypeAuditor - Influencer Marketing Platform. HypeAuditor.com. (2022). Retrieved June 29, 2022, from https://hypeauditor.com/instagram/kimkardashian/

Klar, R. (July 7, 2022). *Democrats seek to boost media literacy for students, veterans with two new bills.* The Hill. Retrieved July 10, 2022 from https://thehill.com/policy/technology/3548040-democrats-seek-to-boost-media-literacy-for-students-veterans-with-two-new-bills/

Knight Commission (2010) *Informing Communities: Sustaining Democracy in the Digital Age* Retrieved June 29, 2022 from http://www.knightfoundation.org/reports/informing- communities-sustaining -democracy-digital

Knorr, C. (2017, February 23). *How kids can resist advertising and be smart consumers.* Common Sense Media. Retrieved June 29, 2022, from https://www.commonsensemedia.org/articles/how-kids-can-resist-advertising-and-be-smart-consumers

LaMorte, W. W. (2019, September 9). *Behavioral change models.* Diffusion of Innovation Theory. Retrieved June 28, 2022, from https://sphweb.bumc.bu.edu/otlt/mph-modules/sb/behavioralchangetheories/behavioralchangetheories4.html#:~:text=Diffusion%20of%20Innovation%20(DOI)%20Theory,specific%20population%20or%20social%20system.

Levitt, J.D., Severts, J. 2022) *Every Students Needs Data Literacy Skills.* Education Next. Retrieved July 4, 2022 from https://www.educationnext.org/every-student-needs-21st-century-data-literacy-skills-forum-rethinking-math-education/

LexisNexis. (n.d.). *Covid-19 and the global media landscape.* COVID-19 Live Media Coverage by Nexis Newsdesk. Retrieved July 4, 2022, from https://professional.lexisnexis.com/COVID-19?utm_source=Digital&utm_medium=Digital

LexisNexis provides free access to coronavirus news, analysis across the Globe. Lexis Nexus. (2020). Retrieved June 28, 2022, from https://www.lexisnexis.com/community/insights/legal/practical-guidance-journal/b/pa/posts/lexisnexis-provides-free-access-to-coronavirus-news-analysis-across-the-globe

Livingstone, S., Kardefelt-Winther, D., & Saeed, M. (2019, November). *Global Kids Online Comparative Report - UNICEF-irc.org.* unicef.org. Retrieved June 28, 2022, from https://www.unicef-irc.org/publications/pdf/GKO%20LAYOUT%20MAIN%20REPORT.pdf

London School of Economics and Political Science. (n.d.). *Children's rights in the Digital age.* London School of Economics and Political Science. Retrieved July 3, 2022, from https://www.lse.ac.uk/media-and-communications/research/research-projects/Children's-Rights-in-the-Digital-Age

Media for the curious. Thinkalong. (2021, June 2). Retrieved June 28, 2022, from https://thinkalong.org/

Masterman, L. (1989). *Media Awareness Education: Eighteen basic principles.* Retrieved June 28, 2022, from https://www.medialit.org/reading-room/media-awareness-education-eighteen-basic-principles

Meshi, D., Tamir, D., & Heekeren, H. R. (2015). *The Emerging Neuroscience of Social Media.* Trends in Cognitive Science. Retrieved June 28, 2022, from https://smnlab.msu.edu/wp-content/uploads/2017/08/Meshi_2015_TICS.pdf

MILID Yearbook 2015. (2015). Media and Information *Literacy for the Sustainable Development Goals.* Nordic cooperation. Retrieved June 27, 2022, from https://www.norden.org/en/publication/media-and-information-literacy-sustainable-development-goals

Mims, C. (2020, October 19). *Why social media is so good at polarizing us.* The Wall Street Journal. Retrieved June 28, 2022, from https://www.wsj.com/articles/why-social-media-is-so-good-at-polarizing-us-11603105204

National Center for Educational Statistics (NCES). 2019. Fast Facts. Dropout Rates. Retrieved July 4, 2022 from https://www.nces.ed.gov/fastfacts/display.asp?id=16

NATO. (2017). *About NATO Stratcom Coe.* StratCom. Retrieved June 27, 2022, from https://stratcomcoe.org/about_us/about-nato-stratcom-coe/5#:~:text=The%20NATO%20Strategic%20Communications%20Centre,establishment%20of%20the%20StratCom%20COE.

NATO. *Emerging and disruptive technologies.* (2022, June 15). Retrieved June 28, 2022, from https://www.nato.int/cps/en/natohq/topics_184303.htm

NATOato. (2019, February 6). *The North Atlantic Treaty.* NATO. Retrieved June 28, 2022, from https://www.nato.int/cps/en/natolive/official_texts_17120.htm

NATO. (2020). *NATO Strategic Communications Centre of excellence riga, Latvia.* StratCom. Retrieved June 28, 2022, from https://stratcomcoe.org/

NATO. (2020, November 25). *NATO 2030.* Nato.int. Retrieved June 28, 2022, from https://www.nato.int/nato_static_fl2014/assets/pdf/2020/12/pdf/201201-Reflection-Group-Final-Report-Uni.pdf

NATO. (2021). *Embrace the change, guard the values.* nato.int. Retrieved June 28, 2022, from https://www.nato.int/nato_static_fl2014/assets/pdf/2021/2/pdf/210204-NATO2030-YoungLeadersReport.pdf

NATO. (2022, April 7). *NATO sharpens technological edge with innovation initiatives.* NATO. Retrieved July 3, 2022, from https://www.nato.int/cps/en/natohq/news_194587.htm

Nordicom Media Reports (2022). *Media Reports.* Retrieved July 2, 2022 from https://www.nordicom.gu.se/en/statistics-facts/media-reports

Portantino, A. J., & Ting, P. Y. (2022). *California SB 830.* California Senate (20212022) - Open States. Retrieved June 28, 2022, from https://openstates.org/ca/bills/20212022/SB830/

Pew Research Center (2021). *Mobile Fact Sheet.* Retrieved June 28, 2022, from https://www.pewresearch.org/internet/fact-sheet/mobile/

Robb, M. (2019, October 29). *Tweens, teens, and phones: What our 2019 research reveals.* Common Sense Media. Retrieved June 28, 2022, from https://www.commonsensemedia.org/kids-action/articles/tweens-teens-and-phones-what-our-2019-research-reveals

RobbGriecco, Michael, (2013). *Why History Matters for Media Literacy Education,* Journal of Media Literacy Education 6(2), 3-22. Retrieved July 4, 2022 from https://www.digitalcommons.uri.edu/cgi/viewcontent.cgi?article= 1155&context=mjle

Rogers, E. M. (1962). *Diffusion of innovations.* Retrieved July 3, 2022, from https://ame.americansamoa.gov/diffusion_of_innovations_everett_m_rogers_pdf

Rogers, E. M. (1995). *Diffusion of innovations* (3rd ed.). Free Press.

Sample, I. (2018, November 5). *Tim Berners-Lee launches campaign to save the web from abuse.* The Guardian. Retrieved June 28, 2022, from https://www.theguardian.com/technology/2018/nov/05/tim-berners-lee-launches-campaign-to-save-the-web-from-abuse

Sanchez, L. (2021, March 31). *Bolstering the democratic resilience of the alliance against* www.nato-pa.int. Retrieved June 28, 2022, from https://www.nato-pa.int/download-file?filename=/sites/default/files/2021-04/013%20CDS%2021%20E%20-%20DEMOCRATIC%20RESILIENCE%20AGAINST%20DISINFORMATION%20AND%20PROPAGANDA%20-%20SANCHEZ_0.pdf

Singer, P., & Johnson, E. B. (2021, February 1). *The need to inoculate military servicemembers against information threats: The case for Digital Literacy Training for the force.* War on the Rocks. Retrieved June 28, 2022, from https://warontherocks.com/2021/02/we-need-to-inoculate-military-servicemembers-against-information-threats-the-case-for-digital-literacy-training/

Singer, D. *International Pioneers Speak.* Consortium for Media Literacy (2015). Retrieved July 3, 2022 from https://www.medialit.org/reading-room/voices-media-literacy-international-pioneers-speak-dorothy-singer-interview-transcript

Sly, L. (2018, January 29). *U.S. soldiers are revealing sensitive and dangerous information by jogging.* The Washington Post. Retrieved June 28, 2022, from https://www.washingtonpost.com/world/a-map-showing-the-users-of-fitness-devices-lets-the-world-see-where-us-soldiers-are-and-what-they-are-doing/2018/01/28/86915662-0441-11e8-aa61-f3391373867e_story.html

Smith, B. (2021, December 6). *How tiktok reads your mind.* The New York Times. Retrieved June 28, 2022, from https://www.nytimes.com/2021/12/05/business/media/tiktok-algorithm.html

Soldatov, A., & Boroga, I. (2022, June 7). *The New Iron Curtain.* CEPA. Retrieved June 28, 2022, from *https://cepa.org/the-new-iron-curtain-2/*

Thoman, E. (n.d.). *Skills & Strategies for Media Education.* Skills & Strategies for Media Education l Center for Media Literacy Retrieved June 28, 2022, from https://www.medialit.org/reading-room/skills-strategies-media-education

Turner, K. H., Jolls, T., Hagerman, M. S., O´Byrne, W., Hicks, T., Eisenstock, B., & Pytash, C. E. (2017, November). *Pediatrics Digital and Media Literacy Recommendations.* medialit.org. Retrieved June 29, 2022, from https://www.medialit.org/sites/default/files/Pediatrics%20Digital%20and%20Media%20Literacy%20Recommendations.pdf

U.S. Department of Education. (2021). *The Condition of Education 2021.* National Center for Education Statistics (NCES) . Retrieved July 3, 2022, from https://nces.ed.gov/fastfacts/display.asp?id=16#:~:text=The%20overall%20status%20dropout%20rate%20decreased%20from%208.3%20percent,to%205.1%20percent%20in%202019.

Unesco, & Baktria Press UNESCO. (1970, January 1). *Media and Information Literacy.* UNESCO.org. Retrieved June 28, 2022, from https://www.unesco.org/en/communication-information/media-information-literacy#:~:text=UNESCO%20is%20the%20leading%20organization,and%20use%20of%20digital%20tools.

United Nations. (2022, June 16). *Committee on the rights of the child.* OHCHR. Retrieved June 28, 2022, from https://www.ohchr.org/en/treaty-bodies/crc

US Department of Education. (June 14, 2022) *The US Department of Education Establishes a National Parents and Families Engagement Council.* Retrieved July 4, 2022 from https://www.ed.gov/news/press-releases/us-department-education-creates-national-parents-and-families-engagement-council-help-ensure-recovery-efforts-meet-students%E2%80%99-needs

US Department of State. (n.d.). *Updated April 8, 2022 - United States Department of State.* state.gov. Retrieved July 3, 2022, from https://www.state.gov/wp-content/uploads/2022/04/MASTER-Sanctions-chart-4.8.22.pdf

USAID supports International Conference on Media Literacy: Press Release: Central Asia Regional. U.S. Agency for International Development. (2022, June 9). Retrieved June 27, 2022, from https://www.usaid.gov/central-asia-regional/press-releases/jun-9-2022-usaid-supports-international-media-literacy

USC. (2017). Civic Imagination Workshops. civicimagination. Retrieved July 3, 2022, from https://www.civicimaginationproject.org/workshops

Voices of Media Literacy, *International Pioneers Speak,* Retrieved July 3, 2022 from https://www.medialit.org/voices-media-literacy-international-pioneers-speak

Wallace, S. *Estonia: the First Digitally Literate Country.* The Startup (2020) Retrieved July 3, 2022 from https://medium.com/swlh/the-first-digitally-literate-country-e9dbc1d0695

World Bank (2022). *Digital Development.* Retrieved July 4, 2022 from https://www.worldbank.org/en/topic/digitaldevelopment/overview https://www.worldbank.org/en/topic/digitaldevelopment/overview#:~:text=The%20numbers%20speak%20for%20themselves,2.5%25%20of%20GDP%20per%20capital

World Economic Forum. (2022). *The media industry: In the vanguard of Digital Transformation.* Digital Transformation. Retrieved July 3, 2022, from https://reports.weforum.org/digital-transformation/the-media-industry-in-the-vanguard-of-digital-transformation/

Tessa Jolls is President and CEO of the Center for Media Literacy, a position she has held since 1999. She also founded the Consortium for Media Literacy, a nonprofit which provides research and publications. During her tenure at CML, Jolls' primary focus is working in partnership to demonstrate how media literacy works through school and community-based implementation programs. She actively contributes to the development of the media literacy field internationally through her speaking, writing and consulting, with curriculum development and research projects, and through publishing and disseminating new curricular and training materials. She is currently a Contributing Scientist at UCLouvain (Belgium)