TESSA JOLLS
PH.D. CANDIDATE, BOURNEMOUTH UNIVERSITY

Media Literacy: A Global Methodology for Teaching and Learning in the 21st Century

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ABSTRACT

Media Literacy: A Global Methodology for Teaching and Learning in the 21st Century

This body of published research contributes new knowledge to inform robust pedagogy and effective practice for media literacy education that is applicable globally. Conducted over 25 years, this research formulates and verifies an approach to media literacy that is consistent, replicable, measurable and scalable. These academic outputs contribute research-informed frameworks and studies predicated on the proposition that using media literacy processes can be, and should be, the central means through which all citizens acquire, contextualize and apply content knowledge in the 21st Century. The research presented focuses primarily on my research contributions from 2013-2023, although this research needs to be understood in the context of previous research and development begun in 1999 through my work leading the Center for Media Literacy, an independent U.S.-based education organization. The research utilizes mixed methods over the body of publications to investigate how skills and knowledge, process and outcomes inter-relate in media literacy, encouraging critical thinking as process of inquiry; how citizens' form relationships with media and technology; and the nature of global-local approaches to media literacy. The thematic arrangement of the work as *Consistent, Replicable, Measurable and Scalable Scalable* demonstrates how my work has contributed to helping provide a foundation for the media literacy field to grow.

INTRODUCTION

Media literacy is a global movement, an academic field of study, and a pedagogy for teaching and learning. When I entered the field of media literacy in 1999, there was little consensus about media literacy, its pedagogy and its practice. Definitions were highly variable and even more highly contested. In the United States, Elizabeth Thoman, the Founder of the Center for Media Literacy (CML) and a U.S. media literacy pioneer, had developed and published a magazine, *Media&Values* beginning in the late 1970's, and she subsequently developed acclaimed curricula and workshop kits in the 1980's and 1990's, and was operating the CML as a distributor of media literacy materials in the U.S. since 1989.

Joining CML as executive director in 1999 to work with Sr. Thoman, a Catholic nun who was first attracted to media literacy as a graduate student at the University of Southern California's Annenberg School of Communication, I had the opportunity to use my publishing background and my professional consulting experience in education, strategic communication and organization development toward an important mission: to drive research and development to help bring media literacy into the mainstream of education practice.

Even today, media literacy organizations tend to fall within varying philosophical camps which distinguish their approaches and practices, from what is known on one end of a spectrum as "protectionist" to the other, known as "empowerment." The CML has been known through the years as taking an "empowerment" approach, meaning that the Center's philosophy is committed to teaching media literacy skills and competencies through a process of inquiry, while leaving any outcomes, conclusions and decisions involved to the participants themselves. Although media literacy is always centered in human understanding and critical thinking, the CML aims to be as nonpartisan as possible, with guidelines revolving around ethical standards and mutual respect for disparate opinions and outlooks. Protectionist approaches, on the other hand, tend to take a stance and advocate for specific points of views on issues, ideas, trends and desired outcomes.

As shown in Appendix B, it 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 (Robb-Griecco, 2013; Jolls, 2022).

All of the research and academic writing I have done through the years is directed at the goal of seeing that media literacy becomes an empowerment lens through which all citizens

acquire, contextualize and apply content knowledge. This goal is only possible if media literacy education can be provided through an *evidence-based methodology* that is **consistent, replicable, measurable and scalable on a global basis**, with media literacy being an educational discipline that is recognized, respected and taught at all educational levels. CML, under my leadership, has targeted its efforts through the years toward researching, identifying and designing, testing, implementing, and evaluating its basic methodology for media literacy teaching and learning, and now in 2024, we can claim an evidence-based methodology, capable of scaling. I believe that our work at the Center, and my own research and contributions to that work through the years, have helped strengthen the understanding and growth of media literacy world-wide.

Impact of Research

To help determine the impact of my research, I have turned to two online resources – ResearchGate and Google Scholar -- that offer different and in many cases, highly variable results for measuring a researcher's citations and overall impact of an individual's research in the field. I do not have a "premium subscription" to either service, but the statistics on my research reported below are readily available to users.

ResearchGate provides a platform for networking for professional researchers and scholars. The site also tracks citations of journal articles by individual scholars, and the h-index provided is a simple way to measure the impact of an individual scholar's research. It does this by looking at the number of highly impactful publications a researcher has published. The higher the number of cited publications, the higher the h-index, regardless of which journal the work

was published in. Appendix A shows the scores which research under my name has received in ResearchGate.

Google Scholar and Academia, both offered through Google, offer a search engine that allows users to search for academic resources and scholarly literature such as abstracts, full-text articles, theses, books, and more from across many disciplines. Google Scholar and Academia track citations by individual researchers/authors (see Appendix A).

Research Background and Questions

Given the CML's – and my own – goal of researching and developing an evidence-based methodology for media literacy that is consistent, replicable, measurable and scalable, the overall body of work that I have contributed to the field since 1999 addresses four major research questions:

1. Is it feasible to develop a sound academic methodology for teaching and learning basic media literacy process skills that is consistent. replicable measurable and scalable?

2. Can this methodology be effective and applicable in a variety of contexts, including for various ages, subjects, themes, cultures and languages globally, while addressing localized media content and issues?

3. Can this methodology be effective in an evidence-based approach that positively affects citizens' knowledge, attitudes and behaviors?

4. Is this methodology scalable on a system-wide basis, capable of being infused throughout an education system or whole-of-government approach?

To address these research questions, I would divide the 25 years of research and development work that I have done into **four stages**, which continue today. Although all four research questions pertain to each of these four stages, each research question features more prominently in certain stages. During this time, I have used mixed research methods, with qualitative and quantitative, longitudinal research, structured interviews, literature searches, comparative research, experimental and evaluative research, exploratory research, theoretical research and practitioner research. I will identify the specific research methods for each academic paper that I have written, and discuss my research findings.

The first research stage, from 1999-2007, focused on ***Research Question #1, "Is it feasible to develop a sound academic methodology for teaching and learning basic media literacy process skills that is consistent, replicable, measurable and scalable?"*** In this stage, we gathered and synthesized the basic components of media literacy, and determined if identifying and documenting these components was feasible and practical from the standpoint of teaching and learning about media literacy in a consistent way.

The second stage took place from 2007-2013, and focused on conducting quantitative research and implementing demonstration projects, to see if the basic media literacy components could be used and taught in a consistent and replicable way, in a variety of contexts. This stage addressed ***Research Question #2, "Can this methodology be effective and applicable in a variety of contexts, including for various ages, subjects, themes, cultures and languages globally, while addressing localized media content and issues?"***

The third stage (overlapping the second stage and also the focal point for this paper), from 2013-2022, offered the opportunity to evaluate the effectiveness of CML's approach to media literacy, to determine if the pedagogy we were using positively impacted

student knowledge, attitudes and behaviors. This quantitative research was conducted through a longitudinal study in conjunction with the University of California, Los Angeles beginning in 2004. This stage also primarily addresses ***Research Question #3, "Can this methodology be effective in an evidence-based approach that positively affects citizens/ knowledge, attitudes and behaviors?"***

The current and last stage, the fourth stage, overlaps the third stage and began in 2022 with an opportunity to again test the positive longitudinal study results published in 2013, through a new study funded by the U.S. Centers for Disease Control, taking place in Chicago Public Schools in 2024. This research stage continues and involves utilizing an evidence-based approach to media literacy that can be scaled with reasonable confidence in attaining desired outcomes. ***Research Question 4, "Is this methodology scalable on a system-wide basis, capable of being infused throughout an education system or whole-of-government approach?"*** applies to this stage.

Stages of Research through 25 Years

STAGE 1: 1999-2007

Overall Research Question: Is it feasible to develop a sound academic methodology for teaching and learning basic media literacy process skills that is consistent. replicable measurable and scalable?

Early on, Elizabeth Thoman and I determined that media literacy needed to be captured and expressed in a way that made teaching it consistent, accessible, practical and sustainable. But big questions remained: was it even possible to pull together the intellectual foundations of media literacy, label them and describe them in a concise way? Because of barriers in education systems around the world – namely time allocation and availability of training and professional

development – media literacy is often seen as an "add-on" subject that is not as essential as reading or science or math. Overcoming this barrier must address the needs of educators, so that media literacy pedagogy is seen as:

- capable of practical integration throughout the curricula;
- understandable without requiring long trainings or advanced degrees;
- easy to grasp and to teach, while maintaining the integrity of the discipline.
- consistent and clear, with ready definitions and modular components that can be plugged into various subjects and themes.

Media literacy is a deeply intellectual subject, encompassing work that emanates from many disciplines – communications, cultural studies, semiotics, rhetoric, behavioral economics, psychology, sociology, statistics – and a true understanding of media literacy can be a lifetime endeavor. It is an enormous challenge to present media literacy theories in a way that is simple to understand but not reductive; that opens the gates to understanding without engulfing users with minutiae; that integrates the principles behind media literacy into a unified whole; and that provides flexibility in teaching and learning while still maintaining consistency and integrity of content.

Media literacy is a discipline that has roots in ancient times, with Socrates (470-399 B.C.) (Kraut, 2019) being the originator of the socratic method of inquiry that continues to be central to media literacy today. Although he didn't use the term "media literacy," Marshall MacLuhan, a Canadian researcher, coined the term "global village" in 1964 (McLuhan, 1964) , connecting the idea of understanding media with the technology that continues to change the world. In the U.S., the National Telemedia Council had its roots in the 1930's, and was formed to examine the

impact of media on consumers, but the first documented use of the term "media literacy" didn't occur until 1955 (Jolls & Wilson, 2014).

Thanks to the work of Canadian pioneers such as John Puengente and Barry Duncan (who was a student off Marshall McLuhan's), media literacy was introduced in Canada and became part of the Canadian education system's language arts strand in 1986. The Canadian media educators pulled together eight key concepts to help unify their work around some consistent principles (Puengente, 2004). Elizabeth Thoman (Hobbs, 2017), in turn, was a pioneering leader who helped introduce media literacy in the United States beginning in the late 1970's. Because the CML at that time was a distributor of educational materials on media literacy – many from Canadian sources – we at CML had wide access to the academic books, teaching materials and thought leaders circulating at the time, which informed our thinking and our research for identifying and integrating knowledge of the discipline into a pedagogy for teaching and learning.

A primary influence on CML's approach to media literacy education is Len Masterman, a UK professor who wrote two books on media literacy that became international best sellers: Teaching About Television (Masterman, 1980) and Teaching About Media (Masterman, 1985). Masterman's key insight – of representation being central to understanding the global symbolic system of media – was foundational for the field, and fueled media literacy around the world. His timeless approach to media literacy and its pedagogy (Masterman, 1989) was – and is – a key impetus behind all of CML's work and CML's philosophy of "empowerment through education."

But just identifying the theoretical components for media literacy practice wasn't enough – our challenge was to make the information actionable for teachers, providing them with a basic process for teaching and learning.

Due to addiction problems in my family, and also given my Catholic upbringing, I was aware of the power of frameworks for finding guidance for living a healthy and productive life, such as the 10 Commandments, the Golden Rule and the 12 Steps of Alcoholic Anonymous. These frameworks have endured for many decades – in some cases, millenia -- and have also provided millions of people throughout the world watchwords and guides for understanding and behavior that they have internalized – heuristics -- so that these watchwords are readily available when needed for decision-making. They provide a high degree of flexibility for individuals while promoting a common understanding and some consistency in application.

Around 2000, I began to see the possibilities for integrating various aspects of media literacy – basic media literacy concepts and questions – into a more unified approach that lent itself to media literacy frameworks that could be taught universally, and that could be applied more individually and locally. These components of media literacy – the core concepts and various questions that could be posed in a process of inquiry – were contained in Elizabeth Thoman's prominent 1993 article for the Association for Supervision and Curriculum Development called "Skills and Strategies for Media Education" (Thoman, 1993). In that article, Sr. Thoman compressed the eight Canadian key concepts to five core concepts that would later become a standard in the U.S. and globally as well (Puengente, 2004).

I realized that, by connecting the core concepts of media literacy with a *process* of inquiry, CML could develop a framework upon which educators could learn to build lessons and curriculum in a more consistent way. Sr. Thoman's article also cited a framework for organizing

media literacy learning that was originally developed by Paulo Freire in Brazil, (Internet Encyclopedia of Philosophy, 2014) which we call the Empowerment Spiral of Awareness, Analysis, Reflection and Action. In the mid-1990's, CML developed curriculum for a community violence prevention program called *Beyond Blame: Challenging Violence in the Media* (Center for Media Literacy, 2024), and this curricula (with Elementary School, Middle School, High School and Adult units) used the Empowerment Spiral as its organizing framework for all lessons. This curriculum, which sold thousands of copies in the U.S., set an example of the power of frameworks as an organizational tool for lesson development.

To begin articulating a consistent understanding and approach to media literacy and media literacy education, Elizabeth Thoman, Jeff Share (who worked for CML as a trainer around that time) and I developed a set of definitions, frameworks and approaches that we published in a basic text, *Literacy for the 21st Century*, first released in 2001 on the CML website, www.medialit.org. (CML's website has about 500,000 unique visitors per year). This book contained theoretical underpinnings for media literacy – definitions, key elements of media literacy such as close analysis, and CML's first articulation of its frameworks for media literacy understanding and instruction: the Empowerment Spiral of Awareness, Analysis, Reflection and Action, as well as the Center's Core Concepts and Key Questions for Deconstruction of media literacy (See Appendix B) and Key Questions for Young Children, also aimed at deconstruction. This work has been downloaded hundreds of thousands of times from CML's extensive website, and it helped spread a more consistent and accessible understanding of media literacy theory and practice throughout the world.

Realizing that a conceptual understanding of media literacy is only a first step in spreading the discipline, CML set out to provide lesson plans to illustrate the practice of media

literacy, and published another key work in 2005, a book of 25 lesson plans (with 5 lessons on each of the CML Five Core Concepts) called "Five Key Questions that can Change the World," by Elizabeth Thoman, Jeff Share and myself. These lessons were designed to show educators how to apply CML's basic methodology and frameworks and also provided guidance on the key characteristics that all media literacy lessons need to include, such as some element of construction/production work for students to complete.

Using frameworks opened potential for rapid spread and adoption of media literacy in a way that uniquely authored curriculum from a centralized source could never do. Uniquely authored curriculum is time consuming to develop, is limited to the subject at hand, and becomes out of date, especially with fresh and pertinent media examples that are required for critical analysis. By providing educators with the basic tools and understanding of media literacy – frameworks for critical analysis – teachers could be empowered to use a systems approach with modular components, while developing their own lessons and curricula, addressing any subject, any theme, any content, anywhere, any time, using any media.

These teaching resources are described as an "onramp" to media literacy, for teachers, librarians and community organizations to have an accessible and practical way to immediately begin teaching media literacy, addressing issues of importance to their schools and communities. With an organized approach to finding an entryway into the discipline and pedagogy, it was now possible to make progress in spreading media literacy more consistently and easily, especially since universities were not often offering any guidance for educators. Certainly, there are many ways to teach media literacy and many nuanced and advanced ideas constantly emerging within the discipline; however, a consistent foundation is needed to be able to have a common understanding of the fundamental ideas and pedagogies behind media literacy and media literacy

education. With this in mind, the CML designed and introduced in 2002 its CML MediaLit Kit ™, a collection of its educational resources, with the purposes of consistency and ease of access in mind.

These CML frameworks were not created in a vacuum, although they are copyrighted due to their representing CML's unique expressions visually and verbally. But just developing the frameworks and articulating their meaning and use was not enough: Elizabeth Thoman and I were highly aware of the need to educate researchers and practitioners about the benefits of using frameworks and the need for consistency. Yet, because media content is infinite and constantly changing, with media technology also constantly evolving, it was essential to find a pathway to help educators find common ground in teaching media literacy, regardless of their subject area: language arts, science, history, civics, health, sociology, etc.

In the early years prior to 2005, Elizabeth Thoman and I co-authored two articles that still receive wide circulation: "Media Literacy: A National Priority for a Changing World," and "Lessons from the Center for Media Literacy." Both of these articles are cited regularly, according to Academia and ResearchGate, two online services which track academic papers and citations for researchers from all fields of study.

Papers

Media Literacy: A National Priority for a Changing World
By Elizabeth Thoman and Tessa Jolls
Sept. 2004, American Behavioral Scientist, Volume 48, Issue 1
https://doi.org/10.1177/0002764204267246
See Appendix C
Research Methods: Theoretical and Practitioner
Research Questions:
What is a definition of media literacy?

What characteristics distinguish media literacy from other communication/educational disciplines?

Why is media literacy important?

Highlights of Research Findings:

In "Media Literacy: A National Priority for a Changing World," Elizabeth Thoman and I articulated how media literacy is focused on teaching process skills that enable users to access, analyze, evaluate, create and participate with media of all genres. Using a definition that we initially provided in our basic book, *Literacy for the 21st Century*, we used this definition of media literacy:

> "Media literacy is a 21st century approach to education. It provides a framework to access, analyze, evaluate and create 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."

As content continues to proliferate and is easily accessible on the internet, it is imperative that education systems shift their focus from imparting content through memorization and drilling to helping students learn process skills that enable them to "learn to learn," and to make meaning from the content that they use. These process skills – like learning to swim or ride a bike – are learned through practice over time, and are applied to content through a process of inquiry, designed to explore how the content is being represented, that enables critical thinking. Critical thinking is essential in understanding one's relationship with oneself and others, as well as a lifelong relationship with the media and technology that are constant presences in a person's life.

Media Literacy Education: Lessons from the Center for Media Literacy
By Elizabeth Thoman and Tessa Jolls
April 2005, Yearbook of the National Society for the Study of Education, v104 n1 p180-205

https://eric.ed.gov/?id=EJ885523
See Appendix C
Research Methods: Theoretical and Practitioner
Research Questions:
How does the CML approach media literacy?
What are the CML frameworks for media literacy?
What distinguishes the CML approach from others?

Highlights of Research Findings:

The article "Lessons from the Center for Media Literacy" was aimed primarily at U.S. educators and it shared and explained CML's new methodology, based on its two frameworks, the Empowerment Spiral and the Key Questions/Core Concepts for Deconstruction. We identified six elements that distinguished our approach to media literacy education:

1. The Inquiry Process: Analysis/Production. We explained that, "Like two sides of the same coin, the inquiry process is understood to include both analytical (deconstruction) skills...combined with creative communications (construction/production) skills." This combination of skills enables users to "free their minds" and to "express their views" – the essentials of being able to communicate.
2. Media Literacy: A Consistent Definition. To encourage consistency in understanding, we provided CML's standard definition, introduced in CML's MediaLit Kit™.
3. The Five Core Concepts and the Five Key Questions. We provided CML's deconstruction framework and a detailed explanation of each Concept and Question. We addressed the notions of construction/authorship, format and techniques, audiences and targeting, framing and bias and omissions, and purposes of profit |

and/or power. We also gave examples of additional questions, called guiding questions, which are designed to further explore particular content or media genres to explore the topical concepts and questions.

5. Process Skills. We articulated and explained basic process skills that media literacy encompasses: the ability to access, analyze, evaluate and create media. (The idea of participation which Henry Jenkins' research introduced came in later years.)
6. The Empowerment Spiral. We explained the Empowerment Spiral framework of Awareness, Analysis, Reflection and Action as a way to organize learning and making meaning through media literacy.

Demonstration Projects/Papers

In addition to peer-reviewed articles aimed at other researchers and practitioners, we determined that demonstration projects were needed to illustrate how CML's approach to media literacy worked in practice on a replicable basis. In addition to CML's regular "Crash Course in Media Literacy," which we offered periodically in Los Angeles as a one-day introductory class, we sought grants funding to secure the partnerships and resources to design and carry out educational interventions that showed how media literacy worked.

Project SMARTArt

Project SMARTArt (Students using Media, Art, Reading and Technology) offered an opportunity to determine how to design and implement a replicable media literacy program, using the consistent pedagogy CML had developed earlier. Project SMARTArt was funded at $240,000 through the U.S. Dept. of Education and the National Endowment for the Arts as a demonstration project for one of the first media literacy grant programs in the United States,

released in 2002. The grant's aim was to "help school districts establish programs that teach students how to examine and interpret media messages...and help students create their own media-based projects that can offer an alternative to violent messages."

Working together to achieve those goals in Project SMARTArt were three Southern California organizations: the Center for Media Literacy (CML), the Education Division of the Music Center of Los Angeles County (MCED), the largest arts education provider at that time in the U.S., and AnimAction, Inc, a small animation production company. In collaboration with administrators from Leo Politi Elementary School and Local District 4 of the Los Angeles Unified School District, the partnership provided the teaching team with professional development, direct classroom instruction and coaching, and ongoing support. Throughout the three-year program, K-5 teachers from Leo Politi Elementary School and residency artist/educators from the L.A. Music Center Education Division comprised SMARTArt's teaching team, along with model media literacy lessons provided through the Center for Media Literacy. Because the majority of students at Leo Politi Elementary School spoke limited English, emphasis throughout the Project built reading, writing, and other basic Language Arts skills. In Year 3, improved results were achieved by including English Language Development (ELD) standards in the media literacy lesson plans and implementing SMARTArt activities daily during ELD time in the classroom.

This program provided the underpinnings for an understanding of what is needed to implement media literacy programs in schools, and subsequently, in a peer-reviewed article (highlighted below) in *Arts Education Policy Review*, Denise Grande, strategic initiatives director at the Music Center of Los Angeles County, and I articulated our guiding principles, approach and methods, the program structure, and the tools and resources needed to support the

teaching and learning in classrooms on a replicable basis. There was no funding for a formal evaluation of Project SMARTArt, and when the project ended, there was no funding to further the sustainability or the scaling of the project – a major disappointment. However, Project SMARTArt provided the media literacy laboratory we needed to begin to analyze program offerings and help determine how to replicate such programs in a variety of settings.

Additionally, CML commissioned a full case study of Project SMARTArt.

A Road to Follow
By Tessa Jolls and Denise Grande
Sept./Oct. 2005, Arts Education Policy Review, Volume 107, No. 1, pp. 25-30
Research Methods: Practitioner and Case Study
See Appendix D
Research Questions:
What program elements lend themselves to a replicable media literacy program within a school setting?
What resources and tools are needed to support teachers and students' learning?
What are some ingredients for sustaining such a program?

Highlights of Research Findings:

This three-year media literacy implementation program, Project SmartART, was a first attempt to use CML's recently developed frameworks for media literacy as a cornerstone of the project's pedagogy. Denise Grande and I documented what we considered essential elements for success in our research and implementation for this project. We worked with about 10 teachers and five teaching artists for a period of three years. To unify the group and to provide consistency in the media literacy pedagogy, we found that:

- Having a consistent philosophy of education – empowerment through education – was essential.
- We used CML's frameworks and pedagogy from the CML foundational text, *Literacy for the 21st Century*. We also used a production tool for students to create animation shorts.

- We provided in-depth professional development for teachers and for teaching artists from the Music Center. We also coached teachers throughout the semesters they participated.
- All participation was voluntary. We were clear that this program was experimental and designed to determine whether it was feasible to use CML's frameworks as a unifying approach.
- Teachers and teaching artists met monthly to discuss needs and progress; program partners met quarterly to coordinate plans. We also sponsored annual meets to discuss the program and our experiences with it.
- The lessons teachers worked with met State Education Standards and used curriculum, for example, for reading, already in use.
- Students produced a number of arts and animation artifacts as they participated in the program over a period of three years. Students with special needs were also included in Project SMARTArt.
- We incorporated Parent Outreach as part of the program, to educate participating parents about media literacy.

All of the teachers who initially signed up to be part of the program continued their voluntary participation for the whole three years; the program was considered a success by the teachers and the school, and parent participation in the outreach program was strong. Teachers and teaching artists alike, as well as students, saw the program as a way to deepen their skills and learning strategies, and they enthusiastically embraced the basic tenets of media literacy, as expressed in CML's frameworks. The frameworks served as unifying ideas around which to build curricula and lessons that met the school's guidelines for all classes. By the end of the

program, teachers were able to design lesson plans incorporating media literacy and multiple state education standards in as little as 20 minutes.

In addition to Project SMARTArt, other early programs – including *Smoke Detectors!,* (2002) a media literacy-tobacco cessation program for high school students in Anaheim, California, and *A Recipe for Action,* (2004) a nutrition education program for middle school students conducted in Los Angeles Unified School District, provided CML with opportunities to partner with schools which have highly diverse populations, where English is often a second language. Although we did not write a formal research summary of either of these latter projects, we used a pre-post test for each project, which revealed results in the range of 21-26% gain in knowledge about media literacy and the content (either smoking or nutrition) amongst participating students. I served as principal author for each grant application, and as project manager for each of these projects, and these responsibilities provided me with hands-on experience in program design with our partners, in utilizing CML's frameworks and methodology in curricula, and in identifying the challenges, benefits and obstacles to implementing media literacy in the U.S. education system.

With Elizabeth Thoman's retirement in 2006, our close partnership and my apprenticeship ended, having given me seven years with her expertise and guidance on all things media literacy. I was very fortunate to have this remarkable expert and far-sighted woman as my media literacy mentor.

STAGE 2: 2008-2012

Overall Research Question: Can this methodology be effective and applicable in a variety of contexts, including subjects, themes, cultures and languages globally, while addressing localized media content and issues?

In the early 2000's, media literacy practitioners primarily focused their efforts on teaching deconstruction/analysis, since bringing technology like television cameras or lighting or other equipment was both expensive and cumbersome. Certainly, construction/production was sometimes incorporated into lessons, but classroom circumstances made production time consuming and inconvenient, and this limited student work to writing papers or reflections, with little opportunity for creativity in media usage. The advent of smartphones, social media, user platforms and applications have thankfully changed this pattern, with production now often easily accessible within class environments and technology being ubiquitous.

Additionally, a groundbreaking report on "new media literacies" and the then-emerging social media gained traction in 2005 and changed the media literacy landscape. "Confronting the Challenges of Participatory Culture: Media Education for the 21st Century," a research study led by Henry Jenkins, et al., (Jenkins was then at MIT and now is provost professor of Communication, Journalism, Cinematic Arts and Education at the University of Southern California), focused on active participation by media and technology users, and illustrated how production and participation in the media world required new skills and knowledge. In the study, Dr. Jenkins cited CML's Five Key Questions for Deconstruction, and pointed out the passive nature of the questions. This was a fair criticism: CML did not address Construction/Production in its initial questioning process/Key Questions, which was a major omission whose time had come for inclusion.

For this reason, in 2007 (beginning one year after Elizabeth Thoman's retirement), I worked with Dr. Mary Ann Sund, associate superintendent of Arcadia Unified School District, and expanded the Five Core Concepts and Five Key Questions for Deconstruction and added

actively-worded Key Questions for Construction, displaying the expanded framework visually in chart called Questions/TIPS (Q/TIPS) (see Chart V below). Along with the Empowerment Spiral framework of Awareness, Analysis, Reflection and Action, the Questions/TIPS (Q/TIPS) framework provide the foundation for CML's current approach to basic media literacy trainings and curriculum development.

The difference between the first set of questions developed in 2001 for Deconstruction only, and the second iteration, released in 2008 and which includes the Key Questions for Construction/Production, is notable. With the 5 Core Concepts serving as the lynchpin for the chart, the relationship of each Key Question to a Core Concept becomes clear, with the point of view – of either a consumer or producer of media – changing accordingly (see Appendix H and I). These questions are only a place to start – certainly many other questions may be asked, as well. But with these primary questions, users can launch a process of inquiry that is related to the important ideas represented by the Core Concepts, with a sure and quick way of conducting an inquiry about any media message, any time, any where, as both a consumer and a producer of media messages.

These timeless questions apply to any type of media, whether print or digital or social.

Papers

Global-Local: Media Literacy in the Global Village
By Barbara J. Walkosz, Tessa Jolls and Mary Ann Sund
***2008: OfCom International Research Forum* (Ofcom, 2008-2009)**
Research Methods: Theoretical and Practitioner
Appendix F
Research Questions:
How has media use changed in recent years, with the advent of the internet?
Why are the process skills of media literacy needed today by youth and adults?
How is it possible to have a global approach to media literacy process skills, yet still address local issues and locally-produced media?

Highlights of Research Findings:

While Elizabeth Thoman and I had focused primarily in the United States on establishing CML's frameworks as a pedagogy for media literacy that could be consistent, replicable, measurable and scalable, the field of media literacy continued to rapidly progress in other parts of the world. Notably, OfCom, the UK's communications regulatory agency, established an office of media literacy under the direction of Robin Blake, beginning in 2004.

This paper, *Global-Local*, was authored by Dr. Barbara J. Walkosz, (Senior Scientist at Klein-Buendel, Inc.,) et. al and presented by me at OfCom's International Research Forum in 2008. We addressed the emergence and impact on youth of the "global village" through technologies, an idea first proposed by Canadian media theorist Marshall MacLuhan. We explored the profound impact on youth through a discussion of how global and local interests intersect in a media-saturated environment. We noted that in the global village of media, adults are typically not present to provide guidance about content, and how youth now need an internalized filtering system to be able to learn and discern through media. We argued that media literacy – using a consistent methodology/heuristics that can be taught to youth everywhere -- is a means through which young global citizens can navigate this "global village" in order to become fully engaged – yet autonomous – members of their local and global communities. While the process skills of media literacy are universal and applicable globally, media content is typically local in origin, and deals with primarily local issues and themes in local languages or dialects. But the process skills of media literacy are universal and can be applied regardless of location, culture, language or demographics.

Voices of Media Literacy
2007-ongoing

Publisher: Center for Media Literacy, with support from Dr. Barbara J. Walkosz

See Appendix G

Research Method: Structured Interviews, with transcripts reviewed by interviewees

Interviews conducted by Dee Morgenthaler (then a graduate student at University of Colorado-Denver) and Tessa Jolls

<u>Research Questions: Each interview covered the following research questions:</u>

Why did you become involved in media education?
2. What were your goals?
3. What has surprised you?
4. What are some experiences that you had early-on?
5. What are some milestones that you noted along the way, for yourself and for the field?
6. What informed and inspired your work? (Scholarly work? Technology? Social Events and Needs?)
7. How far do you think the field has come?
8. Do you think the field has moved in the direction you think best? Why or why not?
9. What would you like to see happen?
10. Whom would you recommend to be part of this project? How can we contact him/her?

Highlights of Research Findings:

A clear view of the thinking behind media literacy by the early pioneers of the time is documented in a 2007-2011 CML research project, which I directed, called "Voices of Media Literacy" featuring transcripts of interviews with more than 25 researchers and practitioners active in media literacy prior to 1990 throughout the English-speaking world (U.K., Australia and U.S.) Participants included Barry Duncan, David Considine, Elizabeth Thoman, Marilyn Cohen, Jean Pierre Golay, Dorothy Singer, John Punguente, Marieli Rowe, David Buckingham, Renee Hobbs, Len Masterman – all outstanding contributors to the media literacy field. From these interviews, it is evident that many of the basic principles and research on media literacy was well underway by the early 2000's, with interest growing dynamically during the 1990's. These structured interviews give fresh and important insight into the early development and tenets of media literacy. For example, Len Masterman shared (2010):

"The problem was this: if you are studying TV, then in successive weeks you might be looking at news, documentary, sport, advertising, soap opera, etc. How is it possible to study such a diverse range of topics in a way that would be focused and disciplined? I suppose the big

step forward was to recognize a truism: that what we were actually studying was television and not its subject contents. That is, we were not actually studying sport or music or news or documentary. We were studying the ways in which these subjects were being represented and symbolized and packaged by the medium…"

Academic literature and varying points of view, later documented in the Voices project, were essential to Elizabeth Thoman and my identifying the basic components necessary for media literacy practice, but the Voices interviews also gave a vivid picture of the launch of a new academic field, and the challenges encountered along the way. Regardless of geographic location, each pioneer struggled to help establish recognition for media literacy as a discipline, but in each case, the imperative for teaching media literacy became more evident with the passage of time, and these dedicated individuals had the satisfaction of seeing the field grow, vindicating their early vision. In each case, pioneers were optimistic about the future, seeing how education must change to accommodate new needs and the plethora of new information becoming constantly and readily available.

For the Voices project, we used structured interviews, with each interview addressing the research questions listed above. These interviews were conducted in English by telephone, and recorded and then transcribed. (The interview with Jean Pierre Golay was conducted personally in French by Marieli Rowe and recorded by Karen Ambrosh.) Each participant was offered the opportunity to review and approve the edited transcript.

The Impact of Technology on Character Education
By Tessa Jolls
2008: US Dept of Education, Character Education Symposium and White Paper
Research Methodology: Theoretical and Practitioner
Appendix H
Research Questions:
Why is media literacy/gaining process skills important to youth today?
How does character education apply to media literacy?

What components of education are needed to help youth understand themselves and their relationship to media today?

How can youth learn to represent themselves effectively in today's media world?

Highlights of Research Findings:

At the invitation of the U.S. Dept. of Education, I keynoted a 2008 Character Education Symposium, accompanied by a white paper I authored. In that paper, I noted that while content was becoming increasingly accessible and nearly infinite thanks to the internet, the process skills of media literacy were scarcely being taught. This imbalance continues to this day, with content knowledge being the primary concern or value of education systems, while process skills – preparing students to learn and to evaluate information they encounter – are still under-valued and seldom emphasized. Entire education systems are organized according to these traditional values, which are limiting citizen's ability to navigate in a world where they have the online world at their fingertips.

I argued that children need to learn about assessing media and information for risk management, and that these process skills apply to knowledge acquisition, problem solving and citizenship. To be prepared to operate as a productive digital citizen, students must be helped to develop their character by: 1) gaining insights into their own being and identity, and about how they represent themselves in the online and offline worlds 2) having arts training to better understand persuasive techniques and to also be better able to express themselves 3) developing internalized heuristics for media literacy, providing students with the foundations for being able to think critically about media on a lifelong basis, anywhere, anytime and 4) recognizing and

articulating a sound value base to evaluate information, choices and decisions while weighing risks and rewards. Character education helps provide this understanding.

Since CML first introduced its groundbreaking book, *Literacy for the 21st Century,* in 2001, and thanks to CML's website, practitioners and researchers from throughout the world were taking notice of CML's new methodology. I conducted speaking engagements and training sessions in highly diverse locations – Korea, Peru, Qatar, Kuwait, Mexico, Canada and of course, the U.S. – and I was able to observe first-hand how CML's frameworks were transferable across cultures and geography and language. In training workshops, teachers learned to use CML's approach in structuring curricula and lessons, and the benefit of having consistency and shared vocabulary was obvious in each setting.

Stage 3: 2013 – 2024

Peer-Reviewed Research from the Past 10 Years

Overall Research Question: Can this methodology be effective in an evidence-based approach that positively affects knowledge, attitudes and behaviors?

In 2013, CML achieved a milestone that we had long worked toward: *the positive results of a longitudinal study addressing CML's frameworks and curriculum, conducted by the University of California, Los Angeles were published in peer-reviewed journals.* From 2004 to 2009 the Center for Media Literacy's updated curriculum, Beyond Blame: Challenging Violence in the Media, underwent a rigorous longitudinal evaluation study by researchers at the UCLA Southern California Injury Prevention Research Center. The goal of study was to assess whether or not a comprehensive media literacy intervention could mitigate the negative effects of exposure to media violence and reduce the risk for aggression and violence among middle school

children. The research was funded by a grant from the Centers for Disease Control and Prevention. The study also examined the impact on participating students of CML's two frameworks, the Empowerment Spiral of Awareness, Analysis, Reflection and Action, and the Questions/TIPS framework featuring CML's Five Core Concepts and Five Key Questions for Deconstruction and Construction. This latter impact was particularly important to establish, since the frameworks themselves, if shown to be effective through research, would be able to be applied to a variety of subjects and contexts, and yet still retain their evidence-based credibility.

The largest implementation of *Beyond Blame: Challenging Violence in the Media* took place from 2007-2009 academic years: 20 middle schools from seven school districts in Los Angeles County took part in implementing the program as part of UCLA's evaluation study of the curriculum. More than 2000 students participated, with about 50 teachers and administrators involved in the program.

Employing a quasi-experimental pre/post test research design, researchers assessed the effects of the curriculum on middle school students, comparing classrooms led by intervention and control teachers in schools predominantly serving minority students. The specific goals of the research were to (1) Test changes over time among study children in measures of beliefs and attitudes towards violence and the media, media knowledge, self-reported viewing behaviors, critical assessment of media messages, risk for violence, and conflict resolution skills. (2) Ascertain the impact of the intervention in terms of knowledge, attitudes, behaviors and beliefs at a six-month interval after the intervention. (3) Assess the effect of gender and ethnic differences on any short-term outcomes observed. Two peer-reviewed papers were published during subsequent years by UCLA researchers, from 2009 to 2012:

- Results from the initial pilot study conducted during the 2005 academic year were published in 2009 in *Health Promotion Practice* by UCLA authors Theresa Webb, Kathryn Martin, A. Afifi, and Jess Kraus, Webb, "Media Literacy as Violence Prevention: A Pilot Study Report," doi:117/1524839908328998.
- In the September 2012 issue of the *Journal of Children and Media, p. 430-449,* authors Theresa Webb & Kathryn Martin published "Evaluation of a US School-Based Media Literacy Violence Prevention Curriculum on Changes in Knowledge and Critical Thinking Among Adolescents," https://doi.org/10.1080/17482798.2012.724591

An additional two peer-reviewed papers were published by Kathryn Martin Fingar and myself, from 2013-2019, include:

Evaluation of a school-based violence prevention media literacy curriculum

By Kathryn R. Fingar and Tessa Jolls

2013: Injury Prevention

See Appendix I

Research Methodology: Evaluative: Quasi-experimental design, pre-post test before and after curriculum implemented, and during fall semester of the next academic year. Multivariate hierarchical regression was used to compare changes from baseline to follow-up between the intervention and control groups.

Research Questions:

Is Beyond Blame, a violence prevention media literacy curriculum, associated with improved knowledge, beliefs and behaviors related to media use and aggression?

Do CML's Core Concepts and Key Questions for Deconstruction positively impact knowledge, beliefs and behaviors?

Highlights of Research Findings:

From 2007 to 2008, health, language arts and social studies teachers from twenty six schools across Southern California participated in a large longitudinal study conducted by the University of California – Los Angeles (UCLA) Southern California Injury Prevention Research Center. Sixty Seven teachers were recruited to participate in evaluating CML's curriculum Beyond Blame: Challenging Violence in the Media, and the CML frameworks, 31 agreed to take part in the project; teachers were assigned as being "trained," "untrained," with no instruction on how to use the curriculum, or as "controls." Teachers at the same school were assigned in the same group to avoid contamination, and they delivered the curriculum within one semester. Students from "trained," "untrained" and control groups were tested before and after the curriculum was implemented (or for controls, at the end of the semester). To assess longer-term effects, a subset of teachers was randomly selected so the comparison groups were similar in race/ethnicity and grade, to participate in a follow-up assessment during the fall semester of the next academic year.

One thousand five hundred eighty students completed the first post-test; four hundred twenty-six completed the second post-test..

Results

- Compared with controls, at the first post test, students in the trained and untrained groups reported increased knowledge of the Five Core Concepts/Key Questions of media literacy,
- Students reported increased exposure to media violence,
  as well as stronger beliefs that media violence affects viewers and that people can protects themselves by using less.
- Regarding behaviors, controls were more likely to report > 8 h of media consumption at the second post-test than at baseline (OR=2.11; 95% Cl 1.13 to 3.97), pushing or shoving another student (OR=2.16; 95% Cl 1.16 to 4.02); and threatening to hit or hurt someone (OR=2.32; 95% Cl 1.13 to 4.78). In comparison, there was no increase in these behaviors in the trained and untrained groups. Because aggression levels naturally increase as children age, this result is considered a positive impact of the curriculum.

This study suggests media literacy can be feasibly integrated into schools as an approach to improving critical analysis of media, media consumption and aggression. Changing the way youth engage media may impact many aspects of health, and to increase confidence in the reliability of this approach, it will be an important next step to apply these frameworks to other topics.

***Evidence-based frameworks: Key to learning and scaling globally* (p. 117)**

By Kathryn R. Fingar and Tessa Jolls

2018-2019 MILID Yearbook, p. 117, UNESCO

See Appendix J

Research Methodology: Evaluative: Using a quasi-experimental design, schools were assigned to either a trained, untrained or control group.

Research Questions:

Does student understanding of the Empowerment Spiral of Awareness, Analysis, Reflection and Action increase with instruction?

Does such understanding by students improve if teachers are trained to deliver the curriculum?

Does the students' understanding of the Empowerment Spiral impact aggression levels?

Highlights of Research Findings:

This paper demonstrates the efficacy of the CML Empowerment Spiral – a framework which can be applied to any topic, so that activities and lessons can be easily and consistently designed while connecting student work to action and also positively impacting student knowledge, attitudes and behaviors. The Empowerment Spiral is driven by a process of inquiry, with the Analysis step exemplified through CML's 5 Key Questions for media deconstruction: Who created this message?/What creative techniques are used to attract my attention?/How might different people understand this message differently?/What values, lifestyles and points of view are represented in or omitted from this message?/Why is this message being sent?

Using a quasi-experimental design, researchers recruited thirty-one teachers from twenty California middle schools with one thousand five hundred eighty students in 2007-2008 to participate in a trained, untrained or control groups. The learning model embedded in the curriculum incorporated the four short-term learning steps of the Empowerment Spiral: Awareness of media violence, Analysis through Core Concepts and Key Questions of media literacy, Reflection, and Action. Evaluators assessed each of these steps through written assessment directly before and after the curriculum was implemented, comparing students in the intervention with the control group using fixed effects models.

Here are the results:

- There were increases in Awareness ($\beta=0.32$, $p<0.0001$, Analysis ($\beta=0.27$),$p<0.---1$, Reflection ($\beta=3.79$, $p=0.0002$), in the intervention group as a whole relative to the control group, but not in aggression ($p=0.1994$). Given that as adolescents aged 1-14 advance in age they advance in aggression as well, the fact that aggression did not increase in the intervention group is a positive finding. (Aggression was measured using the Center for Disease Control's (CDC) Aggression Scale taken from the Compendium of Assessment Tools.)
- Although on each individual scale we observed improvements in Awareness, Analysis and Reflection in both the trained and untrained groups compared with controls, students in the trained group were more likely than those in the untrained group to master all three of these learning steps by the post-test (37.6% of trained vs. 28.5% of untrained students).
- Among students who received the intervention from a trained or untrained teacher, mastery of these learning steps was associated with reduced aggression, relative to mastery of no steps ($p<0.05$).
- The results from this study may be used to identify the critical elements of the intervention so that, through their teachers, students can master each step of a learning process – the Empowerment Spiral – culminating in Action that may lead to reductions in aggressive behaviors. (Changes in aggression from the pre- to the post-test associated with mastery of the awareness, analysis, and reflection components of the Empowerment Spiral in the intervention and control groups, were derived from fixed effects regression models.)
- Although some learning is intuitive, our results highlight the importance of teaching and learning through clear labeling (Awareness building) and a conscious methodology.
- Using a hierarchical difference-in-differences approach that accounted for the clustering of student responses within classrooms, first we examined pre-post change in the Awareness, Analysis, Reflection and Action components of the Empowerment Spiral in the intervention group, compared with the control group. Each outcome was continuous. The models included indicators for intervention group, post-test, and the interaction

between intervention and post-test, as well as a vector of student IDs. These fixed effects control for time-fixed observed and unobserved student-, class– and school-level differences between the intervention and control groups. The parameter estimate for the interaction term between intervention and post-test can be interpreted as the difference in pre-post change in the outcome between the intervention and control groups.

- We used the same regression approach to examine whether the prepost change in aggression differed within the intervention group, according to mastery of one, two or all three steps leading to action (Awareness, Analysis, Reflection). The model included indicators for level of mastery, the post-test, and the interaction between mastery and post-test. This parameter estimate can be interpreted as the difference in pre-post change in the outcome between students who mastered one, two or three components and students who mastered no components.
- Finally, we ran this same model among controls, among which improvements in Awareness, Analysis, and Reflection are unrelated to the intervention. This can be thought of as a falsification test in which we expect null results.

The publication of these UCLA studies provided CML with the confidence that the development work completed to date was on sound footing, and could contribute effectively to media literacy theory and pedagogy. Because of the expense of such analysis (the UCLA grant from the CDC was in excess of $1 million), it would be another 10 years before CML would have the opportunity to follow through with another evaluation study to replicate and validate the results of the first.

In the meanwhile, I continued to pursue my overall research question, aiming to demonstrate that CML's approach is Consistent, Replicable, Measurable and Scalable. The 13 papers that I authored or co-authored during the years 2013-2024 are organized accordingly.

CONSISTENT: 2013-2024 Papers

Through the years, my experience with teaching media literacy in various countries around the world reinforced the need for consistency – educators needed basic concepts and strategies to help them structure lessons and also to be able to teach these basics while helping students learn to question the media. Although CML's methodology was carefully considered and anchored in years of academic research world-wide, researchers and practitioners rightfully

challenge attempts to encapsulate the big ideas that animate the media literacy field. CML faced – and continues to face – the need to explain the rationale behind our approach, and how important having some consistency is to those trying to enter the field, and to teach the basics to their students.

The following articles illustrate my sharing basic principles and tenets of media literacy, to encourage more consistency in understanding and practice:

The Core Concepts: Fundamental to Media Literacy Yesterday, Today and Tomorrow
By Tessa Jolls and Carolyn Wilson
2014: The Journal of Media Literacy Education
See Appendix K
Research Methodology: Theoretical and Practitioner
Research Questions:
What are the Core Concepts of Media Literacy, and how were they developed?
Are the Core Concepts derived from credible sources?

Highlights of Research Findings:

This article explores the history of the development of the Core Concepts of media literacy, which help distinguish the media literacy field from other communications disciplines. Carolyn Wilson, Executive Director of the MacLuhan Foundation in Canada, and a founder of the now-named UNESCO MIL Global Alliance, and I were concerned that the understanding of media literacy was becoming too scattered amongst researchers and practitioners, and we aimed to explain the "roots" of media literacy theory and practice, and to provide a grounding in the principles that unite the field, especially from the perspective of English-speaking practitioners in countries like the U.S., Canada, the UK, and Australia. Since media literacy is often neglected as a subject to be taught in university schools of education and of communication, we placed emphasis on both the theory and the pedagogy behind media literacy, recognizing that

understanding media literacy as a discipline is one challenge, while teaching media literacy is another.

The article shares the Key Concepts originally developed in Canada, and also shares CML's Questions/Tips framework, which incorporate the Core Concepts that Elizabeth Thoman helped to introduce to the U.S. in the 1990's. In our experience, these Concepts were "new" to many media literacy advocates, and they provide a commonality that is essential to understanding the idea of representation and how the global symbolic system of media operates, which is the driving force behind the research and practice of media literacy.

We explained that:

> "The foundations of the discipline have primarily been developed through the work of Len Masterman in England and Barry Duncan in Canada, acknowledged by many educators as the founders of media literacy as we know it today. This foundation includes the basic principles for media literacy introduced by Len Masterman in 1989 and the ways in which these were taken up by Barry Duncan and his Canadian colleagues in their Key Concepts. The Key Concepts, first introduced in 1989, remain central to media literacy education in Canada today. Building on the work of their Canadian colleagues, the American version of the concepts was introduced in 1993 and continues to underpin the work of educators across the U.S."

The article also describes my own contribution to CML's basic frameworks for deconstructing media, which was to connect each of the CML Core Concepts to Key Questions that illuminate a process of inquiry designed to help apply the Concepts to any media content. Ultimately, this connection led to the publication of Five Core Concepts and Five Key Questions for Deconstruction and Construction (Questions/TIPS), and the CML MediaLit Kit ™, which provided a collection of resources for teaching and learning about media literacy, including Key Questions for Young Children (aged eight and under).

Primarily addressing the evolution of the Core Concepts through the point of view of leading researchers in the English-speaking countries: the U.K., Canada, U.S. and Australia, this

article is widely cited and was one of the top ten articles downloaded from the Journal of Media Literacy Education for many years.

How do Digital Media and Learning (DML) and Media Literacy Communities Connect? Why is it important that these communities work together towards common goals?
By Henry Jenkins and Tessa Jolls
2014: Published in Henry Jenkins Blog and CML's Connections
See Appendix L
Research Methods: Theoretical and Practitioner
Research Questions:
How do Digital Media and Learning (DML) and Media Literacy Communities Connect?
Why is it important that these communities work together towards common goals?

Highlights of Research Findings:

The argument for providing universal, foundational pedagogy for media literacy education continues as the field continues to evolve and embrace new forms of technology. In 2014, as Henry Jenkins' ground-breaking work on participatory culture and the impact of the internet and social media gained world-wide prominence, Dr. Jenkins and I embarked on an exchange prompted by reports of a widening split between researchers and practitioners around "digital and new" media literacies and "traditional" media literacy. In our dialogue, Dr. Jenkins and I acknowledged how new technologies were opening pathways for expression and democratizing media, but at the same time, the fundamentals of understanding representation and how representation works in media remain unchanged regardless of technological innovation. The need for teaching fundamentals remains, while at the same time, media literacy researchers and practitioners must continue to explore the impact of media on industry, communities and individuals.

Yet, ideas behind representation – the Core Concepts of Media Literacy -- stand, and these Concepts can be applied to any media. The Concepts provide a distinguishing set of ideas upon which the media literacy field rests. Furthermore, since media literacy education had never

been adopted and scaled in education systems anywhere in the world, citizens do not have the advantage of being exposed to media literacy fundamentals. It is desirable for the media literacy research community to advance new posits and theories, but unfortunately, the public has not had the benefit of learning the basics and being able to build upon that understanding. In education systems, we cannot neglect teaching the fundamentals in pursuit of new discoveries, because new discoveries depend upon the foundations upon which the field is built.

Media and Information Literacy Education: Fundamentals for Global Teaching and Learning, p. 59
By Carolyn Wilson and Tessa Jolls
2015: MILID 2015 Yearbook, UNESCO
See Appendix M
Research Methods: Theory and Practitioner
Research Questions:
How has the new world-wide recognition for media literacy relate to the far-sighted vision of media literacy pioneers?
How do these early insights inform the practice of media literacy today?

Highlights of Research Findings:

As the internet, social media and digital media take hold of communications globally, media literacy education is finally being seen as a more mainstream need in education systems. But media literacy has seldom been institutionalized in education. In spite of this, important foundations for media literacy education have been laid by pioneers in the field, beginning with Marshall MacLuhan and other key innovators, such as Barry Duncan (a student of MacLuhan's) in Canada, and Len Masterman in the U.K. New ideas, such as "connected learning," have now gained currency, with recognition that students learn in the context of a networked, global media culture. Yet these ideas were first proposed by media literacy pioneers whose work should continue to be recognized as their vision for education today comes to fruition.

Media literacy can provide pathways for students and educators to apply media literacy concepts and heuristics to multiple media channels, utilizing process skills acquired through practice over time, to access, analyze, evaluate, create and participate with media content.

The article further explored some historical insights, documenting breakthroughs that propelled media literacy forward as a discipline and a pedagogy that is well-suited for a media-driven world. For example, we cited the key factor which distinguishes the discipline of media literacy, articulated by Len Masterman:

"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." (Masterman, 1989)

We also identified ways in which media literacy education differs from traditional education, primarily in seeing students and teachers as "co-learners" who have agency and process skills through which to acquire, contextualize and apply the content knowledge that is readily available to them. Media literacy is indeed well-suited to education for the 21st century, where content is nearly infinitely available and process skills enable acquisition and filtering of content from a myriad of global sources.

***Radicalization in Cyberspace: Enlisting MIL in the Battle for Hearts and Minds*, p. 167**
by Tessa Jolls and Carolyn Wilson and
2016: MILID Yearbook/2016 UNESCO, p. 167
See Appendix N
Research Methods: Theoretical and Practitioner
Research Questions:
What role can media literacy play in countering terrorism, especially online?
Why is media literacy important to teach youth today?

Highlights of Research Findings:

Media literacy offers a pedagogy that transcends boundaries, and can serve as a catalyst for analysis, discussion, creation of media and participation in communities. Certainly, the skills of media literacy can be used for good or for ill, but youth today need critical thinking skills to accompany their media production skills, so that they are better equipped to challenge the messages behind propaganda and extremism. Today, infowars – battles for hearts and minds – are conducted world-wide, and it is these information wars that often fuel the ideologies behind physical battles. Youth must be prepared to operate in a global village, and be prepared to speak up to represent and defend their own values and points of view. Media literacy is only a first step in providing youth with the foundation they need to exercise their own voices, their values and their choices in an increasingly fraught world.

Developing Digital and Media Literacies in Children and Adolescents

By Kristen Hawley Turner, Tessa Jolls, et al.

2017: Pediatrics, DOI: 10.1542/peds 2016-1758P

See Appendix O

Research Methods: Practitioner

Research Questions:

How can digital and media literacies help create the human capital necessary for success and sustainability in a technology-driven world?

What are ways to set priorities for research and policy?

Highlights of Research Findings:

This paper by leading U.S. digital and media literacy experts, working under the sponsorship of a committee which I co-chaired with Kristen Turner, professor of education at Drew University, for Children and Screens, a project of the Institute of Media and Child Development. We made a case for schools and health care providers to initiate digital media literacy programs by sharing current research on the effectiveness of digital and media literacy in

addressing educational and health concerns, by describing the current state of practice for digital and media literacy, and by making recommendations for action. Notably, the authors acknowledged a proliferation of projects and demonstration pilots for instituting digital and media literacies, but also cautioned that there are many barriers to spreading and scaling such programs, which impede growth of the field and of practice. The paper concluded by calling for investment in our nation's youth, with digital and media literacies as a prime focus.

Media Literacy: A Foundational Skill for Democracy in the 21st Century
By Tessa Jolls and Michele Johnsen
2018: Hastings Law Review
See Appendix P
Research Methods: Theory and Practitioner
Research Questions:
How does media literacy support a pathway towards education in a democracy?
Why is media literacy an appropriate educational approach for today?
What role does disinformation and misinformation play in media literacy?
How can media literacy support a revaluing and rebalancing of freedoms, and economic underpinnings for societies and democracies?

Highlights of Research Findings:

Increased speed in the exchange of information and communication in recent years have greatly impacted democratic societies. In some cases, such flow is positive: as in nearly-instantaneous access to stock quotes or emails or websites. In other cases, such flow can be harmful: as in the spread of dis-or-mis-information. Such untrue rumors erode trust and destabilize citizens' ability to access reliable information. In this paper, Michele Johnsen, a CML Affiliate, and I explored why media literacy should be a central subject for all citizens today; how the media literacy field fits in democracy; and how an understanding of media

literacy contributes to greater citizen understanding of the issues of the day – issues that they need to understand as voters and stakeholders in society.

Education has long been considered a keystone for maintaining a democratic society. But now that information is so readily available, the role of education has changed from being a system that supports the static transmission of information and knowledge, to that of teaching citizens to discern and to engage in a continuous process of learning. This major shift calls for a revaluing of what is taught in schools, and how educators spend time with their students – from an emphasis on rote learning and "mastery" of content knowledge, to an emphasis on learning to access, analyze, evaluate, create and participate with information attuned to the problems at hand. Certainly, content knowledge is still essential – but the process skills of media literacy are now more important than ever, especially given the plethora of information available.

Disinformation and misinformation have always existed; what has changed is the volume and pace with which such mal-information is circulated. It is much more difficult to discern truth from fiction, to detect omissions or blatantly slanted points of view. For this reason, another shift that is important in today's world – especially with AI – is understanding the idea of media literacy as risk management. Having media literacy competencies and skills helps prepare citizens to be more critical thinkers; it is not a guarantee that information they accept is true or credible. It is only a tool for assessment and judgment, which ultimately rest on the individuals and communities engaging with media.

Media literacy is gaining recognition in many countries as a way to help citizens engage with the global media world, and to have more of a voice through social media, but there is much work to be done. Media literacy offers a path for citizens to acquire, contextualize and apply content knowledge in today's media environment.

School Censorship Appropriateness

By Michelle Linford and Tessa Jolls

2019: International Encyclopedia of Media Literacy, edited by Renee Hobbs and Paul Milhailidis

Appendix Q

Research Methods: Theory and Practitioner

Research Questions:

What are some current tensions surrounding the topic of censorship in schools?

What are some current court rulings that impact censorship in U.S. schools?

What considerations should educators have in regards to censorship issues?

What role might media literacy play in helping resolve tensions around censorship in schools?

Highlights of Research Findings:

Michelle Linford, who leads EPIK, a community organization in Utah, and I explored tensions and disagreements about censorship in education that have existed for decades, if not centuries. Today, these tensions have erupted on university campuses throughout the world. But often, questions revolve more around *who* controls censorship decisions, rather than *what* is actually being censored or disallowed. There are a number of court rulings in the U.S. that currently guide administrators about how to decide cases where censorship is an issue: Hazelwood School District v. Kuhlmeier (1988) is a case in point. Educators have many conflicting interests to weigh in censorship cases, with increasing complex and diverse societies and varying values. Media literacy can help prepare students and the school community in learning to analyze and discuss such controversial issues, making room for varying opinions and respecting others' rights.

Censorship and Appropriateness: A Negotiation calling for Media Literacy, p. 361

By Tessa Jolls

2019: Marketing Comunicacao, Tecnologia & Inovacao: Nas Cidades MIL, edited by Mitsuru Yangze and Felipe Chibas, University of Sao Paulo Press, p. 361

See Appendix R

Research Methods: Theory and Practice

Research Questions:

With increased technological capacity for unleashing youth's voice, what are some new issues that have emerged around censorship and appropriateness in schools?

How can we prepare youth for taking on the responsibility involved in having more communication capability?

What role does media literacy play in the new media environment?

Highlights of Research Findings:

This book chapter focuses on how the new voice provided through social media for students – and the increased activism on the part of students – has increased pressure for educators to censor student voices and activities that conflict with community norms. Inevitably, the question of "who censors the censors" arises, and in the case of U.S. court rulings, the courts tend to favor educators.

Media Literacy offers an opportunity to prepare youth to participate in dialogue and to learn to address divisive topics in more analytical and civil ways. In the case of one Hartford public high school, teachers reported that, when a protest erupted around the Parkland School Shootings in 2018, the students were unprepared for the tragedy itself, but, because of their media literacy training, they were prepared to *discuss* the tragedy. In a society where having a civil discussion is often a challenge, media literacy has an important role to play in preparing youth for active citizenship.

REPLICABLE: 2013-2024 Papers

During this period, the CML was actively implementing media literacy programs in many countries: the U.S., Korea, Bhutan, Colombia, and Latvia, among others, and I personally conducted or co-taught these training programs. Additionally, I became a Fulbright Specialist in 2019, spending two weeks teaching media literacy in various forums in Bulgaria, working with the U.S. Embassy. CML also conducted a one-week online Media Literacy Institute through the

University of Washington (University of Washington, 2023), in which we trained for two years, (2022-2023) educators to understand the basics of media literacy, and to be able to construct lesson plans using CML's frameworks and methodology. Due to interest from researchers and practitioners globally, CML established an Affiliate/Associate program, in which we trained media literacy practitioners in CML's approach and helped them apply this approach in their own programming, in their own countries. Today, CML's growing network has a presence in Lithuania, India, Italy, Colombia, Singapore, Peru, and the U.S. All of these training experiences informed my own understanding of whether CML's approach is replicable in a variety of contexts, and my observations strengthened my conviction that teachers could grasp the CML "basics" in as little as 10 hours online, and be ready to construct their own media literacy lessons addressing any subject.

CML's basic educational resources and newer online training class have been translated into at least 14 different languages (Spanish, Portuguese, Malay, Turkish, Arabic, Korean, etc.), primarily at the behest of users who want to provide media literacy materials in their own countries (Center for Media Literacy, 2024). I have encountered CML's Questions/TIPS framework in many countries (Nigeria, Brazil, Philippines, Cypress, China, etc.), most often consistently worded, without attribution.

The following articles on my research in regards to how media literacy may be replicated are peer-reviewed:

The New Curricula
By Tessa Jolls
2015: Journal of Media Literacy Education, Vol 7, Issue 1
See Appendix S
Research Methods: Practitioner
Research Questions:

What are characteristics of curricula that use media literacy frameworks?
How does such curricula differ from traditionally constructed curricula?
Why should administrators and teachers embrace this change?

Highlights of Research Findings:

Today, media literacy skills in the global village are needed as the central tools through which to contextualize, acquire and apply content knowledge. Media literacy frameworks are "constants" used in deconstructing and constructing communication. Content knowledge is "variable," with an infinite number of subjects.

Media literacy, with its emphasis on critical analysis and media production, lends itself well to designing and organizing new curricular resources utilizing overall frameworks that support connected learning. Some examples that characterize the "old" model for developing and distributing curricula with the emerging model characterized by media literacy education include: in the past, students' exposure and interaction with the outside world was limited to field trips or to visitors, while today, technology allows access to experts as well as powerful images, worlds and sounds connecting students with limitless opportunities for exploring and communicating. In the past, teachers were the "imparters of wisdom," using set, prescribed curricula while today, teachers utilize frameworks to guide overall curricular goals and directions. They guide students and set the limits and boundaries necessary for students to work together and to learn.

This has many implications for constructing curricula. Teachers provided the "window on the world" for students, while today, students explore and discover and learn from their peers as well as the teacher. Curricula from the past was typically uniquely authored by a teacher or author; today, teachers team together to collaboratively author curricula so that there is more continuity between classes. The emphasis in the past was individual learning and mastery, with students following the teacher in lockstep to acquire concepts; today, students learn

collaboratively through inquiry, and yet have more opportunities for differentiated instruction.

Since curricula took more time to research, publish and distribute in the past, information was often outdated before arriving at the classroom door; today, information is readily available and sharing is instantaneous. Curricula published in textbooks was necessarily presented in a linear and sequential fashion; technology allows for curricula to be presented in modules that can be interchangeable and dynamic, much like object-oriented software. Also, teachers provided instruction in a directive manner; exploration of a multitude of sources is now easily possible.

The Eighteen Basic Principles of Media Education that Len Masterman, a professor at the University of Nottingham, cited in 1989 echo many of the characteristics of "new curriculum" at a time when the Internet hadn't yet made its appearance. For example, Masterman said,

> "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."

Importantly, and related to the construction of curricula, Masterman advised,

> "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" (Masterman 1989).

The Center for Media Literacy has conducted various professional development workshops for pre-K-12, and these workshops have ranged from one-hour introductory overviews of media literacy to five-day intensive trainings, followed by coaching and culminating projects. CML found that some teachers quickly acquire the skills to integrate their curricula with media literacy principles; others need at least one year to make such a transition (Jolls and Grande 2005). Regardless, teachers need time and encouragement to practice media literacy in their own classrooms.

Promoting Media Literacy Learning: Comparison of Various Media Literacy Models

By Daniela Cornelia Stix and Tessa Jolls

2020: Media Education, 11(1), 15-23. Doi 10 36253/me-9091

See Appendix T

Research Methods: Comparative

Research Questions:

What do comparisons of media literacy models between the U.K., Germany and the U.S. show?

What characteristics do these models have in common?

In what settings do these models work?

Highlights of Research Findings:

This paper, co-authored by Daniela Cornelia Stix, a German researcher, and myself, compared and analyzed four models for media literacy from the U.K., Germany and the U.S. These models included: from Germany, the Four Dimensions of Media Literacy, by Baack (1996), and Magedburger Model of Media Education by Jorissen/Marotski (2009); from the U.K., 18 Principles by Masterman (1989), and from the U.S. Center for Media Literacy, The Empowerment Spiral (1993) and Questions/TIPS (2014).

We found that commonalities amongst these four models included:

- All models identified critical analysis as essential to a media literacy process
- All models emphasized critical analysis as necessary for self-determined people.
- All models assumed that society is mediatized today, with media having a deep impact on people's day-to-day lives.
- Media literacy learning crosses all disciplines and is relevant for all professionals in educational and social systems.
- Media literacy learning is life-long learning.
- Media literacy can be taught in both informal and formal educational settings.

MEASURABLE: 2013-2024 Papers

In any product development cycle prior to scaling , there first must be a product or service. Once a product or service is developed, it is tested for feasibility in a series of steps, with indicators on how success may be defined or viewed. (Ziallis and Blind, 2019) These steps include: consistent replication of the product; pilot testing of the product in real or simulated circumstances, in which the product's reliability and market reception is measured against expected goals; and then, **if the product shows positive, measured results**, introduction of the product and scaling so that the product is seen as worth investing future effort and resources in, and becomes easily accessible and part of mainstream offerings.

This is the development cycle in which CML has undergone in regards to its evidence-based frameworks, the Empowerment Spiral of Awareness, Analysis, Reflection and Action and its Questions/TIPS framework for Deconstruction and Construction of media messages.

Earlier in this paper, I described the quantitative research undertaken with UCLA that enabled CML to claim its frameworks as evidence-based and worthy of further circulation and investment. These frameworks and accompanying research inform every program that CML now undertakes. This research summary can be found beginning on pp. 33:

- Evaluation of a school-based violence prevention media literacy curriculum
  By Kathryn R. Fingar and Tessa Jolls
  2013: Injury Prevention
- Evidence-based frameworks: Key to learning and scaling globally
  By Kathryn R. Fingar and Tessa Jolls
  2018-2019: MILID Yearbook, p. 117, UNESCO

There is an urgent need to be able to address research questions around the level of knowledge that youth around the globe have regarding media literacy. Under the umbrella of Global Kids Online (GKO), a network of researchers founded by Dr. Sonia Livingstone,

Professor of Social Psychology, London School of Economics, I have chaired a survey project since 2020 with a team of researchers to design, pilot test and introduce a new Media Literacy Module to accompany the basic GKO survey. This Module will measure media literacy dispositions and skills for children nine to seventeen. The survey design is complete and ready for pilot testing; however, we are awaiting funding to be able to take next steps.

Additionally, during the period of 2013-2024, I have written two other papers addressing the measurement of media literacy:

The Global Media Literacy Imperative
By Tessa Jolls
2014: January, Russian-American Education Forum
See Appendix U
Research Methods: Theoretical and Practitioner
Research Questions:
Why is education a key to countries' success today?
Why is education globalizing?
Why is media literacy education important in this context?
Are we currently valuing the right educational measures for success in a globalized world?

Highlights of Research Findings:

The increased demand for educated citizens throughout the world amplifies the need for new approaches to education, due to the proliferation of technologies and a highly complex system of economies and trade, capital markets, currencies, supply chains, information technology grids and more that call for competencies in sometimes short supply. Countries see expanding education as a way to improve individual health and wellbeing, and reduce poverty. High school graduation has now become the norm in most industrialized countries.

Today, to meet labor demands and to address the inter-connected competitive business environment, education is being globalized, as independent organizations such as the international Baccalaureate network has grown to include 160 countries. (International

Baccalaureate, 2023) Universities have expanded their offerings and now have satellite institutions located in a variety of countries.

Media literacy education offers a way to prepare youth to participate and compete in today's economy, especially with the demands for technological proficiency. Employers are seeking people who have professionalism and a work ethic, oral and written communication skills, teamwork and collaboration experience, and critical thinking/problem solving as important criteria for hiring. But today, standardized measures of such skills are typically not available; the PISA test and other global measures emphasize content knowledge over the process skills that media literacy provides: the ability to be a lifelong learner, able to access, analyze, evaluate, create and participate with content online and offline. Media literacy is education for the needs of today.

Media Literacy in Peru: Reflections and Comparisons on a 10-year Journey
By J.C. Mateus, T. Jolls, D. Chappell, S. Guzman
2022: Media Education, 13 92 0 55-63 doi: 10 36253/me 12365
See Appendix V
Research Methods: Practitioner and Comparative
Research Questions:
What are conditions for media literacy in Peru?
What are conditions for media literacy within three schools in Peru who were subjects in this study?
Can any reasonable conclusions be drawn from data provided through the two tests conducted 10 years apart at the three schools?

Highlights of Research Findings:

This paper compares the results of a media literacy test taken in 2009 and in 2019 at three private schools in Lima, Peru. To understand these results, background on the current state of media literacy in Peru itself, in the three schools in which the tests were conducted, and on the Center for Media Literacy's evidence-based frameworks and training program was provided in

this paper by J.C. Mateus, Professor, Dept. of Communication at the University of Lima, myself, and Daniel Chappel and Sara Tam, both founders of Medios Claros in Peru.

Although Peruvian schools often have access to technology, the technology is not accompanied by concurrent instruction in media literacy; the emphasis is on teaching technical skills rather than skills addressing critical thinking, even though Latin America has a strong tradition of educommunication amongst researchers and practitioners.

Due to teacher training and subsequent classroom instruction, the 2009 survey results of students showed promising results of the students' knowledge of the Core Concepts and Key Questions of media literacy. However, the 2019 test shows that, although students continue to be skeptical of media, students lost their knowledge of media literacy concepts, or never gained this knowledge, during the ten years time that elapsed between tests. During that time, teachers no longer had access to professional development, and neither the schools' or the national curriculum call for media literacy education, or making media literacy a priority. Also during this period, technology changed dramatically with the introduction of social media, and yet in spite of the increased importance of helping students navigate media in a healthy and productive way, media literacy is still not part of the education mainstream.

2022+: STAGE 4
SCALABLE

Overall Research Question: Is this methodology scalable on a system-wide basis, being infused throughout an education system or whole-of-government approach?

My research through the years has been fruitful and encouraging, whether we were testing the feasibility of media literacy pedagogy or formally evaluating CML's media literacy

frameworks and curriculum. The ultimate test of whether media literacy is adopted or not throughout education systems, however, rests on whether media literacy is integrated throughout an education system or health system or defense agency, as part of the fabric of everyday life.

Certainly, some countries have made more progress than others: Finland, for example, takes a whole-of-government approach to media literacy, and has a national media literacy strategy. (Ministry of Education and Culture, 2019). But this is exceptional and is based on Finland's long history, going back to the 1970's, on integrating media literacy into its systems. In the United States, the Institute of Museums and Library Sciences (IMLS) formed a Task Force in 2022 (IMLS, 2022) on information and media literacy, to explore how government might better address the need for media literacy. I have been invited to serve on this Task Force and to provide information sessions on media literacy for major U.S. agencies, such as U.S. AID, the U.S. State Dept., and NATO's U.S. Mission, where interest in media literacy is ongoing.

More global efforts are also encouraging: UNESCO has long sponsored an office for media and information literacy, and held conferences throughout the world. UNESCO has now organized a Global Media and Information Alliance (UNESCO, 2024) to help guide its efforts; I served on the initial Steering Committee for this new initiative from 2019-2022. Although these efforts are not part of my formal research, they help inform my knowledge and experience in keeping pace with the field, as do attending conferences and doing speaking engagements or participating in webinars and interacting with colleagues.

For the first time in many years, CML has received funding from the Centers for Disease Control, in conjunction with Klein-Buendel, Inc. to help conduct a revamp of its Beyond Blame: Challenging Violence in the Media program. Klein-Buendel (Klein Buendel, 2024), under the guidance of Dr. Barbara J. Walkosz, will conduct a full-scale evaluation of this effort in Chicago

Public Schools, to see whether this new online curriculum replicates the efficacy of the curriculum and frameworks from the 2013 previous longitudinal study. These efforts are now underway, and they will provide great insight into the possible scalability of CML's work on media violence and violence prevention.

In the meanwhile, with all of the research, pilot testing, evaluations etc. that have occurred during the past 25 years, the media literacy field itself is ready for scaling – now, we await a sizable and measurable way to do so.

To help introduce this idea and to give policymakers, researchers and practitioners inspiration for doing so, I undertook a Fulbright-NATO Security Studies Award (Fulbright-NATO, 2020) – one of the first two awarded – to focus on media literacy and why media literacy is essential to information security for all citizens. The result was a 75-page, comprehensive report, as follows:

Building Resiliency: Media Literacy as a Strategic Defense Strategy for the Transatlantic,
By Tessa Jolls
2022: Fulbright-NATO Security Studies Award, Report
See Appendix W
Research Methods: Structured Interviews, Surveys on Resources, Theoretical, Practitioner
Research Questions:
What is the current information/media ecosystem in NATO countries?
What is the current state of media literacy education in NATO countries?
How does media literacy reflect resiliency of citizens?
How does media literacy fit into defense strategies of NATO?
What recommendations might be considered in spreading and scaling media literacy programs?
What laws, regulations and reports currently govern or contribute to understanding of media literacy?
What media literacy programs currently exist in some NATO countries?
What conferences, journals, organizations currently serve those in the media literacy field?

Highlights of Research Findings:

This 2022 report was funded through a partnership between NATO and the Fulbright Commission to provide a Security Studies Award, which invites American academics and professionals to conduct a research or professional project that fosters awareness and understanding of the North Atlantic Treaty Organization (NATO). I fulfilled my assignment in Brussels in 2021 through my host university, UCLouvain, where I served as a Visiting Scholar. During that time, I conducted structured interviews with more than 63 policy makers, media executives and journalists, media literacy researchers and practitioners, and educators throughout NATO countries. In early 2022, I conducted a survey of 24 practitioners to identify major media literacy conferences, organizations, and programs. I then analyzed and synthesized this research along with my theoretical and practitioner knowledge to provide an overview of media literacy in NATO countries.

This report highlighted aspects of the current information ecosystem and the state of media literacy in NATO countries, including the following:

- Due to the proliferation of media, and technological innovations such as social media and AI, media is fraught with inaccuracies, disinformation and misinformation. At the same time, resources for better reporting are either not available or financially unsustainable, causing a serious mismatch between the supply of quality information and the demand for such information.
- While media literacy has grown, with some EU regulations calling for media literacy and reporting by countries on their media literacy activities, and the U.S. and Canada encouraging more media literacy, there is, little if any, systemic attempts to provide media literacy education. Finland, France and the U.K. are exceptions, although the U.K.'s current efforts are centered through its communications regulator, OfCom.

- From a strategic defense standpoint, NATO sees media literacy as part of its efforts to encourage resiliency on the part of all citizens, so that citizens are better able to adjust to changing times and other disruptions to daily life and security through risk management. With this in mind, citizens are the first line of defense for addressing infowars and propaganda. Media literacy applies to all forms of security in which NATO engages: food security, cyber security, housing security, border security, among others. Regardless of the context, media literacy is important to citizens' understanding of how information can be weaponized and misused, and how using media and information responsibly are essential in addressing the crises of the times, whether pandemics, financial meltdowns or natural disasters.
- Recommendations focus on systemic needs, so that media literacy may be spread, institutionalized and sustained. Chief among recommendations is that educational systems seriously and systemically address media literacy as a core of curriculum, so that citizens have the needed process skills to access, analyze, evaluate, create and participate with media in all its forms. Although media literacy philosophies and strategies are varied, media literacy must focus on empowerment of citizens, not censorship or restrictions on media use. This empowerment philosophy supports democratic values of freedom of expression and assembly.
- Commitment and sustained effort are needed to achieve the systemic change needed to provide media literacy for all citizens. Education systems must "retool" to rebalance their offerings, with more emphasis on teaching process skills rather than just transmitting content knowledge (which has been the traditional role of education).

- Based on survey findings, the report provided a comprehensive overview of regulations and laws, prominent programs, organizations, conferences, journals and other resources of service to the media literacy field in NATO countries.

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Appendix A

Tables

ResearchGate (Tessa Jolls Profile)

Research Interest Score:	445.7
Citations:	473
H-Index:	10

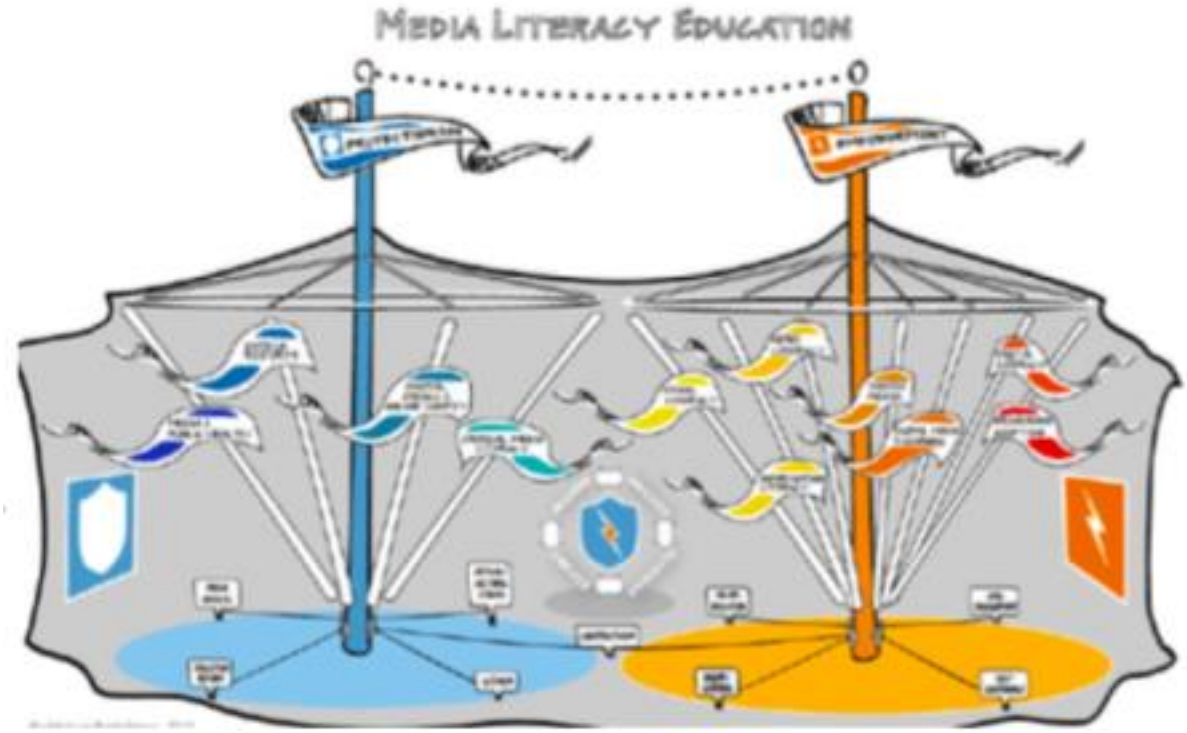
TABLE II.

Google Scholar Citations:	1679	
H-index	17	
I-10 index* number of articles	21	* No. of articles that have received at least 10 citations
Academia Citations:	1918	

Appendix B

Charts

Chart 1. Media Literacy Philosophies: Protectionism to Empowerment



"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 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 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."

CHART II.

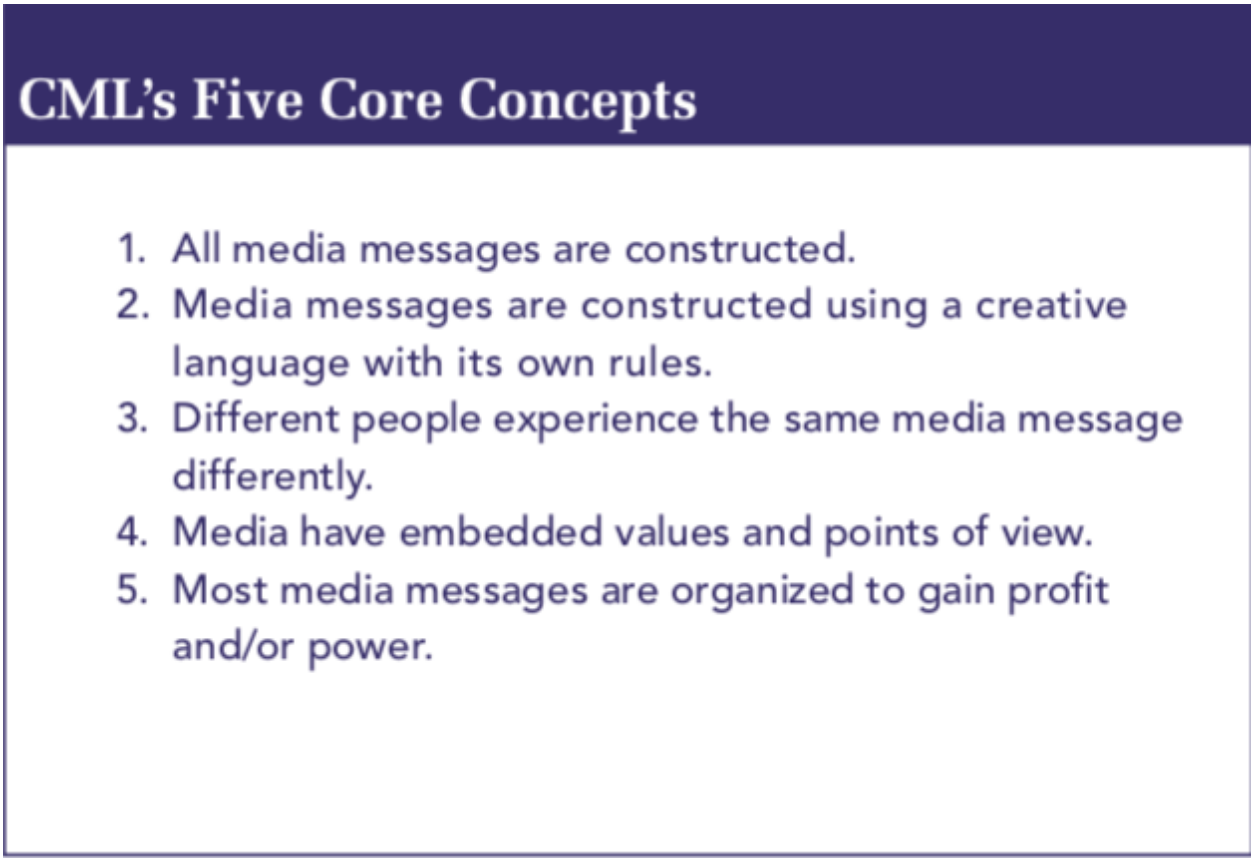


CHART III.

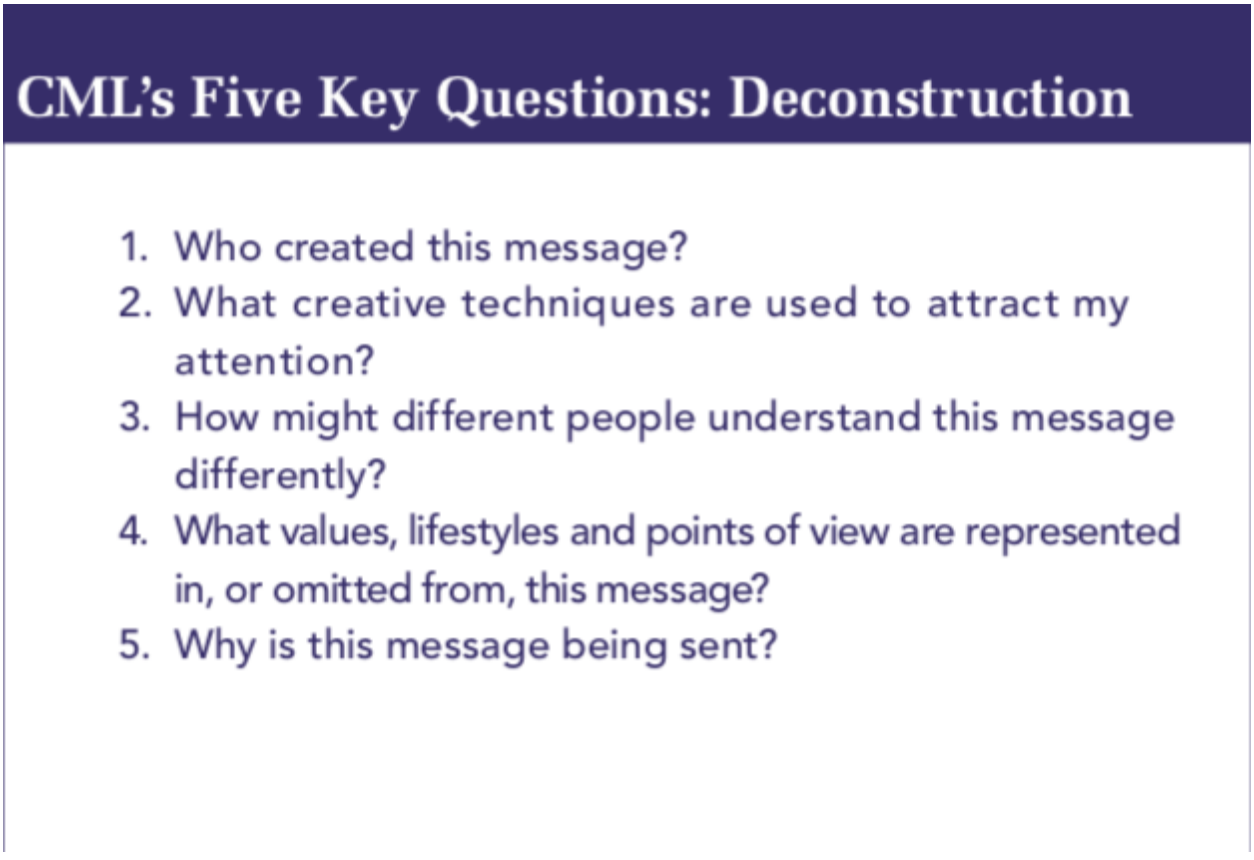

CML's Five Key Questions: Deconstruction
1. Who created this message?
2. What creative techniques are used to attract my attention?
3. How might different people understand this message differently?
4. What values, lifestyles and points of view are represented in, or omitted from, this message?
5. Why is this message being sent?

CHART IV.

Handout 2

CML's
Questions to Guide Young Children: Deconstruction (Consumer)

KQ #1: **What is this?**
How is this put together?

KQ #2: **What do I see or hear? Smell? Touch or taste?**
What do I like or dislike about this?

KQ #3: **What do I think and feel about this?**
What might other people think and feel about this?

KQ #4: **What does this tell me about how other people live and believe?**
Is anything or anyone left out?

KQ #5: **Is this trying to *tell* me something?**
Is this trying to *sell* me something?

	Core Concepts	Key Questions	Questions to Guide Children
1	All media messages are constructed.	Who created this message?	What is this? How is this put together?
2	Media messages are constructed using a creative language with its own rules.	What creative techniques are used to attract my attention?	What do I see or hear? Smell? Touch or taste? What do I like or dislike about this?
3	Different people experience the same media message differently.	How might different people understand this message differently?	What do I think and feel about this? What might other people think and feel about this?
4	Media have embedded values and points of view.	What values, lifestyles and points of view are represented in, or omitted from, this message?	What does this tell me about how other people live and believe? Is anything or anyone left out?
5	Most media messages are organized to gain profit and/or power.	Why is this message being sent?	Is this trying to *tell* me something? Is this trying to *sell* me something?

Chart V.
The Empowerment Spiral

CHART VI.

CML's FIVE CORE CONCEPTS AND KEY QUESTIONS
FRAMEWORK FOR CONSUMERS AND PRODUCERS

CML's Questions/TIPS (Q/TIPS)

#	Key Words and Image	Deconstruction: CML's 5 Key Questions (Consumers)	CML's 5 Core Concepts	Construction: CML's 5 Key Questions (Producer)
1	**Authorship**  "This is not an apple" *Magritte*	Who created this message?	All media messages are constructed.	What am I **authoring**?
2	**Format** 	What creative techniques are used to attract my attention?	Media messages are constructed using a creative language with its own rules.	Does my message reflect understanding in **format**, creativity and technology?
3	**Audience** 	How might different people understand this message differently?	Different people experience the same media message differently.	Is my message engaging and compelling for my target **audience**?
4	**Content** 	What values, lifestyles and points of view are represented in or omitted from this message?	Media have embedded values and points of view.	Have I clearly and consistently framed values, lifestyles and points of view in my **content**?
5	**Purpose** 	Why is this message being sent?	Most media messages are organized to gain profit and/or power.	Have I communicated my **purpose** effectively?

CHART VII.

CML's Questions to Guide Young Children: Construction (Producer)

KQ #1	What am I making? How do I put it together?
KQ #2	What does it look, sound, smell, feel or taste like? What do I like or dislike about this?
KQ #3	What do I think and feel about this? What might other people think and feel about this?
KQ #4	What am I sharing about how people live and believe? Have I left anything or anyone out?
KQ #5	What am I telling? What am I selling?

	Core Concepts	Key Questions	Questions to Guide Children: Construction
1	All media messages are constructed.	Who created this message?	• What am I making? • How do I put it together?
2	Media messages are constructed using a creative language with its own rules.	What creative techniques are used to attract my attention?	• What does it look, sound, smell, feel or taste like? • What do I like or dislike about this?
3	Different people experience the same media message differently.	How might different people understand this message differently?	• What do I think and feel about this? • What might other people think and feel about this?
4	Media have embedded values and points of view.	What values, lifestyles and points of view are represented in, or omitted from, this message?	• What am I sharing about how people live and believe? • Have I left anything or anyone out?
5	Most media messages are organized to gain profit and/or power.	Why is this message being sent?	• What am I telling? • What am I selling?

Appendix C

Papers

Media Literacy: A National Priority for a Changing World**,** p.21

Jolls, T., and Thoman, E. 2004. Media Literacy—A National Priority for a Changing World. *American Behavioral Scientist. 48 (1*). 18-29.

Appendix D

A Road to Follow, p.21

Grande, D. and Jolls, T., 2005. A Road to Follow: Methods, Structure and Tools for Replication. *Arts Education Policy Review.* 107 (1), 25-30.

A Road to Follow: Methods, Structure and Tools for Replication

PRACTICE: IMPLEMENTATION STEPS

By Tessa Jolls and Denise Grande

1. **New Guiding Principle in Action**: Incorporating Media Literacy Concepts and Key Questions, Visual and Performing Arts Standards (VAPA), and English Language Development (ELD) Standards in an elementary school classroom using Open Court Reading Program
2. **Defining the Approach and Methodology**
3. **Providing a Replicable Model with Specific, Readily-Available Tools**
4. **Supporting Sustainability within the School**
5. **Case Study Detailing Implementation Approach**
6. **Integrated Activities using the Five Key Questions, VAPA and ELD Standards and Lesson Plan Samples**

When Project SMARTArt began, the partners were grateful that the type of funding received was through a federal "demonstration grant," because this project represented a beginning in which there were far more questions than answers on how to combine media literacy and the arts in an elementary school classroom.

New Guiding Principle in Action

By the end of Project SmartArt, teachers demonstrated that combining media literacy and the arts, while meeting CA State Education standards for Language Arts (LA) and English Language Development (ELD), is very possible and fairly easy, with the right training, practice and structure. This notion was validated when, within a one-hour period, teaching teams were able to create engaging, integrated activities for classroom use, while connecting the **Five Key Questions of Media Literacy** with state standards for ELD, LA, and Visual and Performing Arts (VAPA). These teaching teams were comprised of Project SMARTArt teachers and teaching artists, and divided into two groups (Grades K-2 teachers and Grades 3-5 teachers), so that the activities were relevant and could be used by the team participants.

This type of flexibility in making curricular connections is essential, since every school district in every state uses different combinations of core curricular materials. CML's Five Key Questions of media literacy can apply to any curricular content, and the arts are used in every form of self-expression, in any project students create to demonstrate their mastery of core subject areas. Through state education standards and through an understanding of how to apply media literacy and the arts into core curricular areas, teachers now have powerful and more flexible ways of connecting their classrooms to the real world, and to providing students with the critical thinking and media construction skills that they need to represent themselves effectively.

Approach / Methods

To learn from the Project SMARTArt experience, it is just as important to understand how the project was approached as what the project's goals, structure and tools consisted of. Here are some important points about the approach used:

A clearly articulated Philosophy of media literacy was essential, so that the aims of the project were clear. The **CML Philosophy of Education** emphasizes empowerment rather than censorship or media bashing.

The project focused on teaching information process skills, so that individuals learn a systematic methodology of analysis that can be applied to any content. With such an analytic method, individuals are free to draw their own conclusions and make their own choices. Project SMARTArt used the theory articulated in **CML's MediaLit Kit™**.

Each arts discipline (dance, music, theatre and visual arts) was represented Project SmartArt. Teaching artists taught core elements of each discipline, making connections to media and media literacy.

Before teachers can teach subjects like media literacy and the arts, they must first develop knowledge, understanding and skills. Professional development and consistent practice are necessary for teachers to be confident and successful.

Students were encouraged to learn by doing, taking a constructivist approach. Learning to apply the Five Key Questions takes practice over time, much like learning to tie shoes. Through repetition and refinement, the process becomes automatic.

Project SMARTArt Partners were equal learners and had a respectful relationship. Teacher participation was voluntary. Project SMARTArt only appealed to committed teachers willing to experiment.

Meeting state education standards was key, as well as connecting to LAUSD's scripted reading program, Open Court, and CML's Five Key Questions of media literacy. Project SMARTArt concentrated on Visual and Performing Arts Standards (VAPA), Language Arts (LA) and English Language Development Standards (ELD).

In the national McRel K-12 Language Arts Standards, the four traditional strands are expanded from reading, writing, speaking and listening to also include viewing and media.

Project SMARTArt did not rely on technology to be successful. Some classrooms were not equipped with computers or had little access to video cassette players/recorders. The activities were scaleable in terms of technology.

Student learning was demonstrated through an ongoing production of artifacts to demonstrate learning; Project SMARTArt was not ultimately geared toward one production project.

Structure of Replicable Model for Implementation

The elements that made up Project SmartArt's structure are:

Professional Development. At the onset of each year, Project SMARTArt provided teachers and teaching artists with training in media literacy. The training focused on CML's Five Core Concepts and Five Key Questions of Media Literacy, providing a good theoretical grounding and practice in applying this framework for analysis/deconstruction to teaching. In its final year, Project SMARTArt also provided teachers professional development in dance, music, theatre and visual arts as well as training on using The BOX!, a tool developed by Animaction, Inc. for teachers to help students produce animation shorts.

Media Literacy Peer Coaching. Teachers had four one-hour meetings with a media literacy teaching coach. These sessions were sequentially designed to: a) answer questions and, plan b) observe the coach in a demonstration lesson, c) allow the coach to observe a lesson by the teacher, and d) critique and plan.

Artists in Residence. Teaching artists representing each of the four arts disciplines (dance, theatre, music and visual arts) worked directly with the students four to six times,

providing basic knowledge of each arts discipline and incorporating the media literacy Five Key Questions into their work.

Artist-Teacher Planning Meetings. Prior to the teaching artists coming into a classroom, the artist and classroom teacher had an opportunity to meet and plan, so that the artist's work was connected to the teacher's ongoing work with the children and tied into the curriculum.

Animation. Students produced 30-second animation shorts as a culminating project, weaving elements of all four arts disciplines into the construction of a replicable media artifact. These animation shorts were created either through a one-day workshop provided by AnimAction, Inc., or through the use of The BOX!, which provides teachers with an in-class animation production studio.

Assessment. Although incorporating media literacy and the arts into assessment was not part of this project, student-based assessment could be built into future projects due to the on-going creation of artifacts.

Monthly Teacher Meetings. Regularly scheduled meetings supported program implementation by providing participants an opportunity to exchange ideas and information.

Quarterly partner meetings. Consistent and frequent coordination between the partners (Leo Politi School, Center for Media Literacy, Music Center Education Division and AnimAction, Inc.) was essential to provide smooth operation of Project SmartArt.

Parent Outreach. Parent Outreach involved two different approaches. the first program for parents featured a special showing of student animations produced through AnimAction workshops; the second program offered parents the opportunity to participate in a Family Album Writing Workshop, where they wrote their personal history for the benefit of their families, and learned about media literacy.

Annual Evaluation Meeting. Teachers, teaching artists and project partners met each year to critique the project, discuss lessons learned, and plan for the upcoming school year.

Tools

To provide a replicable program, specific, consistent and readily available tools are necessary. With these tools, no "cookbook" type of textbook is needed, because (over time) teachers internalize the tools through professional development and everyday practice. Teachers are able

to make the linkages necessary to all curricular subject areas; their lesson plans are informed by this new understanding. This provides a creative way to meet standards while incorporating contemporary media content, while teaching information-processing skills. If teachers consistently provide opportunities for students to apply the Five Key Questions of media literacy, then students also internalize this methodology for thinking critically about media content (even textbooks!).

Project SMARTArt was informed by the following set of Tools, which provided guidance for the project organizers and teachers:

Clear Statement of Philosophy. Provides ideological guide and unity, so that all participants know at the outset what the "agenda" is for the project. Project SMARTArt used **CML's Statement of Philosophy of Education**.

Core Concepts of Media Literacy.**The Core Concepts of Media Literacy have been developed through the years by academics internationally.** Without the use of these Concepts, it is impossible to distinguish media literacy from any other critical thinking program. Project SMARTArt was based on **CML's Five Core Concepts of Media Literacy**.

Key Questions of Media Literacy. Although Core Concepts must be understood by teachers as the underpinning for media literacy, Key Questions provide students with a consistent entry point into a process of inquiry and analysis. Key Questions are engaging for children and are open-ended, stimulating further exploration and discussion. Project SMARTArt utilized **CML's Five Key Questions of Media Literacy and CML's Key Questions to Guide Young Children.**

Standards. California State Education Standards for Visual and Performing Arts (VAPA), English Language Development (ELD) and Language Arts (LA) Standards. All academic content must meet state education standards. Project SMARTArt focused on these content standards as an entry point for integrating media literacy and the arts into other curricular areas. Also, since Los Angeles Unified School District (LAUSD) uses a scripted language arts program (Open Court Reading) to teach reading to elementary school children, Project SMARTArt teachers tied directly into this curriculum.

The BOX!. With The BOX! (developed by AnimAction, Inc.,) and a personal computer any teacher can turn a classroom into a professional animation studio, giving students powerful tools for self-expression that can be duplicated and disseminated through digital

media. As a culminating project, animation provided an opportunity for students to apply their learning in all arts disciplines: storytelling (theatre), drawing (visual arts), movement (dance), and scoring (music).

Artifacts for Student Assessment. Written essays, PowerPoint presentations, visual arts projects, choreography, plays and musical compositions are all examples of artifacts that demonstrate the students' mastery of content and media construction skills. Students can be taught to develop rubrics for assessment, so that they learn to set criteria for judging their production pieces.

(Note: Project SMARTArt did not build a model for student assessment. However, learning can be evaluated through portfolios and performance-based assessment of student produced artifacts.)

Supporting Sustainability

Internalizing the Five Key Questions of media literacy through consistent application and practice over time changes the way teachers teach and students learn. As Alvaro Asturias, a visual arts educator, commented after taking part in Project SmartArt, "I'll never see the world the same way again, and never teach the same way again." Other teachers who participated in Project SMARTArt also shared how they have changed their teaching approach and what they are doing to provide their students with media literacy and arts training today.

The work of replicating this program, and spreading it within a K-12 context, has just begun. Much remains to be done and learned in implementing media literacy programs. To help teachers and administrators who do not have access to a program such as Project SmartArt, the Center for Media Literacy has focused on providing free information in its CML MediaLit Kit™ on Theory, Practice and Implementation of media literacy programs:

Theory: **Literacy for the 21st Century, An Overview and Orientation Guide to Media Literacy Education**. This 35-page booklet provides a plain language introduction to the basic elements of media education. It explains the Inquiry Process, the Five Core Concepts and Five Key Questions, plus How to Conduct Close Analysis of a Media Text.

Practice: Five Key Questions that Can Change the World, Classroom Activities for Media Literacy. This booklet provides 25 cornerstone lesson plans to help you introduce students to the Five Key Questions of Media Literacy and to master them through practice. Useful for all grade levels and across the curriculum: language arts, social studies, health, math and the arts.

Implementation: **Best Practices: Project SmartArt, A Case Study in Elementary School Media Literacy and Arts Education.** This website subsection provides a complete overview of findings and implementation work done through a three-year federal demonstration grant on discovering innovative strategies for effective teaching and student learning, connecting media literacy and the arts to language arts and English language development within **Los Angeles Unified School District (LAUSD)**.

Appendix E

Media Literacy Education: Lessons from the Center for Media Literacy , p.22

> Jolls, T., and Thoman, E. 2005. Media Literacy Education: Lessons from the Center for Media Literacy. *Yearbook of the National Society for the Study of Education.* 104 (1), 180-205

Appendix F

Global-Local: Media Literacy in the Global Village**,** p.26

> Jolls, T., Sunday, M., and Walkosz, B., 2008. *Global-Local: Media Literacy in the Global Village. In:*International Media Literacy Research Forum, London 14-16 May 2008. London. Available from: https://www.medialit.org/sites/default/files/33_globallocal.pdf

Global/Local: Media Literacy for the Global Village By Barbara J. Walkosz, Tessa Jolls and Mary Ann Sund Paper Submitted for International Media Literacy Research Forum Inaugural Meeting Ofcom London 14-16 May 2008 Published by OfCom with permission. © 2008, Barbara J. Walkosz, Tessa Jolls and Mary Ann Sund; incorporating Q/TIPS framework, © 2002-2007 Center for Media Literacy, www.medialit.org 2

Global/Local: Media Literacy for the Global Village H. Marshall McLuhan believed that the "linking of electronic information would create an interconnected global village" by collapsing communication space and time barriers thus enabling people to interact and live on a global scale (Barnes, 2001; McLuhan, 1962; McLuhan & Powers, 1989). Today the global village acts as a metaphor for the complex interconnected electronic world that McLuhan predicted would emerge and provides a framework for helping us analyze our relationship with the media today and most importantly prepare for the future (Gozzi, 1996; McLuhan & Powers, 1989). The globalization of the media, characterized by the internationalization of television programming, worldwide internet access, and cell phone technology, has indeed connected the world in an unprecedented manner. Because the media have often been identified as a "superpeer" replacing traditional socializing agents (Strasburger & Kaszdin, 1995) attention must be given to the ramifications, both positive and negative, of a hyper-mediated world on youth today. This paper addresses the evolution of the global village and its profound impact on youth (worldwide) through a discussion of how global and local interests intersect in a media-saturated environment. We offer media literacy education as a means through which young global citizens can navigate this "global village" in order to become fully engaged – yet autonomous -- members of both their local and global communities. The Global Village: Media Use Today McLuhan might be amused, vindicated, or reified knowing that the global village is open 24/7. Youth currently spend an average of 6.5 -8 hours per day interacting with a wide range of media including television, magazines, videos games, books, radio, the Internet, and cell phones (Roberts, Foehr, & Rideout, 2005; Livingstone & Bovill, 2001; Lenhart et al., 2007). In fact, younger generations are often described as "screenagers" instead of "teenagers" because they are always looking at or interacting with some type of screen often simultaneously (Rushkoff, 2006). For example, in a typical week, at least 81% of teens report that they will engage in some form of media multi-tasking, using more than one form of media at one time such as working on the computer and listening to music or talking on the telephone (Foehr, 2006). A number of recent reports provide additional supportive data regarding this pervasive media use. While television

remains the most often used media, 3 plus hours per day, of Generation M (Roberts, Foehr, & Rideout, 2005), other media are prevalent when the television is off. (Note: the lowest rates of multi-tasking occur during television viewing). Of these, digital media are playing an increasingly predominant role: • 93% of teens have been online (Roberts, Foehr, & Rideout, 2005) • 63 % of teens have a cell phone (Lenhart, et al., 2007) • 62% of Millenials (12-14) are using their cell phones for entertainment (Deloitte & Touche, 2007) • Social Media (teens) (Lenhart, et al., 2007) 3 o 55% belong to a social networking site and have posted profiles on sites like My Space and Facebook o 59% of all teens or 64% of teens who are online report a wide range of content creating activities o 35 % of all online teen girls and 20% of online teen boy have a blog o 57% of teens watch "You Tube Videos" o Teens also actively engage in downloading media: ("Kids age 12 to 14", January, 2008) Video: 7.1 times per month Music videos: 5.7 times per month Music: 4.2 times per month Games: 3.1 times per month Ring tones/ring tunes:2.8 times per month Jenkins (2006) writes that the development of social media has also contributed to the development of a "participatory culture" that extends beyond the posting or downloading of media. For example, teens reported not only posting media but then also discuss what they have posted – almost a meta-communication; 47% of online teens have posted photos where others can see them, and 89% of those teens who post photos say that people comment on the images at least "some of the time" (Lenhart et al., 2007). In summary, youth are interacting with some form of media almost constantly. Smaller screens, such as cell phone and MP3 players, continue to grow in popularity as do social media, such as social networking sites and content creation activities. It is important to contextualize how this media use occurs in the global village – a 24/7 multi-media global world. Prior to the emergence of this global village, the local village provided an environment in which everyone knew everyone else over a period of time and under many circumstances. Parents and other known adults provided a daily filter through which youth learned about differing values, lifestyles and points of view. Today through the media, local is now global. The village has become so large that filters are no longer provided through human interaction, but through technology itself, with VChips, parental controls and other software solutions. But these digital filters are still not capable of delivering the discernment that human judgment renders, and the sheer volume of media interaction in the global village precludes much discussion with children about individual messages. Yet parents, educators and concerned adults continue to see the need for providing a way to help the young interpret the messages they receive and to understand their responsibility in producing messages through which they interact with the global village. And all the while, through this global interconnectedness, the global becomes local and the local becomes global. The Global Village: Where Global is Local and Local is Global Globalization is a phenomenon involving the integration of economies, cultures, governmental policies, and political movements around the world. The concept of globalization, as applied to the media, has resulted in McLuhan's prediction of a connected global village. However, today's village is not one in which all members are homogenously connected but rather it is a complicated and interdependent environment 4 that has enormous political, social, and economic ramifications worldwide (Hobbs, 2007; Kraidy, 1992; McChesney, 2001; Moran 2006). The global media environment allows audiences to share "the same television programs, desire the same products, and even see each others' lives portrayed through the media while living apart geographically" (Moran, 2006, p. 288). Commercial global media conglomerates provide common access to television programming, music, film, and websites (McChesney, 2001). It has been said that youth from different countries may have more in common with each other than they do with their own

families because of these common media platforms. Indeed, it was believed the exportation of primarily U.S. programming would lead to cultural imperialism and result in cultural dominance, a homogenous audience, and a loss of local cultural values (Schiller, 1993; McChesney, 2001). However, rather than a "direct effects" model, a more complex and interdependent view of global media has emerged – it is one that examines the global media through a framework of "hybridity" or "glocalization" (Kraidy, 1992; Kraidy, 1996; McChesney, 2001). Glocalization has been defined as "the interpenetraion of the global and the local, resulting in unique outcomes in geographic areas" (Ritzer, 2003); "a process whereby global corporations tailor products and marketing to particular local circumstances to meet variations in consumer demand (Maynard, 2003, p. 6); or a means to "analyze the ways in which social actors construct meanings, identities and institutional forms within the sociological context of globalization" (Guilanotti and Robertson, 2006). In the context of global media, glocalization offers a lens through which we can understand how "audience members negotiate meaning (of mediated texts) through their own specific cultural lens that is absolutely influenced by both local and global forces" (Moran, p. 288). Kraidy (1992) writes that such interpretations recognize the relationship of both the "homogenizing effect of global media as well as the role of local interpretation in the communication processes" (p. 469). These intersections are particularly critical in the context of media directed to youth as media has been identified as a primary socializing agent and influence on identity formation. Media convey values, lifestyles and points of view which may or may not be consonant with local values, lifestyles or points of view, and censorship and technology filters cannot provide the input needed to help youth and adults alike to determine which messages to value and circulate. Education and empowerment for audiences are now being seen as more important than ever to gain understanding and agency. Thus, the emergence and relevance of an educational approach -- media literacy -- is now underpinned by a global media environment that blends global and local perspectives. Glocalization (the intersection of global and local) of media has conceptualized in a number of ways; in this essay we will focus on the following: (1) how local culture influences the interpretation of global media; (2) how global programming has been adapted to fit local cultures; and (3) how the local can become global Local Interprets Global: First, glocalization can be thought of as how local cultures influence the interpretation of global media. The exportation of successful American programming to youth and adults dominates the global mediascape across cable and satellite television channels and in movie theaters. For example, Viacom's "Nickelodeon channel has expanded to 100 countries worldwide and provides global internet access to nick.com, nickjr.com, nick-at-night.com and tvland.com" (Moran, 5 2006, p. 289). In a similar case, Disney has now has over 20 international sites in Asia, Latin America, and Europe. In most cases, exported programs do not really contain culturally "diverse messages but rather are often only dubbed in the local language offering the same stories, product tie-ins and ideologies to a global audience" (Moran, 2006). Thus, local cultures are left to determine the meanings of this imported media. Current research suggests that perhaps local cultures interpret these media texts in the light of their own cultural values and norms rather than completely adopting the exported messages. For example, a case study in the Philippines concluded that a wildly popular imported telenovela (soap opera) does not change or alter social views but rather reinforces commonly-held Philippine class ideologies for viewers (Santos, 2006). Similarly, study in consumer research disputes the myth of a homogenous global youth culture and define the youth market as one that interprets and reworks global cultural practices and meaning to fit into their local contexts" (Kjeldgaard & Askegaard, 2006). Thus the location of consumption of the global culture influenced identity formation; for example, in

Denmark, identity construction was articulated more at the individual level while in Greenland it was articulated at the collective level. Kjeldgaard and Askegaard note: “in the Danish context, this manifests itself in handling the multitude of cultural opportunities handed down by the parent culture; in the Greenland context, it means negotiating a positive identity away from the deprivation and postcolonial celebration of ethnicity, which were the projects of the parent culture there” (p. 245). In this case, the global youth culture was found to be mediated by the environment in which the youth found themselves. Global Produces Local. The second conceptualization of the global/local relationship is one in which global programs actually localize their content to ensure cultural appropriateness. For example, Sesame Street, a global product, enters into local partnerships to co-produce programming that is culturally significant (see Moran, 2006 for a detailed description of this process). Such collaborations provide audiences with an “alternative to mass-produced entertainment fare” (p. 299). While such collaborations are rare, they do provide a model for the true integration of both local and global. In programming that is more representative perhaps of hybridity, MTV Arabia and MTV China are producing programs that adapt the MTV format to local cultures. Using both imported media and local artists, the MTV programs represent how a primarily western media format is adapting to cultural and political norms in local programming (Fung, 2006; Chudy, 2007). Fung (2006) writes that in China, “MTV maximizes its ability to maneuver within the local culture” with an emphasis on Western music frameworks. On MTV Arabia, in addition to imported media, Partick Samaha the general manager of MTV Arabia stated that “we've created programs that are an Arabic version of MTV programs ...it is the first time that programs like this will really reflect the youth culture here, but we've been mindful all the way about respecting the local culture." Local Becomes Global. Third, the mechanisms are in place where now the local can become global. For example, “global media corporations such a Sony have been producing films with local companies in China, France, and India” thus offering these countries global distribution mechanisms. In the same manner, global distribution and 6 production partnerships are also being established in countries where devotion to local music is passionate, such as Brazil (McChesney, 2001). And such distribution networks have created a stream of exports from around the globe to American markets including the films of Bollywood and the burgeoning Asian film industry as well as the popular Japanese Anime’ to name a few. The current research on the impact of the Internet suggests another mediated location where the local becomes global and the global becomes local. Jenkins (2006) points out that the new media has been identified as the harbinger of digital democracy and embraces the emergence of online communities that reflect “changes that cut across culture and commerce, technology and social organization.” In one study of the Chinese web sites of the 100 top global brands, Maynard and Tian (2004) identified a glocal strategy was being employed in cyberspace. In this case, 58 of the 100 top brands offered a Chinese website that displayed high attention to localization positioning the brand as local but with a global reach. The interweaving of global and local can be viewed as one in which we must pay attention to both the source of the media and to the audience, and the interaction between the two, affecting both. One reason why this is important is because of the obsequious nature of the media today. This pervasiveness of the media has a certain set of implications, as we discuss in the next section. Influence of the Media in Identify Formation Our identity is strongly influenced by the media (Buckingham, 2008); today youth are redefining their identity via media globalization; at times we identify with what is global and other times we take what is global and make it local This is of particular concern as we know that media is instrumental in identity construction by youth. Identified as a superpeer (Strasburger & Kaszdin,

1995), the media have now joined, and in some cases replaced parents, families, peers, schools, and religious organizations as a primary socializing agent in American society (Gerbner, et al., 1990). Children's exposure to mediated messages can result in both health benefits and risks across a wide range of behaviors including nutritional habits (Crooks, 2000; Neumark-Sztainer, et al. 1999), violence (Paik & Comstock, 1994) , sexual activity (Signorelli, 1993), and tobacco use (Pierce et al., 1998; Schooler et al., 1996). And media provides a world where youth who live next door to each other often prefer to communicate through Facebook rather than face-to-face. Everyone and everything are accessible yet distant and once-removed. In this glocalized world, media are the parents and teachers, unfettered by local custom or local control, and influenced by values, lifestyles and points of view from throughout the globe. Rather than learning to navigate their relationship with only their local village and its customs, children must learn to navigate their relationship with this global village from an early age: an imperative which can't be denied. Yet children are still children. They continue to need guidance and they continue to need to learn the skills to become critically autonomous and now, to be capable of navigating these global waters. In this global village, where media is often called "the other parent," children need to be taught an age-old process in a new way. They need to learn in a conscious and systematic way what was once a "given" in a face-to-face world: a set of skills for questioning their experiences, and a quick process for becoming more discerning and more independent in making their own decisions about who and what 7 they interact with, in accordance with their own values. Where parents and teachers aren't present – in the media world – children must acquire and use an internalized process through which they can parent themselves and through which they can negotiate their relationship with media on a lifelong basis. We offer media literacy as this discernment process which becomes internalized and provides a means for youth to move more safely and confidently through the global village. Media Literacy for the Global Village Like all great movements, media literacy began at the grassroots as parents, educators and concerned citizens began to see that if media was to play a pivotal role as childrens' teacher, that children would still need to have a way of filtering through the messages so that wise choices, in accordance with acceptable community norms, are possible. Formal education, not just censorship or control, was seen as an avenue through which to help young people understand their choices and to help question the values represented through the media. Media literacy has its roots in the 1960's through the 1980's through the work of pioneers like McLuhan, Sister Bede Sullivan and Fr. John Culkin, among others. Barry Duncan, an early media literacy advocate from Canada, reports that early conferences in Canada, beginning in 1990 at the University of Wales, Ontario, started attracting a second wave of people interesting in addressing concerns about media. Today, the field has continued to grow to the point where it is represented in as global a way as the media itself. Gradually, perceptions about what media literacy is – and what it isn't – have emerged as meeting the demand for educating citizens capable of navigating the global village has increased. Understanding that demand is a starting place for understanding media literacy. In today's global society, citizens need the skills to access, analyze, evaluate, create and interact with media information 24/7. The goal is not so much to be able to store information, but to process information efficiently and effectively, so that we understand and are able to conduct our lifelong relationship with media by being: • Efficient information managers. We need to access information quickly and be able to store information effectively so that we can access it again. • Wise consumers. We need to understand the messages that come our way and make wise individual decisions, using the information We have. • Responsible producers. Today, everyone can be a producer, and in producing, it is

important for all of us to consider the audience and the society we live in, to provide an enlightened approach to media production. • Active participants. In using media, in deciding to buy products or to cast or ballot, we are sending messages and voting and participating in society. We not only buy a product or a service, but we buy an organization's advertising and communications, and we buy the worldview that the organization's communication represents. Our votes count, and so does our own expression. 8 Where would a company or a university or a nonprofit or an entertainer or an executive or a politician be without us, the audience? This vision illustrates what a "media literate" citizen might be like. But though this vision is admirable and universal, it is not enough. There must be a pathway to creating such media literate citizens, and that pathway must be clear and paved. In the past 30 years, the field of media literacy education has emerged to organize and promote the importance of teaching this expanded notion of what an educated citizen is. At first, media literacy was seen as teaching children about media – how advertising works or how to analyze the nightly news telecast. But in her landmark book "Literacy in a Digital World: Teaching and Learning in the Age of Information," Kathleen Tyner (1998) posited that media education is more about education than it is about media. For Tyner, media education "expands literacy to include reading and writing through the use of new and merging communication tools. It is learning that demands the critical, independent and creative use of information" (p. 196). Today, the field has matured to a greater understanding of its potential, not just as a new kind of literacy but also as the engine for transforming the very nature of learning in a global mutltimedia environment (Thoman and Jolls, 2004). As noted by the Partnership for 21st Century Skills (2003), "Students will spend all their adult lives in a multi-tasking, multi-faceted, technology-driven, diverse, vibrant world – and they must arrive equipped to do so" (p. 4). Media literacy, grounded as it is in inquiry-based, process-oriented pedagogy, offers not a new subject to teach but rather a new way to teach and even more important, a new way to learn. Learning happens anywhere and everywhere, 24/7. Increasingly it occurs most powerfully through the convergence of media and technology. Video games, for example, are not just mindless entertainment. According to literary scholar, James Paul Gee (2003), they are actually quite intricate learning experiences that have a great deal to teach us about how learning and literacy are changing the modern world. In What Video Games Have to Teach Us About Learning and Literacy, Gee identified 36 learning principles built into good games and predicted that video games are the forerunners of powerful instructional tools in the future. It is this convergence between media and education, between entertainment and learning, that is driving major change in the sources and the content of what we learn and how we learn in today's world. Media literacy is not needed in the future, it is needed now, urgently, to assure that our citizens are equipped to make the decisions and contributions a global economy and global culture demand of them. A recent study by the American Diploma Project (2004), an organization composed of representatives from Achieve Inc., the Education Trust and the Thomas B. Fordham Foundation, echoes the need for closing the gap between the classroom and "real life." Their research indicates that high school students are poorly prepared for college and the job market, and that employers and postsecondary institutions "all but ignore the diploma, knowing that it often serves as little more than a certificate of attendance" because "what it takes to earn one is disconnected from what it takes for graduates to compete successfully beyond high school" (American Diploma Project, 2004, p. 1). 9 The American Diploma Project (2004) called for rigorous national standards to better reflect the challenges faced by high school graduates. This is good news for advocates of media education. National standards in all countries would ensure that every child has access to this valuable instruction.

Furthermore, it would lead to a consistent, measurable definition of media literacy and to a set of competencies to guide curriculum development. Certainly the need for a common vocabulary and common understanding of what media literacy is, and how to deliver it, is useful in going forward and in avoiding censoring, boycotting or blaming the media. Instead, media literacy may be seen to advocate a philosophy of empowerment through education, calling for the ability to access, analyze, evaluate and create media in a variety of forms, thereby enabling citizens world-wide to participate in life in a global media world Although media literacy is ideally suited for an educational context, it is clearly not limited to children or to the K-12 classroom. Adults, too, need the opportunity to gain the skills they now find missing in their educational background. Health and religious communities as well as the business world can all make valuable contributions to educating adults. Even the technology, entertainment and media industries have a valuable role to play. Media are powerful teachers. Their power can be a key component of a successful mandate to help all citizens become fluent in 21st century skills. As noted in the Partnership for 21st Century Skills (2003) report, "As the world grows increasingly complex, success and prosperity will be linked to people's ability to think, act, adapt and communicate creatively" (p. 10). If media literacy is to emerge as a global force, with a standard vocabulary and common understanding, what are some characteristics of media literacy that provide this commonality? First, media literacy helps individuals explore their deep and enduring relationship with media. In 1989, Eddie Dick, Media Education Officer for the Scottish Film Council, developed the Media Triangle, which illustrated the relationship between Text, Production and Audience. Understanding this relationship is fundamental to understanding the power dynamic between these three elements involved in media interactions. In looking at a common brand identity or logo, for example, it becomes evident that we as an audience have a shared understanding of the text – the logo – that was produced by a particular organization. We did not necessarily "ask" for this understanding, but because of repeated exposure to the brand, we have internalized or taken in an understanding of what the brand means and how we may have interacted with it in the past, perhaps through product purchases. The producer has established a relationship with us, the audience. This relationship was established through the text, which is the brand identity. Yet we as the audience exert the ultimate power over the relationship when we consciously decide to engage or not. Second, the focus of media literacy is on process rather than content. The goal of media literacy is not to memorize facts about media or even be able to make a video or design a website. Rather, the goal is to explore questions that arise when one engages critically with a mediated message – print or digital. It involves posing problems that exercise higher order thinking skills – learning how to identify key concepts, make 10 connections between multiple ideas, ask pertinent questions, identify fallacies, and formulate a response. It is these skills, more than 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 and 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 by-product of mastering content areas such as literature, history, the sciences and mathematics. Learning and process skills are seldom taught explicitly. But if we are to graduate students who can be in charge of their own continual learning in a media culture, we must "incorporate learning skills into classrooms deliberately, strategically and broadly" (Partnership for 21st Century Skills, 2003, p. 4). As writer Alvin Toffler (as cited in Partnership for 21st Century Skills, 2003) pointed out, "The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn and relearn" (p. 4). By its very

nature, media literacy education teaches and reinforces 21st century learning skills. Third, media literacy education expands the concept of text to include not just written texts but any message form – verbal, aural, or visual (or all three together!) – that are used to create and then pass ideas back and forth between human beings. Full understanding of such a text involves not just deconstruction activities – that is, taking apart a message that already exists – but also construction activities – learning to write their opinions an ideas with the wide range of multimedia tools now available to young people growing up in a digital world. Fourth, media literacy is characterized by the principle of inquiry – that is, learning to ask important questions about whatever you see, watch or read: • Is this new scientific study on diet and weight valid? • What are the implications behind the idea of ranking my friends on a social networking site? • What does it mean when the news reporter talks about a "photo-op?" With a goal of promoting healthy skepticism rather than cynicism, the challenge for the teacher (or parent) is not to provide answers but to stimulate more questions – to guide, coach, prod and challenge the learner to discover how to go about finding an answer. "I don't know: How could we find out?" is the media literacy mantra. How could we find out? Is a question, of course, that opens up many more questions. And how we even approach the question determines what answers we might find. Inquiry is also a messy process because one question leads to another and yet another. To keep inquiry on course and to provide a way to be able to master a process of inquiry, curriculum specialists look for a comprehensive framework to provide guidance and overall direction. Core concepts of media literacy, rooted in media studies by academics from throughout the world, have evolved as a way to express understanding of common media characteristics. Various adaptions of core concepts have been developed, including eight core concepts used in Canada as a way of structuring curriculum. The Center for Media Literacy (CML), one of the pioneering media literacy organizations in the United States (U.S.), provided a framework in 2002 through the release of its original CML MediaLit Kit™. Designed to provide a framework for 11 learning and teaching in a media age, the CML MediaLit Kit features Five Core Concepts for Media Literacy, and provided Five Key Questions for deconstruction of media messages. Recognizing that skills of critical analysis are just as important during media production, in 2007 CML also developed Five Key Questions for construction of media messages. This then completed the CML framework for analysis, called Questions/TIPS (Q/TIPS) by addressing questions from the viewpoint of both consumers and producers. Based on the work of media scholars and literacy educators in the U.S. and from around the world, each of the Five Key Questions flows from a corresponding Core Concept and provides an entry point to explore the five fundamental aspects of any message in any medium: authorship, format, audience, content and purpose. Starting with simple versions of the questions for young children and moving on to more sophisticated analyses for adults, students of all ages can learn how to apply the questions to a wide variety of messages. Because the questions are succinct, media literacy literature includes a wide variety of "guiding questions" to help to tease out the deepest understanding possible. Learning to ask the Five Key Questions is like learning to ride a bike or to swim: it takes practice and usually is not mastered the first time out. Once learned, however, the process becomes automatic as users build the habit of routinely subjecting media messages to a battery of questions appropriate to their age and ability. As the cornerstone of the media literacy process, the Center for Media Literacy's Five Key Questions provide a shortcut and an on-ramp to acquiring and applying critical thinking skills in a practical, replicable, consistent and attainable way. They are an academically sound and yet an engaging way to begin and they provide curriculum developers with a useable structure. Teachers are often called upon to teach critical thinking, but seldom given guidance on

"how." The CML framework, Questions/Tips (Q/TIPS) provides a point of entry and a quick process for continued skill development on a lifelong basis (see next page): 12 CML's FIVE CORE CONCEPTS AND KEY QUESTIONS FOR CONSUMERS AND PRODUCERS Media Deconstruction/Construction Framework CML's Questions/TIPS (Q/TIPS) © 2002-2007 Center for Media Literacy, www.medialit.org # Key Words Deconstruction: CML's 5 Key Questions (Consumer) CML's 5 Core Concepts Construction: CML's 5 Key Questions (Producer) 1 Authorship Who created this message? All media messages are constructed. What am I authoring? 2 Format What creative techniques are used to attract my attention? Media messages are constructed using a creative language with its own rules. Does my message reflect understanding in format, creativity and technology? 3 Audience How might different people understand this message differently? Different people experience the same media message differently. Is my message engaging and compelling for my target audience? 4 Content What values, lifestyles and points of view are represented in or omitted from this message? Media have embedded values and points of view. Have I clearly and consistently framed values, lifestyles and points of view in my content? 5 Purpose Why is this message being sent? Most media messages are organized to gain profit and/or power. Have I communicated my purpose effectively? 13 CML's Five Key Questions of Media Literacy apply to both deconstruction, or analysis and consumption of media messages, as well as construction, or production of media messages. When we "consume" or analyze media messages, we have no control over the content of the message. Instead, we only control the meaning that we make from the message and how we might want to respond to that meaning in our thought processing or in making decisions or taking action. We can accept or reject it, but unless we "remix" and "rehash" the message, we cannot change it until we enter into an active production process. But when we "produce" or construct media messages, we do control the content of the message to the extent that we have autonomy or self-awareness. Yet we always bring ourselves to the message, with all of our experiences and knowledge that inevitably affect the content of our messages, because by definition, human beings have imperfect understanding, and each human being is unique. In constructing a message, we have many more decisions to make. We are not just deciding how to make meaning from our own message, but through our construction techniques, we are also influencing how others might make meaning from it and possibly reacting to input from others. We have both personal and social power, and therefore personal and social responsibility toward our audience. Where there is communication, there is audience, even if it is an audience of one! The Five Core Concepts apply in both the case of consumption and production of media; however, the Five Key Questions that stem from each of the Five Core Concepts are slightly altered because consumers have a different point of view from producers, and this point of view affects the "voice" of the questions, from the passive voice for consumers to the active voice of producers. The process of analysis encouraged by the Five Key Questions and the Five Core Concepts informs the decision-making or actions that we may take. This decisionmaking/action process is represented through CML's Empowerment Spiral. The Empowerment Spiral starts with: • awareness of an issue or message, • analysis through the Five Key Questions, • reflection through processing our learning, and • action -- whether we decide to take action or not. Media literacy is about understanding our relationship with media, about how we make meaning from a media product and about understanding the greater role of media in society. Though being media literate implies a broader skill set than simply evaluating a media product, evaluating a media product always involves the skills of media literacy. Each of the following of CML's Key Questions are explained from the standpoint of Deconstruction/Consumers (Thoman & Jolls,

2002) and of Construction/Producers (Jolls, 2007): 14 Deconstruction/Consumers CML's Key Question 1: Who Created This Message? This question addresses the Core Concept that "All media messages are constructed" and explores the issue of authorship. Whether we are watching the nightly news, passing a billboard on the street, or reading a political campaign flyer, the media message we experience was written by someone (or probably many people), images are captured and edited, and a creative team with many talents put it all together. However, as the audience, we do not get to see or hear the words, pictures or arrangements that are rejected. We see, hear or read only what was accepted! What is important for critical thinking is the recognition that whatever is "constructed" by just a few people can tend to become "the way it is" for the rest of us. Helping people understand how media are put together – and what may have been left out – as well as how media shape what we know and understand about the world we live in is a critical first step in recognizing that media are not natural but constructed, just like a house is built or a car manufactured. Contrary to popular opinion, media are not windows on the world, nor are they even mirrors reflecting the real world. What they are, in truth, are carefully manufactured cultural products. Construction/Producers CML's Key Question 1: What Am I Authoring? Again, this question addresses the Core Concept that "All media messages are constructed" and explores the issue of authorship. When we look at a building, for example, we see that a church looks differently than a house; an office building looks differently than a retail store. Whether someone tells us what type of building it is or not, we recognize the building for what it is due to the way that it's built or put together; the elements that make up the construction of the building cue us as to how the building is used. And someone, or a team of people, decided what those construction elements ire going to be and then actually put the building together, piece by piece. The same is true of media. When we decide to "manufacture" media, we as author decide what type of building we will make and what construction elements to use so that the building's purpose is recognizable to others. Whether it's an advertisement or a logo, a billboard or a social networking page, a videogame or a novel, all media constructions exemplify certain characteristics that must be present for the construction to be recognized. Then, these elements are carefully put together to meet the author specifications, whatever they may be. Authors, designers, developers and producers – however they are labeled -- all create their own media environments, just as builders create physical environments. When we enter or create a media world, we leave the real world behind. 15 Deconstruction/Consumers CML's Key Question 2: What creative techniques are used to attract my attention? Flowing from the Core Concept that "Media messages are constructed using creative language with its own rules," this line of questions examines the creative components that are used in putting it together – the words, music, color, movement, camera angle and many more. Most forms of communication – whether newspapers, television game shows or horror movies – depend on a kind of "creative language": scary music heightens fear, camera close-ups convey intimacy, big headlines signal significance. Understanding the grammar, syntax and metaphor system of media, especially visual language, not only helps us to be less susceptible to manipulation but also increases our appreciation and enjoyment of media as constructed cultural artifacts. The best way to understand how media are put together is to do just that – make a video, create a game or develop an advertising campaign. The more real-world the project is, the better. The four major arts disciplines – music, dance, theatre, and the visual arts – also can provide a context through which one gains skills of analysis, interpretation and appreciation along with opportunities to practice self-expression and creative production. Construction/Producers CML's Key Question 2: Does my message reflect understanding in format, creativity and technology? Again flowing

from the Core Concept that “Media messages are constructed using a creative language with its own rules,” this question explores McLuhan’s famous saying that “the media is the message.” Often, the media determine a great deal about the message. If we are using cellphones to communicate, our messages had better be short and compact! If we are producing film to communicate, we had better know how to make a film and how to use the language of film to communicate with our production team. And if we want a message to resonate with powerful emotions or with compelling facts, we must be clearly aware of what these are and we had better be the master of crafting a particular form of message, whether it’s entertaining, informing, persuading or participating. Having a deep knowledge of the arts is also helpful in mastering the creative languages of media construction. Theatre requires knowledge of storytelling techniques; dance and motion demands understanding of choreography; music involves knowledge of tempo and instruments and orchestration; visual arts require knowledge of perspective and line and form and color. And technology plays a role, too, because the technology provides the tools and also the environmental constraints in which the tools can be used in cases like videogames or websites or search engines. Before making or breaking the rules, we must first know and understand what the rules are. 16 Deconstruction/Consumers CML’s Key Question 3: How might different people understand this message differently? Flowing from the Core Concept that “Different people experience the same media message differently,” this question examines how who we are influences how we understand or respond to a media text. Each audience member brings to each media text a unique set of life experiences (age, gender, education, cultural upbringing, etc.) that when applied to the text – or combined with the text – create unique interpretations. We may not be conscious of it, but we are all (even toddlers) constantly trying to make sense of what we see, hear or read. The more questions we can ask about what we and others are experiencing around us, the more alert we can be when it comes to accepting or rejecting messages. And hearing other’s interpretations can build respect for different culture s and appreciation for minority opinions, a critical skill in an increasingly multicultural world. Construction/Producers CML’s Key Question 3: Is my message engaging and compelling for my target audience? Again flowing from the Core Concept that “Different people experience the same media message differently,” this question acknowledges that not all messages are designed for all audiences. Creative techniques alone are not enough to attract the attention of an audience, because each audience and indeed, each individual is different. The more we know about the audience we are appealing to, the better chance we have of engaging that audience, whether the audience is one person or many. And if the audience is engaged, the audience will feel compelled to take in our message and possibly even view or hear or interact with our entire message, from start to finish. When we go to see a movie, we never “see” the same movie as our neighbor or friend. We can only see through our own eyes. Yet media appeals to life experiences that we have in common, or otherwise we would have no interest in the message. It is for this reason that advertisers “target” audiences, sometimes to reach the widest audience possible, and sometimes to reach only a select few. But in either case, knowledge of the audience and data about the audience helps provide understanding in reaching the audience efficiently and effectively, hopefully for mutual benefit. The producer affects the audience, while the audience affects the producer. Deconstruction/Consumer CML’s Key Question 4: What values, lifestyles and points of view are represented in – or omitted from – this message? This question explores the content of a media message and flows from the Core Concept that “Media have embedded values and points of view.” 17 Because all media messages are constructed, choices have to be made. These choices inevitably reflect the values, attitudes and points of view of the ones doing the

constructing. The decision about a character's age, gender or race mixed in with the lifestyles, attitudes and behaviors that are portrayed, the selection of a setting (Urban? Rural? Affluent? Poor?), and the actions and reactions in the plot are just some of the ways that values become "embedded" in a television show, a movie or an advertisement. Even the news has embedded values in the decisions made about what stories go first, how long they are, what kinds of pictures are chosen and so forth. What is significant about this question is not the fact that ideas and values are embedded but that value-laden information reinforces – or challenges – how we interpret the world around us and the people in it. If we have the skills to rationally identify both overt and latent values in a mediated presentation, whether from the media or from a coworker, we are likely to be much more tolerant of differences and more astute in our decision-making to accept or reject the overall message. Being able to recognize and name missing perspectives is a critical skill as we negotiate our way each day of our lives through an increasingly multicultural society. Construction/Producers CML's Key Question 4: Have I clearly and consistently framed values, lifestyles and points of view in my content? Again flowing from Core Concept that "Media have embedded values and points of view," this question asks producers to confront themselves. Because we are ourselves as individuals, we always bring ourselves – our values, our life experience and our points of view – to our messages. Yes, we can represent other voices and other viewpoints to the best of our ability, but there is never a way for us to represent all other voices; necessarily, someone or something is always left out. Because we are human, we can only aim to be fair and balanced, or admittedly biased in our viewpoints, but we can never be truly objective or provide perfect information. Instead, when we present our message to our audience, we am selecting and framing the content that we are presenting according to our own priorities. Perhaps we consider the needs of the audience or perhaps not. The more clearly and consistently we frame and select our content, the more readily our audience can identify the lifestyles, values and points of view we are presenting, and determine whether that frame suits them or not. Deconstruction/Consumers CML's Key Question 5: Why is this message being sent? With Key Question 5, we look at the motive or purpose of a media message. Recognizing the fifth core concept that "Most media messages are constructed to gain profit and/or power," we use this line of questioning to determine whether and how a message may have been influenced by money, ego, influence or ideology. To respond to a message appropriately, we need to be able to figure out why it was sent. Much of the world's mass media today were developed as moneymaking enterprises and continue to operate as commercial businesses. So when evaluating a specific media message, it helps to know if profit is the purpose. A commercial influence 18 over entertainment media may be more tolerable to many people than, say, a commercial influence over the news. But with democracy at stake almost everywhere around the world, citizens of every country need to be equipped with the ability to determine both economic and ideological spin. The issue of message motivation has changed dramatically since the Internet became an international platform through which groups and organizations – even individuals – have ready access to powerful tools that can persuade others to a particular point of view. As an exercise in power unprecedented in human history, the Internet provides multiple reasons for users of all ages to be able to interpret rhetorical devices, spot faulty reasoning, verify sources and recognize the qualities of legitimate research. Construction/Producers CML's Key Question 5 Have I communicated my purpose effectively? Again based on the Core Concept that "Most media messages are constructed to gain profit and/or power," Key Question 5 asks producers to evaluate the effectiveness of the communication in reaching their ends. If we are going to send a message, we must have a reason

or a purpose. Generally, there are three reasons: we want to persuade or influence or inform someone of something, and as a result, we have a power motive (defining power as neutral and in its broadest sense!). Or we want them to buy something that we are selling, and so we have a profit motive. Or perhaps we have a mix of both a profit and a power motive, where we want to sell the world on a new idea and a new product at the same time. These motives are not necessarily good nor bad, but purpose is always present, regardless of attempts to be fair or balanced. Behind media messages there is always intent. Inherently, there is nothing wrong with profit or power; they can be honorable and serve the public good. Is our intent to make the world a better place? Does our message provide mutual benefit for individuals and for the social good, as well? These are among the questions we must ask of ourselves. The CML MediaLit Kit was created to help make media literacy more accessible as a discipline through a convenient and credible "packaging" of the Core Concepts and Key Questions. In doing so, the hope was to establish a common vocabulary and labeling through which to build curriculum and training for media literacy as a building block for 21st century skills. It provides, for the first time, an accessible integrated outline of the foundational concepts needed to organize and structure teaching activities across the curriculum, across cultures and across disciplines. Through systematic professional development and parental education, adults master both the Core Concepts and the Key Questions plus gain the conceptual know-how to organize media literacy learning in school and nonschool venues. The vision of media literacy is to put all individuals ultimately in charge of their own learning, empowering them to take an active rather than a passive role in acquiring new knowledge and skills. In a sense, using this methodology provides risk management, 19 hopefully making wise choices possible. The Five Key Questions and Five Core Concepts serve as the "big ideas" or the "enduring understanding" that curriculum specialists look for to generate the thinking, organizing and communicating competencies called for by the Partnership for 21st Century Skills and its allies. Together, they are a unique contribution to 21st century education and a powerful set of tools for preparing not only a flexible and proficient workforce but also informed citizens who understand, share in and contribute to the public debate. The response to the publication of the CML MediaLit Kit has been world-wide, attesting to the global interest in media literacy and in tools that make media literacy accessible to all. The Center for Media Literacy has received inquiries from every corner of the globe, asking for permission to use the MediaLit Kit and sometimes, to translate the materials. An organization from Columbia, South America, translated CML's book, Literacy for the 21st Century, into Spanish. An organization from Sao Paulo, Brazil, translated it into Portuguese. The list goes on…and this is all testimony to the international nature of media literacy and to the fact that these concepts and questions are truly boundaryless. In this glocalized world we live in, access to content and the accumulated knowledge of centuries is limitless and yet in its very vastness, ultimately the enormity of it all is inaccessible to the human mind. And so it is still the human mind and the human spirit that we have in common, and though we may no longer need to pass along a storehouse of knowledge to our children, we still need to pass along the spirit of the village and the notion that indeed, parents and other responsible adults raise each and every child. Media literacy is a way to insure that this spirit lives, and that we have a common way to process our vast knowledge and experience, a common way to understand and to extend ourselves and our relationships with each other and the glocalized media world. As John Lennon famously sang in the song "Imagine," "You may say I'm a dreamer. But I'm not the only one. I hope someday you'll join us. And the world will be as one." About the Authors Dr. Barbara J. Walkosz is an Associate Professor in the Department of

Communication at the University of Colorado Denver. Her scholarship and teaching focuses on the role of mass media in society, civil discourse, political communication, and health communication. In the area of media education she has examined the intersection of media literacy education and smoking by middle school children; in health communication, she has been engaged in research programs on skin cancer prevention and social marketing. Her publications have examined such topics as the effects of health communication programs, media representations in the LPGA, and political decision making. Tessa Jolls is President and CEO, Center for Media Literacy,(www.medialit.org) a position she has held since 1999, as well as a Director, Consortium for Media Literacy. Her primary focus is working in partnership to design and implement school and community-based implementation programs for media literacy education. She 20 contributes to the field internationally through her speaking, writing and consulting, with curriculum development and research projects, and through publishing and disseminating new curricular and training materials. Dr. Mary Ann Sund is a Director, Consortium for Media Literacy. Culminating her career as deputy superintendent for curriculum and instruction for Arcadia Unified School District (AUSD) in California, Mary Ann Sund has focused her work as a top public school education administrator to provide equal access to learning and to the engagement of students in their own learning. She continues to consult for AUSD and is actively promoting media education through curriculum development and implementation programs. Center for Media Literacy (www.medialit.org): The Center for Media Literacy (CML) is dedicated to a new vision of literacy for the 21st Century: the ability to communicate competently in all media forms, as well as to access, understand, analyze and evaluate and participate with the powerful images, words and sounds that make up our contemporary media culture. CML's mission is to help children and adults prepare for living and learning in a global media culture by translating media literacy research and theory into practical information, training and educational tools for teachers and youth leaders, parents and caregivers of children. 21 References American Diploma Project (2004). Ready or not: Creating a high school diploma that counts. Retrieved from http://www.achieve.org. Barnes, S. (2002). Computer mediated communication. Lebanon, IN: Allyn and Bacon. Buckingham, D. (2008). Introducing identity. Youth, Identity, and Digital Media: 1–22. Retrieved from http://www.mitpressjournals.org/toc/dmal/-/6, April 14th, 2008. Chudy, J. (November 6, 2007). MTV's Arab net thinking locally: regionalized versions of hits front and center. Hollywood Reporter, p12. Retrieved from General OneFile. Gale. Auraria Library. 25 April 2008 http://0-find.galegroup.com.skyline.cudenver.edu:80/ips/start.do?prodId=IPS Crooks DL.(2000). Food consumption, activity, and overweight among elementary school children in an Appalachian Kentucky community. American Journal of Physical Anthropology,11,159-170. Deloitte & Touche (2007). State of the media democracy. Retrieved from www.deloitte.com , April 12th, 2008. Dick, E. (1989). The Media Triangle, English Quarterly, vol. 25, nos. 2-3. Canadian Council of Teachers of English and Language Arts. Toronto, Ontario, 1992. Foehr, U.G. (2006). Media multi-tasking among American youth. Kaiser Family Foundation Report. Retrieved from www.kkf.org, April 15th, 2008. Fung, A. (2006). Think globally, act locally: China's rendezvous with MTV. Global Media and Communication, 2(1), 71-88. Gee, J.P. (2003). What video games have to teach us about learning and literacy. New York: Palgrave Macmillan. Gerbner, G., Gross,. L., Morgan, M, Signorelli, N., & Shannahan, J. (2002). In Media Effects (eds.J. Bryant & D. Zillman). New York, NY: Lawrence Erlbaum. Gozzi, R. (1996). Will the media create a global village? ETC. A Review of General Semantics. Retrieved from http://www.thefreelibrary.com/Will+the+media+create+a+global+village%3fa018299520, April

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Appendix G

Voices of Media Literacy*, *p.27

Jolls, T., 2007. Voices of Media Literacy: International Pioneers Speak. California: CML. Available from: https://www.medialit.org/voices-media-literacy-international-pioneers-speak

Voices of Media Literacy: International Pioneers Speak

Voices of Media Literacy is a collection of interviews that were conducted in 2010-2011 with 20+ media literacy pioneers who were active in the field prior to 1990. These pioneers represent the English-speaking countries of the United Kingdom, Canada, Australia and the United States. Their views not only shed light on the development of media literacy, but also on where they see the field evolving and their hopes for the future. **Update 2015** - Newly added interview of pioneer Dorothy Singer. **Update 2016** - Newly added interview of pioneer Victor Strasburger. **Update 2017** - Newly added interview with pioneer Lesley Farmer. **Update 2019** - Newly added interview with pioneer Guillermo Orozco Gómez.

These 20+ transcripts may be found as follows (in alphabetical order):

Neil Andersen (Canada)

Cary Bazalgette (UK)

David Buckingham (UK)

Marilyn Cohen (U.S.)

David Considine (U.S. by way of Australia)

Barry Duncan (Canada)

Lesley Farmer (U.S.)

Jean Pierre Golay (U.S. by way of Switzerland)

Guillermo Orozco Gómez

Renee Hobbs (U.S.)

Douglas Kellner (U.S.)

Robert Kubey (U.S.)

Len Masterman (UK)

Barrie McMahon (Australia)

Kate Moody (U.S.)

Renee Cherow-O'Leary (U.S.)

James Potter (U.S.)

Robyn Quin (Australia)

Marieli Rowe (U.S. by way of Switzerland)

Dorothy G. Singer (U.S.)

Victor Strasburger, MD (US)

Elizabeth Thoman (U.S.)

Kathleen Tyner (U.S.)

Chris Worsnop (Canada)

Read News Release

See Presentation from NAMLE Conference 2011

Introduction/Perspective/Credits and Methods

By Tessa Jolls, Publisher and Executive Editor

Friends, Colleagues, and Advocates,

It is my special privilege and delight to present you with the opportunity to enjoy the voices of 20+ pioneers in media literacy – those who talked the talk and walked the walk when media literacy was merely an infant, prior to the 1990s.

The Concepts of media literacy apply to this published project and information as they do to all others. Undoubtedly and sadly, some of these pre-1990 pioneers have been left out – some are deceased; some are lost to the field and now untraceable; some are unknown to us; some do not speak English and due to our resource constraints, we chose not to include them; and yes, some are more equal than others – given that we set out to interview 20+ people, we focused on choosing those recommended to us by other pioneers, those who are outstanding contributors with strongly recognized track records amongst their contemporaries. Only one person whom we invited, John Puengente, declined to participate.

Although media literacy is universally applicable and practiced globally, all of these 20+ pioneers now reside in the English-speaking countries of England, Canada, Australia or the U.S. All of them have devoted significant portions (if not all) of their careers and yes, their lives, to media literacy, even before the term media literacy was invented. Without exception, each recognized – very early – that although media is a fascinating subject, it is teaching about media,

not just teaching with media, that distinguishes media literacy education. In the end, we made our choices of whom to include and we gratefully and proudly stand by them.

We set out to ask the following questions of each pioneer:

1. Why did you become involved in media education?
2. What were your goals?
3. What has surprised you?
4. What are some experiences that you had early-on?
5. What are some milestones that you noted along the way, for yourself and for the field?
6. What informed and inspired your work? (Scholarly work? Technology? Social Events and Needs?)
7. How far do you think the field has come?
8. Do you think the field has moved in the direction you think best? Why or why not?
9. What would you like to see happen?
10. Whom would you recommend to be part of this project? How can we contact him/her?

Each interview took its own course, but in the end, a mosaic emerges, and this mosaic leads to a fascinating mural of the times and the people and the happenings. Some individual views are in concert with others, some are contradictory. But each person speaks for him or herself and a picture of the whole emerges over the course of reading all the interviews.

Perspective

It is my hope and my expectation that these discussions will provoke ideas and will gestate more debate and more importantly, action. We stand today on the shoulder of these giants, of these remarkable people who helped launch a great movement and discipline that is so central to our times and to the future; their perspective and experience are invaluable and instructive.

There are many themes and messages that come to life in these interviews, but a few stand out strongly for me:

In spite of the noise and confusion, the debates and the arguments, we must stand together in our pursuit of media literacy for our people, the citizens of the world who operate each day in the global village. It is not a matter of "new" media literacies or "old" media literacy; it is not a matter of emphasizing the analysis of tv or the internet (or in earlier days, the radio); it is not a matter of whether media literacy is a field or a movement or a pedagogy.

It IS a matter of standing together to help citizens acquire the literacy skills they need for pursuing life, liberty and the pursuit of happiness in the 21st century. Media literacy is literacy.

The timeless Concepts of media literacy, the fundamentals still count, and yet our education system has neglected incorporating them as central to acquiring and discerning content knowledge. That is a result of flaws in the education structure, not in the media literacy pedagogy.

As a result, technology has galloped ahead and is highly accessible, while literacy is not. Generations have missed getting these media literacy fundamentals, but it doesn't make the need to get the fundamentals any less relevant; they are more important than ever before! Deconstruction, construction, participation – they are all intertwined and relevant. The Concepts of media literacy apply, regardless of the medium.

Let's stand together on what we can agree on and seek to help millions of people to get the skills and knowledge they need. Let's recognize up-front that media literacy exists on a continuum – some will be more media literate than others, and that's fine. And in the meanwhile, we can continue to experiment and to develop and grow the cutting-edge body of work that our special expertise enables us to keep expanding.

No one will ever be the master; we all continue to be seekers who can always improve our skills and knowledge. But to make media literacy accessible to millions, it must be presented in a way that works for millions.

Several pioneers expressed thoughts about whether media literacy is a "field" or a "movement." Personally, I see this debate as a false dichotomy and a red herring.

Why does media literacy have to be one or the other? To me, it is both – and more. It is a field of study, a pedagogy, and a movement. There are special characteristics, overlaps, opportunities and cautions involved in each arena.

Media literacy is a field. To be media literate, one must learn about how media systems operate. Media systems can be systematically identified and analyzed (hence the Core Concepts of media literacy), and the systematic exploration of a system at work is the foundational characteristic of a field. The biggest caution I see in making progress in the study of media literacy as a field is a structural one, in that universities are divided into knowledge silos that inhibit interdisciplinary study. Media literacy as a field demands "systems thinking" and interdisciplinary study; it is a 21st century field that the feudal university structures typically don't support, which makes the pursuit of media literacy as a field challenging. Fortunately, scholars are persisting.

Media literacy is a pedagogy. Understanding about media oneself and teaching others about media are two different skills. The basics of media literacy provide a framework and teaching/learning strategy applicable in school and outside of school, 24/7. Using media literacy Concepts is a strategy for helping people acquire content knowledge and to discern. People can use the Concepts to help teach themselves individually on a lifelong basis, or to help teach and share with others, using a common vocabulary and understanding of the Concepts. Media literacy is rooted in a process of inquiry, and this is a fundamental pedagogy and internalized skill that makes sense in today's information-heavy culture. Teaching and learning don't just "happen" in a classroom; we are all teachers and learners who need to know how to be media literate.

But though the classroom walls are breaking down, media literacy advocates must address the professional development and other resources needed for success in formal education settings. And as formal education addresses the fact that content is infinitely available, and that they must concentrate more of their efforts on teaching media literacy process skills, there is a need to build out the pedagogical infrastructure that is missing on a large scale.

Media literacy is a movement. Everyone in society has a stake in media literacy, since media literacy is fundamental to having capable citizens in a democracy that is dependent on critical thinking and analysis of information. With stakes this big, and understanding of the new role of information and education in our society still so limited, it is imperative that media literacy become a movement of millions of people who seek to become excellent information managers, wise consumers, responsible producers and active participants in their communities. It is imperative that millions of people demand that these skills be formally taught to their children. The grassroots will ultimately be heard. In this context, it is also imperative to have the support of all involved, especially the media corporations who drive and control much of the messaging.

Credits and Methods

Many people helped to bring this project to fruition. The major spark for the project came from my friendship and conversations with Marieli Rowe, who has given so much of herself to so many. My work with Elizabeth Thoman over the years also spurred my curiosity and interest in the field's evolution; Liz has been unflagging in her dedication. I started working on the project in earnest in 2008, and upon Marieli's recommendation I contacted Barry Duncan and asked his input. Barry generously framed some historical developments and provided some project parameters. Barry defined the early roots of media literacy as being prior to the 1960s, led by Marshall McLuhan Sr., Bee Sullivan, Father John Culkin and Herb Ostrach. Marieli went even further back in time, as you will see in her interview. Barry defined the first wave of media literacy in the 1960s, 1970s and 1980s (it is this era that Voices of Media Literacy most closely represents). Barry defines the second wave of media literacy as starting with the 1990 conference at the University of Guelph, Ontario and the 1992 Aspen Institute conference (this is when the U.S. folks started participating in greater numbers.) And Barry defines a third wave as starting with the Media Education Conference in 1995 in Boone, NC. There are undoubtedly other turning points or points of departure since then, but I believe that Barry's perspective is key to understanding the early gestation of the field.

Barry also recommended, at the project's inception, to focus on a cultural studies model of media literacy, since this model provides critical rigor for early efforts to understand media and to teach about media. Len Masterman is a key figure in this evolution (and yes, Len, some are definitely more equal than others! Thank you for all your inspiration and the Concepts of media literacy!).

Due to other pressures, I didn't work on the project again for two years, during which time I mentioned the Voices of Media Literacy project to my friend and colleague **Barbara Walkosz**, then a communications professor and media literacy advocate at the University of Colorado-Denver, and now a consultant at Klein-Buendel, a health communications firm. Barb enthusiastically endorsed the project and I invited her to join with me. Barb subsequently recruited a doctoral candidate at UC-Denver, **Dee Morgenthaler**, who along with me, conducted

interviews and assisted with editorial duties beginning in spring, 2010. Marieli Rowe personally interviewed Jean Pierre Golay with the technical assistance of Karen Ambrosh. The last interview was conducted in June, 2011.

It is no easy task to convert an audio recording to a printed text. Dee Morganthaler and Nyrie Kayekjian transcribed 19 audio recordings, and Elizabeth Clayton Smith and Hannah Schechter collaborated to transcribe the recording of Jean Pierre Golay's interview, in which he and Marieli Rowe conversed in French (Hannah Schechter translated the French to English and transcribed the text) and English (Elizabeth Clayton Smith transcribed).

Along the way, minor copy editing for readability from the audio text was done by Dee Morganthaler, by Nyrie Kayekjian, by Joao Castilhos and by me. Each pioneer was given the opportunity to review and edit his/her individual transcript one time; then we published the transcripts. Some transcripts are lightly edited and some are heavily edited by the pioneers, but regardless, the finished transcripts are the words of the pioneers themselves. Beth Thornton, CML's communications director, provide major work with the web-related publishing. Aaron Dietrich, CML's web developer, provided technical assistance. Each one of the people credited here gave countless volunteer hours to this project, and I am deeply grateful.

And I would be remiss if I didn't thank the pioneers themselves: there are not enough words! Their brilliance, their hard work, their dedication, their sharpness, their sense of fun, their inspiration! They have given the world a true gift and on a minor note, their stories kept me going in the times of trouble that plague any major project. I also want to acknowledge and thank my family, especially my husband Tom, who have steadily supported my work.

Appendix H

The Impact of Technology on Character Education**,** p.29

> Jolls, T. 2008. *The Impact of Technology on Character Education. In:*Character Education Symposium, U.S. Department of Education. Center for Media Literacy. Available from: https://www.medialit.org/sites/default/files/DOE%20Jolls%20Impact%20of%20Tech%20on%20Char%20Education.pdf

The Impact of Technology on Character Education Tessa Jolls President and CEO Center for Media Literacy Prepared for: U.S. Department of Education Character Education Symposium 2008 Center for Media Literacy, www.medialit.com T. Jolls -The Impact of Technology on Character Education 2 Abstract/Tessa Jolls/Impact of Technology on Character Education Today, the global online village is open 24/7. Prior to this global village emerging, the local village provided children with a daily filter – adults -- through whom youth learned about values, lifestyles and points of view. Today, adults are largely absent in the global village and technology filters are not enough. Children need to develop internalized processes to filter messages and acquire content knowledge. Such process skills, grounded in values and character, will enable youth to benefit from technology, to manage the risks they encounter, and to make responsible choices on a lifelong basis. Children need to be formally taught these process skills, which facilitate knowledge acquisition, problem solving and citizenship. First, they must understand their own being and how they may represent themselves to others. This can be accomplished by educating children about identity and branding systems that pervade both the local and global villages, and that relate to personal identity and representation in today‘s online world. Second, children need arts training to understand persuasive techniques and to enable self-expression. Third, children must internalize the media literacy process skills so they learn to apply a methodology for critical thinking in understanding and creating messages. Content today is infinitely accessible, media literacy allows for accessing, analyzing, evaluating, creating and participating with multi-media messages. And finally, children need a sound value base to evaluate information, choices and decisions while weighing risks and rewards. Character education provides this understanding. Technology tools make integration of these foundations feasible, and technology offers new ways to contribute positively to character education. Because the education system is profoundly affected by new technologies, structural changes must be made to teach process skills as well as content knowledge to address the needs of the whole child. T. Jolls -The Impact of Technology on Character Education 3 The Impact of Technology on Character Education TABLE OF CONTENTS PAGE Introduction 04 A Context for Learning 05 Identity: Branding and Representation in Private, Public and Commercial Spheres 13 The Arts: Understanding Values and Expression 26 Media Literacy: Acquiring a Lifelong Process for Inquiry 31 Character Education: Values as a Base for Evaluation 38 Implications for Education Practice 44 Conclusion 48 Recommendations 49 References 58 T. Jolls -The Impact of

Technology on Character Education 4 The Impact of Technology on Character Education Introduction Today, the global online village is open 24/7. Youth currently spend an average of 8.33 hours per day (Rideout, Roberts, & Foehr, 2005) – more hours than a full-time working adult – engaging with technology-driven media. Douglas Rushkoff (2006) has called the younger generation ―screenagers‖ because they so frequently interact with technology screens. But using such screens is not passive. Such activity now involves participation as part of a global ―participatory culture‖ (Jenkins, 2006), including posting pictures, drawings, videos or text, discussing and circulating the postings, and ―mashing‖ them into new creations -- and yes, purchasing products and services, as well. Prior to the emergence of this global village, the local village provided an environment in which everyone knew everyone else. Parents and other adults provided a daily filter through which youth learned about differing values, lifestyles and points of view. Today through the media and technology, local is now global. The village has become so large that filters are no longer provided through human interaction (Walkosz, Jolls, & Sund, 2008) but through technology itself. V-Chips, parental controls and other software solutions provide these filters, but these technology filters are still not capable of delivering the discernment that human judgment renders. The sheer volume of media interaction in the global village precludes much discussion with children about individual messages. Yet parents, educators and concerned adults see the need to assist the young in interpreting the messages they receive – whether perceived as positive or negative --and to understand their responsibility in producing messages in the global village. T. Jolls -The Impact of Technology on Character Education 5 Technology and media provide powerful benefits, no question. Usage alone attests to this power and the human desire to use it. But because of the powerful effects of media and technology, children need help in navigating these waters. Examples of harm done to children – and sometimes by children -- are cyberbullying, cyberstalking and videogame addiction (Byron, 2008). When coupled with the notion that children under 12 also face an onslaught of media marketing designed to capitalize on their $30 billion in spending and their influence on more than $500 billion in purchases per year (Golin, 2006), the global village puts quite a decision-making burden on very young shoulders. As Tanya Byron (2008), author of the Byron Review, recommended recently, ―Having considered the evidence, I believe we need to move from a discussion about the media _causing‘ harm to one which focuses on children and young people, what they bring to technology and how we can use our understanding of how they develop to empower them to manage risks and make the digital world safer‖ (p. 2). Although Byron‘s vision is a positive step, it is limited by its view of an unsafe world. This paper focuses on how to provide children with the foundation to be a force for good, equipping them and the adults supporting them to manage the inevitable risks that life proffers, using technology tools to enrich their everyday lives. A Context for Learning The Internet and technologies like video games appear most likely to impact children‘s development in the moral and pro-social arenas (Goswami, 2008), but cognitive developmental neuroscience is revealing powerful learning in all domains of child development from the earliest months of life. In that sense, new media is another cultural ―tool‖ that can be used strategically to affect a child‘s developing understanding of the world. T. Jolls -The Impact of Technology on Character Education 6 Children experience technology from birth. Whether in a car seat engineered for safety, in a room with music or television, or observing a parent speaking on the telephone, babies interact with a world driven by technology. How children process this experience is unknown, but the field of cognitive development has changed dramatically over the last three decades (Goswami, 2008), upending assumptions about what is taking place within a child‘s head. The linear

progress associated with child development that was posited by Jean Piaget (1954) has been subsumed by a new understanding. ―It is now recognized that children think and reason in the same ways as adults from early in childhood. Children are less efficient reasoners than adults because they are more easily misled in their logic by interfering variables such as contextual variables, and because they are worse at inhibiting irrelevant information…Child development is today conceptualized as an essentially social process, based on incremental knowledge acquisition driven by cultural experience and social context,‖ Goswami said (2008, p. 3). This new child development view reinforces a strong message from Harold Hodgkinson in a 2006 report for the Association for Supervision and Curriculum Development (ASCD) called The Whole Child in a Fractured World, ―If one wanted a general rule about changing the educational system, the best advice would be: start earlier…It isn‘t just that intellectual skills are heavily developed in the years before school: emotional social aesthetic and physical aspects are as well‖ (p.9). The advantages of early preschool education are particularly true of children from disadvantaged backgrounds (Dalmia & Snell,2008). And, Hodgkinson aptly noted, education doesn‘t just take place in classrooms. About a third of today‘s students do not graduate from high school. These millions of youth must be reached outside of school. Arts clubs, religious institutions, social clubs, after-school organizations, athletic programs – and T. Jolls -The Impact of Technology on Character Education 7 most importantly, the home -- offer arenas for learning. And in today‘s global world, media are sometimes called ―the other parent;‖ media are a place where children live and learn to live. Media and technology touch all citizens, and media can be forces for good – or not. But when media are looked upon as teachers, it is important to recognize that media are unfettered by local custom or local control. Rather, media are influenced by values, lifestyles and points of view from throughout the globe. In addition to learning to navigate their relationship with their local village and its customs, children must also learn to navigate the global village from an early age. Seventy percent of four- to six-year-olds are using a computer, 64 percent can use a mouse, and 40 percent can load a DVD by themselves (Rideout, Vandewater, & Wartella, 2003). Today, these children need to learn in a conscious and systematic way the values and critical thinking skills that were once a ―given‖ in a face-to-face world. When parents and teachers aren‘t present – and adults are often absent in the media world of youth – children must acquire and use an internalized process to parent themselves and through which they can negotiate their relationship with media on a lifelong basis. (Walkosz, Jolls, & Sund, 2008). When this need for an internalized filtering system is combined with the enormous volume of information at hand, citizens need a sorting process they can easily and consistently apply, and have confidence in its effectiveness. Media literacy skills – learning to access, analyze, evaluate, create and participate with media wisely (Jolls & Thoman, 2004) – provide a framework for children and adults. With wise choices, citizens of the global village may be: Efficient information managers who can access information quickly and be able to store information effectively. T. Jolls -The Impact of Technology on Character Education 8 Wise consumers who are able to critically analyze messages that come their way, making wise individual decisions based on information. Responsible producers. Today, everyone can be a multi-media producer. But in producing, it is important to represent oneself effectively to all audiences responsibly. Responsible producing reflects character – behaving in ways that care for the self and others. Active participants in using media, to make decisions, buy products or cast a ballot. With these decisions, citizens send messages and vote and participate 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 expression. Where would a company, a university, a nonprofit, an entertainer, an executive or a politician be without the audience? Realizing this vision makes the process skills of media literacy more important than ever, since technology has made information and facts available at the touch of a button. This information accessibility has changed the very nature of education itself. As David Berlo said in 1975, in Communication and Behavior, ―Most of what we have called formal education has been intended to imprint on the human mind all of the information that we might need for a lifetime. Education is geared toward information storage. Today that is neither possible nor necessary. Rather, humankind needs to be taught how to process information that is stored through technology. Education needs to be geared toward the handling of data rather than the accumulation of data‖ (p. 3-18). T. Jolls -The Impact of Technology on Character Education 9 Yet education is stuck in an outdated mode where academic content often trumps process skills in setting expectations for learning. Although media literacy is represented in state education standards, often under other names or skills, presently, only Montana has media literacy formally identified as a strand in its language arts standards (McCulloch, 2001), while independent education organizations such as the Partnership for 21st Century Skills (2008) and Achieve Inc. (Thoman & Jolls, 2004) recognize media literacy as an integral part of 21st century education and have called for its inclusion. But acquiring these skills is a long process, and so, for example, to evaluate information, one must be able to set criteria against which to judge information. Such criteria might be a list of specifications for buying a car or for making a decision based on the 10 Commandments Regardless, many skills are involved in the decision-making process. Values provide another lens through which judgments are made, reinforcing the timeless importance of character education in decision-making. The Character Education Partnership published Eleven Principles of Effective Character Education in 2007. Principle 1 notes that effective character education ―promotes core ethical values and supportive performance values as the foundation of good character‖ (Lickona, Schaps, & Lewis, 2007, p.2). ―Character education holds that widely shared, pivotally important, core ethical values – such as caring, honesty, fairness, responsibility and respect for self and others – along with supportive performance values – such as diligence, a strong work ethic and perseverance – form the basis of good character‖ (Lickona, Schaps, & Lewis, 2007, p.2). Because character is a lens through which each individual views the world and makes decisions, character education and media literacy education work hand in hand. T. Jolls -The Impact of Technology on Character Education 10 The Urban Programs Resource Network (2008), in providing resources for educators through the University of Illinois Extension Program, reinforced the value of character education: ―Character education is the development of knowledge, skills, and abilities that enable the learner to make informed and responsible choices …Character education enables students to come face to face with the realities of life. It encourages them to think critically and then act responsibly. Instructional materials, methods and strategies, when developed into interdisciplinary curricular themes, empowers teachers to create meaning while allowing students time for purposeful exploration and self-reflection…‖ (para. 4). President Theodore Roosevelt recognized that ―to educate someone in mind and not in morals is to educate a menace to society‖ (qtd. in Ellenwood, 2006, p. 1). Yet teaching values and character has always held a low priority in schools because it is risky (Ellenwood, 2006), especially in light of demands to focus heavily on the development of academic talents. But the public recognizes that academics alone are not enough to educate a child. A Public Agenda and Gallup poll revealed that academic achievement ranks near the bottom of public concerns, while lack of parent involvement, student drug use, problems with student discipline and gangs, and now

inadequate funding lead the Gallup list (Hodgkinson, 2006). With this in mind, the Association for Supervision and Curriculum Development (ASCD) has initiated a new compact to educate the whole child, calling upon educators, parents, policymakers and business leader to ensure that, in their own community: Each student enters school healthy and learns about and practices a healthy lifestyle Each student learns in an intellectually challenging environment that is physically and emotionally safe for students and adults T. Jolls -The Impact of Technology on Character Education 11 Each student is actively engaged in learning and is connected to the school and broader community Each student has access to personalized learning and to qualified, caring adults Each graduate is prepared for success in college or further study and for employment in a global environment. In this context, the whole child makes for a greater society. Technology as an education tool is able to provide in-depth information on an infinite number of topics on a global basis. But choices are made, with consequences to individuals and society. Choices are rooted in values, and in a technology-driven world where choices abound, it is values, coupled with information, that make the difference. So while technology offers limitless information options, humans need filters and frameworks through which to negotiate meaning. John Naisbitt said in 1988 that society is drowning in information and starved for knowledge; that remains the case. Beginning at birth, children need tools to gain knowledge and make wise choices. Like learning to swim or to row, using these tools takes practice over time. Reinforcement and discussion with adults helps children through the thickets while these adults learn themselves. This adult interaction is essential since humans have ―social‖ brains (Goswami, 2008) which acquire knowledge incrementally through cultural experience and social context. But children also need technical skills and equipment to thrive in the technological world. The United States leads all other Organization for Economic Co-Operation & Development (OECD) nations in providing computers access in schools and classrooms (Hodgkinson, 2006), but predictions are that it may take another decade for teachers to acquire good instructional software and training. Increasingly, technology affords the necessary tools for curricular T. Jolls -The Impact of Technology on Character Education 12 integration and a constructivist approach to education, in contrast to the traditional silo approach which lacks little if any connection to the world outside the classroom. These silos, which define traditional academic subject areas such as language arts, mathematics, history and science, are rich in tradition and knowledge. However, they also discourage sharing of knowledge, since silos represent discreet and often impervious subject areas separated by their own unique vocabularies and views. The silos provide endless opportunities to ―drill down‖ deeper into a particular content area, but often at the expense of a broader perspective. The constructivist direction in education, facilitated by technology, encourages a broader approach through integrating subjects, and is well illustrated by the Social Studies 21st Century Skills Map recently created by the Partnership for 21st Century Skills in cooperation with the National Council for the Social Studies. Through project-based learning, the map names sample outcomes for teaching interdisciplinary themes while also addressing critical thinking, problem solving and ethics (Partnership for 21st Century Skills, 2008). In England, where the government has promoted technology in schools for a decade, the experiment with technology-driven change in education is further along. Steve Lohr in the New York Times (2008) recently reported on two schools, the Shireland Collegiate Academy and the George Salter Collegiate Academy, in high-crime neighborhoods in Birmingham. There, a web-based portal is the entry path for assignments, school-related social activities, online mentoring, discussion groups and email. The schools‘ executive principal, Sir Mark Grundy, reports that students who are suspended from

school for a few days beg not to lose their portal access. Today, the schools are among the top in the nation in yearly improvements in students‘ performance in reading and math tests. In the U.S., the New Technology T. Jolls -The Impact of Technology on Character Education 13 Foundation now has 42 schools in nine states that are experimenting with the Foundation‘s model for project-based teaching. As these movements toward using technology for integration continue, what will be combined? What will be taught discreetly? Going forward, technology provides a virtual centrifugal force for teaching and learning. What skills and tools will enable children to be effective choosers and users of technology? What process skills do children need to be able to think critically and to integrate information from the various knowledge silos? In this paper, understanding the relationship between identity and branding, arts education, media literacy, and character education, including sports and games, will be explored. These disciplines are foundational for empowering children to make wise choices grounded in values and sound character. Though these sometimes overlapping subjects are not part of the traditional 3Rs, a whole child in the 21st Century must be equipped with the understanding and the researchbased frameworks with which to appropriately and efficiently sift and sort information – whether incoming or outgoing. Identity: Branding and Representation in Private, Public and Commercial Spheres As Renee Descartes observed, ―I think, therefore I am‖ (qtd. in Burnham, 2006, sec. 3). But this thought raises questions: ―Who am I? What am I doing here? Where do I belong?‖ Humans continue to ask these central questions of identity throughout their lives. The answers are the underpinnings of character. Without identity, people lack anchors, floating without direction or connection while trying to relate, understand and be useful, somehow, somewhere, to someone. Identity is central to human experience, but identity is hard to identify. The Webster Collegiate dictionary definition of identity (2008) reveals a paradox: 1a: ―Sameness of T. Jolls - The Impact of Technology on Character Education 14 essential or generic character in different instances b: sameness in all that constitutes the objective reality of a thing: ONENESS 2a: the distinguishing character of personality of an individual: INDIVIDUALITY b: the relation established by psychological identification.‖ On an individual level, identity is what distinguishes each person; on a social level, identity shows what is the same or what we have in common. It is an interactive process, with society affecting our individual identity and our individual identity affecting society. An understanding of identity formation brings new meaning to the saying ―All for one and one for all.‖ Like individuals, organizations also have identities. Branding, through the use of names, logos, slogans and other communication symbols, is a shorthand way of establishing, attracting and promoting identity in a systematic and sustained way. Branding is promoted and disseminated through technology. Through a well-conceived and executed brand, audiences can readily find and identify the ―sameness‖ that they are seeking to express their individual desires. Today, both individual and corporate identities are being promoted and formed through global media. Brand identity is widely adopted and indeed, a widely-recognized brand identity – whether corporate or person -- is coveted as a means to fame and/or fortune. Do consumers buy from Chanel or from Wal-Mart? Do they watch NBC or Fox News? Do they use MySpace or Facebook? Similar branding applies to individuals. What name does one use for an avatar online? How many avatars does one maintain? What sounds denote one‘s individual cell phone ring? How many ―friends‖ does a person have? How are these friends ranked? Is a person‘s MySpace page, their ―brand statement,‖ interesting enough to attract more ―friends?‖ Or is it dull dull dull, nevermind, click-away … Branding represents a system of communication at work, and often, this system operates globally through the global village. Brands like Coke are universally known, and branding T. Jolls -The Impact of

Technology on Character Education 15 plays an important part in establishing this name recognition. Branding and identity are closely tied, both on a corporate and a personal level. Yet though children are immersed in branding, they are seldom taught to critically analyze what branding is and how it relates to them and their choices. New media, like social networking with its global technological reach, has offered unprecedented avenues for branding and shaping identity, and understanding how the system works is fundamental if one is to be prepared to make choices about and within the system. Corporate branding reflects corporate identity like a name reflects individual identity, and corporate branding is a reflection of corporate structure. The following chart illustrates the relationships that branding implies, both on an individual and a corporate basis. This sample worksheet is designed for high school students, but it can be adapted for all ages since it can be depicted visually as well as verbally (see next page): T. Jolls - The Impact of Technology on Character Education 16 Company (Owners) Manufacturing/ Operations Marketing/ Sales/Advertising/ Public Relations Administration/ Finance/Accounting/ HR/Legal Table 1 Worksheet What is a Brand? A brand is a collection of images and ideas representing organizations, products or services. It refers to the concrete symbols such as a name, logo, slogan and design scheme as well as the associations and expectations people have about the owner of the brand. Examples of Brand Names Brand names reflect how companies/organizations are organized: Product Description Marketing Name Company Name Toasted rice cereal Rice Krispies Kellogg‘s Harry Potter books Harry Potter & the Goblet of Fire Scholastic, Inc. Undertaker SmackDown World Wrestling Entertainment Operations/Manufacturing Marketing/Sales/ Advertising/PR Owners/Executives Administration Make the product or provide the service Sell the product or product(s) Finance and oversee/advise Operations/Manufacturing and Marketing/Sales Organization Chart Showing Structure/Responsibility: T. Jolls -The Impact of Technology on Character Education 17 The worksheet gives a brief definition of the word brand. Then, examples of brand names are given: Rice Krispies and Kellogg‘s, for example, or the actor Undertaker, who has become a celebrity by appearing in a television show called ―SmackDown‖ produced by World Wrestling Entertainment. The avatar Lord Mongoose is a popular player amongst a band of Halo 3 online game players. These descriptions can be augmented with logos or images, recognizable by students who associate them with the product, individual or company. Discussions with students help them explore, in a manageable way, the difference between generic product descriptions, marketing names (product brands) and company names (or corporate identities). Once students understand these distinctions, they are able to make the connection between how a company‘s structure and major functional areas, such as operations, marketing and administration, relate to each of the products and brand names. So that students have the opportunity to see how a company visually represents its structure, a simple organization chart is shown that can easily be related to the major company functional areas. Understanding this system of visually representing organization structure, products and identity provides students with access to information that will serve them all their lives, not only helping them understand the marketing of products, services and corporate identities, but also showing them where they may fit into the consumer world, or into future employment as they pursue their own career identities. To be able to navigate the system and determine one‘s place in it, one must first understand the system. The stakes are high from every point of view – organizations and individuals. Corporations literally spend billions on their brands and corporate identities each year, using every available tool known to promote their brands and identities throughout the world. The T. Jolls -The Impact of Technology on Character Education 18 impact of this effort affects everyone, consciously or not.

A quick look at this chart shows a ―new way‖ of learning the ABCs: Table 2 The ABCs of Branding These ABCs were not learned in school, but literally millions of people have mastered them. And that brands influence choices was recently demonstrated again in a study that showed that, when given a choice of an identical food in a branded wrapper versus an unbranded wrapper, children will choose the food in the branded wrapper as being tastier (Robinson, Borzekowski, Matheson, & Kraemer, 2007). These choices have profound implications in educating a whole child. Branding is about splicing and dicing, appraising and valuing, judging and separating. In a sense, branding offers risk management, because trusted brands are, yes, trusted to represent a certain level of quality and reliability. Literally, ―In Brands We Trust.‖ And yes, branding is also about affiliating with something or someone. However, this affiliation always T. Jolls -The Impact of Technology on Character Education 19 comes with a price tag, because branding is about valuing and commercializing, about ―monetizing‖ people, places and things. Branding is now about the commercialization of individual identities. In this commercialized world, everything has a risk, everything has a value, everything is for sale, everything has a price. There is a pecking order and a hierarchy, and intrinsic value is ne‘er to be encouraged or found. Transactions are what count. Yet people yearn for the transcendent. MasterCard has brilliantly acknowledged this in its long-running campaign that puts a price on a bicycle at $129, for example, but then points out that a ride with a child is ―priceless.‖ People yearn for the priceless, but they often seek the priceless through more brands and more transactions. People even brand themselves and their relationships, literally and figuratively. Tattoos: Aren‘t they a type of labeling and branding? Screen names and avatars: Don‘t they just represent one aspect of self? And maybe even a contrived aspect of self? ―Viral‖ marketing: How about when ―campus leaders‖ are identified, and a company gives them gifts to hand out to their friends so that the company can create a buzz, and sell more product? Isn‘t this a type of branding and commercialization of friendship? Yet the consequences of this personal branding are seldom discussed or explored. People remain eager to brand themselves. To stand out, and yet to affiliate. To belong. Or at least to look like they belong. Isn‘t it ironic, that by picking brands and buying brands, people are really not standing out; they are herding together to try to define themselves. But in the end, this safety net turns out to be the riskiest strategy of all, because if one wears Burberry from head to toe, who is that person, really? If a fellow only drinks Michelob, does it really make him a hipper, more affluent person? By defining self from the outside in, the risk is that T. Jolls -The Impact of Technology on Character Education 20 one comes up empty at the end, with vital questions unanswered: who one really is, what one can really do and where and with whom one feels a sense of belonging. Since people can extend themselves throughout the world, with the Internet reaching globally, individuals are faced with new interpretations and representations of self that were never before possible. Adolescence is a critical time period for development of identity (Kafai, Fioelds & Cook, 2007) and the computer is a tool for exploration of oneself. But the newness of technology such as social networking is causing confusion and a blending of private, public and commercialized ―selves.‖ So celebrities like Oprah Winfrey attract crowds for politicians like Barack Obama. Who are citizens really voting for? Sometimes there are tragic consequences of this boundary-blurring between the private, public and commercial selves. For example, one ―shooter‖ said in his suicide note that he just wanted people to know who he is, and by murdering people at random, he was sure to be noticed (Associated Press, 2008). By whom? And for how long? For many, creating and networking with online content is becoming an integral means of managing one‘s identity, lifestyle and social relations (Livingstone, 2008). This usage is fast becoming ubiquitous, with 65

percent of teens having created a social networking profile for themselves; 64 percent having created online content and 30 percent owning a cell phone (Rainie, 2008), which they use to text messages, circulate images and surf the Internet. An understanding of media, branding and how it relates to identity is essential to delineate the private, the public and the commercialized self, and for making responsible choices in representing one‘s own identity to others. Following is a framework, the 3 B‘s, to explore identity and the boundaries between private, public, and commercial selves. Understanding how self identity works in private, T. Jolls -The Impact of Technology on Character Education 21 public and commercialized spaces is a foundation for providing conscious paths for decisionmaking and behavior in the world of technologies, such as social networks. The 3Bs framework is divided into three categories across the top and three categories down the left side: T. Jolls -The Impact of Technology on Character Education 22 Table 3 Identity in the Global Village IDENTITY IN THE GLOBAL VILLAGE Self-Aware Enlightened Empty Private Self Public Representation Commercialization of Self of Self BE Self-acceptance: Authentic self as Aspects of self named authentic, whole, shown in public spaces and represented integrated in public spaces BE ME Self-actualization: Mediated self-expression Brand names behavior represent self through products or services used BELONG Extending self Interacting with others Service or product brands to others in in mediated public spaces used or gifted to form basis relationships of interaction with others honest, authentic, responsible, narcisstic, contrived, balanced, intimate reciprocal exploitive Trust, character, connections Selling, transactionoriented, Integrated, relational, reciprocal separated, isolated, oneway © 2008 Center for Media Literacy T. Jolls -The Impact of Technology on Character Education 23 Starting with the three categories down to the left side, the ―Three Bs,‖ relate to all the other categories in the framework: The Private Self When one looks at the Three B‘s in relation to the Private Self, one has a basis for exploring self and self-identity. Be. Being is the self. Ideally, with honest self-awareness, the private person accepts him or herself, and is an authentic, whole, integrated person, with unmeasured and unjudged intrinsic value. Be Me. Behavior is the outward manifestation of self. This is self-actualization; behavior is the action-oriented representation of character, personality, choices, talents and skills. Belong. Be-long. By being long, individuals extend themselves to others through relationships. We make ourselves available; are capable of trust and intimacy with others and actively engage in interactions with others through sharing ourselves. The Public Self On the other hand, Public Representations of Self occur in settings where others are present to witness behavior, or through media representations such as photos or videos or theater or other mediated environments which are generated by oneself or others. Be. Here, the self is revealed to others, perhaps consciously or unconsciously, perhaps authentically or not, but the key to understanding is that the self is being observed or recorded by others. That observation may be shared widely or not, but because the self is not alone, it is a public representation or observation that is being made. T. Jolls -The Impact of Technology on Character Education 24 Be Me. Here, the self is revealed (or disguised) to others through a conscious attempt to represent the self, typically through one-way communication. This can occur through artwork, photos, videos, writing or other media or mode of expression. Whether the person intends the self-revelation to be shared or not is immaterial; the point is that the individual expressed him or herself through some conscious public behavior or media representation. Belong. In interacting with others, whether individually or through some form of media, a person is extending him or herself to them. The self being revealed may or may not be authentic, whole or integrated, but there is a sharing of ―self‖ that occurs in a communityoriented environment, such as a social networking site, through texting or instant

messaging. This type of ―belonging‖ is different from private forums, however, in that the record of the interaction is permanent and can be widely shared and circulated, even on a world-wide basis, instantly and forever, through the Internet. The interaction may extend to people who are not and may never be personally known. The Commercial Self When global media and branding are added to the mix of self-identity, a whole new dimension emerges to an understanding of the Three Bs – involving a commercialization of self and identity, often a re-definition of self. To explore some of these implications: Be. Rather than an integration and wholeness of an authentic self, commercialization of the self encourages a splintering, a ―slicing and dicing‖ of self, depending upon the image and the audience desired. So, for example, a gamer may adopt a gamertag like ―Blade011‖ to elicit a reaction by other gamers of a sharp, dangerous player. This may not be the only screen name adopted by the gamer; this person may have many names for many different applications, with each name projecting a different identity selected to ―market‖ a particular image. T. Jolls -The Impact of Technology on Character Education 25 Be Me. In expressing identity, the individual selects products or services according to brand. So, for example, a person may select a neighborhood based on a branded zip (90210, Beverly Hills) in a branded home (architecture by Frank Gehry) with branded carpets, furniture and home accessories and then wear branded shirts, dresses, pants, socks or underwear and drive a branded car going to a branded restaurant to eat branded food. These labels are everpresent, and they make a statement about how individuals live and who the individuals define themselves to be. Although brands are useful in making selections, it‘s important to note that there is a difference between a brand and the self. A brand fragments the self into thousands of identities; the self is greater than the sum of all these various parts, which do not identify the actual self. Belong. Who are ―friends‖ today? Are they limited to a ranked list of five, ten or twenty people on a social networking site? Are they long lists of people who are attracted to a self-projected media image and who want to identify with that image? Are they people who have lots of ―swag‖ or ―bling‖ to share? Are they individuals who are selected by viral marketers as ―thought leaders‖ who can influence others to buy certain products or services? The basis of these relationships are transactions rather than interactions, often with a commercial basis. Selling is always going on, whether selling to attract friends through a carefully-manufactured and transmitted image or selling these so-called friends products or services. At worst, these relationships are exploitative, opaque and devoid of real friendships or acceptance of the authentic self. Yet, in an intense desire to belong and to feel accepted – by oneself and by others – people allow themselves to be seduced by image, fooled into thinking that the mediated, T. Jolls -The Impact of Technology on Character Education 26 branded world can offer a new and improved version of themselves that will be accepted. While people seek wholeness, integration, connections, trust, intimacy, transparency and reciprocity, what they get often encourages fragmentation, isolation, separation, judging, transactions, fear, opaqueness and competitiveness. This age-old search for self will never end; but by understanding and using a framework, children can come to see the relationship between the media, the message and the brand, and see how they fit in more clearly. Then there is a choice on how citizens identify themselves and others. The Arts: Understanding Values and Expression To be able to express their identity, their thoughts and feelings, and to actively participate as producers in the global village, children need arts education. Arts participation increases academic achievement, creativity, fluency and originality in thinking and feelings of self-worth (Holloway & LeCompte, 2001). This in itself is enough of an endorsement for arts education, but there is more. The arts enable children to express themselves in healthful ways, permitting them to try on a variety of alternative identities

in relatively risk-free environments and to develop a sense of voice and agency. They provide opportunities to interact meaningfully with adults over extended periods of time, facilitating development of communication and critical thinking skills. And perhaps most important, they provide a way for children to express their emotions – all emotions – in a safe way (Holloway & LeCompte, 2001). The arts show character at work and provide a testing ground. In an online program called Arts Focus, designed for middle school girls, girls ―had the opportunity to embody and practice new ways of being and becoming. Embodiment and practice allows children to T. Jolls -The Impact of Technology on Character Education 27 imagine themselves in new roles – whether considered positive or negative by adults – and learn how it feels to act out alternative roles in the world‖ (Holloway & LeCompte, 2001). Even the physiology of the brain speaks affirmatively for arts education and the influence the arts have on cognition: arts training works through the training of attention to improve cognition for those with an interest and ability in the arts (Posner, Rothbart, Sheese, & Kieras, 2008). Since this ―executive‖ attention in the brain is related to a child‘s everyday control of thoughts, feelings and behavior, arts education improves children‘s self-regulation of cognition and emotion, impacting their behavior. The arts are pervasive in technology-driven media, and artists have typically embraced technology. The visual arts, such as typesetting, went digital in the 1970s; graphic arts went digital through publishing software programs in the 1980s; musicians now compose using computer software; storytelling moved from the campfire and the theater to the screen, the radio and now the Internet; and dance and movement are now choreographed electronically, through animation and video. Today, with digital photography, video, recorders, and the Internet and cell phones, anyone can be a producer, an artist, global distributor and collaborator. As the global village grows, its highways, buildings and even ―people‖ are built through the media arts and technology. So as the global village grows, so do the media arts, offering careers in an important and growing part of the local economy. In Los Angeles and Orange counties alone in 2005, the creative economy created more than one million direct and indirect jobs; more than $140.5 billion in sales/receipts; and more than $3.4 billion in state tax revenues (Kyser, Sidhu, Freeman & Huang, 2007). The convergence of media, technology and education is well illustrated in arts education. The U.S. Dept. of Education, in conjunction with the National Endowment for the T. Jolls -The Impact of Technology on Character Education 28 Arts, sponsored 17 grants on media literacy and the arts beginning in 2000. One of these grants resulted in Project SMARTArt, a joint effort of Los Angeles Unified School District, the Education Division of the Music Center of Los Angeles County, the Center for Media Literacy, and AnimAction, Inc. Project SMARTArt explored how media literacy and the arts might inform one another as disciplines. The Project used the theme of violence prevention as the inspiration for 30-second animation shorts produced by participating elementary school students. Three years of work at Leo Politi Elementary School in Los Angeles showed that the arts and media literacy could be integrated together and across the curriculum, in Language Arts and English Language Development. Project SMARTArt revealed that media literacy and the arts can underpin a cycle of analysis and expression, where students engage both their heads and their hearts. Initially it was posited that media literacy content would drive student media analysis, and that the arts would provide a vehicle for expression through the creation of media. However, the distinctions between these two purposes were not so clear cut. On a deeper level, the processes engaged in media literacy (accessing, analyzing, evaluating and creating) are directly paralleled in the study of the arts, as the following framework comparisons show using California State Education Standards for Visual and Performing Arts (qtd. By Jolls & GrandeHarris, 2005): Access: Participation in the

arts allows students to access and process information, as well as demonstrate knowledge, using various learning modalities. As different art forms engage different learning styles, more students are given opportunities to be successful in the educational system. In this way, T. Jolls -The Impact of Technology on Character Education 29 the arts provide access to learning — which might otherwise be difficult in the traditional academic environment — for many students. Analysis: Quality arts education includes the component of Artistic Perception, which "refers to processing, analyzing, and responding to sensory information through the use of the language and skills unique to" the arts. As students develop skills in artistic perception, they are expected to specifically articulate "the what" in communicating "the why" (for example: "the slow, steady beat of the bass drum conveyed a feeling of loneliness"). The ability to articulate "the what" to communicate "the why" is a central principle in the teaching of media literacy. Evaluation: Aesthetic Valuing, also a key component of arts education, requires that students "critically assess and derive meaning from the work of an (arts) discipline, including their own." This emphasis on making individual judgments about what they observe (and what they create) in the arts empowers young people to draw their own conclusions and make their own choices. Applied in the broader context, this skill set directly services the conviction that a media literate person is equipped to make more informed choices, and is able to live consciously in a media-oriented society. Creation: Through Creative Expression, "students apply processes and skills in compositing, arranging and performing a work and use a variety of means to communicate meaning and intent…" This component of arts education engages students in the process of creating works, providing them opportunities to T. Jolls -The Impact of Technology on Character Education 30 explore, learn, practice and refine their own abilities to communicate a specific point of view or message. Project SMARTArt defined "media" to include any channel of communication thereby identifying all art as "media." With this expanded view, works of art themselves became source material for critical analysis. However, Project SMARTArt did not address participation with interactive online media, since at the time of the program implementation (2001-2004) such classroom access was unavailable at Leo Politi Elementary School (Jolls & Grande-Harris, 2005). The 30-second animation shorts that students produced during Project SMARTArt are clear examples of technology-oriented production that can serve as the basis for social media campaigns, spotlighting: violence prevention, smoking cessation, safe sex, healthy eating, etc. Through active production and participation, students learn to translate theory into action and engage with society at large in socially responsible ways. Today, such engagement is happening regularly. VERB™ It's what you do was a national, multicultural and social marketing campaign coordinated by the U.S. Department of Health and Human Services' Centers for Disease Control and Prevention (CDC). This social marketing campaign applied commercial marketing strategies to influence the voluntary behavior of target audiences to improve personal and social welfare by increasing and maintaining physical activity among tweens (aged 9-13). The 2002-2006 campaign provided clear evidence that a national media campaign with strong social marketing elements can have a demonstrable impact on physical activity, nationwide (Cavill & Maibach, 2008). Such campaigns turn ordinary citizens into active participants using multi-media technology tools. T. Jolls -The Impact of Technology on Character Education 31 Although such a sophisticated social marketing campaign required knowledge of many subjects, the arts serve as a core element in communicating the content area by expressing values, identity, thoughts, emotion, realities and ideals. Media Literacy: Acquiring a Lifelong Process for Inquiry The skills of critical analysis are fundamental to media literacy, whether one is acting as a consumer, producer or active participant with media. Media literacy,

grounded in inquirybased, process-oriented pedagogy, offers not a new subject to teach but rather a new way to teach and a new way to learn. Media literacy began at the grassroots as parents, educators and concerned citizens concluded that if media was to play a pivotal role as children‘s teacher, children would need a way of filtering through the messages. The goal is wise choices, in accordance with acceptable community norms. 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. Once children master a decision-making skill, they can apply it to a variety of contexts. 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. Media literacy has continued to grow globally and has some common characteristics: T. Jolls - The Impact of Technology on Character Education 32 First, media literacy helps individuals explore their deep and enduring relationship with media. In 1989, Eddie Dick, Media Education Officer for the Scottish Film Council, developed the Media Triangle, which illustrated the relationship between Text, Production and Audience. Understanding this relationship is fundamental to understanding the power dynamic between these three elements. In looking at a common brand identity or logo, for example, it becomes evident that audiences have a shared understanding of the text – the logo – that was produced by a particular organization. The audience did not necessarily ―ask‖ for this understanding, but because of repeated exposure to the brand, people have internalized an understanding of what the brand means and how they may have interacted with it in the past. The producer has established a relationship with the audience through the text, which is the logo. Yet the audience exerts the ultimate power over the relationship when consciously deciding to engage or not. Second, the focus of media literacy is on process rather than content. The goal of media literacy is not to memorize facts about media or be able to make a video or design a Web site. Rather, the goal is to explore questions that arise when one engages critically with a mediated message – print 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, more than 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). T. Jolls -The Impact of Technology on Character Education 33 Such skills have always been essential for an educated life, and good teachers have always fostered them. But they too emerge only as a by-product of mastering content areas such as literature, history, the sciences and mathematics. Seldom are process or learning skills explicitly taught. But if society is to graduate students who can be in charge of their own continual learning in a media culture, learning skills must be ―incorporated into classrooms deliberately, strategically and broadly‖ (Partnership for 21st Century Skills, 2003, p. 6). As writer Alvin Toffler (qtd. in Partnership for 21st Century Skills, 2003) pointed out, ―The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn and relearn‖ (p. 6). By its very nature, media literacy teaches and reinforces 21st century learning skills. Third, media literacy education expands the concept of text to include all message forms – verbal, aural or visual (or all three together!) – used to create and then pass ideas back and forth between human beings. Full understanding of such a text

involves not just deconstruction activities – that is, taking apart a message that already exists – but also construction activities – learning to write opinions and ideas with the wide range of multimedia tools available to young people growing up in a digital world. Fourth, media literacy is characterized by the principle of inquiry – that is, learning to ask important questions about whatever one sees, hears, produces or engages with: Is this new scientific study on diet and weight valid? What are the implications of ranking friends on a social networking site? What does a ―photo-op‖ mean? T. Jolls -The Impact of Technology on Character Education 34 With a goal of promoting healthy skepticism rather than cynicism, the challenge for the teacher (or parent) is not to provide answers but to stimulate more questions – to guide, coach, prod and challenge the learner to discover how to go about finding an answer. ―I don‘t know: How could we find out?‖ is the media literacy mantra. Questions, of course, open up many more questions. And how one even approaches a question determines what answers one might find. Inquiry is also a messy process because one question leads to another and yet another. To keep inquiry on course and to provide a way to be able to master a process of inquiry, curriculum specialists look for a comprehensive framework to provide guidance and structure. Core concepts of media literacy, rooted in media studies by academics throughout the world, are a way to express common media characteristics. Various adaptations of core concepts have been developed, starting with 18 concepts originally named by Len Masterman in his seminal work, Teaching the Media, and eight core concepts used in Canada as a way of structuring curriculum. The National Association for Media Literacy Education provides a listing of Core Principles for media literacy, as do other organizations such as Project LookSharp. The Center for Media Literacy (CML), one of the pioneering media literacy organizations in the United States, provides a research-based framework through the release of its original CML MediaLit Kit™ in 2002. Designed to provide a common vocabulary and approach, the CML MediaLit Kit features Five Core Concepts for Media Literacy, and provided Five Key Questions for deconstruction of media messages. Recognizing that skills of critical analysis are just as important during media production, in 2007 CML also developed Five Key Questions for construction of media messages. This pioneering CML framework, T. Jolls -The Impact of Technology on Character Education 35 called Questions/TIPS (Q/TIPS), addresses questions from the viewpoint of both consumers and producers. Based on the work of media scholars and literacy educators in the U.S. and from around the world, each of the Five Key Questions flows from a corresponding Core Concept and provides an entry point to explore the five fundamental aspects of any message in any medium: authorship, format, audience, content and purpose. Starting with simple versions of the questions for young children and moving on to more sophisticated analyses for adults, anyone can apply the questions to a variety of texts. Because the questions are succinct, media literacy literature includes a variety of ―guiding questions‖ to tease out the deepest understanding possible. Learning to ask and to apply the Five Key Questions to texts is a process skill that is not mastered the first time out. Once learned, however, the process becomes automatic as users build the habit of routinely subjecting media messages to a battery of questions appropriate to their age and ability. As the cornerstone of the media literacy process, the Center for Media Literacy‘s Five Key Questions provide a shortcut and an on-ramp to acquiring and applying critical thinking skills in a practical, replicable, consistent and attainable way. They are an academically sound and an engaging way to begin and they provide curriculum developers with a useable structure. Teachers are often called upon to teach critical thinking, but seldom given guidance on ―how.‖ The CML framework, Questions/Tips (Q/TIPS), provides a point of entry for thinking critically and a quick process for continued skill development on a

lifelong basis (see next page): T. Jolls -The Impact of Technology on Character Education 36 Table 4 CML's FIVE CORE CONCEPTS AND KEY QUESTIONS FOR CONSUMERS AND PRODUCERS Media Deconstruction/Construction Framework CML's Questions/TIPS (Q/TIPS) © 2002-2007 Center for Media Literacy, www.medialit.org # Key Words Deconstruction: CML's 5 Key Questions (Consumer) CML's 5 Core Concepts Construction: CML's 5 Key Questions (Producer) 1 Authorship Who created this message? All media messages are constructed. What am I authoring? 2 Format What creative techniques are used to attract my attention? Media messages are constructed using a creative language with its own rules. Does my message reflect understanding in format, creativity and technology? 3 Audience How might different people understand this message differently? Different people experience the same media message differently. Is my message engaging and compelling for my target audience? 4 Content What values, lifestyles and points of view are represented in or omitted from this message? Media have embedded values and points of view. Have I clearly and consistently framed values, lifestyles and points of view in my content? 5 Purpose Why is this message being sent? Most media messages are organized to gain profit and/or power. Have I communicated my purpose effectively? T. Jolls -The Impact of Technology on Character Education 37 CML's Five Key Questions of Media Literacy apply to both deconstruction, or analysis and consumption of media messages, as well as construction, or production of media messages. When audiences ―consume‖ or analyze media messages, they have no control over the content of the message. Instead, they only control the meaning that they make from the message and how they might want to respond in making decisions or taking action. They can accept or reject the message, but unless the message is ―remixed‖ and ―rehashed,‖ the audience cannot change it until they enter into an active production process. But when an individual or team ―produces‖ or constructs media messages, they do control the content of the message to the extent that they have autonomy or self-awareness. Yet they always bring themselves to the message, with all of the experiences and knowledge that inevitably affects the content of their messages, because by definition, human beings have imperfect understanding, and each human being is unique. In constructing a message, a producer has many decisions to make. The producer is not just deciding how to make meaning from his own message, but through his construction techniques, he is also influencing how others might make meaning from it and possibly reacting to input from others. All producers have both personal and social power, and therefore personal and social responsibility, toward their audience. Where there is communication, there is audience, even if it is an audience of one! The Five Core Concepts apply in both consumption and production of media; however, the Five Key Questions that stem from the Five Core Concepts are slightly altered because consumers have a different point of view from producers. This point of view affects the ―voice‖ of the questions, from the passive voice for consumers to the active voice of producers. T. Jolls -The Impact of Technology on Character Education 38 The analysis process encouraged by the Five Key Questions and the Five Core Concepts informs the decision-making or actions that may be taken. This decisionmaking/action process is represented through CML's Empowerment Spiral. The Empowerment Spiral starts with: awareness of an issue or message, analysis through the Five Key Questions, reflection through processing our learning, and action -- whether we decide to take action or not. Media literacy is about understanding ongoing relationships with media, about how audiences make meaning from a media product and about understanding the greater role of media in society. Though being media literate implies having a broader skill set than simply evaluating a media product, evaluating a media product always involves the skills of media literacy. Character

Education: Values as a Base for Evaluation What Aristotle called ―the habits of right action‖ can surely be taught, but it is highly doubtful whether they can simply be instilled or coerced (Ellenwood, 2006). Regardless of what habits of right action may be, or how they are taught, they rest squarely on an understanding of values: what they are, why they are important, and how they are applied. Establishing a vocabulary for values is a first step, and many character education programs do a thorough job of labeling and explaining values such as respect, fairness, integrity so that students have common understanding and grounds for discussion. When these ideas are presented as a framework, students have tools which they can use on a lifelong basis. Many organizations involved in character education provide solid frameworks, such as the Six Pillars T. Jolls -The Impact of Technology on Character Education 39 of Character by Character Counts (Josephson Institute, 2008), or the CHEER™ framework provided by the Harlem Globe Trotters (Business Wire, 2008). Ann W. Rousseau, president, Involve Me, I Will Learn, Inc., has developed an excellent framework, defining ―character‖ in a memorable way (personal communication, July 31, 2008): Char-Actor (Care Behavior); and further defining character, ―My character is the things I say and do that show how much I care about me and you!‖ The core values are communicated as ―being a R.A.S.C.A.L.‖ who, before saying or doing anything, asks whether the action is: Respectful of myself and others Appropriate for the time and place Safe – emotionally and physically Considerate of another‘s feelings/needs Accepting of others‘ beliefs & actions Loving – coming from my heart Having a knowledge of what values are is necessary in decision-making of all types and in all contexts. In identity formation, values determine what individuals are attracted to and affiliate with, or not (Livingstone, 2008). In using a media literacy approach, values play a central role in evaluating information and in using judgment. With the advent of new technology, there are new ways to present students with opportunities to test their values in simulated settings or even with multiple identities using avatars. In a sense, interactive media and technology has opened doors that didn‘t exist before, and like all fields of knowledge, character education is moving from the paper-and-pencil era to the virtual era in helping students cope with the new landscape of the global village. T. Jolls -The Impact of Technology on Character Education 40 So rather than just using traditional print-based fiction and biography as ways of providing students with scenarios built on a believable, rich series of actions, Web sites like ―Teach with Movies‖ provide a compendium of films categorized according to values or character lessons. In using such vehicles over time, students gradually come to understand the intricate interplay of rational, humane, caring, courageous and cultural factors in judgments and decisions (Ellenwood, 2006). They have opportunities to explore conflict between values and the context in which decisions are made. These kinds of lessons can be integrated into language arts, social studies or other content areas, while meeting state education standards. Additionally, interactive Web sites and games provide new worlds in which children can experiment and play, trying on various guises and as active agents, while still being constrained by the rules and values of the technological box in which the game or Web site is contained. These virtual games play on the very qualities that make physical education so integral to character formation: the ability to participate with others as a team, learning how to negotiate the relationship and interplay between self and others. There are new freedoms for players who adopt avatars in games, which allow participants to adopt new names, different genders, altered ages, different looks, for example, without revealing their true identities. And certainly, in these new fantasy worlds, there are many of the same old behaviors evident from the real world -- class stratification, pressure to fit in with the latest trend, and even inequitable racial representation (Kafai, Fields, & Cook, 2007). These online worlds

present ―teachable moments‖ impossible to replicate in the real world. ―Video games represent a process…that leads to better and better designs for good learning and indeed, good learning of hard and challenging things,‖ James Paul Gee (2007) noted in his ground breaking book, What Video Games Have to Teach Us About Learning and Literacy (p. 6). T. Jolls -The Impact of Technology on Character Education 41 One media world, Kaleidostories, was created explicitly to explore how middle and high school students and their teachers, in five different Spanish/English sites around the world, created a virtual community to exchange stories about shared values and role models. The research project goal was to explore how new technologies can assist young people to discover their selves as well as the underlying patterns of thought and behavior that connect the worldviews proposed by different cultures. The project shows how teachers were able to use the online community to complement and augment their face to face activities and interactions by integrating Kaleidostories into different curricular content areas (Bers, 2005). Although values and character education are timeless, the arena where behaviors and character come into play is rapidly moving online, to the point that when one is not ―online,‖ one is ―offline.‖ The world of ideas in the global village is a competitive marketplace, and values guide citizens on what to place value on. To be able to deliver character education, educators must move to the virtual world and use the power of technology to help teach, so that students may more effectively learn in a context that is meaningful to them. Only then can citizens be prepared to make the judgments that will determine whether they allow themselves to be manipulated -- or whether they are guided by more sophisticated evaluations of the tradeoffs between risk and reward. In this valuing of the balance between opportunity and risk, people need to determine what their real risks and opportunities are, and sort through the ―scares‖ and the red herrings. Providing children with meaningful skills such as statistical analysis and helping them practice valuing their risks and opportunities is a facet of character education often overlooked. Here are some facts about Internet use reported by the Pew Internet & American Life Project (Lenhart, 2007): T. Jolls -The Impact of Technology on Character Education 42 93 percent of American teens ages 12 – 17 use the Internet 32 percent of online teens report they have been contacted online by a complete stranger (defined as someone who has no connection at all to you or any of your friends) Of teens who have been contacted, 23 percent say they were made scared or uncomfortable by the stranger contact Overall, 7 percent of online teens experienced disturbing stranger contact. What value should be placed on this research? What resources should be matched to address this problem and how should those resources be allocated? It is in answering these types of questions that values play out, and citizens and their representatives are called to answer these questions. Such decisions cannot be lightly made; they take skills, knowledge, understanding and indeed, wisdom, since choices will affect people world-wide. Citizenship in the global village requires preparation, just like citizenship in the local village. Technology can facilitate or exacerbate sorting through the information at hand, and the media literacy skills, combined with character education, provide a way to integrate the processes necessary to make choices. So, for example, if a choice is made to minimize the number of stranger contacts to online teens (prompted by valuing this action), a cursory example of how to attack this issue would be to seek to answer, ―How can the number of contacts by strangers to online teens be minimized?‖ Using media literacy skills, one would access, analyze, evaluate, create and participate with multi-media information to conduct a process of inquiry: Access: By tapping into digital resources and databases, it is possible to access an enormous repository of information to expand knowledge about this question. T. Jolls -The Impact of Technology on Character Education 43 Analyze: Using an analysis process for

critically thinking about the information obtained, it is important to use a sound methodology for determining the accuracy and efficacy of the information. Tools like CML‘s Five Key Questions enter into use in this step. Evaluate: Setting criteria pertinent to solving the problem or answering the question is the key with this skill. It is in this step that values are reflected, tradeoffs considered, and information eliminated or considered accordingly. Create: Integrating, documenting, presenting, sharing and disseminating information – these are all part of the creation process, using a variety of multi-media/technology tools. Participate: Interacting with others while using the information elicits a dynamic process of interchange; questions and knowledge-sharing deepens understanding and generates options for problem solving. In addition, decision-making tools such as the CML Empowerment Spiral, based on the work of Paulo Friere (1970), provide a model for the steps needed in taking action: Awareness: One has to be aware of an issue. Analysis: The media literacy steps outlined above provide an analysis process. Reflection: One must reflect, judge and choose. Action: One can do nothing, or do something to the extent desired, alone or with others. These steps are age-old and do not require technology, but technology allows for better, faster and cheaper ways to teach people needed skills and more quickly arrive at decisions. With the sheer volume of information available, these skills are needed more than ever. Students need explicit labeling and processes to develop a shared vocabulary for interactive problem solving. T. Jolls -The Impact of Technology on Character Education 44 On balance, then, the impact of technology on character education is positive because technology gives more power to the people, and empowers people to solve problems more efficiently and to live better lives. Character education is not just about learning to be safe or managing risk; it is about maximizing the positive prospects for individuals and society, about living values that elevate people and the human condition in even the most trying circumstances. That this message resonates with people is exemplified in the phenomenal response to the late Randy Pausch‘s last lecture called ―Really Achieving Your Childhood Dreams.‖ On September 18, 2007, computer science professor Randy Pausch stepped in front of an audience of 400 people at Carnegie Mellon University to deliver his lecture with slides of his CT scans beaming out to the audience. Randy told his audience about the cancer that was devouring his pancreas that would claim his life in a matter of months, but he also laid out his philosophy for how to live fully the gift of life. Randy‘s lecture became an instant world-wide phenomenon on YouTube, as has the book he wrote. Sadly, Randy lost his battle to pancreatic cancer on July 25th, 2008, but his legacy – his framework for living -- will continue to inspire generations to come, thanks to the power of the global village to hear his message. Implications for Education Practice Technology affords new understanding and new approaches as the global village becomes ever more complex. The world of education is often disconnected from the global village due to a continuing paucity of technology use in classrooms, and as a result, it operates in a world removed from where children spend much of their time. All disciplines, including character education, are contained in the education structure, and it is impossible to separate the education structure from an individual discipline within it. With the pace of technological T. Jolls -The Impact of Technology on Character Education 45 change, the U.S. education system is under unprecedented and much-needed pressure to adapt and to engage in a process of creative destruction to reinvent itself. The change that technology is bringing is revolutionary, not evolutionary, and it affects all stakeholders – students, teachers, administrators, parents, employers and citizens. This is particularly true in the shift from emphasizing content knowledge over process skills. They are not mutually exclusive – rather, they are mutually supportive of each other, with the combination actually strengthening the two.

But embedding the formal teaching and learning of process skills into the education system takes new understanding, new modeling and an ongoing, high-level, determined commitment. This chart captures some of the major shifts that technology has brought to the education world – changes which educators are still struggling to understand and adapt to: T. Jolls -The Impact of Technology on Character Education 46 Table 5 Comparisons between Local Village and Global Village Past Today Local Village Global Village Adult Guidance Plentiful Adult Guidance Scarce For Children Local Representations Global Branding Information Access Scarce Information Access Plentiful Information Acquisition Information Sorting Content Knowledge Transmitted Process Skills Practiced and Applied Granular Content Knowledge Research-based Framework Sorting Isolated Content Silos Integrated Problem Solving Production by Few Production by Many Access to Best Teachers Scarce Access to Best Teachers Plentiful through Technology Physical Location of Schools Virtual School Locations Examining this table more closely, the present education was born in an era when: children‘s contact with adults in the local village was intense on a daily basis, providing children with guidance and filters on the information and people they came in contact with. Now, in the global village, such contact with adults is scarce. businesses and organizations in the local village were known individually. Today, businesses and organizations are often branded globally for instant recognition. information and access to printed information was scarce. Now, information access is plentiful and overwhelming. content knowledge was passed down through individual teachers and printed information was often hard to obtain. Now, sorting through and validating information are the priorities, using research-based frameworks grounded in information process skills. T. Jolls -The Impact of Technology on Character Education 47 content silos developed as ways to specialize and share scarce knowledge and scarce access; today, deep knowledge is readily documented and available while problem solving across disciplines, using specialized knowledge from various resources, is needed. production of media was controlled by a few; today, everyone is a media producer using digital tools. access to the best teachers was limited to physical proximity. Today, everyone can have access to the best teachers through the global village. students had to be physically present in school to progress; today, students are free from time, space and a lock-step pace. learning to play together, to work in teams cooperatively, was confined to physical interaction. Now, students can learn teamwork through online sports and games. students were more physically active because their world was more physical. Today, students are less physically active, creating poor environments for physical health and well-being. With these changed conditions of life in the 21st Century, then it is imperative to ask: If process skills are central to being an educated citizen, why are process skills not clearly defined and articulated through educational frameworks? Why are these skills not the focal point for learning and acquiring content knowledge? So, for example: If values are the fundamental prism for evaluating choices and decision making, why isn‘t character education at the heart of education? If critical analysis of representations, including branding systems, is key to sorting valid information for risk analysis and decision-making, why isn‘t media literacy education central to teaching? If the arts provide the creative language for emotional expression and understanding, why are the arts being downsized in schools when children need these skills to understand the global village and need to have outlets for expression and learning through different modalities? If sports and games are effective ways of learning to work individually and in teams in today‘s complex society, then why are physical education programs being eliminated when children need these skills more than ever? The whole child is more than the sum of the parts that are currently being addressed in today‘s schools. T. Jolls -The Impact of Technology on Character Education

48 Conclusion Due to the revolution that technology has engendered, the present education system reflects a system of values from the past. Access to content knowledge is being valued by our society as scarce when it is indeed plentiful. Process skills represented in character education and media literacy have not been explicitly labeled and taught in schools through the years because in the local village, access to adult guides was plentiful. Now, access to caring adults is scarce in the global village. Citizens need internalized frameworks and process skills now more than ever, to navigate the media world. This is not to say that content knowledge is unimportant – quite the contrary – but process skills in the global village are needed as the central tools through which to acquire and apply content knowledge. This means that process skills must be valued, articulated and taught systematically. 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 will inform and guide their decisions throughout life. Equipping children with the tools to be able to evaluate their opportunities and risks and to make their own choices is the ultimate responsibility – and gift – of educators to their young charges and the nation‘s citizens. The global village, built on the base of technology and media, is as much an arena for learning as the classroom in the local village. It‘s time to embrace this new way of living and learning and indeed, loving. Isn‘t that what character is all about? T. Jolls -The Impact of Technology on Character Education 49 Recommendations Here are some recommendations for educators who must teach youth to live and work together in the global village: 1. Prepare citizens to learn, work and play -- alone and together -- in the global village. As commercialization drives much of the global village, give citizens the understanding and tools they need to access, analyze, evaluate, create and participate in this new world. Citizens have the ultimate power of choice, but they must be prepared to use their power and choices wisely. They must be able to evaluate risks and rewards and allocate resources through the prism of their own individual and social values. This is the profound goal for educating responsible citizens. 2. The process skills of character education, media literacy, arts education, and sports/team play must provide the focal point for education, not a peripheral role, because it is through these process skills that students learn to acquire the content knowledge and content expertise they need to apply in their chosen fields and lives. Additionally, in providing such contextualization for acquiring knowledge, educational efforts are not only more effective in facilitating student learning but also provide students with the lifelong learning skills needed to be healthy, active citizens. To accomplish this goal, standards, curriculum development, professional development, assessment and evaluation, and systems support must be aligned with 21st Century Skills using media literacy as an integration tool and methodology for teaching critical thinking in all disciplines through deconstruction and construction of information as well as participation in the global village. T. Jolls -The Impact of Technology on Character Education 50 3. Provide a national office and team for media literacy education as a coordinating body. Great Britain currently has a unit devoted to media literacy education in its Office of Communications (OfCom). This group has provided an entire research base on the media literacy skills of the UK population, including special demographics such as seniors, early childhood, and disabled citizens. Additionally, the European Union has recently adopted a directive requiring all member states to report on their media literacy activities, and has worked actively to promote media literacy. Europe‘s Safer Internet Action Plan is a strong model for the U.S. and other countries to follow (Family Online Safety Institute, 2008) Canada requires media literacy for high school graduation. There is a worldwide movement toward media literacy and U.S. participation is lagging. 4. Integrate curriculum more and eliminate redundancies. The

global village breaks down barriers between countries, cultures, subjects and disciplines, while at the same time providing an arena for those with common interests to gather. The silos of the past were necessary because it was too difficult physically and geographically to communicate ideas and solutions rapidly and easily between academic disciplines. Those silos are breaking apart as common language, vocabulary, technology tools and cross-disciplinary collaboration become more accessible. This power is now being unleashed through more access to and integration of knowledge. As the global village becomes more complex, this integration becomes more and more important. Like all other disciplines, especially those focused on process skills, character education has often lived in a silo that now must be integrated with other disciplines. As process skills span over all academic subjects, the process skills become T. Jolls -The Impact of Technology on Character Education 51 a new way to teach all subjects rather than a new subject to teach. This shift, in turn, provides the opportunity to narrow the number of content/subject areas that must be addressed during the school day, and to focus on using the process skills to acquire knowledge. 5. Use technology to deliver quality curriculum more consistently. Excellent curriculum, especially interactive curriculum, is expensive to develop but because it does not rely on human delivery, it provides a more consistent message to students. Values and character inform all decisions; character education is a classic example of a subject that should be integrated across all curricular areas and delivered through technology. Corporate training systems provide some useful models in disseminating curriculum through technology. 6. Emphasize process skills as well as content knowledge. The global information glut is impossible for humans to comprehend. Process skills are all-important in preparing citizens to be lifelong learners, and acquiring these process skills takes practice over time. It‘s no longer about memorizing the content because access to books and resources is scarce; it‘s about knowing how to access, analyze, evaluate, create and interact with an infinite amount of readily-available content. It‘s about problem-solving, with judgment, risk management, choices and consequences. These are domains where character education is central. 7. Develop standards and assessments designed for process skills. State education standards currently reflect a glut of content-oriented expectations and a dearth of process-oriented expectations. In turn, the standards are driven by testing that places an emphasis on content-oriented expectations at the expense of process skills. Content T. Jolls -The Impact of Technology on Character Education 52 knowledge and process skills are mutually supportive, not mutually exclusive, especially considering how children learn and develop. New standards for process skills are needed, and these process standards should not be intermingled with content standards. New methods for assessment and evaluation are needed and are becoming possible through technology. Character education is key to the mix of process skills needed. 8. Determine minimum standards for process skills that should be mastered, as well as for content knowledge. Some content knowledge and process skills are foundational for all citizens; others are more appropriate for higher levels of competency. There will always be a continuum of knowledge amongst citizenry on an infinite number of content subjects as well as process skills. What should be common for all students, and what should be individualized? What are the minimum standards – both in content and process arenas -- for students preparing for life in the global village? How can redundancy be eliminated? There is a critical sorting process that must take place. Technology will be an essential tool in providing the knowledge and the infrastructure with which to make and manage these decisions. Local communities continue to need control over setting priorities to address local needs, while meeting the needs of all students for life in the global village. Since character education is fundamental to educating a whole child, it must be part of the ―basic‖ training that all citizens should have. 9. Use

technology to provide students with the best instruction available, regardless of geography. Technology provides the tools to conduct distance learning and to cut expenses on delivering quality instruction, where direct instruction is required. Why not T. Jolls -The Impact of Technology on Character Education 53 give students access to leading thinkers in character education, or in math or in social studies? Technology relieves local teachers of the need to be the experts in every subject. This will sometimes require more sophisticated technological learning resources, such as games or online learning environments, which school districts are not currently prepared to finance or develop. Regardless, technology can enable local teachers to engage with students as facilitators and devote their time to organizing projects and process-oriented experiences and discussions. In using technology, not only can instruction be freed from geographical constraints but students can be freed, as well, from lock-step grade promotions, one size-fits all instruction delivered in local school-based classrooms. Character education will benefit from integration into all curriculum subjects and delivery via technology. This approach will provide students with access to the best resources available. 10. Provide ongoing professional development for teachers in how to become "guides on the side" to support student learning rather than "sages on the stage." There is no substitute for adult interaction with children. Teaching process skills changes the way that teachers teach and students learn; teachers need to understand media literacy, arts and character education before they can teach; they need solid resources to work with and classroom-based assessments to guide them. 11. Provide technology programs and support at the local level, and pay competitive salaries to attract the best technology professionals. Although the U.S. is an international leader in providing equipment and software to schools, there is a dearth of technical support at the local level. Teachers are prevented from maintaining or getting T. Jolls -The Impact of Technology on Character Education 54 help with their equipment. In some cases, teachers lack any technology equipment at all, even televisions and DVD players. Schools often lack the resources to teach children to learn programming or other technical skills necessary for life in the global village. 12. Provide research-based frameworks to help students cut through the information glut and provide lifelong learning tools. To help cut through the complexity of today's global village, humans need frameworks that provide sound approaches, time-tested processes and quick and simple ideas that can be internalized and used on a lifelong basis. The more research-based these frameworks are, the more confidence citizens may have in them. Character education frameworks are no exception: they are needed and should be validated through research. 13. Support media literacy as a metaframe for teaching critical thinking, production and participation skills necessary for prospering in the global village. Support arts education and character education as foundational for learning to make wise choices. If process skills in areas like character education and media literacy are to be valued and taught, the educational structure must accommodate and support them. This means major change in teaching and learning approaches. 14. Involve students more as teachers. Through project-based learning geared toward problem solving (such as social marketing) students can contribute to solutions while learning. They can interact with the real world and the global village. Although students need adult guidance, they enjoy and benefit from being active learners who have purpose. Character education needs to be represented in these major development efforts, and teachers should be retained or selected on the basis of their desire and capacity to deliver 21st century skills. T. Jolls -The Impact of Technology on Character Education 55 15. Actively teach students, teachers, administrators and parents how to engage appropriately with their online school relationships. Interacting online and using technology tools for school communication requires a different skill

set than face-toface, interpersonal communication. Simply handing members of the school community an Acceptable Use Policy Statement to sign annually is not enough; people need education on how to relate fluently and responsibly to technology and their online community. 16. Update K-12 structures and financing methods to be more flexible. Given how technology has up-ended educational needs, the regulatory structures and financial underpinnings of K-12 schools are too rigid, too outdated and based on 19th century models. Often, schools and districts receive their major funding on the basis of student attendance, which is confining in terms of planning and in keeping students literally in their seats. Regulations – for example, in teacher credentialing -- are so voluminous as to be unmanageable, causing the need for more and more administration rather than direct service to students. One notable example of the disconnect over resource allocation – showing how out of touch with the global village the education world is -- is that school districts are often forced to buy paper-based textbooks they do not want or need, and that are outdated by the time they are delivered to the warehouse, due to slow and cumbersome state adoption requirements. Some schools have no texts at all. In spite of recent progress with accountability measures, reform is still desperately needed at all levels and the responsibility lies squarely with policy makers and legislators. T. Jolls -The Impact of Technology on Character Education 56 17. Free teachers to select educational resources that meet the state standards. Standards-based education provides a flexible way to approach educational resources, since teachers could be free to use whatever resources they see fit so long as standards are being met and students are learning and performing. Technology provides tools to measure effectiveness immediately. This is especially important since one size does not fit all, in a country where there are at least 17,000 school districts. 18. Use technology to help identify, organize and use research. Much is known through research, but often the research is redundant or little used. Identifying research has become easier with online searches but the movement from research to practice is still uneven at best. Using online assessment tools and other technology for research will speed the cycle times on collecting and analyzing data for research and policy decisions so that the results are timely and meaningful for educators. 19. Remember to teach the parents and community as well. Adults did not grow up learning process skills; they grew up in an environment where content mastery was emphasized. Grassroots support is essential. The public supports teaching children how to become responsible citizens, but they need to be appraised of how this is done and how results will be realized. 20. Recommend that higher education institutions work more closely with K-12 in achieving a new vision for education. K-12 may make important shifts, but if students and parents perceive that universities devalue the type of K-12 education received, they will not support change. Generally, universities today value T. Jolls -The Impact of Technology on Character Education 57 individual academic achievement most highly. Since subjects like character education, the arts and media literacy are not measured and not looked on as ―academic,‖ they are often less valued. 21. Recommend that university schools of education provide training for teachers that meet the needs of the global village, emphasizing how to teach process skills. Teachers can only teach what they understand, and they must be prepared. Schools of education have an important role to play; they must adapt and lead the way. 22. Call for K-12 education to provide more resources and alternative resources for students who are not university-bound. Some public high schools only provide college prep curricula that ignores other modes of learning or outcomes. Students who wish to acquire technical skills must turn to private alternatives at significant expense. Regardless, all students need the process skills that media literacy, the arts and character education provide. 23. Look outside the K-12 walls for solutions. Nonprofit

organizations, corporations, museums and factories, faith-based organizations, community colleges, universities, home-schooling groups – there are myriads of people who can and want to help; learning to unlock this power is essential in changing the insularity of the K-12 world. 24. Start early in reaching children. Just as K-12 education must be responsive to the requirements of higher education and employers, educators must cope with equalizing the skills and knowledge that kindergarten students bring into the classroom. When it comes to basic skills as well as process skill-building in T. Jolls -The Impact of Technology on Character Education 58 character education, the arts and media literacy, it‘s best to find ways to start early with disadvantaged children, for both content knowledge and process skills.

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Appendix I

Evaluation of a school-based violence prevention media literacy curriculum**,** p. 32

Finger, K., and Jolls, T., 2013. Evaluation of a school-based violence prevention media literacy curriculum. *Injury Prevention*, 20 (3), p. 183-190.

Appendix J

Evidence-based frameworks: Key to learning and scaling globally**,** p. 32

> Fingar, K. and Jolls, T. 2018/2019. Evidence-based frameworks: Key to learning and scaling globally. *In:* Tornero, J., Orozco, G., and Hamburger, E., *MILID Yearbook.* Barcelona: UNESCO, p. 117.

Evidence-based frameworks: Key to learning and scaling globally Kathryn R. Martin Fingar and Tessa Jolls University of California Los Angeles, USA Center for Media Literacy, Consortium for Media Literacy, Los Angeles, USA Inquiry-based learning encourages the critical thinking and process skills needed to cope and conquer in an age where media is ubiquitous. To promote understanding in places where smart phones reign, educators must ensure that the process skills they encourage are consistent, replicable, measurable and scalable – and capable of being applied to any subject globally – so that anywhere, anytime learning is supported. Evidence-based frameworks provide a methodology that can be flexible, yet applied with fidelity, so that consistency and measurability are possible. This methodology provides immediacy in accessing, analysing, evaluating and creating content, so that learners are empowered to decide and to act in accordance with their own values, lifestyles and points of view. The Center for Media Literacy (CML), along with UCLA, conducted a major longitudinal study to evaluate CML's two primary frameworks: the Questions/TIPS deconstruction framework for media analysis; and the Empowerment Spiral of Awareness, Analysis, Reflection and Action. In the study, these frameworks were employed to address violence prevention, in a curriculum called Beyond Blame: Challenging Violence in the Media. This paper explores how such evidence-based frameworks can be applied to a specific topic (in this case, media and violence) so that activities and lessons can be easily and consistently designed while impacting student knowledge, attitudes and behaviors. This approach transcends geographic boundaries, gender identities, cultural differences, and even time – lessons can be employed immediately, as news or events or stories unfold, once students internalize the foundational understanding of the frameworks in a heuristic manner. Classroom walls are no longer pertinent with a methodology that provides a mindset to go with the handset or the headset. Keywords: Media literacy evidence frameworks, learning, Evidence-based media literacy frameworks and practices are scarce. A small body of literature suggests media literacy interventions are associated with decreases in youth violence, for example, yet few curricula have used a consistent pedagogy 118 Kathryn R. Martin Fingar and Tessa Jolls and/or framework, and many have been implemented by researchers rather than teachers. It is largely unknown how the underlying approaches and frameworks for media literacy curricula impact youth violence or whether curricula can effectively be implemented under real-world circumstances (Potter, 2004; Bergsma 2008). A better understanding of how

interventions “work” is not only needed for media literacy curricula and frameworks, but of youth violence prevention programmes more broadly. Many school-based violence prevention programmes have had a high degree of researcher involvement. One review of over 200 programs reported that less than 15% of interventions were implemented under real-world circumstances (Wilson and Lipsey, 2005). Furthermore, even when organizations translate a tested, effective prevention approach into a school-based environment, they may not implement it as originally intended (Fagan, Hanson and Hawkins, 2009). Understanding how an intervention leads to behaviour change may better enable teachers to implement the programme with fidelity and integrate the approach more seamlessly into classrooms on a routine basis. The Center for Media Literacy (CML), along with the University of California-Los Angeles (UCLA), undertook a longitudinal implementation study (Fingar and Jolls, 2013) to demonstrate how consistent frameworks for media literacy education, systematically labelled and applied in teaching and learning, can be employed with positive, evidence-based results to any subject. The study was conducted in Southern California with a highly diverse population with 20 schools, 31 teachers and more than 2,000 students, to evaluate CML’s two primary frameworks: the Questions/TIPS framework for Deconstruction and the Empowerment Spiral of Awareness, Analysis, Reflection and Action. (See Table 1: Baseline characteristics of students who participated in the study.) These frameworks were employed in the study to address violence prevention in a CML-developed curriculum called Beyond Blame: Challenging Violence in the Media. This paper demonstrates the efficacy of the CML Empowerment Spiral of Awareness, Analysis, Reflection and Action – a framework which can be applied to any topic, so that activities and lessons can be easily and consistently designed while connecting student work to action and positively impacting student knowledge, attitudes and behaviours. The Empowerment Spiral is driven by a process of inquiry, exemplified through CML’s 5 Key Questions for media deconstruction: Who created this message?/What creative techniques are used to attract my attention?/How might different people understand this message differently?/What values, lifestyles and points of view are represented in or omitted from this message?/Why is this message being sent? 119 Kathryn R. Martin Fingar and Tessa Jolls Table 1 Baseline characteristics of students who participated in the study Source: Own elaboration. Summary of Findings Through validating the effectiveness of the Empowerment Spiral and the CML 5 Key Questions/Core Concepts of media literacy, our results suggest it is possible to provide media users with a reliable way to engage with and deconstruct any media message, in any medium. Although media messages are infinitely variable, the process skills needed to construct and deconstruct media messages have common elements that can be systematically analyzed and applied. Doing so is important to replicate, measure and scale timely and relevant media literacy programmes that address important health and citizenship issues globally, including youth violence. The implementation steps and highlighted results for the study include: • CML developed a curriculum called Beyond Blame: Challenging Violence in the Media based on The Empowerment Spiral framework with four short-term learning steps of Awareness, Analysis, Reflection and Action. Analysis was taught through CML’s set of Five Core Concepts and Key Questions of media literacy that are widely used in the United States. The purpose of Beyond Blame: 120 Kathryn R. Martin Fingar and Tessa Jolls Challenging Violence in the Media, a violence prevention curriculum, was to use media literacy as an educational intervention strategy to improve middle school students’ knowledge, beliefs and behaviors related to violent media content and to reduce aggression. With a total of ten lessons, the first three lessons that comprise Beyond Blame give students a background on violence and media, and provides information on

four effects of media violence: increased fear of the world, increased aggression, lessened willingness to help others in trouble, and an increased desire to engage with more media violence. Five lessons then provide students with methods and practice for critical analysis of media and violence, with CML's Five Core Concepts/Key Questions providing the underpinning for this methodology. The last two lessons give students a chance to practice using all five Key Questions and to analyse their own personal media usage, including the use of violent media, and to construct their own messages about media violence. Classroom teachers delivered these lessons, and instructional techniques included a workbook with blank pages for journaling with every lesson; a KWL Chart, where students shared with their peers what they Know, what they Want to Know, and what they Learned after each lesson. When watching video clips, students were asked to fill out a PMI Chart to describe their Positive, Negative and Interesting ideas after watching the video clip. Small group discussions and paired discussions are combined in every lesson. A DVD accompanied the curriculum, containing 20 media clips as well as photographs, and excerpts from videogames and website, employing a wide range of media (Webb and Martin, 2012). Researchers recruited 31 teachers from 20 California middle schools with 1,580 students in 2007-2008 to participate in a trained, untrained or control group. The learning model embedded in the curriculum incorporated the four shortterm learning steps of the Empowerment Spiral: Awareness of media violence, Analysis through Core Concepts and Key Questions of media literacy, Reflection, and Action. Evaluators assessed each of these steps through written assessment directly before and after the curriculum was implemented, comparing students in the intervention with the control group using fixed effects models. • Results: There were increases in Awareness ($\beta=0.32$, $p<0.0001$), Analysis ($\beta=0.27$, $p<0.0001$), and Reflection ($\beta=3.79$, $p=0.0002$) in the intervention group as a whole relative to the control group, but not in aggression ($p=0.1994$). Given that, as adolescents aged 1-14 advance in age they advance in aggression as well, the fact that aggression did not increase in the intervention group is a positive finding. (Jaffee , K., Foshee,V, Ennett, S. and Suchindran, C., 2009) (See Table 2: Changes in the awareness, analysis, and reflection components of the Empower- 121 Kathryn R. Martin Fingar and Tessa Jolls ment Spiral in the intervention and control groups.) Aggression was measured using the Center for Disease Control's (CDC) Aggression Scale taken from the Compendium of Assessment Tools. (Fingar and Jolls, 2013) Table 2 Changes in the awareness, analysis, and reflection components of the Empowerment Spiral in the intervention and control groups Source: Own elaboration. • Although on each individual scale we observed improvements in Awareness, Analysis and Reflection in both the trained and untrained groups compared with controls, students in the trained group were more likely than those in the untrained group to master all three of these learning steps by the post-test (37.6% of trained vs. 28.5% of untrained students). (See Table 2: Changes in the awareness, analysis, and reflection components of the Empowerment Spiral in the intervention and control groups.) Among students who received the intervention from a trained or untrained teacher, mastery of these learning steps was associated with reduced aggression, relative to mastery of no steps ($p<0.05$). • We observed increases in Awareness, Analysis and Reflection among students who received the curriculum from a trained or untrained teacher, compared with controls. However, students in the trained group were more likely to master all three of these learning steps than controls. (See Table 3: Mastery of the awareness, analysis, and reflection components of the Empowerment Spiral in the intervention and control groups from the pre- to the post-test.) • Improvements in Awareness, Analysis and Reflection from the pre- to the posttest were associated with reduced aggression (i.e., Action) among students in the intervention group. (See Table 4: Changes in aggression from the pre– to

122 Kathryn R. Martin Fingar and Tessa Jolls the post-test associated with mastery of the awareness, analysis and reflection components of the Empowerment Spiral in the intervention and control groups, from fixed effects regression models.) Table 3 Mastery of the awareness, analysis, and reflection components of the Empowerment Spiral in the intervention and control groups from the pre- to the post-test Source: Own elaboration. • The results from this study may be used to identify the critical elements of the intervention so that, through their teachers, students can master each step of a learning process – the Empowerment Spiral – culminating in Action that may lead to reductions in aggressive behaviours. (See Table 4: Changes in aggression from the pre- to the post-test associated with mastery of the awareness, analysis, and reflection components of the Empowerment Spiral in the intervention and control groups, from fixed effects regression models.) Although some learning is intuitive, our results highlight the importance of teaching and learning through clear labelling (Awareness building) and a conscious methodology for Analysis (the Core Concepts and Key Questions) – a heuristic – for attacking a learning goal. The curricular content drew upon many media sources – video, news articles, videogame exerpts, photos, and the participating students represented a highly diverse group, reflecting the racial and ethnic diversity of Southern California, with African American, Asian, Hispanic/Latino and white students. (Fingar and Jolls, 2013) 123 Kathryn R. Martin Fingar and Tessa Jolls Table 4 Changes in aggression from the pre- to the post-test associated with mastery of the awareness, analysis, and reflection components of the Empowerment Spiral in the intervention and control groups, from fixed effects regression models Source: Own elaboration. Among other media, 20 videoclips were analysed during the course of the curriculum. For example, the Super Bowl XLI Coca Cola advertisement “Give a Little Love” was used to introduce CML’s Five Key Questions in Lesson 4. Teachers and students were encouraged to ask exploratory questions, “Do you recognize the videogame that this ad talks about?” “Who is the sponsor of this message?” “What role does violence play in the video game?” “What role does violence play in the ad?” “How are they different? “How does this ad make you feel about Coca Cola?” “How much money do you think an ad like this costs to play during a Super Bowl game?” “Clean up New York” was another ad, a New York City Public Service Announcement, that was used to explore points of view, conflict resolution and CML’s Key Question, “How Might different people understand this message 124 Kathryn R. Martin Fingar and Tessa Jolls differently?” A violent explosion was represented in a video clip from Monster House; exploring violence without a weapon was illustrated in a clip from Team Ninja – Dead or Alive 4. Clips from South Park and The Unit illustrated violence with a weapon. Clips from WWE’s Smack Down were used to explore branding and points of view, and omissions (Key Question #4), and the Japanese anime Naruto was viewed to do a close analysis with all 5 Key Questions. The media content was highly variable, but the Five Key Questions remained constants for deconstruction and exploration. But the consistency that allowed for measurable, positive results rested in the fact that all teachers participating in the study – whether trained or untrained – used the same methodology for deconstructing media messages with their students. These lessons in Beyond Blame were designed to teach and reinforce this Analysis/deconstruction process through repeated practice. It may not be enough to assume that children will understand media messages if they simply read or view enough media. In fact, because media is “naturalized” through increased exposure, it is all the more important to challenge it consciously and deliberately, having a methodology and vocabulary to process it both individually and collectively. Lessons in Beyond Blame reinforced self reflection as well as group discussion, so that students learned to articulate and share their thinking and their feelings.

In a successful intervention, the media literacy components become internalized and a positive heuristic to combat other negative heuristics. Methods Study Design During the 2007-2008 academic year researchers at the Southern California Injury Prevention Research Center at the University of California Los Angeles (UCLA) recruited public mainstream and charter middle schools from seven southern California districts to administer Beyond Blame, which was developed by the Center for Media Literacy (CML). Using a quasi-experimental design, schools were assigned to either a trained, untrained or control group. Health, social studies, and language arts teachers and students in their classrooms were eligible to participate. Teachers at schools within the trained group administered the curriculum after attending a one-day workshop. This study was approved by the Office for the Protection of Research Subjects at UCLA. Additional methods can be found in prior publications (Fingar and Jolls, 2013; Webb and Martin, 2012). 125 Kathryn R. Martin Fingar and Tessa Jolls Curriculum At the time of this study, Beyond Blame met California English/Language Arts and Health Education standards and National Education Technology standards for middle school. Since then the curriculum has been updated to reflect the Common Core standards, which have been adopted by 42 states, including California. The curriculum consists of ten 45-50-minute lessons administered throughout one semester and has two main theoretical underpinnings: The Empowerment Spiral and CML's Key Questions and Core Concepts of media literacy. The Empowerment Spiral, based on the work of Brazilian educator Paulo Freire, outlines a way to organize media literacy learning (Thoman and Jolls, 2005). It includes four short-term learning steps that allow students to break down complex concepts that dominate media culture. These steps are Awareness, Analysis, Reflection and Action. The first three steps promote critical inquiry and exploration culminating in an active learning exercise that may lead to a change in behaviour. The curriculum is designed to give students the tools to analyse media messages through a set of Key Questions and Core Concepts developed by the CML. The basic premise is that, by increasing these analytic skills students will be able to query and evaluate media messages, critique those supporting violent behaviour, and ultimately make wiser choices in terms of engaging with both violent content in media and real-world violence. The Five Key Questions include (1) Who created this message, (2) What creative techniques are used to attract my attention, (3) How might different people understand this message differently, (4) What values, lifestyles and points of view are represented in, or omitted from, this message, and (5) Why is this message being sent? Each Key Question holds an underlying Concept, that (1) All media messages are constructed, (2) Media messages are constructed using a creative language with its own rules, (3) Different people experience the same media message differently, (4) Media have embedded values and points of view, and that (5) Most media messages are organized to gain profit and/or power (Bergsma and Carney, 2008; Thoman and Jolls, 2005). Measurement Intervention classes were tested one week prior to the start of the intervention and immediately afterwards. Controls received the pre- and post-test at the beginning and end of the semester. Below we describe how students' mastery of the four components of the Empowerment Spiral was operationalized. 126 Kathryn R. Martin Fingar and Tessa Jolls Awareness In the Awareness step, students participate in activities that lead to observations and personal connections. One of these insights is that violent content in media affects viewers. To gauge students' understanding of these effects, students were asked whether they agreed, on a five-point scale, that such content affects aggression, fear, desensitization, and the desire to watch more violent content in media. The four questions were averaged to create a composite score ranging from one to five, where five represents a greater belief that media violence has harmful effects. Analysis Analysis allows students to understrstand "how" an issue

came to be. The Key Questions and Core Concepts help students understand how the construction of any media product influences the meaning we make of it. To measure knowledge of the Key Questions and Core Concepts, students were asked, on a five-point scale, how much they agree that people react to violent content in media differently and how much they agree that media is based on a desire for influence, profit, and power. Then they were asked to identify the Key Questions and Core Concepts in a list of response options with both correct and incorrect answers. This question was also scored from one to five, where students were given a point for each option they checked (or did not check) correctly. The questions, worth five points each, were averaged to create a continuous score where five represents greater analytic skills. Reflection Through Reflection, students ask 'What ought we do or think?' Depending on the group, they may also consider philosophical or religious traditions, ethical values, social justice or democratic principles that are accepted as guides for individual and collective decision-making. We used a 3-point scale to measure reflection, asking students if violent content in media is problematic (3=yes, 2=not sure, 1=no). 127 Kathryn R. Martin Fingar and Tessa Jolls Action Finally, to measure Action, we used the 11-item Aggression Scale published in a compendium compiled by the Center for Disease Control and Prevention (Dahlberg, Toal, Swahn, et al. 2002). The scale asks students to self-report on aggressive behaviours in the past week (Orpinas, Parcel, McAlister, et al., 1995). The final score ranges from zero to 66, where 66 represents more frequent aggressive behaviours. Mastery We examined pre-post change in the Awareness, Analysis, and Reflection components of the Empowerment Spiral. Students who increased their score or who maintained a high score at both the pre-and post-test (of 4 or more on the Awareness and Analysis components and of 3 on the Reflection component) were categorized as 'mastering' the component. We categorized students as having mastered one, two, or three components and examined levels of aggression across these categories. Analysis Using a hierarchical difference-in-differences approach that accounted for the clustering of student responses within classrooms, first we examined pre-post change in the Awareness, Analysis, Reflection and Action components of the Empowerment Spiral in the intervention group, compared with the control group. Each outcome was continuous. The models included indicators for intervention group, post-test, and the interaction between intervention and post-test, as well as a vector of student IDs. These fixed effects control for time-fixed observed and unobserved student-, class– and school-level differences between the intervention and control groups. The parameter estimate for the interaction term between intervention and post-test can be interpreted as the difference in pre-post change in the outcome between the intervention and control groups. Second, we used the same regression approach to examine whether the prepost change in aggression differed within the intervention group, according to mastery of one, two or all three steps leading to action (Awareness, Analysis, Reflection). The model included indicators for level of mastery, the post-test, and the interaction between mastery and post-test. This parameter estimate can be 128 Kathryn R. Martin Fingar and Tessa Jolls interpreted as the difference in pre-post change in the outcome between students who mastered one, two or three components and students who mastered no components. Finally, we ran this same model among controls, among which improvements in Awareness, Analysis, and Reflection are unrelated to the intervention. This can be thought of a falsification test in which we expect null results. Discussion Translational research into how evidence-based youth violence prevention approaches can be effectively administered in real-world situations is needed (Wilson and Lipsey, 2005; Fagan, Hanson, Hawkins and Arthur, 2009). The results of this study lend insight into incorporating violence prevention-based media literacy curricula into middle school

classrooms. Several findings have implications for translating the curriculum into practice. First, compared with students in the control group, students who received the curriculum from their own teacher increased Awareness, Analysis, and Reflection. Not only did we observe increases on each of these scales individually, the intervention group was more likely than the control group to increase multiple components of the Empowerment Spiral, including the CML's Core Concepts and Key Questions of media literacy as the Analysis component. This suggests that teachers in the intervention group did in fact use a structured methodology that built upon the shortterm learning steps of Awareness, Analysis, and Reflection. Second, there was a decrease in aggression among students who received the intervention and whose learning process followed the model laid out in the curriculum. When intervention students mastered the Awareness, Analysis, or Reflection components of the Empowerment Spiral, we found a decrease in aggressive behaviours, compared with intervention students who mastered no concepts. These results suggest that this structured methodology for teaching and learning is correlated with Action, the last component of the Empowerment Spiral. However, these improvements in Awareness, Analysis, Reflection and Action were not large enough to result in decreased aggression in the intervention group as a whole compared with controls when students were tested immediately after the curriculum was implemented. In a prior study, we found the intervention was associated with improvements in certain aggressive behaviours relative to controls among a sub-set of students who completed a second post-test one academic year later (Fingar and Jolls, 2013). Unfortunately, this sample was too small to further breakdown mastery of the Empowerment Spiral and therefore the second post-test 129 Kathryn R. Martin Fingar and Tessa Jolls was not included in this analysis. However, the fact that we did not find an association between the intervention overall and aggression at the first post-test highlights the importance of equipping students with each building block of Awareness, Analysis, and Reflection in this learning process. Ongoing, sustained teaching and learning using media and information literacy methodologies beg to be instituted and measured as ways to address the education needs of global youth today. We strongly suspect teacher training is important for enabling students to move through each critical learning step of the Empowerment Spiral. As with any intervention, there may have been differences in implementation across teachers, and across the trained and untrained groups. Although we observed improvements on each of the individual scales measuring Awareness, Analysis and Reflection in both the trained and untrained groups, relative to controls, we suspect teacher training may be important for students to grasp all three of these concepts. Indeed, students in the trained group were more likely than those in the untrained group to master all of the first three components of the Empowerment Spiral. One caution in interpreting our results is that our operationalization of Awareness, Analysis and Reflection was based on written assessment. A students' knowledge of the Core Concepts and Key Questions of media literacy, for instance, serves only as a proxy for analytic skills. The curriculum did include hands-on exercises in which students evaluated media clips; however, we were not able to measure this analytic process. One contribution of our research, however, is that teachers implemented the curriculum under real-world circumstances with little interference by outside researchers, while students were encouraged to connect their own learning with real-world action. References Bergsma, L.J. & Carney, M.E. (2008). "Effectiveness of Health-Promoting Media Literacy Education: A Systematic Review." Health Education Research 23(3):522- 542. Council of Chief State School Officers (CCSSO). (2017). "Evidence-Based Practice and School Improvement: Key Considerations." Retrieved from https://www.ccsso. org/sites/default/files/2017-

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Appendix K

The Core Concepts: Fundamental to Media Literacy Yesterday, Today and Tomorrow**,** p. 37

> Jolls, T., and Wilson, C. 2014. The Core Concepts: Fundamental to Media Literacy Yesterday, Today and Tomorrow. *Journal of Media Literacy Education,* 6 (2), p. 68-78.

Abstract: “New media” does not change the essence of what media literacy is, nor does it affect its ongoing importance in society. Len Masterman, a UK-based professor, published his ground-breaking books in the 1980’s and laid the foundation for media literacy to be taught to elementary and secondary students in a systematic way that is consistent, replicable, measurable and scalable on a global basis – and thus, timeless. Masterman’s key insight was that the central unifying concept of media education is that of representation: media are symbolic sign systems that must be encoded and decoded. This paper explores the development and the application of the Core Concepts of media literacy, based on Masterman’s groundbreaking work, in Canada and in the U.S. Keywords: core concepts, media literacy, construction, deconstruction, history Media literacy has survived through the years largely as a grass-roots movement which, slowly but surely, has developed around the world (Walkosz, Jolls and Sund 2008). While it has often been present on the “margins” of school curriculum, thanks to the steadfast support of global organizations such as UNESCO, media literacy continues to gain recognition and legitimacy worldwide. Yet because media literacy is rarely institutionalized in education systems and not taught consistently, there is often little understanding of the foundation and basic concepts of media literacy and how these concepts evolved.

The words "media literacy" are not new, nor does the notion of "new media" affect the essence of what media literacy is, since all media—new and traditional—benefit from a critical approach to analysis and production. What is timeless and unique about media literacy? It is a discipline that provides a distinct framework for critically examining and producing media. The foundations of the discipline have primarily been developed through the work of Len Masterman in England and Barry Duncan in Canada, acknowledged by many educators as the founders of media literacy as we know it today. This foundation includes the basic principles for media literacy introduced by Len Masterman in 1989 and the ways in which these were taken up by Barry Duncan and his Canadian colleagues in their Key Concepts. The Key Concepts, first introduced in the 1989, remain central to media literacy education in Canada today. Building on the work of their Canadian colleagues, the American version of the concepts was introduced in 1993 and continues to underpin the work of educators across the U.S. The development of media literacy in both of these countries reinforces the importance of a fundamental paradigm and conceptual framework for media literacy education today. In the U. S., the origins of media

literacy education--providing support for teachers, parents, children and adults to critically analyze and produce T. Jolls & C. Wilson / Journal of Media Literacy Education 6(2), 68 - 78 69 media—can be traced back to the days when radio was the latest communication technology. The "Wisconsin Association for Better Radio Listening Bibliography Helpful to Teachers" lists and describes booklets with titles such as "Skill in Listening" (published by the National Council of Teachers of English) and details 22 articles about "good listening" dating back to 1935 (Spence 1950). Dr. Leslie Spence, Ph.D., Chairman of Education for the Wisconsin Association for Better Radio and Television, also addressed the new technology of television with her 1952 booklet titled "Let's Learn to Look and Listen," featuring a slogan on the front cover which said "Radio-TV: Everyone's Responsibility" (Spence 1952). In a 1955 issue of the Better Broadcasts Newsletter, a publication of the American Council for Better Broadcasts (a predecessor of today's National Telemedia Council), Louis Forsdale (1955) discussed seven specific in-school activities and then said, "Through activities like these (and many more), we may hasten the inevitable maturation of the newer media and help our students gain necessary multimedia literacy. Is there an educational job to be done which has a higher priority?" These notions weren't confined to the United States. Internationally, concerned adults, inside and outside the classroom, became increasingly committed to helping youth negotiate their lifelong relationship with media (Walkosz, Jolls & Sund 2008). Jean Pierre Golay, for example, experienced Nazi propaganda in Switzerland in the 1930's, and as a Swiss teacher in the 1950's, he became determined to help his students learn "to look around, listen, question, discuss, take time to think…More and more, we shifted from 'talk about media' to 'experience production' with tape recorders, printers, varied tools. We bought a television studio, then a second, with a console for mixing, some special effects, a blue box, three cameras, sound and proper lighting equipment" (Golay 2011). In Canada, the pioneering work of communications expert Marshall McLuhan in the 1940s through the 1960s created a foundation upon which many of our current ideas about media literacy are built. McLuhan was aware of the profound impact of communications technologies on our lives, our societies and our future. His famous idea, that the "medium is the message" taught us to recognize that the form through which a message is conveyed is as important as the content of the message (McLuhan 1967, 63). McLuhan's theory was based on the idea that each medium has its own technological "grammar" or bias that shapes and creates a message in a unique way. Different media may report the same event, but each medium will create different impressions and convey different messages. While McLuhan was developing his theories long before the use of the Internet and social media, he also coined the phrase "the global village" to suggest the ways in which technological change would connect audiences and users of media and technology. Indeed, he believed that the technology would come to act as extensions of ourselves, shaping and influencing our attitudes, beliefs and behaviours (McLuhan 1967). Other pioneers active prior to the 1960's – Harold Innis, Bee Sullivan, Father John Culkin, and Herb Ostrach, and later, Neil Postman, explored the new media world of their time, and began describing the impact of media on society (Duncan 2010). But it wasn't until Len Masterman, a UK-based professor, published his ground-breaking books, Teaching About Television (1980) and Teaching the Media (1985), that the foundation was laid for media literacy to be taught to elementary and secondary students in a systematic way that is consistent, replicable, measurable and scalable on a global basis – and thus, timeless. Masterman brought a key new insight to the worlds of media, culture and education: The problem was this: if you are studying TV, then in successive weeks you might be looking at news, documentary, sport, advertising, soap opera, etc. How is it possible to study such a diverse range of topics in a way

that would be focused and disciplined?…I suppose the big step forward was to recognize a truism: that what we were actually studying was television and not its subject contents. That is, we were not actually studying sport or music or news or documentary. We were studying representations of these things. We were studying the ways in which these subjects were being represented and symbolized and packaged by the medium…(Masterman 2010) This insight led to Masterman's concise statement about what distinguishes media education from other disciplines: "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" (Masterman 1989). Looking back on his work in a 2010 interview for the Voices of Media Literacy Project, Masterman addressed the changed perspective that he had introduced to teaching and learning, and the enduring nature of that change: "…you can teach about the media most effectively, not through a content-centered T. Jolls & C. Wilson / Journal of Media Literacy Education 6(2), 68 – 78 70 approach, but through the application of a conceptual framework which can help pupils to make sense of any media text. And that applies every bit as much to the new digitized technologies as it did to the old mass media…The acid test of whether a media course has been successful resides in the students' ability to respond critically to media texts they will encounter in the future. Media education is nothing if it is not an education for life" (Masterman 2010). As Masterman identified new tenets for media education, he continued his quest to describe—through a process of inquiry—how media operate: '…if we are looking at TV as a representational system, then the questions inevitably arise as to who is creating these representations. Who is doing the representing? Who is telling us that this is the way the world is? That their way of seeing is simply natural? Other questions emerge. What is the nature of the world that is being represented? What are its values and dominant assumptions? What are the techniques that are used to create the 'authenticity' of TV? How are TV's representations read and how are they understood by its audiences? How are we as an audience positioned by the text? What divergent interpretations exist within the class?" (Masterman 2010) It was out of such questions that Masterman articulated, in a systematic way, how media operate as symbolic "sign systems." In his second book, Teaching the Media, Masterman applies the systematic framework he developed to all media (Masterman 1985), exploring ideas such as the constructed nature of media, media techniques used to attract attention, purpose, authorship, bias, values, lifestyles, points of view, omissions, power. Through examining these ideas, it is possible to see how media presents itself to us in a ubiquitous way; it is also used by us and it can be about us. But whether it is for us is a matter of values and opinion, and personal judgment (Golay 2011). Masterman recognized that media education addresses both the consumption and production of media texts, regardless of technology: "Developing a conceptual understanding of the media will involve both critical reception of, and active production through, the media. At all ages, it will develop through the choice of content material appropriate to, and of interest to, the student group concerned. It should go without saying that these concepts should be made explicit, in an appropriate form, to pupils and students, and not simply exist within the heads of the teachers" (Masterman 1985). To be able to apply the media literacy concepts, students must have the relevant vocabulary and ongoing critical practice. Masterman identified principles for classroom teaching and learning that can be considered current today. His 18 Basic Principles for media awareness education, written in 1989, read like a manifesto for 21st Century education (Masterman 1989). Highlights of these principles include: • Content, in Media Education, is a means to an end. That end is the

development of transferable analytical tools rather than alternative content. • Ideally, evaluation in Media Education means student self-evaluation, both formative and summative. • Indeed, Media Education attempts to change the relationship between teacher and student by offering both objects for reflection and dialogue. • 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. • 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. • Media Education is a holistic process. Ideally it means forging relationships with parents, media professionals and teacher-colleagues. • Media Education is committed to the principle of continuous change. It must develop in tandem with a continuously changing reality. • 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. Masterman's approach to education supports the types of learning environments currently being called for by many students, parents, teachers and employers. It also is consistent with brain research which has revealed that, unlike Jean Piaget's linear model for child development which postulates that intelligence develops in a series of T. Jolls & C. Wilson / Journal of Media Literacy Education 6(2), 68 - 78 71 stages that are related to age and are progressive, because one stage must be accomplished before the next can occur (Cherry 2010), children have "social" brains which acquire knowledge incrementally through cultural experiences and social context (Barbey, Colom and Grafman 2012, 265). Some models for addressing new media, such as that outlined in Henry Jenkins "Confronting the Challenges of Participatory Culture," (Jenkins 2006) call for youth to develop skills such as simulation, appropriation, and transmedia navigation. These skills often call for social participation as well as individual use. Masterman's approach, however, not only calls for a collaborative effort and social participation, but also provides both a conceptual framework and a pedagogy which teachers can readily use in their classrooms. Table 1 : AML's Eight Key Concepts for Media Literacy 1 All media are constructions. 2 The media construct reality. 3 Audiences negotiate meaning in media. 4 Media have commercial implications. 5 Media contain ideological and value messages. 6 Media have social and political implications. 7 Form and content are closely related in the media. 8 Each medium has a unique aesthetic form. When Masterman's initial book, Teaching about Television, was published, it became an international sensation which sold out twice on its print run in the first six months of publication, and ultimately sold 100,000 copies worldwide, primarily in Britain, Australia, Canada and Europe. In North America, Masterman's Concepts first took root in Canada, where media literacy pioneer and venerated teacher Barry Duncan, as well as other leaders, including John Pungente, Cam Macpherson, Rick Shepherd, Dede Sinclair, Bill Smart, and Neil Andersen began experimenting with both McLuhan's and Masterman's ideas. In 1987, Duncan and the Association for Media Literacy (AML) in Ontario, articulated these ideas, based primarily on Masterman's work, as Eight Key Concepts of media literacy. These Eight Key Concepts, shown in Table 1, continue to provide a theoretical base for all media literacy in Canada and to give teachers a common language and framework for discussion (Wilson and Duncan 2008, 129). Duncan said: …looking at not just the content but the form of the media was Marshall McLuhan's unique contribution…and I had the good fortune of being his graduate student at the University of Toronto, along with five or six

others, just as he was hammering out his ideas….But the notion of representation – that is the central concept of media literacy—that notion was propelled through the decades, through the '60's to today. It is central that how well we talk about representation largely determines the nature of how GOOD our media literacy is. So, representation, and the core principles–what we in Canada call the Key Concepts—by having these key notions, which often are turned into questions, that has kept us on track…(Duncan 2011). T. Jolls & C. Wilson / Journal of Media Literacy Education 6(2), 68 – 78 72 From the time that Duncan founded the Association for Media Literacy (AML) in 1978, educators and media literacy activists worked to ensure that media education became a mandatory component in the Ontario curriculum from grade 6 to grade 12. Duncan and members of the AML developed the Media Literacy Resource Guide (1989), which explored ways of implementing the Key Concepts across the curriculum at both the elementary and secondary levels. AML Executive members traveled across the province of Ontario to help teachers implement the guide, and following the success of the AML's work in Ontario, educators across Canada came to embrace the Resource Guide and worked to include media literacy in their curriculum documents (Duncan 2010). The popularity of the resource guide spread to the United States and around the world: the landmark Media Literacy Resource Guide has been translated into French, Italian, Japanese and Spanish. The publication of the Media Literacy Resource Guide marked a pivotal time in the development of media literacy in Canada: …it led to…the mandatory (media literacy) component, in English. (Media literacy) has always been tied in with the subject (of English), from coast to coast in Canada, now mandated from grades 1-12. Everything was generated with reference to the Key Concepts. To a certain extent there were lesson plans but we didn't have a detailed set. People would adapt them [the key concepts] to what we called 'teachable moments.' The teachable moments are the things like the War in Vietnam, and more recently, 9/11, the [Asian] Tsunami, [Hurricane] Katrina. All of those things are mediated by the media and [illustrate the] need to have the structure of media literacy, and an understanding of the ideological implications of the media, in order to clarify what is happening… (Duncan 2010) In 1986, Ontario was the first English-speaking jurisdiction in the world to mandate media literacy in its curriculum (Wilson and Duncan 2008, 131). In an effort to support teachers trying to implement the new media literacy expectations from the curriculum, after the Media Literacy Resource Guide was developed, two international media education conferences followed in 1990 and 1992. Organized and hosted by the AML, The New Literacy (1990) and Constructing Culture (1992)— remembered as the "Guelph conferences" since they took place at Guelph University in Ontario—each attracted over 500 participants from around the world. It was clear that media literacy had far-reaching appeal, and that an international movement was taking root in Canada. Throughout the 90s and for the next two decades, the AML continued to support the work of teachers at home and around the world. To help teachers develop pedagogical approaches for implementing the media literacy curriculum and the Key Concepts, summer institutes were offered in Canada, in the cities of Toronto and London, Ontario, and Vancouver, B.C. Additional Qualifications courses for teachers were offered through the University of Toronto and York University. Also in the 1990s, the AML originated the concept and purpose of the national Media Awareness Network, today known as Media Smarts (Wilson and Duncan, 2008, 128). Best practices and resources were generously shared with colleagues near and far, through newsletters, publications and video conferences. International recognition for the work of the AML occurred in 1998, when Barry Duncan and Carolyn Wilson (then past and current AML presidents, respectively) accepted an award from the World Council on Media Education which recognized the AML as "the most influential

media education organization in North America". Not interested in resting on its laurels, the AML was a main organizer and co-host of Summit 2000, the largest media education conference in the world, with 1500 delegates from 54 countries. The AML continued to develop other resources and curriculum for the Ministry of Education in Ontario, always keeping the Key Concepts at the core. These documents included Think Literacy for Grades 7 to 10 (2005), and the media strand in the elementary Language document for grades 1-8 (2005), and in the secondary English document for grades 9 – 12 (2006). These documents emphasize the importance of providing students with the opportunity to become involved in media analysis and production, through curriculum expectations that focus on purpose and audience, media conventions and techniques, media forms, and representation. In recent years, members of the AML Executive have developed resources on such topics as digital storytelling, Internet safety, digital citizenship, and media violence. In 2005, the achievements of Carolyn Wilson, then the president of the AML, were recognized nationally when she received the Prime Minister's Award for Teaching Excellence. The Prime Minister's Award Committee recognized Carolyn as a tireless pioneer and advocate for media literacy and global education on the local, national and global levels. In 2006, another significant milestone occurred as the AML worked with the Media Awareness Network T. Jolls & C. Wilson / Journal of Media Literacy Education 6(2), 68 - 78 73 and the Canadian Teachers' Federation to develop the first Canadian National Media Literacy week (Wilson and Duncan 2008, 132). The annual week continues to be held to celebrate the work of teachers and students in digital and media literacy education, and to promote the integration of media literacy across the curriculum. Now in its ninth year, Media Literacy Week has become an international event, with participants from such countries as Brazil, Burkina Faso, Nepal, Singapore, the United Kingdom, and the United States. With the AML's interest in supporting teachers, students and media users across Canada and beyond, it was natural that the possibilities offered by distance education would be embraced. Working with the Jesuit Communication Project and Face to Face Media, members of the AML Executive Board developed the first online course in Media Literacy for teachers and for the general public. The course, "Understanding Media Literacy: Inside Plato's Cave", has been offered through Athabasca University since 2009. Underpinned by the Key Concepts, the course includes an introduction to media literacy, examples of media education curriculum from across Canada, and modules based on a number of key themes, including Ideology and Representation, Media Language, and New(er) Technologies. (http://sals.lms.athabascau.ca/course/view.php?id=76) Research and resource development continues with the work of the national organization Media Smarts (formerly the Media Awareness Network). Since 2000, Media Smarts has conducted the most comprehensive study of its kind, exploring the role of the Internet in the lives of young Canadians today. The most recent 2014 study, "Young Canadians in a Wired World Phase III: Life Online" focuses young peoples' attitudes and behaviors regarding the Internet, specifically examining "what youth are doing online, what sites they're going to, their attitudes towards online safety, household rules on Internet use and unplugging from digital technologies" (Johnson 2014). On its website, Media Smarts offers a plethora of media literacy resources, on topics ranging from gender representation in the media, to cyberbullying, to marketing and consumerism, for parents, teachers and students, in both English and French. All of these accomplishments, projects and events, one could argue, stem from the pioneering work of Barry Duncan, the founding of the Association for Media Literacy in Ontario, the development of the Key Concepts and the Media Literacy Resource Guide, and those important Guelph conferences. It was the conferences that provided the first international gathering for like-minded teachers,

activists and media producers to come together to debate, to strategize and to envision the goal of advancing the media literacy movement. Inspired by the Canadian media literacy work, Americans from the U.S. attended the AML Conference in Guelph in 1990, and conducted their own special session on "How do we get going?" U.S. pioneers such as Marilyn Cohen, David Considine, Renee Hobbs, Douglas Kellner, Robert Kubey, Kathryn (Kate) Moody, Jim Potter, Renee Cherow-O'Leary, Marieli Rowe, Elizabeth Thoman and Kathleen Tyner, among other early media literacy advocates, were all active during that time, and they were to devote the coming years of their careers to spreading media literacy (Center for Media Literacy 2011). The development of the Concepts that Masterman and Duncan originally articulated continued, however. J. Francis Davis (1989) wrote an article that first cited five ideas to teach children about media, based on the Key Concepts from the Association for Media Literacy. In 1993, Elizabeth Thoman, who founded the Center for Media Literacy in 1989 and published Media & Values, expanded on these ideas in a widely distributed article for the Association for Supervision and Curriculum Development (ASCD). Thoman stated that "At the heart of media literacy is the principle of inquiry," and she articulated Five Concepts (Thoman 1993): 1. All media messages are 'constructed.' 2. Media messages are constructing using a creative language with its own rules. 3. Different people experience the same media message differently. 4. Media are primarily businesses driven by a profit motive. 5. Media have embedded values and points of view. Borrowing from Masterman and Duncan, Thoman also emphasized the idea of asking questions related to the concepts, to begin opening up deeper questions. Thoman went on to describe a process of close analysis, through which a media text can be analyzed in a group setting. She also described an Action Learning Model, based on the work of Brazilian educator Paolo Freire (Freire Institute 2014), summarized as a four-step 'empowerment' process of Awareness, Analysis, Reflection and Action. Through these four steps, individuals or groups may "formulate constructive action ideas, actions that will lead to personal changes in their own media choices and viewing habits as well as working for change locally, nationally or globally" (Thoman 1993). T. Jolls & C. Wilson / Journal of Media Literacy Education 6(2), 68 – 78 74 CML published its curriculum, Beyond Blame: Challenging Violence in the Media in 1995, and used the Five Concepts and the Action Learning Model (later called the Empowerment Spiral) as a structural backbone for Beyond Blame. As Thoman wrote in an email to Ryan R. Goble on Sept. 16, 2010: Because thousands of copies were sold, it served to distribute the Concepts widely through the lessons and handouts. Then, about 2000, Tessa Jolls (who joined CML as executive director in 1998), came in to the office one day and said, 'It's too difficult for kids to deal with concepts, what they need is a series of questions.' It revolutionized all of our thinking to date. So we set about creating questions out of the concepts…we continued to undergo word-smithing until we published the first edition of Literacy for the 21st Century in 2002. That was part of a larger publishing effort known as the CML MediaLit Kit™. In the MediaLit Kit™, CML brought together elements such as a basic definition of media literacy, the Empowerment Spiral of Awareness, Analysis, Reflection and Action, and question sets for young children as well as for experienced media literacy practitioners. For the first time, CML displayed the Concepts visually by connecting the Five Core Concepts to Five Key Questions for Deconstruction (Thoman, Jolls and Share 2002). But, as technology rapidly advanced—allowing for instant video production, social media sharing and a host of other possibilities—it became clear that the Concepts needed to be tied closely with construction/production, so that students would learn not just to "press buttons," but to critically analyze their work as they produced it. "What has changed today…with the low costs of media production and the easy access and

capacity for distribution, is that media education has become much more production centered…the media educator thus needs to bring strategies, concepts and frames to the teaching context, but with an open mind towards media production practice that may be better known by young learners" (Hoechsmann 2011). CML's latest version of the Core Concepts and Key Questions, called Questions/TIPS (Q/TIPS), features the addition of Five Key Questions for Construction, and was published as a component of CML's media literacy framework in the second edition of Literacy for the 21st Century (Jolls 2007). CML developed the visual display (Jolls and Sund 2007) of the Concepts and Questions. Figure 1 shows the Concepts in the middle of the chart, relating to both Deconstruction and Construction (Jolls and Sund 2007). This graphic display provides a quick and clear framework for analysis of any media text, addressing any subject in any medium. With practice over time, students can apply the framework to their roles as media consumers and producers, and establish habits of mind that can last a lifetime. In a recent evaluation of CML's framework for deconstruction and its updated Beyond Blame curriculum addressing media and violence, a longitudinal study confirmed that CML's approach to media literacy education has a positive impact on student knowledge, attitudes and behavior (Fingar and Jolls 2013; Webb and Martin 2012,430). Although media literacy is a component of the Partnership for 21st Century Skills framework for U.S. education, it is still not formally recognized in the Common Core Standards for Language Arts, nor is it typically included in teacher preparation programs. This is not only true in the U.S.; unfortunately, formal teacher preparation programs that include media literacy are also scarce in Canada (Andersen 2011). These omissions point to a foundation in media literacy that is missing in K-12 education and in universities in the U.S. Since the Concepts of media literacy provide the framework for understanding how media work as a representation system, a lack of teacher preparation not only robs students of the opportunity to understand the global village that McLuhan so aptly named, but also contributes to a diffuse understanding of media literacy that does not allow for consistent, replicable, measurable and scalable programs that lend themselves so well to digital technologies. Instead, the education system is stuck in the era where information is valued because it is seen as being scarce, where citizens must physically retrieve information from "temples" of learning, and where pedagogy is focused on narrow content silos that often neglect to provide the problem-solving abilities for today's world. Today, information is plentiful, and the consistent inquiry skills of media literacy are well-suited for addressing the infinite variety of content knowledge available—yet these process skills are scarce, given the lack of media literacy training for teachers and students alike (Jolls 2012). There remains the danger of media literacy fundamentals being lost as they are passed over in favor of students learning media production alone, often in ways that serve only to "celebrate" young peoples' media practices, without encouraging a much needed critical analysis. T. Jolls & C. Wilson / Journal of Media Literacy Education 6(2), 68 - 78 Figure 1: CML's Questions / Tips T. Jolls & C. Wilson / Journal of Media Literacy Education 6(2), 68 – 78 76 There is hope: Finland, long recognized for its educational excellence, has adopted a new national strategy for media education (Ministry of Education and Culture, Finland 2013). The European Union calls for every member country to report annually on media literacy programs and activities (Livingston and Wang 2013, 166). Australia continues to embed media literacy into its education system (Quin 2011). Global organizations such as UNESCO and others offer media literacy programs throughout the world. UNESCO describes media and information literacy as the focus of their current work: "Media and Information Literacy recognizes the primary role of information and media in our everyday lives. It lies at the core of freedom of expression and information—since it empowers citizens to

understand the functions of media and other information providers, to critically evaluate their content, and to make informed decisions as users and producers of information and media content." UNESCO has undertaken several initiatives in media and information literacy, with a particular focus on providing support for teachers and policy makers through a number of resources (Wilson and Grizzle 2011). The Aspen Institute has published a new policy report called "Learners at the Center of a Networked World," that calls for media literacy and social/emotional literacies to serve as the heart of education (Aspen Institute 2014). We can take inspiration from these new global developments in media literacy, and continue to build on the strength of the foundations that were laid by Masterman and Duncan many years ago. Barry Duncan (2010), before his death in 2012, issued a call that should be heeded: "I want to see critical pedagogy have a major role in bringing the key ideas both of traditional media and new media together, making literacy more meaningful in the curriculum. The so-called convergence [of technologies] and the culture of connectivity—all of the new directions—have to be reconciled with the traditional. If we do a good job at that, we will be successful." References

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Appendix L

How do Digital Media and Learning (DML) and Media Literacy Communities Connect? Why is it important that these communities work together towards common goals?**,** p. 39

> Center for Media Literacy, 2014. *How do Digital Media and Learning (DML) and Media Literacy Communities Connect? Why is it important that these communities work together towards common goals?* California: CML. Available from: https://www.medialit.org/reading-room/how-do-digital-media-learning-dml-and-media-literacy-communities-connect-why-it

How do Digital Media & Learning (DML) and Media Literacy Communities Connect? Why is it important that these communities work together towards common goals?

Henry Jenkins and Tessa Jolls on the meaning of Media Literacy and the need for a strong coalition of advocates regardless of the name.

This conversation first appeared on Henry Jenkins' blog **Confessions of an Aca-Fan** then in CML's newsletter *Connections* (Oct/Nov. 2014).

Henry: When I and other researchers from MIT wrote the 2006 white paper, *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*, we were very aware of building on the foundations of the Media Literacy movement as it had taken shape in North America over the prior several decades. We made a number of gestures across the paper, which were intended to pay tribute to what had been accomplished, to signal the continuities as well as differences to our vision for the "new media literacies." For example, early in the paper, we emphasized that the newer skills and competencies we were identifying built on the foundation of traditional print-based literacies, core research skills, core technical skills, and media literacies. We wrote, "As media literacy advocates have claimed during the past several decades, students also must acquire a basic understanding of the ways media representations structure our perceptions of the world; the economic and cultural contexts within which mass media is produced and circulated; the motives and goals that shape the media they consume; and alternative practices that operate outside the commercial mainstream...What we are calling here the new media literacies should be taken as an expansion of, rather than a substitution for, the mass media literacies." (20). Later, in the document, we do challenge whether some of the core frameworks of the media literacy movement have been adequately framed to acknowledge and take account of instances where young people are themselves producing and circulating media, rather than consuming media produced by others, but these were intended as fairly local critiques in recognition of the need to continually reappraise and reframe our tools to reflect new

developments and new contexts. This same passage flags what we saw as some of the core virtues of those same conceptual frameworks: "There is much to praise in these questions: they understand media as operating within a social and cultural context; they recognize that what we take from a message is different from what the author intended; they focus on interpretation and context as well as motivation; they are not tied up with a language of victimization...One of the biggest contributions of the media literacy movement has been this focus on inquiry, identifying key questions that can be asked of a broad range of different media forms and experiences." (59)

If we flash forward to the current moment, it seems that there remain many mutual misunderstandings between advocates for media literacy (who come from these rich traditions) and newer researchers who have entered the field through the Digital Media and Learning tradition.

Tessa: I remember well the excitement that I felt when you published your white paper in 2006 (Confronting the Challenges of Participatory Culture: Media Education for the 21st Century) -- it was (and is!) a profound and and a document that contributed great advances to understanding significant examination of the new media emerging from the technology advances of our time, and media literacy skills needed in our society. Personally, I've always embraced your work because I see the added-value to the field and how it builds upon and is compatible with what has come before, and I've been puzzled as to why there seem to be rifts when it is far more beneficial to acknowledge our commonality and to leverage it to gain traction in the bigger world of education.

I agree that there are mutual misunderstandings between media literacy advocates who have long practiced in the field and newer researchers who have entered the field through the Digital Media and Learning tradition. BUT because media literacy education has been ignored and neglected in schools through the years, there was no foundation laid for why media literacy is important, for its foundational concepts and for how to deliver the pedagogy (more on the foundation needed later). There were few if any troops to call on to be able to deliver media literacy education — very few had been taught, and no one could then teach it on the mass scale that is needed. And efforts to penetrate the education system in the U.S. meet with resistance since the system itself is based on a 20th century approach emphasizing content knowledge over process skills and a factory model that is incompatible with the collaborative networks and new curricular approaches needed today.

One response to the frustrations of dealing with the education system was — and is — to put technology in the hands of the youth and have faith that they will figure it all out. Using the technology approach, the iPhone is the "school" and anyone who uses it adeptly is the master and anyone over 30 is, well, handicapped at best. New technologies enable this approach because now, hardware and software are available and production has been democratized — everyone is a producer, a collaborator, a distributor and a participant. While experiential and project-based learning is truly exciting and an important component of media literacy, it is not synonymous because the outcome of the technology approach is often limited to technical proficiency without critical autonomy. Whether using an iPad, a pencil or a videocam, pressing the right buttons is

important but not enough! This is where many media literacy advocates, including myself, feel that the train has left the station because some researchers, educators and parents, too, think that just learning to use the technology is enough (they probably don't know about or have access to alternatives) and they pursue technology projects with no credible media literacy components.

Henry: MacArthur Foundation (Digital Media & Learning Initiative) was pretty committed to the phrase, New Media Literacies, so we worked hard to try to figure out what kind of meaning to attach to it. I did want to signal continuities with the Media Literacy movement, so it did not seem altogether a problematic term, but I was also worried about the connotations you describe here. This is one reason why I was so explicit that we were not leaving behind traditional literacies, media literacy, research skills, or technical skills, but that what we were describing were an added layer or an extension of each that now needed to be factored into our consideration of what an ideal curriculum looked like. I did not want to imply that these skills were entirely new -- many were things we should have and some of us had been teaching all along -- nor were they exclusively about new media per se. We've always insisted that these were not technical skills but rather social skills and cultural competencies, and that these were things that can be taught in low tech or no tech ways (and should be, rather than waiting for low income schools to catch up in terms of their technical infrastructure before introducing these literacies into the curriculum.) Despite having spent much of my career at MIT, I have worked hard to avoid any and all forms of technological determinism.

Still, there's some rhetorical power to attaching yourself to the digital revolution rhetoric (as well as many pitfalls) insofar as it provides some urgency to the message, but ultimately I frame these skills in relation to the idea of a participatory culture rather than in terms of digital change. This is also why I have had reservations all along about the phrase, Digital Media and Learning, since it implies that we are interested only or exclusively in digital media, and that has never been my focus. Keep in mind both that I wrote the white paper in the wake of writing Convergence Culture, which was all about "Where old and new media collide," and that it emerged from the context of the Comparative Media Studies program, which studied the interplay across media. We find that when we do workshops for teachers and students, they often anticipate that technologies are going to be much more central to our work than they are. Our first task is always to achieve that shift from a focus on technologies to a focus on culture.

And like you, I share concern that in many cases, we are now bringing technologies into the classroom as if doing so would substitute for a more comprehensive approach to media literacy. As Liz Losh notes in her recent book, the focus on technology turns media education into something that can be sold -- like getting whole school districts to buy iPads -- and can be purchased from the school budget, rather than something which as the white paper suggests, should require a fundamental paradigm shift in the ways we teach all school subjects.

That said, I got into some trouble with the original white paper in reducing the rich kinds of conceptual models that surround, say, the Computer Club House movement to purely technical skills comparable to penmanship. Most of the work which gets presented at the Digital Media Literacy (DML) conference is about the fusion of hands-on technical processes, whether tied to

hacking, games-based learning, the Maker movement, etc., with rich conceptual frameworks which are intended to allow people to understand at a deeper level how the constraints and affordances of digital media impact the world around us. To me, this is a kind of media literacy, though less tied to notions of representation or messaging than previous kinds of media literacy work. If one does not displace the other, they certainly can co-exist within a more comprehensive model which considers the nature of platforms and programming alongside the questions about who produces which representations for which audiences with which motives.

In many ways, what we were trying to do with the white paper was to build a coalition which would include people interested in engaging with new media platforms and practices, people committed to promoting media literacy, and teachers seeking new ways to animate the teaching of their disciplines. Where our work has been successful, we have brought together these interests. Such an approach has tended as you suggest here to pull media literacy advocates into more active engagement with notions of media change and new technologies, but it also has the intent to draw people who want to teach using new technology to confront the participation gap, the transparency issues, and the ethical challenges we identify in the white paper and through doing so, to pull media literacy more actively into their teaching practice.

Tessa: Henry, I applaud your action and know that your intentions are the absolute best. Most importantly, we agree on the primary goal of media literacy education: as you said, media literacy requires a fundamental paradigm shift in ways to teach all subjects. Media literacy education— whether it is high tech or low tech — primarily concerns itself with teaching and learning the conceptual underpinnings beneath contextualizing, acquiring and applying content knowledge. Learners gain content knowledge through using their media literacy skills — and these skills are applicable to any content any time, any where on a lifelong basis. Sometimes this process has little or nothing to do with technology, although I will note that access to technology in the U.S. Is widespread: in our experience at CML, in the poorest communities in the U.S., cell phones and applications like video games proliferate, but these technologies are frequently barred in the classroom.

This changed education paradigm is a radical shift in cultural and education systems where formal learning worldwide has traditionally been confined to content silos whose subject matter is warehoused in physical textbooks and dumped into students' heads. Since these traditions have dominated since Gutenberg's invention of the press, they are rooted deeply in our culture. "Mastery" is no longer the goal for education; constant improvement on a continuum of learning is what we are seeking, while recognizing that some will inevitably be more skilled than others in various domains. As Len Masterman, a professor from the University of Nottingham and a media literacy visionary, said his Eighteen Basic Principles in 1989, "...you can teach about the media most effectively, not through a content-centered approach, but through the application of a conceptual framework which can help pupils to make sense of any media text (this includes media texts created by users and

software "texts"). And that applies every bit as much to the new digitized technologies as it did to the old mass media...The acid test of whether a media course has been successful resides in

students' ability to respond critically to media texts they will encounter (or create) in the future. Media education is nothing if it is not an education for life."

We at CML like to say that thanks to technology, the content is infinitely variable, plentiful and available, but that the media literacy process skills of "learning how to learn" and to be critically autonomous are the constants that learners need to practice and employ and constantly improve — and because of the lack of understanding and training of both teachers and learners, these skills are scarce. It is going to take more than a village to institutionalize media literacy education. Policy initiatives, coalitions, professional associations, researchers etc. will all play a vital part in realizing this global imperative.

Which brings me to the point that being media literate, undertaking research and development, teaching media literacy, and institutionalizing media literacy are widely divergent roles which require various degrees of media literacy knowledge and skills. Who needs what knowledge when, and for what purpose? Masterman noted that ..."media are symbolic sign systems that must be decoded (and encoded). The central unifying concept of media literacy is that of representation (what is represented through media to us and what we represent to others through media)." Researchers who explore the vanguard of media literacy — such as you and many of those who are part of the DML community — may have a different goal for media literacy education than preschool teachers, and yet each is in the business of sharing knowledge about media literacy and helping youth and adults to understand and be able to describe and navigate symbolic media systems — whether these systems are technology-based or not. I do not see conflict — I see coalescence. Common understanding fuels coalition-building — which is highly desirable and needed!

To grow media literacy education at the pre-K-12 level, we need to have pedagogy that can be replicated, measured and scaled. Only then will media literacy be common knowledge rather than privileged information. Some of the basic components for achieving this goal have already been developed in ways that fit with new curricular approaches — highly encouraging. And in the meanwhile, it is also encouraging to note that media literacy education has survived through the grassroots for many years, because some early adopters recognized its importance and refused to abandon their first-hand experience with its benefits and promise (anyone who is interested in this evolution may want to check out CML's **Voices of Media Literacy Project**, which features 20 media literacy pioneers active prior to 1990). Yet in spite of these past efforts, we are at the beginning of the beginning, although Marieli Rowe, president of the National Telemedia Council and I have joked for years that "media literacy is just around the corner." So far it's been a very long block to walk!!

Henry: There's no question in my mind that the work we are doing today would not be possible without the work of the kind of media literacy pioneers you have been documenting and it is an enormous service to capture those voices and their memories of the early days of the media literacy movement while it is still possible to do so. I think there has been a tendency for those people who have jumped into this space in the wake of the MacArthur Digital Media and Learning initiatives to forget this history, to see these projects as a new beginning, and as a

consequence, we are losing much wisdom, not to mention the opportunity to forge a stronger alliance with those veterans who have much experience in the field of this struggle. This is why I have made a point of remaining connected to NAMLE and serving on the editorial board of the Journal of Media Literacy to make sure those links remain strong.

Once we wrote the white paper and turned our attention to developing our own curricular resources, our first major project, which became the book, Reading in a Participatory Culture, sought to bridge between the literary practices of the 19th century (those which gave rise to Moby-Dick) and today's remix practices, whether those associated with hip hop or digital media; we wanted to help teachers to understand the differences between plagiarism, fair use, and remix, and we wanted students to think not only critically but also creatively about the many different kinds of texts they encountered in their everyday lives as readers and writers within contemporary culture. Our goal was not about promoting new media per se; we wrote that we hoped to raise a generation which had a mouse in one hand and a book in another. And the approach we took was comparative to its core, seeking to identify connections across media as well as differences.

You are right to say that technologies are becoming more widely available (and thus, one case for teaching media literacy is that we need to help young people think critically about tools and practices that are very much part of their everyday environments.) We certainly still are finding cases where young people lack access to these technologies -- or meaningful access -- outside the classroom, so that having twenty minutes of restricted access in a public library does not equal the unlimited, anywhere-anytime access enjoyed by other youth. But, we are also finding other inequalities in access to skills and knowledge, mentorship, networks, etc. which result in gross inequalities of opportunity between different youth -- this is what we called in the original report, the Participation Gap, and this also is why it is so vital to incorporate media literacy experiences, including experiences working with new media technologies, into every institution that touches young people's lives, but especially through schools. MacArthur's original focus was on spaces of informal learning, which was an important first step, but increasingly, the DML folks are focused on "connected learning," which centers on building a more fluid set of relations between home, out of school, and in school practices. All of this is why I have shifted from talking about "a participatory culture" to "a more participatory culture" to emphasize the work which still needs to be done in insuring equity of opportunity.

Participation in What? Part 2 Jenkins and Jolls

Henry: ...I have called for a recognition that media literacy is a "social skill" having to do with the ways we interface with each other, how we participate collectively within the activities of a networked society. I fear that our schools place too much emphasis on the autonomous learner and not enough emphasis on how we create and share knowledge together. This is perhaps a key way in which the new media literacies differ -- we are focusing on notions of collectivity and connectivity more. Our emphasis on participation begs the question, participation in what. I've made this a key concern in some of my own recent writings, but the answer necessarily involves something larger than the individual, or it is by nature not participation.

Tessa: I appreciate your exploring the question of "participation in what?" Maybe there are no set answers to this question — maybe our role in media literacy education is to help increase the capacity of participants to participate effectively in whatever they choose to engage with?

I certainly agree with you that media literacy is a social skill in regards to how we relate to each other and how we participate collectively within the activities of a networked society. Relationships are — and have always been — central to media literacy and media literacy education. First and foremost, through media literacy we explore our relationship with media itself. We engage with media and given its pervasiveness in our lives, divorce is not an option!

In understanding our media relationship, we come to see that there are relationships between the text, the audience and the producers/participants, and as technology has offered increased capacity for interaction and world-wide connectivity, that relationship becomes more and more dynamic and expansive. At the same time, our media relationship affects our very identities as individuals and as affiliative groups — we have private selves (what goes on inside), public/representational selves (how we extend and represent ourselves to others alone or as a group/entity) and what I call "commercialized" selves (that allow marketing and/or ideological elements, such as branding or big data, define who we are or whom we affiliate with and whom we are seen to affiliate with). These notions apply to individuals as well as organizations or groups.

I agree with you, that schools emphasize individual autonomy and not enough emphasis on how we create and share knowledge together. (And I believe that higher education is the tail that wags the Pre-K-12 dog in this regard — SAT scores and college admissions departments reward individuals). But sharing is not a new idea — sharing has been part of enlightened media literacy pedagogies for many years. I quote Masterman's 18 Basic Principles again because — well, he is my master (and I am continually wowed to see how his words resonate through the years): "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..."

As technology has enabled the classroom walls to break down through more connectivity, good media literacy pedagogy becomes more and more feasible — and desirable — in both formal and informal settings. "Underlying Media Education is a distinctive epistemology," Masterman wrote. "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 student and teachers." This dialogue arises in many contexts, not just the formal classroom. And as you said (and it can't be said enough!), we have a moral and economic challenge in our society to insure that these opportunities are widely and equitably available.

Because of the lack of education system imperatives to teach media literacy and to encourage critical autonomy alone and through groups -- rather than to meet fill-in-the-bubble testing deadlines — it is difficult at best to deliver media education in a credible and evidence-based

way. Often, media researchers have no clue about what pedagogy is or how school systems work — and it is for this reason that we often say that media literacy is more about education than about media. The education imperative is paramount: the promise of the technology in putting power into the hands of the people is squandered if people don't have the critical thinking skills and complementary new media skills to use technology wisely and to amplify benefits from its use.

But then the questions become, what skills are necessary and how do we help people gain media literacy skills? Your 2006 white paper outlined new media skills that are needed — play, performance, simulation, appropriation, multitasking, distributed cognition, collective intelligence, judgment, transmedia navigation, networking and negotiation. These are sophisticated skills that are highly suited to the technology and the digital world that enables their use. They rest on the basic foundations of media literacy skills that are usually missing for students, or that are taken for granted by media researchers who may already have a conceptual understanding of media representations, deconstruction and construction. However — and yes I repeat myself — this basic foundation is absent in American education systems. Quite simply, teachers cannot teach what they do not know and what the system has not valued.

And so we — as educators and as citizens — have skipped teaching and learning an enormous media literacy underpinning for new media as well as for non-digital media like the logos on shirts, the billboards, the theater plays, the food packaging, the school posters. And this lack of understanding of basic media literacy concepts translates from the playground to the Twitter feed. And as you said, Henry, it also robs researchers of a rich base of knowledge that should inform their work. Yet it's important to have unity as a field so that we can gain traction and scale our work in a significant way amongst the general population — to translate the Research & Development (R&D) into awareness and actions of use to citizens nationally and globally.

This translation goal has been the Center for Media Literacy's (CML's) mission since its founding by Elizabeth Thoman in Los Angeles in 1989 (and with CML's predecessor organization the Center for Media&Values springing from homan's work beginning as a USC Annenberg graduate student in the late 1970s). I applaud your work and that of others, to operationalize and to "package" these powerful media literacy ideas and practices into pedagogy and curricula available for all of our citizens and youth — so needed! We must always keep in mind that we are trying to reach and inspire millions of people and so our task is enormous — but other movements, such as the environmental movement, provide us with inspiration and hope for fulfilling our mission.

In the meanwhile, we have a foundation to lay, with an expanded repertoire of media literacy skills that are needed in the 21st century (thanks to your groundbreaking work). What are the media literacy fundamentals that have been so neglected these past decades?

Earlier I noted that Masterman focused on priorities for media literacy education by saying: "Media are symbolic sign systems that must be decoded (and encoded)... The central

unifying concept of media literacy is that of representation (what is represented through media to us, and what we represent to others through media)."

He went on to say, "Without this principle, no media education is possible. From it, all else flows." his idea is as relevant to today's media as it was to the media of Masterman's time.

Henry: I really appreciate the work the CML does in translating research into awareness and action, in trying to build a more sustainable and scalable movement for media literacy. As someone who sees themselves first and foremost as a researcher, I am deeply committed to translating our research into language that can be broadly accessible and providing resources which can be deployed within important conversations; I see this blog as part of the work I try to do to broker between different groups of people who should be talking to each other. My team through the years has done a fair amount of applied work with educators, trying to get our materials out in the field. We've come to the same conclusion you have that media literacy is at least as much about rethinking education as it is about rethinking media. We found very early on that developing resources were never enough unless you also helped to train the teachers who would be using those materials. This took us down the path of developing and running teacher training programs in New Hampshire and California, and then publishing a series of white papers which dealt with what we saw as best practices in fostering participatory learning, practices that both dealt with how to integrate the new media literacies into school curriculum but also how to couple them with progressive pedagogies that are very much in line with those that Masterman describes above -- pedagogies that are very much informed by thinkers such as Dewey and Freire. See, for example:

http://henryjenkins.org/2012/12/play-participatory-learning-and-you.html
http://henryjenkins.org/2012/12/shall-we-play.html
http://henryjenkins.org/2012/09/designing-with-teachers-participatory-approaches-to-professional-development-in-education.html

We are back in the trenches again with the latest phase of our work, this time emerging from extensive research (interviews with more than 200 young activists) about the political and civic lives of American youth: We've now built an archive featuring videos produced by young activists around a range of causes, many of them appropriating and remixing elements from popular culture, many of them using tools and tactics associated with participatory culture. This time, we are testing these materials in collaboration with the National Writing Project, and working with their teachers (as well as the organizations we study) to develop activities and lesson plans which might allow educators to integrate our materials and insights into their teaching. One thing we've learned through the years is that our core strength is ultimately in cultural theory and research and thanks to my move to USC, coupled with media production capacities; we have some understanding of core pedagogical issues; but we do better working hand in hand with classroom teachers to develop the actual activities that make sense in the public schools. And we count on the power of various networks -- including both the Media Literacy Movement and those folks involved with the DML world -- to get word out about what

we've created. This is why I place such a high priority in building partnerships which can help us work together to achieve our shared goals.

The issue of whether representation remains the core of contemporary media literacy is a complex one, it seems to me. Representation is a powerful principle, one which helps to explain the ways we use media to make sense of ourselves and our lives, and it remains very pertinent in a world where we are encouraging young people to develop a stronger sense of their own public voices, to tell their own stories, to create their own media. Looking critically at existing representations, thinking ethically about the choices they make as they create their own representations as media producers remain core to any understanding of media literacy, but young people are also participating in media which are more focused on social exchanges and personal interactions in which the creation of texts is secondary to the cementing of social bonds. If we were developing media literacy in response to the telephone rather than television, would we be asking different questions, have different priorities?

Representation is itself a process, to be sure, but we also often use it to refer to a product or text: a representation. The disciplines which do much of the heavy lifting on media literacy education -- especially language arts but also arts education -- tend to focus heavily on texts, and so as the term representation gets translated into their vocabulary, it is not surprising that it comes to circle around texts. This focus on texts can lead us to think in terms of readers and writers/producers but not in terms of participants in an ongoing communication process. And this is a key reason why my vocabulary tends to place a greater emphasis on notions of participation than on notions of representation.

Tessa: Ah...and so down the rabbit hole we go. And we are going on a slippery slope because as you said, it's complicated. I'm enjoying the ride!SEP Which universe are we describing? The physical world that surrounds us and that we perceive on a local and physical level -- the world that surrounds us with physical media like logos and traffic signs and billboards and movies and music and candy wrappers -- or the alternative global village or digital media that we access only through the assistance of hardware and software media like the internet in general or Instagram or Facebook or games? In each case, the media are man-made, which means that men (and oh yes let's be sure to be inclusive and say women too) construct these media messages and devices. Construction always calls for decisions on the part of the creator(s), who sets the initial limits and boundaries through which we may experience his or her creation -- media construction, whether digital or not, is a physical representation of the creator's intention.

So fundamentally, construction and (implicitly) representation must take place before participation is possible. And participatory culture (whether we participate online or off) is both an input to and an outcome of construction/representation -- and the fusion constantly changes the nature of and the expression of the construction, which always has emotional, social and cultural implications. There is a chicken-or-egg quality to the cultural issues and their intersection with media, but it can also be argued that an individual's mind and group culture itself are also constructions/representations.

But back to media...As an example, let's think about video games. The games are media constructions and they provide a software "box" in which players operate, and this software box is constrained by the hardware platform. The creator of the game designed the game intentionally -- to share a worldview and/or to profit from game purchases. Players engage with the game text itself and interact with each other to experience the game in a myriad of ways -- visual, verbal, social, emotional -- and often players invent new ways of experiencing the game through mods or hardware and they amplify their experiences together. But because the construction itself is constrained, there are inevitably frames and experiences that are included and excluded.

So much depends on how we parse the world we live in! But at the same time, to take a scientific approach towards media literacy, we need boundaries and concepts that define and describe a specific field of inquiry -- that of media, in this case. While the cementing of social bonds through media use may be a primary goal for youth or adults, media are still the means toward an end, while also acknowledging that digital spaces (constructions) multiply possibilities for and the nature of social engagement exponentially.

I agree with you, Henry, that the focus on the word “texts" -- because of its traditional association with physical media -- generally limits people's perceptions about participating in an ongoing communication process that digital media enable. In today's context in the global village, the notion of text expands so that "text" may become the entire "box" that encompasses

the digital world itself, and the cultural representations within the box and outside it. We now have the physical world and the digital world and their intertwining and as Steve Jobs famously espoused, we need to "think different."

Nevertheless, to be a field, media literacy must have a set of "universals" that always apply -- timeless concepts that describe how media operate as a symbolic system. These concepts must apply to the physical and digital world, and they must traverse both, without exception. The concepts, like the laws of physics, must serve as the basis for theory and pedagogy (practice) and implementation because otherwise, we have no commonality or foundation to build upon. We need such a conceptual foundation to be able to replicate, measure and scale applications.

The Five Core Concepts of media literacy offer such a foundation, and with an expanded notion of "text" or “message” in mind, and with the idea that constructions are implicitly representations, here they are:

CML’s Five Core Concepts

1. All media messages are constructed. 2. Media messages are constructed using a creative language with its own rules. 3. Different people experience the same media message differently. 4. Media have embedded values and points of view. 5. Most media messages are organized to gain profit and/or power. (For those uncomfortable with the word ‘power,’ CML intends its use in the broadest sense)

There are various expressions of these concepts – for example, Canadians use eight Key Concepts, but CML compressed them to five for the U.S. beginning in the early 1990s. The Five Core Concepts are rooted in Masterman's work and developed by Canadian media literacy pioneers including Barry Duncan and John Puengente in the 1980s.

These Five Concepts are as relevant to new media as to any other media. There is a distinction here between describing how media operate as a symbolic system — the theoretical description of media embodied in the Five Core Concepts — and how individuals and groups use and experience the media — the practice, the skills, the applications of the theory.

As researchers and developers in the field, we must constantly test the Core Concepts to see whether they are still universally valid and descriptive of all forms of media. It is this basic description of a global media system at work that distinguishes media literacy from other communications fields, and they provide a rallying point around which institutionalizing media literacy becomes possible. The Core Concepts capture the fundamental understanding that has long been missing in our culture and in the Pre-K- 23 +++ education system. They also provide the basis for pedagogy that can be built around them.

Henry, in the name of all those who have come before us, I am deeply grateful and privileged to have this opportunity to explore and share with you and I hope, to help build these bridges that are so needed. Do I believe that our R&D should continue to advance the field of media literacy and media literacy education? Absolutely! And I also believe that the Core Concepts, rooted in the big idea of representation, offer a major foundational bridge that is applicable anytime, anywhere, in any media, with any "text," and that all citizens need access to a common understanding of media that the Core Concepts provide.

Appendix M

Media and Information Literacy Education: Fundamentals for Global Teaching and Learning, p. 40

> Jolls, T., and Wilson, C., 2015. Media and Information Literacy Education: Fundamentals for Global Teaching and Learning. In: Singh, J., Grizzle, A., Yee, S., and Culver, H., University of Gothenburg: International Clearinghouse on Children, Youth, and Media, p. 59.

Media and Information Literacy Education: Fundamentals for Global Teaching and Learning Carolyn Wilson & Tessa Jolls New approaches to learning, including "connected learning", have gained currency worldwide as educators have recognized that students learn in the context of a networked, global media culture. In a post-2015 world, media and information literacy (MIL) provides a common denominator through which citizens can connect – an idea anticipated and articulated through the work of pioneers Marshall McLuhan, Len Masterman and Barry Duncan. This foundational work provides a pathway to teach in a systematic way that is consistent, replicable, measurable and scalable on a global basis – and thus, timeless. This article will outline how the work of these pioneers continues to define our understanding of MIL, and provides recommendations for sustainable MIL programs for teachers and students now, and beyond 2015. Keywords: connected literacy, media and information literacy, Len Masterman, Barry Duncan, Marshall McLuhan, key concepts, media literacy, post-2015 development agenda, Aspen Institute, critical thinking, heuristic learning The Post-2015 Development Agenda of the United Nation's highlights several goals that are fundamental for equity, inclusion and relevance in education. While the goals could be described by some as ambitious and perhaps even idealistic, they nevertheless remain essential for ensuring a just society as we imagine the educational landscape beyond 2015. The need for education and professional development for teachers, inclusive access to learning technologies and the Internet, and access to knowledge and skills development for all citizens, are just a few of the priorities that have been identified (UNESCO, 2015). While many look to the field of media and information literacy (MIL) to envision ways of implementing these priorities, it is also important that we look to the history of MIL to build upon the foundations in MIL theory and practice that have been proven to be effective. While it may seem counter-intuitive, it can be useful at times, to borrow from communications expert Marshall McLuhan (1969), to look forward "through a rear-view mirror". 60 Carolyn Wilson & Tessa Jolls MIL and New Approaches to Education New approaches to education are arising to meet the demands of the post-2015 agenda. With the advent of the Internet and social media, it is now possible to provide education opportunities that offer a radically different approach from the "factory model" of education in closed classrooms that has long prevailed in many parts of the world. "Connected learning" is an approach that calls for education to provide youth with opportunities to engage in socially- supportive learning that is also personally interesting and relevant, while connecting academics to civic engagement and career opportunities. Additionally, core properties of connected learning experiences are described as "production-centered," using digital tools to create a wide variety of media, knowledge and cultural content, with shared purposes for cross-generational and cross-cultural learning geared toward common goals and problem-solving (Aspen Institute, 2014, p. 31). These

characteristics are closely aligned with the skills that citizens need and that employers cite as desirable for workplace readiness, such as professionalism/work ethic, oral and written communications, teamwork/collaboration and critical thinking/problem solving (Lotto & Barrington, 2006). To address these widespread sentiments, as well as the profound changes being called for in the world of education, the Aspen Institute released a comprehensive report called "Learner at the Center of a Networked World" (Aspen Institute, 2014, p. 16). The report identifies five essential principles for creating safe, optimized and rewarding learning experiences for young learners: • learners need to be at the center of new learning networks that extend outside schools; • every student should have access to learning networks, insuring that every student has connectivity, and access to hardware, applications, digital- age literacy and high-quality content; • learning networks need to be inter-operable, so that education resources are not isolated in separate silos and that innovation can be shared; • learners should have the literacies necessary to utilize media as well as safeguard themselves in the digital age; • students should have safe and trusted environments for learning, which will protect children's safety and privacy online. The report calls for a different approach for acquiring content knowledge and competencies – namely, that "all learners and educators need a sufficient degree of media, digital and social-emotional literacies to learn through multiple media confidently, effectively and safely. Every student must have a chance to learn these vital skills" (Aspen Institute, 2014, p. 36) [emphasis added]. 61 Carolyn Wilson & Tessa Jolls The relevance of media and information literacy to the post-development agenda is further illustrated by the description of MIL provided by UNESCO (2014): "Media and Information Literacy recognizes the primary role of information and media in our everyday lives. It lies at the core of freedom of expression and information – since it empowers citizens to understand the functions of media and other information providers, to critically evaluate their content, and to make informed decisions as users and producers of information and media content." However, for media and information literacy to have an impact on education, MIL skills must be valued, articulated and taught in ways that are consistent, replicable, measurable and scalable globally – thus becoming sustainable and timeless (Jolls & Wilson, 2014). Very few of today's teachers grew up themselves learning through a media and information literacy lens, and unless professional development is scaled up and delivered in a way that is accessible for the many rather than the few, the likelihood of transforming teaching and learning is greatly diminished. Foundations for MIL Education: the Work of McLuhan and Masterman In many regions, media and information literacy has existed largely outside the education mainstream, and as a result there has been little formal exploration of how to teach it effectively either in graduate schools of education or in school districts. Tomorrow's teachers need the opportunity to learn about media and information literacy theory, to develop pedagogical approaches for exploring new MIL technologies, and to develop critical frameworks that can be used in the analysis and evaluation of media content and information available in today's world. New approaches to learning also demand openly networked, online platforms and digital tools that can make learning resources abundant (Aspen Institute, 2014, p. 31). But technology itself is only one part of the equation. The work of helping teachers develop MIL programs for students in a systematic, consistent and research-validated way is an enormous task, given the relatively young state of the field and the challenges of using media in the classroom. Yet in our efforts to move forward, our work can be informed by the foundations for media and information literacy that have already been established and proven. Because MIL has been rarely institutionalized in education systems, there is often little understanding of the foundation and basic concepts of media and information literacy, including

how these concepts evolved, and what their contribution can be in a post-2015 world (Jolls & Wilson, 2014). In North America and other parts of the world, the underlying foundation for MIL rests on the groundbreaking work of Marshall McLuhan, a Canadian 62 Carolyn Wilson & Tessa Jolls whose work in the 1940s through the 1960s called attention to the profound impact of media and information technologies on our lives, our culture and our future. McLuhan foresaw that technology would shrink the world and expand it at the same time. He predicted how various technologies would eventually merge to create what we now know as the Internet. He used the phrase the "global village" to describe the impact of this merging, including the priority and value that would be placed on the exchange of information and possibilities for intercultural dialogue (McLuhan, 1964). Through his famous phrase "the medium is the message", he articulated his idea that the form through which information is conveyed is as important as the content of the message (1967). According to McLuhan, because each medium has its own technological "grammar" or bias, each inevitably creates and shapes a unique message, even if each is conveying the same information about the same subject. Ultimately, McLuhan saw that technology would come to act as an extension of ourselves, shaping and influencing the way we think, act and relate to one another (1964). In the U.S. and Canada, the foundations of the MIL discipline continued to be developed through the work of Len Masterman in England and Barry Duncan in Canada, acknowledged by many educators as the founders of media and information literacy as it is known in North America today. This foundation includes the basic principles for media and information literacy introduced by Masterman in 1989 and the ways in which these were taken up by Duncan and his Canadian colleagues in their Key Concepts. The Key Concepts, first introduced in the 1989, remain central to media and information literacy education in Canada today (Wilson & Duncan, 2008). Building on the work of their Canadian colleagues, the American version of the Concepts was introduced in 1993 and continues to underpin the work of educators across the United States (Thoman, 1993). The development of media literacy in both of these countries reinforces the importance of a fundamental paradigm and conceptual framework for media and information literacy education today (Jolls & Wilson, 2014). But it was when Masterman first published his ground-breaking books, Teaching About Television (1980) and Teaching the Media (1985), that the basic pedagogy for media and information literacy was first articulated, which enabled these disciplines to be developed further in North America and taught systematically to elementary and secondary students. According to Masterman, there is a key factor which underpins the discipline of media and information literacy. "The central unifying concept of Media Education is that of representation. The media mediate. They do not reflect but represent 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" (Masterman 1989). Masterman anticipated how, in a world where content is infinitely available, it would be essential for educators to provide their students with heuristic approaches to learning. This approach is well suited to the type of teaching and learning needed in an age driven by algorithms, as Masterman observed in a 2010 interview for the Voices of Media Literacy project: "…you can teach about the media most effectively, not through a content-centered approach, but through the application of a conceptual framework which can help pupils to make sense of any media text. And that applies every bit as much to the new digitized technologies as it did to the old mass media… The acid test of whether a media course has been successful resides in the students' ability to respond critically to media texts they will encounter in the future [including those they are creating]. Media education is nothing if it is not an education for life" (Masterman, 2010). As Masterman identified new tenets for media education,

he continued his quest to describe – through a process of inquiry – how media operate. While Masterman uses television as his example here, the questions he is posing could just as easily be applied to radio, social media or print: …if we are looking at TV as a representational system, then the questions inevitably arise as to who is creating these representations. Who is doing the representing? Who is telling us that this is the way the world is? That their way of seeing is simply natural? Other questions emerge. What is the nature of the world that is being represented? What are its values and dominant assumptions? What are the techniques that are used to create the 'authenticity' of TV? How are TV's representations read and how are they understood by its audiences? How are we as an audience positioned by the text? What divergent interpretations exist within the class? (Masterman, 2010) Masterman's questioning led him to identify how media operate as symbolic "sign systems", and he articulated ideas about the constructed nature of media, purpose, authorship, media techniques and formats, bias, omissions, power, lifestyles, values and points of view. He developed and applied a systematic framework to address all media in his second book, Teaching the Media (Masterman, 1985). Building on the Foundations: Global Developments in MIL Masterman's approach and the concepts of media literacy provide a framework necessary for understanding how media operate as a system for representation. As Masterman said, "What existed up until about the 1960's, where it existed at all, was a study of the media that was highly fragmented and split around different established subjects, but with no coherent approach that might justify the notion that this was a subject that was actually worth studying in its own right." Masterman's methodology gives both teachers and students an opportunity to 64 Carolyn Wilson & Tessa Jolls explore, understand, and participate in the global village that McLuhan aptly named, as well as a consistent way to communicate the important ideas that underpin the discipline. Unfortunately, a lack of teacher education in media and information literacy is endemic and contributes to a diffuse understanding that does not allow for the consistency in program development that can be measured, replicated and adapted to suit local and regional contexts. However, thanks to the steadfast support of global organizations such as UNESCO, media and information literacy continues to gain recognition and legitimacy worldwide and countries around the world have made MIL a priority. In Great Britain, the UK regulatory agency, Ofcom, has conducted research and advocated for media literacy (Ofcom, 2014) and Finland adopted a national strategy for encouraging media literacy (Ministry of Education and Culture, 2013). Ontario, Canada, the first jurisdiction in the world to mandate media literacy curricula, includes media literacy in Language Arts and English curriculum from grades 1 – grade 12 and continues to develop supportive curricular resources (Wilson & Duncan, 2008). The European Union calls for every member country to report annually on media literacy programs and activities (Livingstone & Wang, 2013, p. 166). Australia continues to embed MIL into its education system (Quin, 2011). UNESCO has advanced media and information literacy education throughout the world through several resources and initiatives that provide support for teachers and policy makers (Wilson & Grizzle, 2011). We can take inspiration from new global developments in media and information literacy, and continue to build on the strength of the foundations that were laid by McLuhan, Masterman and Duncan many years ago. Media and information literacy skills for the post-2015 development agenda should be seen as the central tools through which to contextualize, acquire and apply content knowledge. These skills are based on heuristics that are 'constants' used in deconstructing and constructing communication. Content knowledge is 'variable', with an infinite number of subjects. Having media and information literacy skills, especially being able to use a consistent process of inquiry that is internalized, enhances the ability to communicate

and to share ideas through a common vocabulary that transcends subject areas as well as geographic boundaries. Thus, there are no 'silos' with this method for teaching and learning because the media and information literacy skills are cross-curricular and common to all. It is through a process of inquiry that students interrogate, acquire and master content knowledge, but both media and information literacy skills and content knowledge rest on a continuum that can always be expanded and deepened (Jolls, 2014). The integrated nature of media and information literacy skills supports the needs of a globally networked society, where problem-solving must span many domains using integrated approaches. Environmental disasters, terrorism, hu- 65 Carolyn Wilson & Tessa Jolls man trafficking, pandemics – all are ultimately human rights issues that present complex problems, calling for citizens to have a sophisticated ability to access, analyze, evaluate, communicate and create using the information and technologies that are available. Media and information literacy empowers citizens and leaders with an analytic approach and the type of critical thinking that transcends boundaries of all types – physical and geographic, cultural and conceptual – while increasing the capacity for citizens to participate actively in the global village. Yet solutions to these global problems rest ultimately with each individual and with preparing each citizen to use the media and information literacy skills they need for life in a global media culture. As Masterman (2010) said: My own objectives were to liberate pupils from the expertise of the teacher, and to challenge the dominant hierarchical transmission of knowledge which takes place in most classrooms. In media studies, information is transmitted laterally, to both students and teachers alike. The teacher's role is not to advocate a particular view but to promote reflection upon media texts, and to develop the kind of questioning and analytical skills which will help students to clarify their own views. Such connected learning has – and always will – pave the path to the future. References Aspen Institute. (2014). Learner at the Center of a Networked World. Retrieved from http:// www.medialit.org/voices-media-literacy-international-pioneers-speak Duncan, B. (2010). Voices of Media Literacy. Retrieved from http://www.medialit.org/ reading-room/voices-media-literacy-international-pioneers-speak-barry-duncaninterview-transcript Duncan, B. (2011). Voices of Media Literacy: International Pioneers Speak. Retrieved from http://www.medialit.org/voices-media-literacy-international-pioneers-speak Jolls, T. (2014). "The Global Media Literacy Imperative." The Russian-American Education Forum: An Online Forum, Volume 6, Issue 1. Retrieved from http://www.rusameeduforum.com/content/en/?&iid=18 Jolls, T. & Wilson, C. (2014). "The Core Concepts: Fundamental to Media Literacy Yesterday, Today and Tomorrow." Journal of Media Literacy Education. Retrieved from http://digitalcommons.uri.edu/jmle/vol6/iss2/6 Livingstone, S. & Wang, Y-H. (2013). "On The Difficulties Of Promoting Media Literacy." In B. De Abreau & P. Mihailidis (Eds.), Media Literacy in Action: Theoretical and Pedagogical Perspectives. Retrieved from http://books.google.com/books?id=JoBiA gAAQBAJ&pg=PA166&lpg=PA166&dq=european+union+requirements+for+me dia+literacy&source=bl&ots=t-Bm4GNmqY&sig=3ludF6eqUKWbcv8yl3frXrj68- lg&hl=en&sa=X&ei=_hzsUt3YAc6oQSAuoGgAQ&ved=0CHwQ6AEwCQ#v= onepage&q=european%20union%20requirements%20for%20media%20 literacy&f=false Routledge: New York. 66 Carolyn Wilson & Tessa Jolls Lotto, J. & Barrington, L. (2006). Are They Really Ready to Work? Retrieved from http:// www.p21.org/storage/documents/FINAL_REPORT_PDF09-29-06.pdf Masterman, L. (1980). Teaching About Television. United Kingdom: Palgrave Macmillan. Masterman, L. (1985). Teaching The Media. Abingdon, Oxon, England: Comedia Publishing Group. Masterman, L.

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Appendix N

***Radicalization in Cyberspace: Enlisting MIL in the Battle for Hearts and Minds*,** p. 41

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Youth Radicalization in Cyberspace:

Enlisting Media and Information Literacy in the Battle for Hearts and Minds

Tessa Jolls & Carolyn Wilson

Media and information literacy (MIL) transcends boundaries – geographically, and across subjects and disciplines – yet it provides a process that serves as a catalyst for analysis, discussion, creation and participation. (Wilson and Jolls, 2015) Through a consistent global framework, it is possible to devise a coherent and replicable strategy that can be measured and scaled. MIL offers an effective counter-strategy to tactical radicalism and extremism, and is one that can be readily employed and that has demonstrated its effectiveness in winning hearts and minds when applied for pro-social purposes. Most importantly in light of the urgency of countering terrorism globally, training and implementation of MIL programs can be done efficiently in a timely manner.

In light of the above perception, this paper will:

- *– explore the research related to the power and effectiveness of MIL education*
- *– explore the importance of a conceptual framework for MIL*
- *– present several case studies that illustrate the relevance of MIL when dealing with issues such as human rights, propaganda, indoctrination and extremism*
- *– discuss how taking MIL "global", and make a place for media and information literacy for key groups*

and stakeholders is essential as we address the current global challenges facing MIL and human rights.

Keywords: Media literacy, media and information literacy, education, extremism, counter-terrorism, globalism

Introduction

Education is a powerful catalyst for change, and it is also a predictor of who engages in participatory politics – the more education, the more likely a citizen is to be politically active. Today, when looked at through the prism of educational attainment, college students are the most active in the participatory politics realm, which is defined as interactive, peer-based actions through which individuals and

groups seek to exert both voice and influence on issues of public concern (Cohen & Kahne, 2012).

That targeting such politically active college and high school-aged youth is a strategy employed by ISIS and other radical extremists is acknowledged through anecdotal reports and at top levels of government:

"UK surveillance chief Robert Hannigan has said ISIS and other extremist groups use platforms like Twitter, Facebook and WhatsApp to reach their target audience in a language it understands. 'Their methods include exploiting popular hashtags to disseminate their message,' he said.

'ISIS also uses its Western recruits to promote the cause to other people like them back home.' "And the extremist group is putting a particular focus on girls, analysts say.' We're seeing young women from across Western countries both expressing their support for and migrating to Syria now in totally unprecedented numbers,' said Sasha Havlicek, chief executive of the Institute for Strategic Dialogue. 'And I would say this is the result really of an extremely sophisticated propaganda recruitment machinery that's targeting young women very specifically' "(Mullen, 2015).

Evidence such as this emphasizes the growing need—some might say urgency— of media and information literacy (MIL) education. MIL, with its focus on key competencies, can work to provide young people with the skills, knowledge and attitudes they need to understand: how all media, including social media, operate; how they can be used, by whom and for what purposes; and how to evaluate the information they present.

Background to the Crisis

Between 27,000-31,000 foreign recruits from at least 86 countries have traveled to Syria and Iraq to join the Islamic State as of December, 2015 -- a significant increase from the 12,000 foreign fighters from 81 countries reported in June, 2014. Western Europe, Russia and Asia have also seen significant increases in recruitment; the U.S. has remained flat, with most recruitment in the U.S. occurring through social media. The average rate of returnees to Western countries is between 20-30%. (Soufan Group, 2015). This data indicates that much remains to be done to discourage alle- giance to the Islamic State and a long list of other terrorist organizations throughout the world – Hezbollah, Boko Haram, Al-Queda, Abu Sayyaf, and on and on.

Understanding the role that the Internet is playing in the grooming and recruit- ment of young extremists is key to identifying an effective strategy for challenging the jihadist propaganda. In a 2013 study (von Behr, Reding, Edwards & Gribbon, 2013) of 15 extremist and terrorist cases identified through the UK Association of Chief Police Officers (ACPO) and UK Counter Terrorism Units (CTU), researchers from Rand Europe stated that "for all 15 individuals we researched, the internet has been a key source of information, of communication and of propaganda for their extremist beliefs... this access to people online may provide greater opportunity than the offline world to confirm existing beliefs and avoid confrontation with information that would challenge them." Rand Europe analyzed and compared five hypotheses regarding internet use by radicals; the hypotheses were identified through a literature review and are shown in the table below. Rand Europe then compared these hypotheses to the primary data contained in the 15 terrorist cases, with the following results:

Literature Hypotheses	**Does the primary data support the hypotheses?**

1. The internet creates more opportunities to become radicalized.	Yes in all of these cases.
2. The internet acts as an ‘echo chamber’.	Yes in the majority of these cases.

3. The internet accelerates the process of radicalization.	While there is no agreed length of time or template for radicalization, it is not clear that the internet would have accelerated this process in the majority of our cases: in these cases the internet appears to enable rather than necessarily accelerate radicalization.
4. The internet allows radicalization to occur without physical contact.	Not in the majority of these cases: most cases involve offline activity that could have played a role in the individual's radicalization.

5. The internet increases opportunities for self-radicalization.	Not in the majority of these cases: most cases of so-called 'online self-radicalization' involve virtual communication and interaction with others.

These findings strongly support the notion that the internet plays a unique and unprecedented role in the recruitment process, from creating opportunity to connect with others, to reinforcing radical beliefs in a virtual "echo chamber"(Shane, Apuzzo and Schmitt, 2015). However, personal contact in the offline world also plays an important part in radicalization, and why and how these connections are made also must inform strategies for combatting terrorism.

According to Olivier Roy, a professor at the European Institute in Italy and well-known analyst of Islamic terrorism, "Radicalisation is a youth revolt against society, articulated in an Islamic religious narrative of jihad. It is not the uprising of a Muslim community as victims of poverty and racism: only young people join, including converts who did not share the 'sufferings' of Muslims in Europe. These rebels without a cause find in jihad a 'noble' and global cause, and are consequently instrumentalised by a radical organization (Al Qaeda, ISIS), that has a strategic agenda" (Swanson, 2015).

Beyond increasing their intelligence capacity, governments and society "need to debunk the myth that radical terrorists are heroes, and subvert the idea that the

Islamic State is successful and impervious to our attacks," according to Roy. "What's more, we need to foster the idea that Islam is a normal part of society, not a dangerous or oppressed minority. Instead of 'exceptionalizing,' we should 'normalize' ".

Youth and the New Media Culture

At the heart of the matter – the emotional heart – are issues of identity that have long driven youth behavior. "...strip away all the grievances and myriad individual triggers that might drive an individual to join an extremist group, and you find underlying issues of identity and belonging. None of this is new," said Shiraz Maher, senior research fellow, International Centre for the Study of Radicalisation and Political Violence (Maher, 2015).

Certainly, the commercialization of youth identity has long been a focus of expensive and endless studies and marketing campaigns, with companies targeting youth to tune into movies, television, music, smartphones, online apps and plat- forms in an effort to sell their merchandise to them– and even encouraging youth to share their "friends" contact information so that they too can be targeted by the corporation. Nor is the appeal to be "exceptional" new in the commercial arena: Remember the classic 1997 Apple campaign admonishing youth to "Think Different"? (Hormby, 2013)

Today, the co-opting of youth identity has shifted to the more sophisticated and consequential ideological realm, where girls speak of "leaving behind an immoral society to search for religious virtue and meaning," (Bennhold, 2015) and boys "are motivated by the desire to be a hero, to do violence or get revenge." (Swanson, 2015). Social contagion is also a factor, with copycat behavior that sometimes results in clusters of young friends and/or family joining in jihad. (Bennhold, 2015; Mate 2015). Destructive and even suicidal copycat behaviors are not new. Documented cases of youth suicides incited through media go back to the publication in 1774 of Wolfgang von Goethe's sensational book, "*The Sorrows of Young Werther*." (Furedi 2015) Werther, the book's main character, kills himself with a pistol after being rejected by his lady love, and upon publication of the book, there was a notable uptick of young men committing suicide through the same means, leading to a type of suicidal social contagion called the "Werther effect".

Whether recruiting boots on the grounds or brides for recruits, ISIS is relentlessly and effectively employing its army online in fighting the global battle for hearts and minds. ISIS has mobilized a decentralized media empire which relies on followers world-wide to distribute messages in at least half a dozen languages. (Stewart & Maremont, 2016) The scope of the ISIS effort is daunting: Twitter alone "removed more than 26,000 suspected pro-Islamic State accounts in March (2016), nearly four times the number erased in September, according to an anal- ysis conducted for The Wall Street Journal by Recorded Future, Inc., a threat-intelligence firm based in Somerville, Mass. Islamic State supporters have tried to

keep pace, establishing more than 21,000 accounts in March (2016), compared with about 7,000 in September, the analysis found".

Although signs of ISIS' and other radicals' online "success" include depictions of beheadings, enslavement of women, purging of Christians and ethnic minorities and other barbarous physical acts that are all-too- familiar litanies of war, the battles fought online represent utilizing new technologies and strategic employments that are inevitably part of war —except that this time it is the online war which military forces are ill-equipped to fight, globally and locally.

Yet the battle must be fought – and won – using the very technologies and media and information that the radicals also employ. However, it is not enough to rely on Twitter, Facebook or government counter- terrorism units to filter out terrorist-inspired messages. According to an intelligence brief issued by Stratfor, a global intelligence consulting firm: "Ordinary citizens exercising situational aware- ness can and have saved lives...It is unrealistic to expect the government to uncover and thwart every plot. There are too many potential actors and too many vulner- able targets. Individuals need to assume some responsibility for their own security and the security of their communities. This does not mean living in fear and paranoia, but rather living with a relaxed level of situational awareness, being cognizant of potential dangers and alert to indicators of them. People who accept the responsibility and who practice this awareness are the true grassroots defenders" (Stewart, 2013).

The Role of Media and Information Literacy

With ideology being the focus of jihadist and terrorist recruiting, and with their "weapon of choice" for recruitment being the Internet and social media, the need for media and information literacy (MIL) education globally is now imperative.

Like centuries of old, the battle by grassroots defenders must be fought and won by youth who provide the boots on the ground. But this time, these youth must be armed with a critical understanding of the media they use. Since the politicians and generals have no direct control over online activities and operations; they must rely on the smarts and the hearts of young people to bring a critical lens to the representations and message about their world, and the threats to that world. The "boots on the ground" now traverse the virtual world, and still encounter an enemy as threatening as those found on the battlefield.

In today's global village, the media provide a culture that has gone beyond blue jeans and rock'n'roll. Today, the global and the local are often merged, yet global media convey values, lifestyles or points of view that may not be consonant with local values. Sometimes the global and the local inform each other and sometimes not; sometimes local culture influences the interpretation of global media; some- times global media is adapted to fit local cultures or conversely, local culture influences global media. Youth are often rudderless, navigating the online universe with little adult guidance or institutional anchoring (Walkosz, Jolls and Sund, 2008).

Preparedness to navigate the global village – providing youth with an understanding of human rights and dignity, and of the importance of rule of law to freedom and economic prosperity -- comes in this new arena through media and information literacy education.

Youth primarily get their news and information through media outlets such as YouTube or Instagram, often spending more than eight hours each day with media. (Common Sense Media, 2015) In the media world of powerful images, words and sounds, media *is* youth culture.

But youth still need filters (and more!) for all kinds of purposes, from internet safety to having the ability to select credible information sources. They (and we) need a mindset to go with the headset – an internalized filtering system that can be used anytime, anywhere; that is commonly shared; and that transcends cultural and national boundaries. We need algorithms for our brains, to use as we both consume and produce media, and participate in a globalized society.

Media and information literacy offers both offensive and defensive tools of discernment and expression to advocate for positive human values and for political action, and to recognize and to mitigate harmful media messages and effects. MIL education has long shown how it is one of the most viable intervention strategies to minimize media's negative consequences and maximize its positive influence on children's beliefs, attitudes and behaviors. An extensive meta-analytic review of studies in this area conducted over the past three decades found that media literacy interventions counteract media effects related to risky and anti-social behaviors, including violence and aggression, alcohol and tobacco use, body image and eating disorders and commercialism (Jeong, Cho & Hwant, 2012). Additionally, MIL positively impacts children's knowledge acquisition skills, attitudes and behaviors about the nature of media and its influence, an awareness of persuasive techniques used to influence audiences, and their ability to assess the realism of media representations.

These MIL skills directly address the profile of online radicalization described by the U.S. Department of Justice's Community-Oriented Policing Services:

"Generally, as individuals immerse themselves in online extremist content, they begin to develop a skewed sense of reality in which their views no longer seem radical. Online interactions with like-minded individuals can substitute for an indi- vidual's physical community and create an online social environment similar to that of a gang in which deviant behavior and violence are the norm. Consumers of online extremist content can also develop or increase feelings of superiority, moral outrage, desensitization to violence, and willingness to commit acts of violence in further- ance of a particular cause" (International Association of Chiefs of Police, 2014).

MIL education has proven itself as an effective intervention strategy for violence prevention: an extensive longitudinal study conducted by UCLA, (Fingar & Jolls, 2013) evaluating the Center for Media Literacy's framework and violence prevention curriculum, *Beyond Blame, Challenging Violence in the Media,* found concrete results from a cognitive intervention that called upon middle school students' critical understanding and expression. The study found that students were able to discern the Four Effects of Media Violence -- increased aggression or

imitation, a heightened sense of fear for one's own safety, desensitization toward the pain and suffering of others, and habituation. Additionally, they came away with stronger beliefs that media violence affects users and that people can protect them- selves by using less. Students' rates of aggression slowed during the course of the study,

and specific behavioral changes included students' consuming less violent media, fewer incidents of pushing or shoving other students, or threatening to hit or hurt someone.

Yet providing media and information literacy education is a demand as yet unmet inside and outside of classrooms, as youth themselves attest: 84% of youth respondents in a 2012 study reported that they would benefit from learning how to judge the credibility of what they find online (Cohen & Kahne, 2012). How accurate and factual is the information? What worldview is represented? Who and what are left out? Who benefits (or not), and how? Is there anything that can be done, or should be done? What is our individual and collective responsibility? Making these types of judgments requires textual and contextual readings that are based upon an ethical framework for analysis and evaluation – and with social media and media production, applying these frameworks to creative content that youth themselves produce.

Since all media are representations that are constructed by an author(s) for a particular purpose, and for a particular audience, the Core Concepts of Media Literacy – like Newton's laws of gravity – describe in a consistent, systematic way how media are constructed in every genre, every time. (Wilson & Jolls, 2015) These Core Concepts apply to both deconstruction (reading) and construction (writing) of media. They are foundational to understanding media and to critically analyzing media for both consumers and producers of media messages, who "represent" or re-present, reality to audiences.

To deepen the exploration of the nature of the Core Concepts and represen- tation, the Center for Media Literacy's Questions/TIPS (Q/TIPS) framework is an example of an evidence-based practice that enables a process of inquiry. This inquiry can be applied to any media, anytime to interrogate the media's authorship, purpose, techniques, framing of values and biases and audience targeting (Jolls & Wilson, 2014). Through applying and practicing this process of inquiry, media users develop an internalized filtering system – or heuristic – that may be used for discernment and for informing decisions. In turn, this analysis is part of a deci- sion-making process of Awareness, Analysis, Reflection and Action – an Empower- ment Spiral that provides a basic heuristic for breaking down the steps followed in determining whether to take action, or not.

For example, a deeper understanding and application of Core Concept #5, "Most media messages are organized for profit and/or power," is particularly rele- vant to combatting terrorism and jihadism, since users would be encouraged to explore the financial or ideological implications of messages they engage with. Core Concept #4, "Media have embedded values and points of view," helps users to see how messages are framed, to observe what is contained or omitted in the message, and to understand the lifestyles, values and points of view that contribute to the content and inevitable bias in the message. These Concepts help illuminate a process of inquiry that can take a media user well beyond the surface meaning or message conveyed.

An example of putting these Core Concepts to work can be found in identifying the root causes of the Arab Spring, which began in 2010 when a Tunisian man named Mohamed Bouazizi set himself on fire and millions of people took to the streets across the Middle East. The news media reported heavily on the use of social media in the demonstrations, but social media was not the root cause of people taking to the streets: "In the end, everybody, I think, does understand at some level that this has always been a situation of despair. The guys who did the twittering and the Facebooking may have received a lot of the publicity in the Arab Spring," Hernando de Soto, founder and chairman of the Institute for Liberty and Democ- racy, said. "People understand that social media makes news travel faster, but that the substance of the news comes from someplace else. It's not that I believe that economics is the whole explanation for what happened, but it is the missing ingredient (in the news coverage)." DeSoto's diagnosis of the causes of the revolution is that small vendors like Mohamed Bouazizi have no property rights and no redress; when the government takes away their property, they have nothing; they are liter- ally facing starvation, with no

future. Despair is what's left. De Soto should know: he is a veteran of helping to defeat the Shining Path Maoist terrorist organization in Peru, and his Institute conducted in-depth interviews and research into the circumstances surrounding Mohamed Bouazizi and the 49 other individuals who self-immolated within 60 days of Bouazizi (McKinsey on Society, 2016). Clearly understanding the context of the media commentary gives the situation a whole new meaning

Recommendations: Heeding the Call

Calls for media and information literacy education are being made by important organizations across the globe. The UN Security Council's Counter-Terrorism Committee (Counter-Terrorism Committee, 2016), has called for "creating avenues for the voices of women and youth...and developing education programmes to promote critical thinking and understanding of other cultures." UNESCO has long supported media literacy and intercultural dialogue through its Media and Information Literacy initiative. Through the UNESCO-initiated Global Alliance for Media and Information Literacy (GAPMIL), active chapters are working toward the promotion of MIL throughout the world. UNESCO recently released *A Teacher's Guide on the Prevention of Violent Extremism*, and addresses the topic of "online media literacy" as a means to "help learners use the Internet and social media in a safe and effective way" (UNESCO, 2016). A major strategy report (International Centre for the Study of Radicalisation and Political Violence, 2009), specifically called for the UK government to "empower online communities" and "reduce the appeal" of radicalization, saying that "more attention must be paid to media literacy, and a comprehensive approach in this area is badly needed". Although its focus was primarily education reform, an Aspen Institute report called "Learner at the Center of a Networked World" (The Aspen Institute, 2014) called for media literacy and social/emotional literacies to be at the heart of education.

Yet politicians and mainstream media have not joined this call: "The gulf between the political set and the ordinary members of society is vast," according to the World Editors Forum (Mukuka, 2016). "So too is the disconnect between the mainstream media and ordinary people, particularly the young."

Universities and other temples of learning have also failed to prioritize MIL education: with the erosion of free speech on many campuses and the censorship of content, too few youth understand that one person's offense can be another's expression of truth to power (Gillman and Chemerinsky, 2016). University schools of education have sadly neglected media and information literacy, nor is MIL a required competency for gaining a teaching certificate. (ABCTE, 2016)

Technology companies have not stood up for increased user discernment through MIL: while media production has been democratized through the promo- tion and use of social media, media and information literacy becomes even more essential in a media climate where algorithms are the new editors that may limit users' access to important information by censoring, and where companies profit by selling personal data, while running on users' content and online preferences and histories (Herbst, 2016).

While report after report from practitioners across the globe has laid out paths for providing MIL education – from the Grunwald Declaration in 1982 (UNESCO, 1982) to the present (The Aspen Institute, 2014; Cohen & Kahne, 2012; Hobbs, 2010; Turner, *et.al*. 2016), MIL remains marginalized as a solution to important world problems and as a movement worthy of encouragement and investment. This neglect should be a shameful embarrassment for leaders the world over, who stand by as citizens lack the competencies to stand up to dangerous worldviews and the

powerful omissions and commissions that the media perpetuate. “Media literacy is an all-hands-on-deck issue. We need to wake up,” said Kevin Stratton, Republican member of the Utah House of Representatives (Stratton, 2015).

Media and information literacy transcends boundaries – geographically, and across subjects and disciplines – and it provides a process that serves as a cata- lyst for analysis, discussion, creation and participation. (Wilson & Jolls, 2015) Through using a consistent global framework, it is possible to devise a coherent and replicable strategy that can be measured and scaled. It offers a strategic count- er-strategy to tactical radicalism and extremism that can be readily employed and that has demonstrated its effectiveness in winning hearts and minds when applied to pro-social purposes (International Centre for the Study of Radicalisation and Political Violence, 2009).

This heuristic-oriented approach to MIL education places trust in the judg- ment, decisions and actions of individuals and communities. It is a democratic approach, where individuals and groups are empowered to use tools of discernment and persuasion to work towards their own goals. It is not directive or top-down; it relies on a process of inquiry that raises questions about values, motives and purpose; it provides a sense of ownership and agency for decisions and actions that individuals may take as a result of employing MIL competencies in any subject area. MIL education can contribute to solutions to problems of global proportions that are happening *now*. The need for media and information literacy education is urgent. Most importantly in light of the urgency of countering terrorism globally, training and implementation of MIL programs can be done efficiently in a timely manner (Fingar & Jolls, 2013). Learning about MIL is not a linear abstract process – it is an experiential process. Training programs for teachers taking less than one day have been effective in providing a foundation for MIL education (Fingar & Jolls, 2013). Furthermore, since a media and information literacy framework can be applied to any message, anywhere, anytime, using such a framework is highly flexible, portable and timely. The foundational skills of MIL are necessary as a plat- form upon which to build citizenship skills, workplace competencies and healthy life decisions.

The rise of ISIS and other extremist groups is confirmation of what we in MIL education have long said: that using new media technology effectively is about more than learning to click or create at the touch of a finger. The stakes are high, and understanding the nature and the use of representation through media and information literacy is essential: “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.” (Dyer, 1993).

Minds, hearts -- and lives -- must be won over, in a way that exemplifies universal human values. We must act now.

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Appendix O

Developing Digital and Media Literacies in Children and Adolescents**,** p.42

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Developing Digital and Media Literacies in Children and Adolescents

Kristen Hawley Turner, PhD; Tessa Jolls, BA; Michelle Schira Hagerman, PhD; William O'Byrne, PhD; Troy Hicks, PhD; Bobbie Eisenstock, PhD; Kristine E. Pytash, PhD
Address correspondence to Kristen Hawley Turner, PhD, Drew University, 36 Madison Ave, Madison, NJ 07940. E-mail: krturner@fordham.edu

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In today's global culture and economy, in which individuals have access to information at their fingertips at all times, digital and media literacy are essential to participate in society. But what specific competencies must young citizens acquire? How do these competencies influence

pedagogy? How are student knowledge, attitudes, and behaviors changed? What are the best ways to assess students' digital and media literacy? These questions underscore what parents, educators, health professionals, and community leaders need to know to ensure that youth become digitally and media literate. Experimental and pilot programs in the digital and media literacy fields are yielding insights, but gaps in understanding and lack of support for research and development continue to impede growth in these areas. 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. To create the human capital necessary for success and sustainability in a technology-driven world, we must invest in the literacy practices of our youth. In this article, we make recommendations for research and policy priorities.

Topics:

literacy, seizures, teaching

We live in a connected world where information is plentiful, and experts are, literally, at our fingertips. With ubiquity in mobile technologies around the globe, we see a new vision of education: learning anywhere, anytime, with equal access for all as a fundamental human right.[1] This vision is predicated on the idea that children are capable of and prepared for lifelong learning and that they are equipped with the skills they need to access, analyze, evaluate, create, and participate in civic life through digital media. Research over the last 2 decades has shown that reading and writing in digital spaces may require a more complex application of skills than print-based literacy[2,3]; yet most formal institutions of education still cling to traditional definitions of literacy and pedagogical approaches, focusing solely on print and teacher-centered instruction.[4] In these institutions, children are often not empowered to learn, nor are they connected to the world outside their classroom walls.

Outside of school, however, children increasingly use mobile devices, video games, and the internet to explore their worlds.[5] To successfully navigate and participate in these interconnected spaces, youth must acquire digital and media literacies; they must be able to critically consume and create digital, multimodal texts. The Aspen Institute[6] highlights the fact that "all learners and

educators need a sufficient degree of digital age literacy, where media, digital and social-emotional literacies are present, to be able to use these learning resources to learn through multiple media confidently, effectively and safely." However, the majority of students graduating from high school lack basic skills to help them navigate the digital landscape safely and responsibly.[7] The fallout about "fake news" from the 2016 US presidential election is but 1 example of the consequences we face when citizens do not engage critical digital and media literacies.

These problems call for education that goes beyond mastery of traditional content silos that have existed for centuries.[8] The gap between a vision of interconnected learning and the reality of education today is wide, and research and policy initiatives are needed to provide education that will prepare youth for basic needs in a technologically driven future.

Current State

Defining Digital and Media Literacies

To be literate in today's world involves skills that include fairly granular tasks, such as copying and pasting digital content, and more complex work, such as critical analysis and synthesis of information accessed through a variety of texts. Digital literacy takes into account the full range of skills needed to read, write, speak, view, and participate in online spaces. All of these practices require media literacy, which includes the ability to access, analyze, evaluate, create, and participate with media in all its forms. Although various terms are used in literature surrounding these skills (eg, new literacies, web literacies, or multiliteracies), we take the stance that digital and media literacy should be taught as literacy and that the fields of digital and media literacies can no longer exist in isolation from each other.

Concern about the impact of media on children and adolescents has led to research that documents negative effects on young people's health and well-being.[9,10] However, developing digital and media literacies is one of the most viable intervention strategies to minimize media's negative consequences and maximize its positive influences on beliefs, attitudes, and behaviors.

An extensive meta-analytic review found that these interventions counteract effects related to risky and antisocial behaviors, including violence and aggression, alcohol and tobacco use, body image issues, eating disorders, and commercialism.[11] In other studies, researchers showed that interventions increased civic responsibility and democratic participation.[12]

In short, interventions that equip youth to critically navigate their digital lives have positive impacts that mitigate potentially harmful effects of participation in digital spaces. These literacies are fundamental in helping youth to become critical consumers and creators in a digital world; sadly, large-scale efforts to develop these skills have not been adopted politically or educationally.

Policy Initiatives

Global efforts are underway to reinforce the importance of digital and media literacies, with initiatives led by the United Nations Educational, Scientific, and Cultural Organization, and countries such as Canada, New Zealand, Australia and the United Kingdom are targeting these literacies as essential for their citizens' success. In the United States, we have a vision; we need understanding and collective action by policy makers, health practitioners, educators, parents, and students to realize it. The time to focus on digital and media literacies is now.

To date, media and information literacy policy advocates have brought together coalitions of stakeholders to propose policy at the international, national, and community levels.[13] In the United States, media and information literacy legislation has been introduced in 15 states (adopted in 9), addressing such topics as digital citizenship, internet and social media safety training, the incorporation of media literacy standards into the core curriculum, and training programs for teachers.[14]

These gains are promising, but we are not moving nearly fast enough. The concept of digital and media literacy as a broad construct has not yet entered political discourse. Policy makers must recognize digital and media literacy as literacy in today's world. In an information-based society, our competitive advantage relies on a digital and media-literate citizenry. It is not enough for students to read books and write essays. A literate citizenry must read multimodal, hyperlinked

texts critically, create these texts, and participate ethically in a networked world. Education and workplace training policies should reflect this reality.

Future Research

The rapidly changing technological world inspires many questions about the skills and developmental trajectories we can expect of children as well as equal opportunities for all to develop these skills. We have identified 3 research priorities moving forward:

Conduct Longitudinal Studies That Identify the Essential Knowledge and Skills Needed to Foster Digital and Media Literacy Competencies for Diverse, Lifelong Learners

Although literacy has always evolved with new technologies,[15] no technology has impacted literacy with the same scope and speed as the internet.[16] Having access to the internet is one thing; knowing how to think critically, create, innovate, and participate ethically in digital spaces may be social differentiators of unprecedented proportion. The Organization for Economic Cooperation and Development[17] reports that increased literacies correlate with higher income levels, increased participation in government and volunteer activities, and informed health and welfare decisions, but we do not yet have a collective understanding of how these skills develop, especially in school.

Although the field has provided insight into the literacies developed in authentic, out-of-school settings,[4,18] we have not yet defined developmental trajectories of such skills. The field of literacy studies in print-based contexts is rich in this area[19]; we need parallel research and recommendations for digital and media literacies.

Investigate Instructional Methods and Other Programs That Equalize Opportunities for All

In 2000, the Clinton-Gore administration warned that “unequal access to technology and high-tech skills by income, educational level, race, and geography could deepen and reinforce the divisions that exist within American society,”[20] and the 2016 National Educational Technology Plan[21] identified a significant digital use divide that separates students who use technologies in active, creative, and critical ways from those who use technologies for “passive content consumption.”

A considerable body of work now suggests that socioeconomic status predicts digital literacy skills.[22] Leu et al[15] found that low-income middle-schoolers were much less able than higher-income peers to locate online information, evaluate information critically, synthesize understanding from multiple digital texts, and communicate ideas using digital media. Other studies report racial, cultural, linguistic, and sex-based inequalities in online participation and skill development.[23,24]

The field raises fundamental questions of equity, social justice, and citizenship. If we believe that all children deserve the chance to develop the skills needed for high-paying jobs and engaged citizenship, then research on literacy instruction must articulate methods that close this gap. Creating equal opportunities for all must be a top priority.[25]

Investigate the Potential Connections Among Out-of-School Learning, Formal Learning, and Civic Engagement

Finally, we must identify methods of instruction that will enable young people to enhance the innovative digital and media literacies they acquire outside of school for work in the classroom and beyond.[26] By softening the boundaries between the classroom and the outside world, we can build a citizenry that is informed, thoughtful, and responsible.

Children do engage in creative and innovative digital and media literacy practices outside of school,[27] and technology skills correlate positively with engaged citizenship[17]; however, we still know little about how teachers can tap into that work in productive ways that serve higher-order skill development and civic engagement. To prepare all youth, regardless of background or socioeconomic status, to contribute, we cannot expect that digital and media literacies develop only in natural settings. Schools must adapt.

Recommendations

By identifying broad actions to be taken at federal, state, or local levels that focus on a future that holds a fully digitally and media-literate citizenry, we hope to spark much needed conversation in the political arena about the nature of literacy in a technological, global world. In response to this need, we recommend 3 priority actions for policy makers:

Eliminate High-Stakes Tests That Define Literacy Too Narrowly

Issues of digital and media literacy are lost in conversations focused on high-stakes testing. Nearly all standardized tests have shifted to online, adaptive tests that, even with the incorporation of audio and video components, still focus largely on multiple-choice and short-answer responses. Although these tests are being delivered on computers, they are not inviting students to demonstrate the full complexity required to be digitally and media literate. They do not assess real-world literacy skills.

Continued reliance on outdated modes of assessment will stifle "educators' efforts to focus on the broad range of learning experiences that promote the innovation, creativity, problem solving, collaboration, communication, critical thinking and deep subject-matter knowledge that will allow students to thrive in a democracy and an increasingly global society and economy."[28] In other words, an era of new tests does not mean that we are bringing in new paradigms for assessment.

Tests influence what gets taught in schools, and in many ways they reinforce traditional structures that keep disciplines in silos. This bifurcation of learning does not support the kind of connected learning that occurs outside of school. If children are to become literate citizens who are actively engaged and contribute positively to society, these kinds of traditional structures and tests must be dismantled and replaced by structures that build and reinforce digital and media literacies.

Address Problems Contextually, Not With 1-Size-Fits-All Programs

Because policies are often drafted as 1-size-fits-all solutions, variability in context and community needs are not considered. For instance, some kindergarten through 12th grade districts face teacher shortages and limited physical space, others face fiscal challenges and high dropout rates, and many struggle with the digital use divide. These problems are symptoms of a larger challenge: the challenge of educating diverse, digitally connected youth in a variety of contexts.

Policies at the federal and state levels should empower local officials to make decisions about instruction and assessment in schools. To make informed decisions, however, funding structures

must change. Schools have little, if any, money for research and development. In many cases, districts spend large amounts on wide-scale purchases without the consideration of teacher training or the potential for structural transformation. These kinds of purchases often fail (eg, Los Angeles Unified School District's iPad initiative). Contextually driven decisions that are based in quality research and development are desperately needed; 1 size fits all simply does not work.

Create Flexible Parameters for Defining and Using Texts

Because of the time and expense involved in adjudicating conflicts regarding intellectual property, it is essential that Congress clarify current copyright laws and strike a balance between protecting the rights of authors and allowing flexibility for new, adaptive, and transformative uses of digital texts.

Invention comes from remixing content, and new legal frameworks for intellectual property should permit the development, recreation, and sharing of digital assets. Researchers, educators, and students all need new and more flexible parameters for operating within ethical boundaries that are embedded in acceptable use policies and terms of use for digital texts and tools.

These policy initiatives will open opportunities for education with the intent of creating a literate citizenry in a digital age.

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Appendix P

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JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM [1379] Media Literacy: A Foundational Skill for Democracy in the 21st Century TESSA JOLLS* & MICHELE JOHNSEN** The current focus on the validity, credibility, and trustworthiness of media and information is urgent and global. In the past ten to twenty years, the information landscape has fundamentally changed due to an exponential increase in access to information consumption and production. Meanwhile, the role of traditional filters and gatekeepers that monitor accuracy and balance has been substantially reduced. This transformation has given rise to an unprecedented power shift in the way information is produced, consumed, distributed, trusted, and valued. On one hand, empowered citizens can now learn, participate, share, and express themselves as never before. On the other, abuses such as unintended spread of misinformation, disinformation campaigns by malicious actors, and misuse of personal information have become rampant, and citizens must navigate a complex new media landscape without traditionally trusted resources. The challenge for democracies is to find ways to preserve the freedoms that come with more access to information while minimizing the threats that go along with them. Modern education's role in this is to enable students to live, learn, discern, and thrive in a diverse, global media culture, both online and offline. With content readily at hand, education must emphasize information process skills as central to teaching and learning. Media literacy offers empowerment through education and an opportunity to equip all citizens with the skills they need to become lifelong learners who are maximally prepared to navigate and leverage the power of media for their own benefit and that of others. Through media literacy education, students internalize process skillsheuristicsthat become automatic filtering systems to apply to any media content, anywhere, anytime. This approach is compatible with the mobility that most people enjoy through their mobile devices and enables citizens to be better informed participants in today's media culture. Media literacy practices and pedagogy can be consistent, replicable, measurable and scalable globally, providing an evidence-based methodology for critical thinking, in both the consumption and production of media. Media literacy provides a pathway to appropriate education for the 21st century. The time is now to prepare all citizens to be effective risk managers, efficient organizers of information, wise consumers, responsible content producers and active participants. * Tessa Jolls is President and CEO of the Center for Media

Literacy and Director of the Consortium for Media Literacy. ** Michele Johnsen is President of Ignite Global Good, LLC, an affiliate of the Center for Media Literacy. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM 1380 HASTINGS LAW JOURNAL [Vol. 69:1379 TABLE OF CONTENTS

INTRODUCTION

The current focus on the validity, credibility, and trustworthiness of media and information is global and urgent. In the past ten to twenty years, the increase in access to information consumption and production has been exponential, with far fewer filters in place to monitor accuracy and balance. While this has led to many positive outcomes, such as more diverse voices heard,1 faster and more economical business functions, and easy and free communications with others regardless of geographic distance, unforeseen challenges also arose. As the internet and social media expand their reach and functions, threats range from loss of control over private data,2 to cyberbullying and increased surveillance, possibilities for authoritarian regimes to reach beyond old methods of international interference, and finding new methods to spread harmful propaganda internationally.3 While more authoritarian nations, such as 1. See Harry T. Dyer, The Internet Is Giving a Voice to Those on the MarginsLosing Net Neutrality Will Take It Away, THE CONVERSATION (Dec. 19, 2017, 9:02 AM), http://theconversation .com/the-internet-is-giving-avoice-to-those-on-the-margins-losing-net-neutrality-will-take-it-away89259. 2. See Jonathan Shaw, Exposed: The Erosion of Privacy in the Internet Era, HARV. MAG. (Sept.–Oct. 2009), https://www.harvardmagazine.com/2009/09/privacy-erosion-in-internet-era. 3. See Sergey Sanovich, Computational Propaganda in Russia: The Origins of Digital Misinformation (N.Y. Univ. & Oxford Univ., Working Paper No. 2017.3, 2017), http://comprop.oii.ox.ac.uk/wp-content/uploads/sites/89/2017/06/Comprop-Russia.pdf. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM June 2018] MEDIA LITERACY 1381 China, Iran, and Russia, 4 resorted to censorship, thus limiting their citizens' access to the internet in order to cope with these threats (as well as maintain control), these options are antithetical to democratic societies. So, 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 does just that. When students are capable of thinking critically about media messages, they participate in society more as independent thinkers capable of making their own decisions about what information is trustworthy. 5 But, media literacy education is not yet widespread within school curricula today. That must change, because media literacy is critical for citizens in 21st century democracies who intend to remain true to their ideals. It is time to make media literacy education a primary priority, so that those who value democracy can cope with the demands of the new information landscape, without relying on censorship nor techniques only acceptable in more autocratic regimes. Our best option is to enable citizens to thrive in the global village that Marshall MacLuhan foresaw in 1962.6 However, today's media, government, and educational institutions are still grappling with how to better prepare youth and adults for living in the global village, where content is now easily accessible and virtually limitless. All citizens need the process skills of media literacy to be efficient managers of information, wise consumers, responsible producers, and active and effective participants in today's media-driven cultureespecially as nearly infinite amounts of information explodes through the internet, and specifically, in social media. Yet society continues to value access to content knowledge as being scarce, and built its institutions and pedagogies to reflect that value. Access to content knowledge is no longer scarce, it is plentiful. Meanwhile, providing for teaching the process skills of media literacy is scarce indeed. 7 4. See Katherine Ognyanova, Careful What You Say: Media Control in Putin's RussiaImplications for Online Content, INT'L J. E-POLITICS 1 (2014); Beina Xu & Eleanor Albert, Media Censorship in China, COUNCIL ON FOREIGN REL., https://www.cfr.org/backgrounder/ media-censorship-china (last updated Feb. 17, 2017). 5. See CATHY J. COHEN ET AL., PARTICIPATORY POLITICS: NEW MEDIA AND YOUTH POLITICAL ACTION (2012), https://ypp.dmlcentral.net/sites/all/files/publications/YPP_Survey_Report_EXECSUM_0.pdf. 6. See Explorations: Marshall MacLuhan's Theory of the Global Village (CBC television broadcast May 18, 1960). 7. See Tessa Jolls, The Global Media Literacy Imperative, RUSS.- AM. EDUC. F. (May 2014), http://www.rus-ameeduforum.com/content/en/?task=art&article=1001036&iid=18. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM 1382 HASTINGS LAW JOURNAL [Vol. 69:1379 This current cultural valuing of content knowledge at the expense of process skills creates a misalignment between how democratic institutions provide for citizens' education attainment and outcomes, what is truly important, what should be valued, and what is measured. These institutional gaps, in turn, underlie calls for change that are symptoms of the underlying mismatch between the plenty of information and the scarcity of process skills. Rightfully, these calls for change mean a re-examination of: the role of media in a democratic society, how institutions and systems (including technology) are organized to address new information and media imperatives, how technology can contribute positively to tracking and verifying the provenance of information, and how society prepares its citizens with process skills and content knowledge so that they can interrogate and engage media effectively through technology.8 Media literacy education is ideally suited to help address these transitions in a disruptive era marked by changes in media, learning and living in a democratic society. I. CITIZEN JOURNALISM AND THE SHIFT IN ACCESS TO MASS COMMUNICATION As access to technology tools has expanded access to information and to content distribution, citizen journalismthe collection, dissemination and analysis of news and information by the general public, especially by means of the internet9changed the information landscape dramatically. Now the power of mass communications is in the hands of the many instead of just a few

powerful entities. The press, or “fourth estate,”10so vital to the very foundation of democracyis no longer solely the territory of traditional news, media, and entertainment companies. The internet, including social media sites, like Facebook, Twitter, YouTube, and Snapchat, made it possible for individuals and private organizations to create and distribute content to large swaths of people for little or no cost. Content distributors are able to bypass the traditional gatekeepers of the print and electronic news era, such as professional editors or fact checkers, when they disseminate their information. Meanwhile, the number of people who get their news from the internet is rising steadily while the population of people who receive 8. See Tessa Jolls, The New Curricula: Propelling the Growth of Media Literacy Education, J. MEDIA LITERACY EDUC. 65 (2015), http://digitalcommons.uri.edu/jmle/vol7/iss1/7/. 9. See Citizen Journalism, OXFORD DICTIONARIES, https://en.oxforddictionaries.com/ definition/citizen_journalism (last visited May 7, 2018). 10. See Ming-Li Wang, The Fourth State Under Siege: The Making of a Democratic Institution and its Pressing Challenges, NTU Law Review 7(2) 385 (Sept. 30, 2012), https://papers.ssrn.com/
sol3/papers.cfm?abstract_id=2258929&rec=1&srcabs=985113&alg=7&pos=3. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM June 2018] MEDIA LITERACY 1383 their information through other print or broadcast news sources declines. According to a recent study by the Pew Research Center, forty-three percent of Americans often get their news online, while fifty percent often get news on television. That gap is closing rapidly. In 2016, the gap between the two platforms was nineteen. In 2017, the difference was a mere seven percent. 11 Clearly, messaging and communication are entering a new era. Are democratic citizens prepared to competently navigate it? Do they have the skills to make wise choices that protect democratic ideals, as well as their own interests in the age of participatory communication? Unfortunately for most, the answer is “no.”12 Meanwhile, trust in media is at an all-time low.13 As trust deteriorates, citizens must navigate the media landscape without traditional trusted resources. Many yearn for the days of tuning in to Walter Cronkite’s reports,14 newspapers delivered to their door, familiar magazines, and radio programs. But, new media and its power shift are permanent. What remains is a virtual world that presents content ranging from friends’ selfies to ISIS beheadings and an onslaught of real-time headlines from faraway places. Media literacythe ability to communicate competently in all media forms, as well as to access, understand, analyze, evaluate, and participate with powerful images, words and sounds that make up our contemporary mass media culture15is absent from most educational curricula or, at best, marginalized.16 For the most part, students learn to evaluate messages today the same way they did when media information flowed from a relatively small number of sources in the form of a daily newspaper landing on their front porch, or a few evening radio or television broadcasts. During those pre-internet days, the majority of messages in the media were far more limited in quantity and approved 11. See Kristen Bialik & Katerina Eva Matsa, Key Trends in Social and Digital News Media, PEW RES. CTR. (Oct. 4, 2017), http://www.pewresearch.org/fact-tank/2017/10/04/key-trends-in-socialand-digital-news-media/. 12. See Sam Wineburg et al., Evaluating Information: The Cornerstone of Civic Online Reasoning, STAN. HIST. EDUC. GRP. (2016), http://purl.stanford.edu/fv751yt5934. 13. See Anna Nicolaou & Chris Giles, Public Trust in Media at All Time Low, Research Shows, FIN. TIMES (Jan. 15, 2017), https://www.ft.com/content/fa332f58-d9bf-11e6-944b-e7eb37a6aa8e. 14. See Tom Egelhoff, Where’s Walter Cronkite When We Need Him?, KMMS (July 5, 2017), http://kmmsam.com/wheres-walter-cronkite-when-we-need-him/. 15. See About CML, CTR. FOR MEDIA LITERACY, http://www.medialit.org/about-cml (last visited May 7, 2018). 16.

See Robert Kubey, Obstacles to the Development of Media Education in the United States, 48 J. COMMC'N 58 (1998); RENEE HOBBS, ASPEN INST., DIGITAL AND MEDIA LITERACY: A PLAN OF ACTION (2010), https://mediaeducationlab.com/sites/default/files/Hobbs%2520Digital%2520and%2520 Media%2520Literacy%2520Plan%2520of%2520Action_1.pdf. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM 1384 HASTINGS LAW JOURNAL [Vol. 69:1379 by professional editors who, while far from perfect, at least were trained on-the-job to meet some standard of professionalism and accuracy.17 Although media literacy education was important then, it is absolutely vital now.18 Today, citizens' interactions with mediaboth as consumers and producersare numerous, immediate, and highly accessible through the internet, specifically social media. Social Media Today reports that on YouTube alone, more than 500 hours of content are uploaded by subscribers each minute, with more than 1.5 billion monthly active users (second only to Facebook), as of September 2017.19 And, a study by the Institute for Communication Technology Management ("CTM") at the USC Marshall School of Business and CTM Visiting Researcher James E. Short, reports that U.S. media consumption averages thirty-three gigabytes per consumer per day.20 Complicating matters, confirmation bias influences people to seek or interpret evidence in ways that reinforce their existing beliefs, expectations, or a hypothesis in hand.21 Combined with social media algorithms that feed users more of what they already "like," people are exposed primarily to information "echo chambers,"22 regardless of whether they consciously choose to be or not. According to the Reuters Institute Digital News Report 2017: [P]eople are almost twice as likely to share news or comment in social networks when their friends have similar political views, rather than when they do not hold similar political views or when they do not know their views. More sharing or commenting amongst people with whom we agree may make us feel good, but it may also encourage the kind of hyper-partisan polarization . . .23 Democratic norms are vulnerable to extreme polarization.24 Polarization hinders exposure to opposing viewpoints and reduces the 17. See Ethics, AM. SOC'Y NEWS EDITORS, http://asne.org/resources-ethics (last visited May 7, 2018). 18. See R. Kelly Garrett & Brian E. Weeks, Epistemic Beliefs' Role in Promoting Misperceptions and Conspiracist Ideation, PLOS ONE (Sept. 18, 2017), https://doi.org/10.1371/journal.pone .0184733. 19. See Andrew Hutchinson, Mind-Blowing YouTube Stats, Facts and Figures for 2017 [Infographic], SOC. MEDIA TODAY (Sept. 14, 2017), https://www.socialmediatoday.com/ social-business/mind-blowing-youtube-stats-facts-and-figures-2017-infographic. 20. See James E. Short, How Much Media? 2013 Report on American Consumers, INST. FOR COMMC'N TECH. MGMT. (CTM), THE USC MARSHALL SCH. OF BUS. (Oct. 2013). 21. See Raymond S. Nickerson, Confirmation Bias: A Ubiquitous Phenomenon in Many Guises, 2 REV. GEN. PSYCH. 175 (1998). 22. See Michela Del Vicario et al., Echo Chambers: Emotional Contagion and Group Polarization on Facebook, SCI. REP. 6 (2016). 23. See Antonis Kalogeropoulos, 3.5 Participation Online News, in REUTERS INSTITUTE DIGITAL NEWS REPORT 2017 45, 46 (2017), https://reutersinstitute.politics.ox.ac.uk/sites/default/files/ Digital%20News%20Report%202017%20web_0.pdf. 24. See Steven Levitsky & Daniel Ziblatt, How Wobbly Is Our Democracy?, N.Y. TIMES (Jan. 27, 2018), https://www.nytimes.com/2018/01/27/opinion/sunday/democracy-polarization.html. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM June 2018] MEDIA LITERACY 1385 potential for healthy debate based upon mutual given "truths." It can become an obstacle to democracy as fringe movements develop and traditional parties, desperate not to appear weak, become wary of cooperating across the aisle.25 In addition, "news" producers now use attention-

getting techniques, such as sensationalized headlines and a focus on news that creates shock or outrage, to provide deliberately false information from both the perspectives of the political left and the right. Filippo Menczer, a professor of Informatics and Computer Science at Indiana University who runs the fake news tracking site Hoaxy, states that "[t]hose people who generate this kind of fake news don't care about politics. They just care about generating clicks, and so sometimes they generate similar messages for the right and the left."26 This disservice to the public and to trust in democratic institutions will continue since such misinformation, emotionalism, and hysteria are lucrative for purveyors up and down the distribution chain. Coping with this through censorship is a dangerous and unconstitutional option in the United States. Fortunately, the First Amendment protects freedom of speech, and rests on trust in the people's ability to rely upon each other in mutually beneficial ways.27 As citizens' trust in media erodes, more citizens say that media is not living up to its important role in sustaining democracy.28 Importantly, early Founders saw education as a glue that can help hold a democracy together. Thomas Jefferson said, "I know no safe depository of the ultimate powers of the society but the people themselves; and if we think them not enlightened enough to exercise their control with wholesome discretion, the remedy is not to take it from them, but to inform their discretion by education."29 Alan Taylor, a historian at the University of Virginia, states that the Founders who led the American Revolution viewed education as "more than a mere boon for individuals, education 25. See Mohamad A. El-Erian, How Political Polarisation Is Crippling Western Democracies, WORLD ECON. F. (May 12, 2015), https://www.weforum.org/agenda/2015/05/how-political-polarisat ion-is-crippling-western-democracies/. 26. See The Rise of Left-Wing, Anti-Trump Fake News, BBC NEWS: BBC TRENDING (Apr. 15, 2017), http://www.bbc.com/news/blogs-trending-39592010. 27. See Nicandro Iannacci, Is the American Free Speech Consensus Under Attack?, NAT'L CONST. CTR.: CONST. DAILY (May 3, 2017), https://constitutioncenter.org/blog/is-the-american-free-speechconsensus-under-attack; Mark Warren, Trust and Democracy, in The OXFORD HANDBOOK OF SOCIAL AND POLITICAL TRUST 75 (Eric M. Uslaner ed., 2018). 28. See GALLUP, INC. & KNIGHT FOUND., AMERICAN VIEWS: TRUST, MEDIA AND DEMOCRACY (2018), https://kf-site-production.s3.amazonaws.com/publications/pdfs/000/000/242/original/KnightFou ndation_AmericansViews_Client_Report_010917_Final_Updated.pdf. 29. See Deseret News, Opinion, In the Words of Thomas Jefferson: Why Education Matters, DESERET NEWS (Feb. 26, 2015, 10:24 PM) (quoting Letter from Thomas Jefferson to William Charles Jarvis), https://www.deseretnews.com/top/3087/0/In-the-words-of-Thomas-Jefferson-Why-educ ation-matters.html. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM 1386 HASTINGS LAW JOURNAL [Vol. 69:1379 was a collective, social benefit essential for free government to endure."30 Taylor also notes that the Founders declared that Americans needed more and better education to preserve their state and national republics from relapsing into tyranny.31 And, former Governor of Virginia, William H. Cabell, asserted in 1808 that education "constitutes one of the great pillars on which the civil liberties of a nation depend."32 Today, the need for education, and media literacy education in particular, is even clearer than it was in the days of the Founding Fathers. Modern education needs to enable students to live, learn, discern, and thrive in a diverse, global media culture, both online and offline. Current Common Core content standards33 in U.S. education do not sufficiently distinguish content standards and process skills for a media age. For example, language arts strands address the traditional reading, writing, speaking, and listening, while ignoring skills such as viewing, producing and

representing. A strong media literacy component is needed to focus on process skills that apply to both language arts and mathematics,34 so that deconstruction skills may be applied both qualitatively and quantitatively. II. THE EVOLUTION OF MEDIA LITERACY A consequence of the current erosion of trust in media is that the contemporary calls for media literacy education are often rooted in the perception that media content is misleading or false, since trust in media in an annual Gallup poll in 2017 was at an all-time low.35 Though these calls for media literacy are much needed and welcome, they represent the latest wave of wake-up calls for examining the role of media in society.36 Media literacy has early roots in the radio days of the 1930s.37 Media literacy movements were frequently engaged in challenges to violent, 30. Alan Taylor, The Virtue of an Educated Voter, AM. SCHOLAR (Sept. 6, 2016), https://theamericanscholar.org/the-virtue-of-an-educated-voter/#. 31. Id. 32. Id. 33. See About the Standards, COMMON CORE STANDARDS INITIATIVE, http://www.corestandards.org/about-the-standards (last visited May 7, 2018). 34. See Frank Baker, Standards, Media Literacy Education, in THE PRAEGER HANDBOOK OF MEDIA LITERACY 551–59 (Art Silverblatt ed., 2014); DAVID COOPER MOORE & EMILY BONILLA, NAMLE, MEDIA LITERACY EDUCATION & THE COMMON CORE STATE STANDARDS (2014), https://namleboard .files.wordpress.com/2015/04/namlemleccssguide.pdf. 35. See Leandra Bernstein, Poll: Mainstream Media Continues to Lose the Public's Trust, WJLA (Feb. 14, 2017), http://wjla.com/news/nation-world/main-stream-media-continue-to-lose-thepublics-trust. 36. See Marieli Rowe, On the Genesis of Media Literacy in the United States, as Seen Through the Lens of a Wisconsin Participant, in THE PRAEGER HANDBOOK ON MEDIA LITERACY 463-77 (Art Silverblatt ed., 2014). 37. See Leslie Spence, Can Radio Listening Be Taught? The Wisconsin Association for Better Radio and Television (1950). JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM June 2018] MEDIA LITERACY 1387 sexualized, and commercialized media content, and groups such as Action for Children's Television, founded by Peggy Charren in 1968,38 and Turn-Off TV Week,39 first introduced by TV-Free America in 1994, were reactions to the perceived negative influence of television on U.S. culture, especially on children. Jerome and Dorothy Singer,40 Yale professors who noticed and studied the impact of television on children's imaginations and play, emphasized the importance of parent mediation as a way to prepare children for navigating the media. But the overwhelming sentiment of U.S. activists at the time was to attempt to control and censor media content, to stop or limit using visual media, or to avoid engaging with "pop culture"namely television and new forms of music and expression. At the time and even lingering todayart critics and academics often drew a divide between what they promoted or perceived as "high culture"fine art, classical music, literature from the then-accepted canon, and film"low culture or pop culture"graphic arts, comics, pop music, and graphic novels or paperback only publications and television shows. 41 "Low culture" media was not considered worthy of teaching nor exploring in classrooms. What's more, media production was looked upon as "vocational" work that did not meet traditional academic standards worthy of serious studya notion that persists even now in some school systems.42 Researchers in the mid-twentieth century also conducted and released studies on the effects of media violence. As a result of fifteen years of "consistently disturbing" findings about the violent content of children's programs, the Surgeon General's Scientific Advisory Committee on Television and Social Behavior formed in 1969 to assess the impact of violence on the attitudes, values, and behaviors of viewers.43 The resulting report and a follow-up report in 1982 by the National Institute of Mental Health identified several major effects of 38. See Matt Schudel, Peggy Charren,

Advocate for Improving Children's TV Programming, Dies at 86, WASH. POST (Jan. 23, 2015), https://www.washingtonpost.com/entertainment/tv/peggycharren-advocate-for-improving-childrens-tv-programming-dies-at-86/2015/01/23/e5085916- a323-11e4-903f-9f2faf7cd9fe_story.html?utm_term=.d135245cdf5e. 39. See Lisa Belkin, Don't Turn Off the TV Week, N.Y. TIMES: PARENTING BLOG (Apr. 21, 2009, 12:24 PM), https://parenting.blogs.nytimes.com/2009/04/21/dont-turn-off-the-tv-week/. 40. See DOROTHY G. SINGER & JEROME L. SINGER, THE HOUSE OF MAKE-BELIEVE: CHILDREN'S PLAY AND THE DEVELOPING IMAGINATION 183 (1990). 41. See PETER GOODALL, HIGH CULTURE, LOW CULTURE: THE LONG DEBATE (1995). 42. See Media Arts Schools & Colleges, TRADE SCHOOLS, COLLEGES & U., https://www.tradeschools.net/media-arts/ (last visited May 7, 2018); see also Paul Fain, Spotlight on Vocational Training, INSIDE HIGHER ED. (Apr. 25, 2017), https://www.insidehighered.com/news/2017/ 04/25/vocational-education-surges-continues-struggle-image-and-gender-imbalance. 43. Violence in the Media: Psychologist's Study Potential Harmful Effects, AM. PSYCHOL. ASS'N, http://www.apa.org/action/resources/research-in-action/protect.aspx (last visited May 7, 2018). JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM 1388 HASTINGS LAW JOURNAL [Vol. 69:1379 children seeing violence on television: less sensitivity to the pain and suffering of others, more fear of the world around them, and more likeliness to behave in aggressive or harmful ways toward others. Major national scandals and tragedies in the 1990s and early 2000s, such as the Clinton impeachment proceedings,44 the Columbine school shootings45 and copycat crimes attributed to MTV's "Jackass" show, 46 have also called attention to media's role in shifting societal norms and a need for media literacy. Words such as fillatio or curse words are much more normalized in media today.47 School shootings and internet-inspired copycat bombings are also, sadly, more common to the point where police and some media outlets are modifying how they communicate about such tragic situations.48 Since content is not only affected by the subject addressed but the purpose behind providing the contentsuch as selling toys or foods to young childrenthe Campaign for a Commercial-Free Childhood recently challenged commercialization of children's media.49 Response to these alarms has varied, since the threat of regulation through the Federal Communications Commission, Federal Election Commission or Federal Trade Commission has loomed over cable companies, film producers, and news organizations for many years. Ratings systems for television, film, videogames, music, the V-Chip, and other attempts to "grade" content or to limit content access are all responses to mitigate the negative effects of media content on the general populace.50 Cable in the Classroom, an initiative of the National Cable Television Association ("NCTA"), launched in 1989 and sponsored media literacy programs.51 But today, this organization no longer exists. Instead, the cable industry outsourced its media watchdog efforts to Common Sense Media, which 44. See This Day in History: Dec. 19, 1998 President Clinton Impeached, HIST., http://www.history.com/this-day-in-history/president-clinton-impeached (last visited May 7, 2018). 45. See David L. Altheide, The Columbine Shootings and the Discourse of Fear, 52 AM. BEHAV. SCIENTIST 1354 (2009). 46. See Emily Farache, Another "Jackass" Copycat, E! NEWS (Apr. 24, 2001, 1:15 PM), http://www.eonline.com/news/41509/another-jackass-copycat. 47. See Matthew J.X. Malady, No Offense, SLATE (July 1, 2013, 3:33 PM), http://www.slate.com/ articles/life/the_good_word/2013/07/swear_words_old_and_new_sexual_and_religious_profanity_giving_way_to_sociological.html. 48. See POLICE EXEC. RES. F., THE POLICE RESPONSE TO ACTIVE SHOOTER INCIDENTS (2014),

http://www.policeforum.org/assets/docs/Critical_Issues_Series/the%20police%20response%20to%20active%20shooter%20incidents%202014.pdf. 49. See CAMPAIGN FOR A COMMERCIAL FREE CHILDHOOD, http://www.commercialfreechild hood.org (last visited May 7, 2018). 50. See THE BOUNDARIES OF FREEDOM OF EXPRESSION & ORDER IN AMERICAN DEMOCRACY 91 (Thomas R. Hensley ed., 2001). 51. See Cable in the Classroom, MEDIA & LEARNING, https://www.media-and-learning.eu/ resource/cable-in-the-classroom (last visited May 7, 2018). JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM June 2018] MEDIA LITERACY 1389 "rates" children's content in a variety of media.52 Facebook recently took action to address news literacy by forming working groups of publishers and educators to help determine how to enable people to be informed readers, as well as to provide platform features that enable discernment.53 But violent and sexualized content, and also content featuring substance use, is more prevalent than ever.54 And, with the internet, any content is infinitely available anytime, anywhere at the touch of a largeor a very smallfinger. Early versions of media literacy were often fear-based responses to these perceptions of the harmful effects of media consumption, and media literacy was seen as a protective "inoculation" against these effects. Hence, the spectrum of media literacy education runs from protectionism, where media literacy is seen as the antidote for harmful media, to laissez-faire or normalization, where formal media literacy education is seen as unnecessary because of the perceived beneficial effects or innocuousness of media.55 III. EMPOWERMENT THROUGH EDUCATION: UNDERSTANDING REPRESENTATION Marshall McLuhan's famous work and phrase, "the medium is the message,"56 laid important groundwork for the media literacy field, but the major turning point from a predominantly fear-based and changeresistant call for media literacy education began in 1980, with the publication of Len Masterman's book, Teaching about Television, an international best seller that provided a key insight. As Masterman himself noted: 52. See James Steyer, Xfinity TV and Common Sense Media: Helping Parents Discover the Right Entertainment for Their Family, COMCAST (July 17, 2013), https://corporate.comcast.com/comcastvoices/xfinity-tv-and-common-sense-media-helping-parents-discover-the-right-entertainment-fortheir-family. 53. See Emily Dreyfuss, Facebook Pushes News Literacy to Combat Crisis of Trust, WIRED (Apr. 6, 2017, 2:40 PM), https://www.wired.com/2017/04/facebook-pushes-news-literacy-combat-crisistrust/. 54. See Joy Gabrielli et al., Industry Television Ratings for Violence, Sex, and Substance Use, 138 PEDIATRICS 1 (2016), http://pediatrics.aappublications.org/content/138/3/e20160487. 55. See Renee Hobbs & Amy Jensen, The Past, Present and Future of Media Literacy Education, 1 J. MEDIA LITERACY EDUC. 1 (2009), https://files.eric.ed.gov/fulltext/EJ1095145.pdf. 56. See MARSHALL MCLUHAN, UNDERSTANDING MEDIA: THE EXTENSION OF MAN (1964). JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM 1390 HASTINGS LAW JOURNAL [Vol. 69:1379 [T]he big step forward was to recognize a truism: that what we were actually studying was television, and not the different subject contentsthat we were not actually studying sport or music or news or documentary. We were studying representations of these things . . . We were studying the ways in which these subjects were being represented and symbolized and packaged by the medium. What we are dealing with is not reality, but a symbolic system. 57 Masterman introduced a media literacy pedagogy based on the idea of empowering people to use media thoughtfully and with agency, by understanding and interrogating the symbolic system that media perpetuates, and by challenging the power and profit motives that underpin media. Masterman's empowerment philosophy of media literacy took hold throughout the English-speaking world, and continues to inform best practices and foundational pedagogy

that underpin media literacy teaching and learning. Canadians, most prominently Barry Duncan and John Puengente, built on Masterman's work and brought an empowerment approach to media literacy to North America.58 U.S. practitioners owe a debt of gratitude to their Northern neighbors for their generosity and tireless work in helping introduce, define, and model media literacy in both Canada and the United States. 59 Best practices in media literacy pedagogy have always called for a production elementor "writing" the media.60 But until the advent of smartphones, media construction was an expensive and time-consuming endeavor that required professional equipment and skills.61 Often, media literacy lessons focused primarily on deconstruction, or "reading" the media. Now Smartphones and social media are pervasive, even with young children. In 2016, the average age for children getting a first smartphone was 10.3 years old; 38% access the internet through their phone (versus 19% in 2012); 50% have social media accounts by age 12 and 11% had a social media account when they were younger than 10. Facebook and Instagram represent the most-used social platforms, with seventy-seven percent of children each. Twitter attracts fifty-nine percent, and Snapchat forty-seven percent, with no other social media 57. See Len Masterman, Voices of Media Literacy, CTR. MEDIA LITERACY (2010), http://www.medialit.org/sites/default/files/VoicesMediaLiteracyLenMasterman_1.pdf. 58. See Tessa Jolls & Carolyn Wilson, The Core Concepts: Fundamental to Media Literacy Yesterday, Today and Tomorrow, __ J. MEDIA LITERACY EDUC. 68, 68-70 (2014), http://digital commons.uri.edu/jmle/vol6/iss2/6/. 59. See Sam Nkana, History of U.S. Media Literacy Education, PRAEGER HANDBOOK OF MEDIA LITERACY 544–59 (Art Silverblatt ed., 2014). 60. See Kathleen Tyner, The Role of Media Literacy in the Media Arts, PRAEGER HANDBOOK OF MEDIA LITERACY 599–602 (Art Silverblatt ed., 2014). 61. Interview by Marieli Rowe with Jean-Pierre Golay, Former Dir., Centre d'Initiation aux Communications de Masse (Aug. 28, 2011), http://www.medialit.org/sites/default/files/ Voices_of_ML_JP_Golay.pdf. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM June 2018] MEDIA LITERACY 1391 platforms having a significant presence.62 Media literacy lessons can easily incorporate both deconstruction and construction,63 so that students gain experience in the full range of experience—using media and applying media literacy concepts. Media literacy is "new" again.64 Media literacy education must start early. Parent mediation is most effective when it starts from birth65 since parents provide modeling or guidelines for screen time, feedback on messages and values, and questioning of content that teaches children to look beyond the face value of media messages. At a preschool level, early learning environments can reinforce and strengthen how young children process media and use it to learn.66 Curricula must include a thorough understanding of citizens' relationships with the media67 that enables competent engagement with the world, as well as media literacy education that empowers students to challenge unproductive by-products of digital media. This is the best available approach to raise wise media consumers with strong critical thinking skills. Such skills enable youth and all citizens to make sound choices to protect their own interests, as well as society's democratic ideals. Ultimately, media literacy education can provide the foundation for lifelong learning and an entry path for acquiring, trusting, and mastering content knowledge. IV. THE DEMOCRATIZATION OF INFORMATION AND CULTURAL LAG Rapid changes in the flow of information and communication in the past fifteen to twenty years have created both positive and negative effects on democratic societies. An example on the positive side: Dave Carroll, a musician and disgruntled United Airlines passenger, had his guitar damaged by baggage handlers and then was refused assistance and compensation by the airline's customer service department. Carroll made a comic musical video called "United Breaks Guitars" and

posted it on YouTube after a year of battling with the airline. To date, the video has garnered more than 17 million views, and its popularity prompted the 62. Kids & Tech: The Evolution of Today's Digital Natives, INFLUENCE CENT., http://influencecentral.com/kids-tech-the-evolution-of-todays-digital-natives/ (last visited May 7, 2018). 63. CAITLIN BARRY ET AL.,IMPLEMENTING MEDIA LITERACY IN YOUR CLASSROOM 1 (2018). 64. Henry Jenkins, New Media LiteraciesA Syllabus, HENRY JENKINS: CONFESSIONS OF AN ACAFAN (Aug. 17, 2009), http://henryjenkins.org/blog/2009/08/new_media_literacies_-_a_syll.html. 65. Interview by Tessa Jolls with Dorothy G. Singer, Former Senior Research Specialist, Yale U. (July 18, 2015), http://www.medialit.org/reading-room/voices-media-literacy-internationalpioneers-speak-dorothy-singer-interview-transcript. 66. See Tessa Jolls et al., Media Literacy Education: A Preschool Imperative for Building Resiliency, 82 CONNECT!ONS 3 (May 2016). 67. Elizabeth Thoman & Tessa Jolls, Media LiteracyA National Priority for a Changing World, 48 AM. BEHAV. SCI. 18, 24 (2004). JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM 1392 HASTINGS LAW JOURNAL [Vol. 69:1379 airline to offer to pay to repair the damaged guitar and provide Carroll with $1200 in flight vouchers.68 Carroll's experience demonstrates that the power of self-created content can lead to just outcomes. At its best, citizen-created media content also enables more diverse and underrepresented voices to be heard, and allows news to be received directly from the source.69 In the past, an underrepresented group of people might not have had the means to publish or air their own news and perspectives. Now, the internet allows them to self-generate and publish media by just starting a blog or gathering a following on social media. Also, the internet is effective at bringing together people who want to stir positive change in society. For example, the Facebook page "Israel Loves Iran" has nearly 120,000 global followers, many of whom aim to prevent war by bridging the gap between people in the Middle East.70 While it is impossible to know whether all people who follow a social media group are aligned with the views of that group and willing to act on its behalf, these groups do bring like-minded people together and encourage action. But, just like the printing press, radio and television, the internet is not always used for ethical purposes.71 With so many content producersincluding both citizens and traditional message makersreaching the masses directly online, it is inevitable that misleading, biased, and outright false stories spread in the interest of acquisition of power, financial gain or, as is the case with cyberbullying,72 outright malice. With a tool as powerful as the internet, this can threaten democracy in many new ways. Unethical or irresponsible use of the internet can erode trust in media and in fellow citizens in four main ways by: (1) deeply dividing people based on ideology;73 (2) providing a massive, global platform for malicious propaganda;74 (3) making it relatively easy to cyberbully, threaten and humiliate people for reasons 68. Mark Tran, Singer Gets His Revenge on United Airlines and Soars to Fame, GUARDIAN (July 23, 2009, 6:39 AM), http://www.theguardian.com/news/blog/2009/jul/23/youtube-united-breaksguitars-video. 69. See Serena Carpenter, A Study of Content Diversity in Online Citizen Journalism and Online Newspaper Articles, 12 NEW MEDIA AND SOC'Y 1064 (2010). 70. Israel-Loves-Iran, FACEBOOK, http://www.facebook.com/israellovesiran/ (last visited May 7, 2018). 71. Veronica Ma, Propaganda and Censorship: Adapting to the Modern Age, HARV. INT'L REV. (Apr. 28, 2016), http://hir.harvard.edu/article/?a=13083. 72. What Is Cyberbullying, STOPBULLYING.GOV, http://www.stopbullying.gov/cyberbullying/ what-is-it/index.html (last visited May 7, 2018). 73. Partisanship and Political Animosity in 2016, PEW RES. CTR. (June 22, 2016), http://www.people-press.org/2016/06/22/partisanship-and-political-animosity-in-2016/. 74. Saheli Roy Choudhury, Digital Propaganda and Misinformation Isn't Just a US

Problem, Says Google Exec, CNBC (Nov. 2, 2017, 4:32 AM), http://www.cnbc.com/2017/11/02/google-execsays-fake-news-and-extremist-content-are-global-problem.html. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM June 2018] MEDIA LITERACY 1393 that are protected by their constitutional rights, such as their points of view, religion, ways of life or beliefs;75 and most importantly, (4) eroding trust in democratic and economic institutions. 76 The emergence of a highly divided citizenship is a consequence of the internet's ability to bring people together based upon shared interests and ideologies. A study by economics professors Yosh Halberstam from the University of Toronto and Brian Knight from Brown University77 states that "[w]hile scholars have long argued that voters should have access to high-quality information from a diverse set of sources, separate literature has documented a tendency towards homophilya preference for associating with like-minded individuals." The preference for communication with others who share instead of challenge existing beliefs exists along with another troubling phenomenon. According to a study conducted in 2016 by the Pew Research Center, 78 majorities in both parties express not just unfavorable but very unfavorable views of the other party. While this animosity has risen and fallen at an uneven rate since the 1960s, it has climbed steeply and steadily since the beginning of the 21st century in congruence with the rise of social media and use of the internet to find news and information.79 As animosity towards the opposing party grows, citizens have less civil conversations about sensitive topics and hyper-partisan rhetoric replaces healthy discussion and debate.80 This can divide a nation and reduce cooperation in preserving democratic ideals. An 1858 quote from Abraham Lincoln81 rings true here in the 21st century: "A house divided against itself cannot stand." The troubling aspects that come from faster and more diverse access to communication via technology can, in large part, be attributed to "cultural lag,"a term that describes what happens in a social system when the ideals that regulate life do not keep pace with other changes which are oftenbut not alwaystechnological.82 Advances in 75. Maria Konnikova, How the Internet Has Changed Bullying, NEW YORKER (Oct. 21, 2015), https://www.newyorker.com/science/maria-konnikova/how-the-internet-has-changed-bullying. 76. Trust in Government, OECD, http://www.oecd.org/gov/trust-in-government.htm (last visited May 7, 2018). 77. Yosh Halberstam & Brian Knight, Homophily, Group Size, and the Diffusion of Political Information in Social Networks: Evidence from Twitter 22 (Nat'l Bureau of Econ. Research, Working Paper No. 20681, 2014). 78. Partisanship and Political Animosity in 2016, supra note 73 (noting that Pew has asked this question since 1992). 79. Partisanship and Political Animosity in 2016, supra note 73. 80. Partisanship and Political Animosity in 2016, supra note 73. 81. House Divided Speech, NAT'L PARK SERV.: LINCOLN HOME, http://www.nps.gov/liho/learn/ historyculture/housedivided.htm (last updated Apr. 10, 2015). 82. Ashley Crossman, What Is Cultural Lag? How Cultural Lag Affects Societies, THOUGHT CO. (Apr. 12, 2017), http://www.thoughtco.com/cultural-lag-3026167. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM 1394 HASTINGS LAW JOURNAL [Vol. 69:1379 technology and other areas effectively render old ideals and social norms obsolete, which leads to ethical conflicts and crises.83 Existing standards in education, law, politics, social and business interactions, and interpersonal communication simply do not prepare citizens to cope with a 24-hour flood of messaging that can come from virtually anywhere without a filter.84 The effects of cultural lag last years. History shows that this is true for many technological advances. "Life support" is one example: medical technology is used to keep people's bodies functioning long after they would otherwise have been declared dead. This raises cultural and ethical questions about when life ends and who has the right to end life support or

prolong existence. The developments of new cultural beliefs, values, and norms lag behind the dilemmas posed by the technological change.85 The nation's educational system is experiencing its own cultural lag when it comes to media literacy curricula and there are consequences.86 The Stanford Graduate School of Education spent more than a year evaluating how well students across the country can evaluate online sources of information.87 Because young people are generally social media savvy, it is often assumed that they are also media literate. The Stanford study found this to be false. Among other examples, the study showed that most middle school students have trouble telling journalism from native advertisements, and that college students do not suspect bias in tweets from an activist group. Overall, the students performed much more poorly than researchers expected.88 Making media literacy education a higher priority within school curricula addresses cultural lag within the education system and takes a strong step forward in overcoming the challenges that come with faster, broader, and more participatory access to information. However, societies have created tools and methods to help cope with the effects of cultural lag and the new flow of information. Although they are still in their infancy, advances are occurring globally on this front. For example, the website www.faktisk.no was created prior to the September 2017 Norwegian election, when fears were ignited after "fake news'" impacted Brexit and the U.S. election. 89 Rival news organizations in Norway, which normally compete against each other as opposed to cooperate, came together to 83. Crossman, supra note 82. 84. Barbara J. Walkosz et al., Global/Local: Media Literacy for the Global Village, OFCOM (May 16, 2008), http://www.medialit.org/sites/default/files/33_globallocal.pdf. 85. Crossman, supra note 83. 86. Wineburg et al., supra note 12. 87. Wineburg et al., supra note 12. 88. Wineburg et al., supra note 12. 89. Wineburg et al., supra note 12. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM June 2018] MEDIA LITERACY 1395 create the powerful fact-checking website www.faktisk.no so that Norwegian citizens would be less at-risk of misinformation as they made their voting decisions.90 Within three months of launching, www.faktisk.no became one of the most popular websites in Norway. Fact-checking sites alone are not a panacea. But, as businesses (and educators and innovators) worldwide grapple with the challenges brought by the rapidly changing media and information landscape, more tools can be developed to help societies "catch-up" with technological advances and the challenges of cultural lag. Although there are many examples of innovators who are designing new ways to combat the effects of cultural lag with regard to today's flow of information, the risks to democracy are too great to wait for these new tools to mature and become widespread. An effective and efficient way to create sophisticated citizens91 is to develop a population with sound critical thinking skills and a deeply embedded knowledge of how to deconstruct and analyze messages through media literacy education. Media literacy education teaches children (and adults) that audiences understand messages differently and how to examine who is saying what and why, with an emphasis on the context of media messages in all their forms. This contextual analysisplus the analysis of the actual textual content of a message (fact vs. opinion, inference vs. evidence, and feeling vs. thinking)all add up to discernment and the ability to look for how information is framed and for points of view left out of communications. Such analyses lead to scrutinizing messages and data before forming an opinion or sharing on social media.92 Media literacy is a tool that can help citizens transcend emotional reactions to shocking headlines, colorful advertising, and celebrity endorsements. Media literate users understand logical fallacies and use their intellect to understand the messages sent and form of expression employed. They discern that all media have purpose when attempting to change behavior, spending, or influence votes. While there is no perfect way to eliminate a citizen's vulnerability to misinformation and abuse

of communications tools, media literacy education can 90. Daniel Funke, Three Months After Launching, Faktisk Is Already Among the Most Popular Sites in Norway, POYNTER (Oct. 3, 2017), http://www.poynter.org/news/three-months-afterlaunching-faktisk-already-among-most-popular-sites-norway; Shan Wang, Competing News Outlets in Norway Are Building a New Standalone Site Dedicated Entirely to Fact-checking, NIEMAN LAB (Apr. 5, 2017, 12:28 PM), http://www.niemanlab.org/2017/04/competing-news-outlets-in-norwayare-building-a-new-standalone-site-dedicated-entirely-to-fact-checking/. 91. Justin Lewis & Sut Jhally, The Struggle over Media Literacy, 48 J. COMM. 109 (1998). 92. CML's Five Key Questions and Core Concepts (Q/TIPS) for Consumers and Producers, CTR. MEDIA LITERACY, http://www.medialit.org/sites/default/files/QTIPS%20CHART_0.pdf (last visited May 7, 2018). JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM 1396 HASTINGS LAW JOURNAL [Vol. 69:1379 empower students to interact positively with their society.93 It equips informed "risk managers," who are armed to make the best decisions for themselves and their society. Media literacy education has always been important. But, in this age of information abundance, it is an absolutely crucial skill for citizens of free nations that value thriving democracy.94 V. KEEPING MEDIA LITERACY WELL DEFINED A challenge for the media literacy field is for civil society, and particularly educators, to maintain a consistent understanding of what media literacy is and how to provide a sound, credible, and effective pedagogy so that it may be taught and learned. Without a coherent understanding, there is a danger of media literacy being diluted or directive in nature, when in practice media literacy pedagogy is inquirybased, nonpartisan, and non-ideological. Though media literacy methods are used to explore power and profit dynamics, the purpose of media literacy is to possess the tools for exploration and expression, not "all the answers." Media literacy offers empowerment through education and an opportunity to equip all citizens with the skills they need to become lifelong learners, capable of navigating and leveraging the power of media for their own benefit and that of others.95 Media literacy addresses the symbolic system that comprises global media, the role of media in society, the production system behind media, and technology's impact on media. Media literacy education and pedagogy addresses philosophies, methodologies, and tools for encouraging critical thinking in teaching and learning. In trainings for educators, the Center for Media Literacy ("CML") emphasizes what media literacy is not: Media bashing is not media literacy; however, media literacy sometimes involves criticizing the media; Media production is not media literacy; although media literacy should include media production; Teaching with media is not media literacy; one must also teach about media; and Media literacy does not mean "don't watch" or "don't use;" it means use carefully, think critically. 96 93. Neil Anderson, Making a Case for Media Literacy in the Classroom, CTR. MEDIA LITERACY, http://www.medialit.org/reading-room/making-case-media-literacy-classroom (last visited May 7, 2018). 94. UNESCO, MEDIA AND INFORMATION LITERACY: POLICY AND STRATEGY GUIDELINES (Alton Grizzle & Maria Carme Torras Calvo eds., 2013). 95. See Erica Weintraub Austin, A Bicycle Riding Theory of Media Literacy, in THE PRAEGER HANDBOOK OF MEDIA LITERACY, 538–44 (Art Silverblatt ed., 2014). 96. See TESSA JOLLS ET AL., LITERACY FOR THE 21ST CENTURY, CENTER FOR MEDIA LITERACY, 538–44 (2n ed. 2018). JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM June 2018] MEDIA LITERACY 1397 For effective use in everyday life, media literacy must be easily and widely understood and emphasize frameworks for process skills that can be constantly improved with practice over time. As Masterman said, [Y]ou can teach about the media most effectively, not through a contentcentered approach, but through the application of a conceptual

framework which can help pupils to make sense of any media text. And that applies every bit as much to the new digitized technologies as it did to the old mass media. . . . The acid test of whether a media course has been successful resides in students' ability to respond critically to media texts they will encounter in the future. Media education is nothing if it is not an education for life. 97 CML uses three basic frameworks (and there are variants) to address the "symbolic system" that Masterman identified to distinguish the media literacy field and to provide a foundational understanding for media literacy:98 (1) the Media Triangle, which explains the enduring relationship between media producers, audiences, texts, and culture; (2) the Empowerment Spiral of Awareness, Analysis, Reflection and Action (based on the work of Paulo Friere),99 which provides an overarching context and connections for applying media literacy and critical analysis in every-day life, and (3) CML's Questions/TIPS, featuring the Core Concepts and Key Questions of Media Literacy, which provide specific principles for analysis and for understanding how media operate as a system, and for interrogating media messages in all their forms.100 In learning and practicing applications (content subjects or themes) for these frameworks, students internalize new media literacy process skillsheuristicsthat become automatic filtering systems to apply to any media content, anywhere, anytime.101 This approach is compatible with the mobility that most people enjoy today through their mobile devices and enables citizens to thrive in today's media culture. These frameworks provide an understanding of media systems that transforms and transcends today's "siloed," content-centered approach to teaching and learning. Because media literacy focuses on process skills and frameworks for addressing media content, media literacy skills transcend cultural, political, and social boundaries.102 In a global media culture, media literacy provides a global skill set enriching vocabulary 97. Masterman, supra note 57, at 1. 98. See Educator Resources, CTR. MEDIA LITERACY, http://www.medialit.org/educator-resources (last visited May 7, 2018). 99. Paulo Freire, FREIRE INST., http://www.freire.org/paulo-freire/ (last visited May 7, 2018). 100. JOLLS ET AL., supra note 96. 101. See Tessa Jolls & Carolyn Wilson, The Core Concepts: Fundamental to Media Literacy Yesterday, Today and Tomorrow, 6 J. MEDIA LITERACY EDUC. 68, 68–70 (2014), http://digitalcommons.uri.edu/jmle/vol6/iss2/6/. 102. Jolls, supra note 8, at 68. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM 1398 HASTINGS LAW JOURNAL [Vol. 69:1379 and conceptual approaches that can be commonly shared and discussed with civility. Although the media itself may be local, media literacy is global. There are programs in Bhutan, Colombia, Brazil, South Africa, Norway, Russia, Japan, Egypt, Korea, India and China, among others.103 While media literacy education is global in nature, applications for media literacysuch as news, digital citizenship, or gender representationmay be local.104 Though media literacy process skills can be applied to any content subjectnews, gender, addiction, citizenship, history, science, and technologymastering a content subject cannot and should not be conflated or misunderstood as media literacy. For example, being considered a "good" digital citizen in China may be an entirely different proposition than being a "good" digital citizen in the U.S. But "good" media literacy practices and pedagogy offer an open-ended and boundless approach, while still springing from a foundational common philosophy around inquiry and how symbolic media systems operate systematically and universally. With this universality in mind, media literacy practices and pedagogy can be consistent, replicable, measurable, and scalable.105 Media literacy can provide an evidence-based methodology that can be applied to any subject, anywhere and anytime. Important criteria such as education and workforce preparation become increasingly globalized and mobile. The next generation of young people will grow to adulthood and become voters,

financial decision makers, parents, and even community leaders. With the benefit of early and continuous media literacy education, critical thinking and message analysis skills will be intrinsic to them. With that, we can look forward to a new generation of citizens for whom basing choices and actions on sound evaluation of messages and data will simply be second-nature.106 That new generation will be far less vulnerable to informational manipulation than the current one, as well as better armed to make choices that support democracy and other hallmarks of a free society. 103. Global Alliance for Partnerships on Media and Information Literacy, UNESCO, http://www.unesco.org/new/en/gapmil/ (last visited May 7, 2018). 104. Walkosz et al., supra note 84, at 5. 105. See generally Kathryn R. Fingar & Tessa Jolls, Evaluation of a School-Based Violence Prevention Media Literacy Curriculum, 20 INJURY PREVENTION J. 183 (2013). 106. See Tessa Jolls & Carolyn Wilson, Youth Radicalization in Cyberspace: Enlisting Media and Information Literacy in the Battle for Hearts and Minds, MILID YEARBOOK (2016), http://www.medialit.org/sites/default/files/MILID%20Yearbook%202016_0.pdf. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM June 2018] MEDIA LITERACY 1399 A. MEDIA LITERACY EDUCATION: FOUNDATIONAL FOR DEMOCRACY IN THE 21ST CENTURY INFORMATION ENVIRONMENT Media literacy education is not yet institutionalized, however. Gaps in understanding and lack of support for research and development continue to impede growth of the field, especially in the United States.107 The United Nations Educational, Scientific and Cultural Organization (UNESCO)108 has advocated for media and information literacy since the late 1940s, and countries such as Finland, Great Britain, Canada, Australia, New Zealand, as well as the European Union as a whole, have taken strong steps to introduce media literacy into education curricula and into regulatory policies: Finland, known internationally for its effective education system, has a national strategy for media literacy;109 Great Britain, through the communications regulatory agency ("ofCom"), has an Office for Media Literacy that takes responsibility for research and for outreach to encourage media literacy;110 Canada requires media literacy as a component of the national language arts curriculum;111 Australia and New Zealand embed media literacy in national curricula through required media arts strands;112 and In the European Union, a study published in 2017 provided a crosscountry comparison of media and information literacy in 28 European countries, including trends forecasting.113 The European Union also calls for annual reporting on media literacy activities by each member country.114 In the United States, advocates for media and information literacy have proposed policy at the international, national, and community 107. See Kristen Hawley Turner et al., Developing Digital and Media Literacies in Children and Adolescents, 140 PEDIATRICS S2, S123 (2017). 108. See e.g., UNESCO, supra note 94. 109. KAVI, FINNISH MEDIA EDUCATION: PROMOTING MEDIA AND INFORMATION LITERACY IN FINLAND (2013), https://kavi.fi/sites/default/files/documents/mil_in_finland.pdf. 110. Children's Media Literacy, OFCOM (Nov. 29, 2017), https://www.ofcom.org.uk/researchand-data/media-literacy-research/childrens. 111. Media Education in Ontario, MEDIA SMARTS, http://mediasmarts.ca/teacherresources/digital-media-literacy-outcomes-province-territory/media-education-ontario (last reviewed July 2017). 112. See Literacy, AUSTRALIAN CURRICULUM, https://www.australiancurriculum.edu.au/ f-10-curriculum/general-capabilities/literacy/ (last visited May 7, 2018); see also Media Literacy, TKI: MINISTRY OF EDUC., NEW ZEALAND, http://media-studies.tki.org.nz/Teaching-media-studies/ Media-literacy (last visited May 7, 2018). 113. PUBLIC POLICIES IN MEDIA AND INFORMATION LITERACY IN EUROPE: CROSS COUNTRY COMPARISONS (Divina Frau-Meigs et al.

eds., 2017). 114. See Media Literacy, EUROPEAN COMM'N, https://ec.europa.eu/culture/policy/audiovisualpolicies/literacy_en (last visited May 7, 2018). JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM 1400 HASTINGS LAW JOURNAL [Vol. 69:1379 levels.115 Topics such as media literacy, digital literacy, digital citizenship, and internet and social media safety have been introduced as legislation in at least ten states, and five statesWashington, Connecticut, Rhode Island, New Mexico, and Californiapassed bills in 2017.116 In a 2014 report prepared by a bipartisan, blue-ribbon education committee and entitled "Learner at the Center of a Networked World,"117 the Aspen Institute called for media literacy and social/emotional literacies to be at the center of curricula and educationnot the peripheryand proposed an action agenda at federal, state, community, and school district levels. But these initiatives are not nearly enough, nor do they provide enough momentum to address the yawning crevice in access to the kind of education that literate citizens in this century need. Both democracy and a healthy economy depend on trust in societal institutions, including the media. Competitive advantage relies on a workforce of educated citizens who are prepared to engage effectively and ethically in a connected world.118 This type of education is needed by the manynot the fewto successfully navigate today's 21st century media culture. As recommended in Pediatrics in November 2017: 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. To create the human capital necessary for success and sustainability in a technology-driven world, we must invest in the literacy practices of our youth.119 Not only are these literacy practices mobile, but they can also be applied to any content and any subject. Since using these skills is so closely associated with using mobile devices that are now ubiquitous, this new type of educationand the ability to access it through technologyis foundational to teaching and learning, to the point that some educators are calling equal access to digital and media literacy a fundamental human right.120 115. See generally RENEE HOBBS, DIGITAL AND MEDIA LITERACY: A PLAN OF ACTION (2010), https://knightfoundation.org/reports/digital-and-media-literacy-plan-action; ASPEN INST. TASK FORCE ON LEARNING & THE INTERNET, LEARNER AT THE CENTER OF A NETWORKED WORLD (2014), https://assets.aspeninstitute.org/content/uploads/files/content/docs/pubs/Learner-at-the-Centerof-a-Networked-World.pdf; Turner et al., supra note 107; KNIGHT COMM'N,INFORMING COMMUNITIES, SUSTAINING DEMOCRACY IN THE DIGITAL AGE (2009), https://assets.aspeninstitute.org/content/ uploads/files/content/docs/pubs/Informing_Communities. 116. See Your State Legislation, MEDIA LITERACY NOW, https://medialiteracynow.org/your-statelegislation/ (last visited May 7, 2018). 117. See ASPEN INST. TASK FORCE ON LEARNING & THE INTERNET, supra note 115. 118. VIVIEN STEWART, A WORLD-CLASS EDUCATION 28–31 (2012). 119. Turner et al., supra note 107, at S122. 120. See TEENS, SOCIAL MEDIA & TECHNOLOGY OVERVIEW 2015 2–5 (2015), http://www.pewinternet.org/2015/04/09/teens-social-media-technology-2015/pi_2015-04-09_tee nsandtech_06/; Turner et al., supra note 107, at S123. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM June 2018] MEDIA LITERACY 1401 For that reason, media literacy is not a new subject to teachit is a new way to teach all subjects.121 Media literacy education, through evidence-based frameworks, offers a meta-frame that applies to all academic subjects, thus connecting and integrating the various disciplines in a way that can contribute to multidisciplinary problem-solving through a process of inquiry that can be collaborative or individualistic.122 But before teachers can begin to utilize

such pedagogy, they must first understand media literacy themselves, because most adults did not grow up learning about media literacy, nor did they learn how to teach it. Unfortunately, large-scale efforts to develop these skills are not yet adopted politically nor educationally.123 B. MEDIA LITERACY: MORE ABOUT EDUCATION THAN MEDIA There is an urgent need for preservice learning and professional development for teachers, so that they can make the shift from being a "sage on the stage" to being a "guide on the side." With this approach, the teacher's role is not to advocate a particular view nor provide directive opinions, but to promote reflection upon media texts and develop the kind of questioning and analytical skills that will help students to clarify their own views. There is a need for evidence-based pedagogies and multimedia, online, and interactive teaching resources. Yet most formal education institutions still rely on teacher-centered approaches, focused on traditional definitions of literacy and pedagogy, primarily using print media.124 People today most frequently learn outside of classrooms. Youth have the online world available to them in the palms of their hands. They need the educational tools and skills to reach beyond the traditional content silos that upon which education has relied upon for centuries and to connect learning to today's realities.125 The Center for Media Literacy was founded in 1989 by Elizabeth Thoman, who long advocated: "The ultimate goal of media literacy is to make wise choices possible."126 The end results of media literacy education are wiser consumers, more responsible producers, and active participants and citizens in both the online and offline worlds. These skills apply to information, misinformation, and disinformation, regardless of political or geographic boundaries. 121. See Best Practices, CTR. MEDIA LITERACY, http://www.medialit.org/best-practices/ (last visited May 7, 2018). 122. Jolls, supra note 8, at 68. 123. Turner et al., supra note 107, at S123. 124. Jolls, supra note 8, at 69–70. 125. Turner et al., supra note 107, at S123. 126. CTR. MEDIA LITERACY, http://www.medialit.org/about-cml (last visited May 7, 2018). JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM 1402 HASTINGS LAW JOURNAL [Vol. 69:1379 C. MEDIA LITERACY: AN EMPOWERING MEANS TO ADDRESS THREATS TO DEMOCRACY Developing an empowered population that can identify and avoid misinformation (as well as unjust attempts to invalidate legitimate sources) on its own terms is not only the most effective solution available, it is also the most democratic way to restore trust in media, fellow citizens, and other institutions. It empowers citizens to make informed choices about what information is worthy of their trust, instead of leaving those decisions to governments or other entities, which can cross a fuzzy line between serving the people and outright censorshipsomething counter to democratic ideals. History shows countless examples of censorship as a harbinger of democracy's decay, and leaders who use limits on freedom of expression to undermine democratic governments, move to more autocratic forms of rule. A recent example is Hugo Chávez, the former president of Venezuela. According to the NGO Human Rights Watch: The Chávez government sought to justify its media policies as necessary to "democratize" the country's airwaves. Yet instead of promoting pluralism, the government abused its regulatory authority to intimidate and censor its critics. It expanded the number of government-run TV channels from one to six, while taking aggressive steps to reduce the availability of media outlets that engage in critical programming . . . The sanctioning and censorship of the private media under Chávez have had a powerful impact on broadcasters and journalists. . . . The fear of government reprisals has made self-censorship a serious problem.127 Right now, democratic nations are grappling with how to preserve free speech and at the same time protect citizens from autocratic regimes. These regimes have long aimed to suppress political pluralism and free expression to maintain power within their own nations, and are now

increasingly using their principles and tactics to promote their interests internationally.128 The term "sharp power" is new language that "refers to the information warfare being waged by today's authoritarian powers, particularly China and Russia."129 The term was recently coined by Christopher Walker and Jessica Ludwig from the National Endowment for Democracy130 to define information that "pierces, penetrates, or perforates the political and information environments in the targeted 127. Venezuela: Chávez's Authoritarian Legacy, HUMAN RTS. WATCH (Mar. 5, 2013, 5:24 PM), https://www.hrw.org/news/2013/03/05/venezuela-chavezs-authoritarian-legacy. 128. See CHRISTOPHER WALKER & JESSICA LUDWIG, NAT'L ENDOWMENT FOR DEMOCRACY, SHARP POWER: RISING AUTHORITARIAN INFLUENCE (2017), https://www.ned.org/wp-content/uploads/2017/ 12/Introduction-Sharp-Power-Rising-Authoritarian-Influence.pdf. 129. Joseph S. Nye, Jr., How Sharp Power Threatens Soft Power, FOREIGN AFF. (Jan. 24, 2018), https://www.foreignaffairs.com/articles/china/2018-01-24/how-sharp-power-threatens-soft-power. 130. See NAT'L ENDOWMENT FOR DEMOCRACY, https://www.ned.org/ (last visited May 7, 2018). JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM June 2018] MEDIA LITERACY 1403 countries."131 Joseph Nye, the political scientist who coined the term "soft power"132 in the 1980s, warns democratic nations to avoid the temptation to cope with sharp power by using methods that are typical of autocratic regimes. "As democracies respond to sharp power, they have to be careful not to overreact, so as not to undercut their own soft power by following the advice of those who advocate competing with sharp power on the authoritarian model."133 Media literacy education offers democratic societies a way to support independent thinking among their people and arms citizens to minimize their chances of being misinformed or manipulated, without sacrificing the ideal of freedom of expression, or risking censorship or other autocratic methods to cope with today's information related challenges. Fact-checkers and fact-checking websites cannot replace the benefits of media literacy education within democratic societies. Sites such as snopes.com, factcheck.org, and Politifact are among today's most respected sources to confirm or debunk news and information.134 They are useful for people who are looking for verified information, but media literacy education cannot and should not replace these services. However, citizens who rely solely on fact-checking sites to determine what information is trustworthy are more at risk of manipulation than those who have learned to evaluate and analyze information independently with critical thinking skills acquired through media literacy education. In addition, fact-checking organizations could be encouraged to hold themselves to higher standards when they know that their audience is made up of critical thinkers who make informed decisions and are better able to recognize falsehoods and bias. Media literacy education does not aim to make ordinary citizens into professional fact checkers. With the current abundance of information, it is impossible to fact check everything. However, media literacy education transforms ordinary citizens into powerful "risk managers"135 when it comes to information, who are able to discern who and what to trust, identify informational manipulation, produce quality content, and make 131. WALKER & LUDWIG, supra note 120, at 6. 132. See JOSEPH S. NYE, JR., SOFT POWER: THE MEANS TO SUCCESS IN WORLD POLITICS (2004). Soft power is the ability to attract and co-opt, rather than by coercion (hard power), which is using force or giving money as a means of persuasion. . . . A defining feature of soft power is that it is noncoercive; the currency of soft power is culture, political values, and foreign policies. 133. Nye, Jr., supra note 120. 134. See Jennifer Snelling, Top 10 Sites to Help Students Check Their Facts, ISTE (Feb. 1, 2018), https://www.iste.org/explore/articleDetail?articleid=916. 135. See Chris Nichols, Stalled

Bill to Help California Schools Fight Fake News to Be Revived, CAP. PUB. RADIO (Dec. 11, 2017), http://www.capradio.org/articles/2017/12/11/stalled-bill-to-helpcalifornia-schools-fight-fake-news-to-be-revived/. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM 1404 HASTINGS LAW JOURNAL [Vol. 69:1379 informed decisions when using the power of their votes, actions and dollars. VI. INTERROGATING THE NEW MEDIA Through it all, civil societyboth consumers and producershas maintained and even deepened its relationship and infatuation with media. The penetration rate of smartphones in the U.S. at the end of 2016 was 81% of all mobile phones,136 and media production through social media is as ubiquitous as consumption. Today, the public not only gives viewership to advertisers who sponsor commercialized content, but also through interactive media, personal data, clicks, click histories, as well as individual eyes, ears, and voices during the media transactions and productions that propel everyday lives. Everyone is a producer now, and virtually anything goes in the virtual world. With these new technology tools available to all, it is apparent that, to have any hope of maintaining a free press and instilling media literacy skills, citizens must stop wishful thinking in regards to influencing, regulating, or censoring contentwhich has proven, in most cases, fortunately, to be a vain hope. Instead, the focus must shift to educating audiences137who are now also major content producers through social media. Today, content producers are highly mobile and vie for very short attention spans amidst the bombardment of media messages that splinter audiences.138 With less attention to be had, and with a myriad of competing choices from a much more disparate distribution network, it is becoming more and more difficult for independent media producers, whether print or video, to garner an audience outside of the major social media platforms. For independent media producers, it is now more difficult to attract advertisers to underwrite a sustainable business model.139 It is becoming more challenging to lure audiences, and the desperation with which many media outlets act is apparent as sensationalized stories are retracted almost as quickly as issued to compete in a 24/7 news cycle.140 136. Adam Lella, U.S. Smartphone Penetration Surpassed 80 Percent in 2016, COMSCORE (Feb. 3, 2017), https://www.comscore.com/Insights/Blog/US-Smartphone-Penetration-Surpassed-80- Percent-in-2016. 137. KNIGHT COMMISSION, supra note 106. 138. See Frank Furedi, The Crisis of Attention, SPIKED (Feb. 2016), http://www.spikedonline.com/spiked-review/article/the-crisis-of-attention/18068#.WlHRviOZN0w. 139. See Bharat N. Anand, The U.S. Media's Problems Are Much Bigger than Fake News and Filter Bubbles, HARV. BUS. REV. (Jan. 5, 2017), https://hbr.org/2017/01/the-u-s-medias-problems-aremuch-bigger-than-fake-news-and-filter-bubbles. 140. See Zach Shonfeld, The Faults in Our Stories: The Year in Retractions, NEWSWEEK (Dec. 25, 2014, 2:34 PM), http://www.newsweek.com/faults-our-stories-year-retractions-294189. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM June 2018] MEDIA LITERACY 1405 Content producers, more than ever, cannot be relied upon to set higher content standards nor support enlightening audiences through media literacy education, since many perceive this to be against their selfinterest.141 Yet media literacy offers a path to more trust and confidence in media when consumers realize that no information is perfect nor without bias, and that it is their discernment that ultimately counts towards judging the quality of content. To gain an audience, producers use expedient tools such as confirmation bias or framing to be seen as "one of us," or to act as an echo chamber for what is perceived as what an audience wants to hear.142 It is no accident that television anchors or reporters are more willing to express their opinions or their emotions in their stories today. 143 But with media representing a symbolic system, the virtual world is not transparent; it is opaque. Its purpose is not just to

inform, persuade or entertain; it usually aims to gain profit or power and influence. The internet shows a shiny surface of images and information, but that interface hides a vast database144 that is capable of capturing, quantifying, and sharing every click and keystroke, and in some cases, faces, irises, and the timbre of voices. The internet is used to convey information through those databases on a truly massive scale. “Smart cities” connect “smart homes” where “smart” toys for toddlers are now connected toys that connect to each other and to online platforms. These “smart toys” collect personal information in “smart homes” in “smart cities.”145 Often, consumers are not aware of how that information may be used or shared, nor whether it is secure. Technology, entertainment, and media industries frame these questions as privacy issues. However, citizens’ business and personal interests go far beyond that. Each bit of data is gathered, analyzed, packaged, and monetized, and data becomes the new currency of value for a business proposition.146 The relationship citizens enjoy with mediathe relationship between the production system, the audience and the text, depends upon each and every transaction between the participating parties, and yet everyday citizens are unaware and lack value in their ownership or personal property rights. With the casual click 141. See Lewis & Jhally, supra note 91. 142. See Nickerson, supra note 21. 143. See Brent Cunningham, Re-thinking Objectivity, COLUM. JOURNALISM REV.(July/Aug. 2003), http://archives.cjr.org/feature/rethinking_objectivity.php. 144. See Stephanie Pappas, How Big Is the Internet, Really?, LIVE SCI. (Mar. 18, 2016, 11:40 AM), https://www.livescience.com/54094-how-big-is-the-internet.html. 145. See FUTURE PRIVACY F. & FAMILY ONLINE SAFETY INST.,KIDS & THE CONNECTED HOME: PRIVACY IN THE AGE OF CONNECTED DOLLS, TALKING DINOSAURS, AND BATTLING ROOTS (2016). 146. See Natarajan Chandrasekaran, Is Data the New Currency?, WORLD ECON. F. (Aug. 14, 2015), https://www.weforum.org/agenda/2015/08/is-data-the-new-currency/. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM 1406 HASTINGS LAW JOURNAL [Vol. 69:1379 of a button, users routinely sign away what few rights they may have.147 These exchanges undermine trust in media relationships and are becoming more and more urgent priorities for action. No current legal framework governs ownership of personal data that begins to generate from before the birth of each and every individual.148 In 2014, Tim Berners Lee,149 a founder of the internet, called for a Magna Carta for the internet150 because the internet and the data that drives it offer new surveillance opportunities and benefit the few at the expense of the many. Data’s value and the monetization of that value is the new bedrock upon which fortunes rest and grow. This shift in value and how value is created is not widely understoodyet. For example, if most consumers are asked to describe what they see when they see a car, they would probably answer “car” or “automobile,” or give a brand name for a certain type of car.151 But these days, what they are really seeing is a data collection machine.152 Cars now have radar, cameras, and sensors that gather data to share information on fender benders with insurers and sell advertising to companies that want to reach bored passengers in driverless cars. Such data-gathering is the difference between today’s economy and the economy of the past, because it is data that is driving value creation, products, and services. Yet citizens do not participate directly in the distribution of the value they help create through data. Today, companies use citizens’ own data to know how to find them and to bill them, but citizens typically do not receive a royalty check for the use of their data, nor do they have access to the research and findings, trends and social information that their data provides. Companies like Facebook, Snapchat, and Twitter may know far more about citizens than citizens know about themselves, and even our youngest citizens are being surveilled through smart toys.153 What should be private, and what should not? And why? Who should have access

to the data collected, and why or why not? Who should benefit financially 147. See TERMS AND CONDITIONS MAY APPLY (Variance Films 2013). 148. See Brian Naylor, Firms Are Buying, Sharing Your Online Info. What Can You Do About It?, NPR (July 11, 2016, 4:51 PM), https://www.npr.org/sections/alltechconsidered/2016/07/11/ 485571291/firms-are-buying-sharing-your-online-info-what-can-you-do-about-it. 149. See Sir Tim Berners-Lee, WORLD WIDE WEB FOUND., https://webfoundation.org/about/ sir-tim-berners-lee/ (last visited May 7, 2018). 150. Sir Tim Berners-Lee: World Wide Web Needs Bill of Rights, BBC NEWS (Mar. 12, 2014), http://www.bbc.com/news/uk-26540635. 151. See Sports and Media Literacy, 91 CONSORTIUM FOR MEDIA LITERACY 2 (2017). 152. See Peter Valdes-Dapena, GM: Sure, the Auto Industry Is Transforming. But We've Got This, CNN TECH. (Dec. 1, 2017, 6:00 PM), http://money.cnn.com/2017/12/01/technology/ gm-ride-sharing-business/index.html. 153. See Caitlin Dewey, 98 Personal Data Points That Facebook Uses to Target Ads to You, WASH. POST (Aug. 19, 2016), https://www.washingtonpost.com/news/the-intersect/wp/2016/08/19/ 98-personal-data-points-that-facebook-uses-to-target-ads-to-you/?utm_term=.49ca8410dc5a. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM June 2018] MEDIA LITERACY 1407 from the data, and is citizens' owning their personal, individual data a human right? As technology evolves, some solutions are emerging that can complement media literacy efforts to restore trust and personal property rights. For example, micropayments154 and blockchain155 technology (or distributed ledgers) are promising developments that can allow for tracking, transparency, and payment systems that delineate and compensate each citizen's contributions of content, data and clicks/attention, both large and small. But it is still early, and much legal and technical work remains. Yet media literacy is something that citizens can enjoy now. Citizens need to be equipped with media literacy to understand their lifelong relationship with media and the economic structures and processes that support media in a democracy. Individuals need to see that they are the true product being sold in transactions between advertisers and publishers and/or platforms, and that ultimately, they hold the power in any media transaction, because without an audience and broadband rights, media cannot exist. It is up to the people to demand media literacy education,156 because becoming media literate—understanding how the global media system works through a systematic process of inquiry—is entirely within their self-interest, as well as the self-interest of society at large, locally, and globally. CONCLUSION Technology is changing the way civil society communicates, learns, and lives at break-neck speed. Modes of communication that may be commonplace in households in a decade are unimaginable for most people today. But democracy is an ideal that the free world long fought to protect for the best possible chance to endure throughout time. It is up to this generation to add media literacy education as a crucial tool and metaframe to address the cultural and institutional disruption that the internetand the consequent abundance of informationcauses, and to embrace the opportunities inherent in that change. This is a transformational agea networked age knitted together through technology, that relies on networks of information and people like never before. Media literacy is the path through which to acquire, contextualize, 154. See How Do MicroPayments Systems Work?, QUORA, https://www.quora.com/ How-do-micropayments-systems-work (last visited May 7, 2018). 155. See Trust Through Technology, 94 CONSORTIUM LITERACY 2, 4–14 (2017); Phil Gramm & Hernando de Soto, How Blockchain Can End Poverty, WALL ST. J. (Jan. 25, 2018, 7:11 PM), https://www.wsj.com/articles/how-blockchain-can-end-poverty-1516925459. 156. See Thoman & Jolls, supra note 67. JOLLS & JOHNSEN (FINAL) (DO NOT DELETE) 6/3/2018 1:28 PM 1408 HASTINGS LAW JOURNAL [Vol. 69:1379 and apply the content knowledge157

accumulated through centuries and readily available to all. This transformation means an unprecedented power shift in the way information is produced, consumed, distributed, trusted, and valuedoffering empowered citizens an opportunity to learn, participate, share, and express themselves as never before. With competence in media consumption and production, citizens have the opportunity to revalue and rebalance the unity, individual and societal freedoms, and economic underpinnings that are crucial to democracy. The time is now to create smart policies and educational approaches that empower citizens to analyze the messages they create and receive and, in turn, to make wise choices for themselves and their communities. Media literacy is an essential skill to advance democracy in a hyper-connected global media world. Let us seize this opportunity to make media literacy as ubiquitous as the media itself. 157. Jolls, supra note 7.

Appendix Q

School Censorship Appropriateness**,** *p. 44*

Jolls, T., and Lindford, M., 2019. School Censorship Appropriateness. *In:* The International Encyclopedia of Media Literacy. Wiley Online Library: John Wiley & Sons.

Appendix R

Censorship and Appropriateness: A Negotiation calling for Media Literacy*, *p. 45

Jolls, T., 2019. Censorship and Appropriateness: A Negotiation calling for Media Literacy. *In:* Yangze, M., and Chibás, F., ed. Marketing, Comunicação*, Tecnologia & Inovacao: Nas Cidades MIL*. São Paulo: University of São Paulo Press, p. 361

Appendix S

Jolls, T. 2015. The New Curricula. *Journal of Media Literacy Education*, 7(1), 65-71.

The New Curricula: How Media Literacy Education Transforms Teaching and Learning

Abstract

As new online and cellular technologies advance, the implications for the traditional textbook model of curricular instruction are profound. The ability to construct, share, collaborate on and publish new instructional materials marks the beginning of a global revolution in curricula development. Research-based media literacy frameworks can be applied to all subjects, and they enable teachers to have confidence that, in employing the frameworks to address academic subjects, themes or projects, students will gain content knowledge. Teaching through media literacy education strategies provides the opportunity to make media literacy central to teaching and learning, since media literacy process skills enable students to become self-directed lifelong learners, capable of addressing any subject. What are characteristics of curricula that use media literacy frameworks? How does such curricula differ from traditionally constructed curricula? And why should administrators and teachers embrace this change? As education is moving from paper-based, face-to-face classwork to technology-enabled curricula that is better, faster and cheaper, educators need new yet proven approaches and curricular resources to delivering effective lessons and outcomes. With media literacy education, this shift is not only possible but also imperative for providing curricula for the globalized classroom.

Keywords*: curricula, globalization, technology, media, literacy*

New economic realities and rapid shifts in labor markets are fundamentally changing education systems around the world; and now, access to high quality education institutions at all levels is globalizing as well (Jolls 2014). Signs of this change—this movement in the U.S. and abroad toward being a global information economy and having education systems to match—are persistent and demand attention, experimentation, and investment.

The growth of the International Baccalaureate (IB) Program is a case in point: between December 2009 and December 2014, the number of IB programs offered worldwide grew by 46.35%, with 4972 programs being offered across 3968 schools. A primary school description of the IB tells the story behind this success: "The International Baccalaureate® (IB) Primary Years Program is a curriculum framework designed for students aged 3 to 12. The PYP prepares students to become active, caring, lifelong learners who demonstrate respect for themselves and others and have the capacity to participate in the world around them. It focuses on the development of the whole child as an inquirer, both within and beyond the classroom" (International Baccalaureate 2014, *emphasis added*). These qualities—though timeless in many ways—are now enabled by online and cellular technologies, enabling participation in the global village beyond the classroom, liberating students and teachers alike from the printed page and from the necessity of a total reliance on face-to-face interactions.

This ability to construct, share, collaborate on and publish new instructional materials online marks the beginning of a revolution in curriculum development. In the U.S., adoption of the Common Core State Standards is now driving curriculum development. These standards bring a consistency nation-wide that has long been missing, since standards had previously been developed state-by-state, yet there is a wide divergence in how states, districts, schools, and teachers choose to meet the standards through their instruction. Although the Common Core still emphasizes the mastery of content knowledge mixed in with the acquisition of process skills that must be practiced over time, the Common Core nevertheless offers an avenue to pursue the ability to standardize, measure and scale educational curricula in a way never possible before. Just as the Common Core is providing a base for standardization, the TIMS, PERLS, and PISA tests represent steps towards more globalized assessments of student attainment, as do the AP (Advanced Placement) and IB exams administered internationally (Jolls 2014).

Certainly, essential questions remain: are we calling for students to learn and to be measured in the right things for the right reasons in the right way, or not? These questions will continue to be debated, and rightly so. Regardless, steps towards a more globalized approach to education may be crude, but these steps are what they are: attempts to deliver education better, faster and cheaper to more and more people. Technology is enabling experiments to identify and capture what society believes that humans need to learn, and also supports attempts to quantify whether society's enormous investment in improving its human capital is being realized (Stewart 2014). "To the extent that public delivery systems embrace market opportunities, investment in new learning tools, and new school formats, will yield improved learning, staffing and facilities productivity and make worldwide access to high-quality, cost-effective learning experiences possible" (Vander Ark 2009).

New philosophies of education are arising to meet these demands. With the advent of the Internet and social media, it is now possible to provide education opportunities that offer a radically different approach from the "factory model" of education in closed classrooms that has long prevailed. Connected learning calls for education to provide youth with opportunities to engage in socially supportive learning that is also personally interesting and relevant, while connecting academics to civic engagement and career opportunities. Additionally, core properties of connected learning experiences are described as "production-centered," using digital tools to create a wide variety of media, knowledge and cultural content, with shared purpose for cross-generational and cross-cultural learning geared toward common goals and problem-solving (Aspen Institute 2014, 31). These characteristics are closely aligned with the skills that citizens need and that employers cite as desirable for workplace readiness, such as professionalism/work ethic, oral and written communications, teamwork/collaboration, and critical thinking/problem solving (Lotto and Barrington 2006).

An example of such a learning environment in action is Learn4Life (Learn4Life 2014), a growing network of California public charter schools which serves a population consisting

primarily of high school drop-outs aged 14-23. Students who attend Learn4Life schools are all taught individually in a one-on-one setting, on a personalized track to graduation. No two students are ever alike, and their learning plans are created accordingly primarily through independent study, with an emphasis on teacher guidance in a student- centered approach. Results are highly encouraging: Learn4Life schools boast a 90% graduation rate.

From a technology standpoint, connected learning demands openly networked, online platforms and digital tools that can make learning resources abundant (Aspen Institute 2014, 31). But technology itself must also be addressed: "learners must be equipped—through computational thinking—to understand the difference between human and artificial intelligence, learn how to use abstraction and decomposition when tackling complex tasks and deploy heuristic reasoning to complex problems. The semantic web, big data, modeling technologies and other innovations make new approaches to training learners in complex and systems thinking possible" (NMC Horizon Report, K-12 Preview 2014, 5).

Students are on board with integrating technology into their classrooms: the 2013 Speakup Survey of more than 403,000 K-12 students, parents, educators, and community members reported that students are "looking for a classroom environment that more closely replicates the way they are using digital tools outside of school to support greater communication and collaboration. Furthermore, 53% of students would like for their schools to let them use their own mobile devices within instruction to support their schoolwork, and nearly 50% of virtual high school students say there were interested in what they were learning in school, while only 32% of traditional high school students said the same" (Speakup 2013).

Table 1
Comparing Curriculum Characteristics

T. Jolls / *Journal of Media Literacy Education* 7(1), 65 -71

CURRICULUM CHARACTERISTICS Factory Model Networked Model	
Closed classroom experience	Open to world, sharing with others, anytime, anywhere

Teachers delivers prescribed curricular content	Teachers use overarching frameworks to design curricula and lessons, and assigns tasks, sets parameters and guides toward results
Teacher-led focus	Student-led focus with peers
Uniquely authored curriculum	Collaboratively authored curriculum

Individual learning in class setting	Differentiated learning in collaborative setting
Information not timely	Information as of today
Linear, sequential, directive	Modular, interchangeable, 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, goal-oriented

Limited distribution physically	Unlimited distribution 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 state-wide	Individualized resources meeting standards/local needs
Often not research-based	Research-validated frameworks for inquiry and process
Access limited to print	Easily accessible digitally

Curricula a standardized cookbook emphasizing content	Curricula based on frameworks with varying relevant content
Technology discouraged	Technology essential
Seat-based	Competency-based with measurement, ie., badging, gamification

Silo thinking	Systems thinking
Hands-on deconstruction, limited construction and collaboration	Hands-on, deconstruction, construction, interaction, collaboration
Oriented to understanding	Oriented to understanding, problem solving and action

Student work discarded	Student work archived digitally
Intellectual property taken for granted	Intellectual property valued

To address these widespread sentiments and to address profound changes being called for in the world of education, the Aspen Institute recently released a comprehensive report called “Learner at the Center of a Networked World” (Aspen Institute 2014, 16). The report cites a different approach for students acquiring content knowledge—namely, that “all learners and educators need a sufficient degree of media, digital and social-emotional literacies to learn through multiple media confidently, effectively and safely. Every student must have a chance to learn these vital skills” (Aspen Institute 2014, 36).

This is not to say that content knowledge is unimportant—quite the contrary—but media literacy skills in the global village are needed as the central tools through which to contextualize, acquire and apply content knowledge. Media literacy skills are "constants" used in deconstructing and constructing communication through which to contextualize, acquire and apply content knowledge. Content knowledge is "variable," with an infinite number of subjects. Having media literacy skills, especially being able to use a consistent process of inquiry that is internalized, enhances the ability to communicate and to share ideas through a common vocabulary that transcends subject areas as well as geographic boundaries. Thus, there are no "silos" with this method for teaching and learning because the media literacy skills are cross-curricular and common to all. It is through this process of inquiry that students interrogate, acquire and master content knowledge, but both media literacy skills and content knowledge rest on a continuum of knowledge that can always be expanded and deepened (Jolls 2014).

This means that media literacy skills must be valued, articulated, and taught systematically in ways that are consistent, replicable, measurable, and scalable globally (Jolls 2012). Countries around the world have made media literacy a priority, most notably in Great Britain, where the UK regulatory agency, OfCom, has conducted research and advocated for media literacy; and in Finland, which adopted a national strategy for encouraging media literacy (Good Media Literacy: National Policy Guidelines 2013-2016). The United Nations Educational, Scientific and Cultural Organization (UNESCO) has advanced media literacy education throughout the world through its ongoing commitment to the field.

Media literacy, with its emphasis on critical analysis and media production, lends itself well to designing and organizing new curricular resources utilizing overall frameworks that support connected learning. With this in mind, the following chart compares characteristics of the "old" model for developing and distributing curricula with the emerging model characterized by media literacy education. To wit: Students' exposure and interaction with the outside world was limited to field trips or to visitors, while today, technology allows access to experts as well as powerful images, worlds and sounds connecting students with limitless opportunities for exploring and communicating.

In the past, teachers were the "imparters of wisdom," using set, prescribed curricula while today, teachers utilize frameworks to guide overall curricular goals and directions. They guide students and set the limits and boundaries necessary for students to work together and to learn. This has deep implications for how curricula are constructed. Teachers provided the "window on the world" for students, while today, students explore and discover and learn from their peers as well as the teacher. Curricula from the past was typically uniquely authored by a teacher or author; today, teachers team together to collaboratively author curricula so that there is more continuity between classes.

The emphasis in the past was individual learning and mastery, with students following the teacher in lockstep to acquire concepts; today, students learn collaboratively and yet have more opportunities for differentiated instruction. Since curricula took more time to research, publish and distribute in the past, information was often outdated before arriving at the classroom door; today, information is readily available and sharing is instantaneous. Curricula published in textbooks was necessarily presented in a linear and sequential fashion; technology allows for curricula to be presented in modules that can be interchangeable and dynamic, much like object-oriented software. Also, teachers provided instruction in a directive manner; exploration of a multitude of sources is now easily possible with an emphasis on evaluating the quality of sources. Emphasis was on content "mastery," since memorizing basic concepts and facts was critical in an environment where information access was more limited. Now, strengthening skills to access, analyze, evaluate, create, and participate with information are critically important in a world where information is easily available. The primarily emphasis of instruction in the past was on facts and content; although facts and content are still highly important (since they represent a particular discipline or information needed for problem-solving), facts and content information are readily accessible. Today, more time is spent on process skills that allow for the ready and effective acquisition and application of content knowledge to projects or problem solving.

Student-produced artifacts in the past were typically written papers or physically constructed projects; today, students are producing digitally-created, project-based, goal-oriented projects. Demonstrations of student learning, such as student artifacts, were typically limited viewing by the teacher or other students and occasionally, parents. Today, these demonstrations of learning can be distributed easily worldwide.

Due primarily to time limits, assessment was limited primarily to the teacher's feedback on students' performance. Today feedback can be quickly obtained from many people, both within and outside the classroom. Assessment data can now be easily collected and used. Because teachers were assessing the work of many students, assessment was more limited and often took much time. Technology is continuing to expand assessment possibilities through software such as "reputation" rating or comments, or badging programs. Also, assessment data can be aggregated or broken down as desired.

States "adopted" and required certain textbooks in each discipline for purchase by school districts. As states loosen regulation, schools will have the option to purchase customized resources so long as these resources meet adopted education standards. Due to (1) the cumbersome and expensive processes needed to support research-based approaches, (2) the uniquely-authored curricula generally available, and (3) the difficulty in easily distributing this knowledge and information to teachers, research-based approaches tend to be hard to find. Using research-validated frameworks that allow for modular curricular construction by a variety of

authors allows for a flexible research-validated approach while allowing for an infinite number of variations on how to engage students and promote understanding.

Access to knowledge was limited to face-to-face encounters or print publications; today, face-to-face encounters can connect a multitude of people from anywhere in the world, and information is accessible in multi-media formats that can be published globally. Due to physical limits of print media, distribution of knowledge was limited; today distribution is easily scaled to meet needs and demand. With uniquely authored curricula, presented in a physical text in a linear fashion, curricula presented a standardized "cookbook" that teachers needed to follow day by day. Today, curricula based on research-validated frameworks can be presented in a non-linear, dynamic fashion through a multitude of channels, some involving the teacher, some not.

Technology is often discouraged in today's classrooms, with cellphones and laptops being banned. Such technology will be essential in the future, both as an instructional tool and for student engagement. Completion of student education was judged by the time in seats rather than through measurements of competency, such as completion of "badges" or meeting hurdles presented through games. The increased "gamification" of curricula is a hallmark of new approaches. Each subject that students studied was confined to a class or "silo"; now, with research-based frameworks enabling integration of subjects, students can focus on problem solving that integrates various subjects and encourages a systems-thinking approach.

Because of limited access to technology tools and multi-media production, media literacy instruction has typically been limited to deconstruction activities with limited opportunities for construction (with assignments such as "write a letter to your Congressman" or "write a reflection on the role of branding in your food choices.") Access to multi-media, interactive and collaborative tools allow for a full range of media literacy instruction and collaboration. Primarily because of the classroom isolation of teachers and students, instruction was typically oriented to promoting student understanding. With technology access to the world, instruction can be oriented to both understanding and to problem solving and action. Again, because students and teachers were isolated in their classrooms with few and limited opportunities to share their work, intellectual property and student work were taken for granted and not valued (typically being thrown out at the end of an assignment). The communications and storage capacities of technology allow for teacher, student and class work to be archived and in cases where the work actively contributes to problem-solving or societal issues, valued appropriately as intellectual property.

This "retooling" of curricula and instruction in the United States is just beginning; and of course, the barriers toward such change are high, including the lack of research and development funds towards such change (Vander Ark 2009). Yet interestingly, the Eighteen Basic Principles of Media Education that Len Masterman, a professor at the University of Nottingham, cited in 1989

echo many of the characteristics of "new curriculum" at a time when the Internet hadn't yet made its appearance. For example, Masterman said, "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." Importantly, and related to the construction of curricula, Masterman advised, "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" (Masterman 1989).

But before teachers can teach media literacy, they must first understand. Media literacy education is well suited to providing the new type of curricula and instruction required. Because a media literacy approach has been outside the education mainstream, there has been little systematic exploration of how to teach media literacy effectively either in graduate schools of education or in school districts. The Center for Media Literacy has conducted various professional development workshops for pre-K-12, and these workshops have ranged from one-hour introductory overviews of media literacy to five-day intensive trainings, followed by coaching and culminating projects. CML found that some teachers quickly acquire the skills to integrate their curricula with media literacy principles; others need at least one year to make such a transition (Jolls and Grande 2005, 25-30).

Regardless, teachers need time and practice to understand media literacy frameworks, as well as how to apply them and how to teach them. For the first time, the U.S. Chamber of Commerce published a metric for whether states had a 21st Century Teaching Force; the National Council on Teacher Quality (NCTQ) based this metric on an analysis. Not a single state's teacher quality policy earned an overall grade of an A, whereas 18 states earned a D or an F. Digital Learning Now! Gave only two states an A- for technology policy, and 14 states received F's (U.S. Chamber of Commerce Foundation 2014, 26-28).

Indeed, CML's longitudinal evaluation of the delivery of its curriculum, *Beyond Blame: Challenging Violence in the Media*, (Webb & Martin 2009, 430-449) revealed just how important teacher training is. The acquisition of student content knowledge and changes in student attitudes and behaviors in the classes of teachers who were trained in a one-day professional development workshop substantially outshone their peers who delivered the same curricula without training, or who merely administered a pre-post test as a control group. Teachers need training and they need educational resources to do the job. Few, if any, presently teaching in U.S. schools grew up learning through a media literacy lens; and unless professional development is scaled up and delivered in a way that is accessible for the many rather than the few, the likelihood of transforming teaching and learning is greatly diminished.

Hopefully, the same technologies that will transform classroom practice and curricula will also transform professional development for educators. The work of developing tools and measures for teachers to deliver media literacy in a systematic, modular, consistent and research-validated way is an enormous task, given the relatively young state of the field and the challenges of using media in the classrooms. The "new curricula" helps give teachers the resources and guidance that they need to accelerate and to fulfill the global imperative for media literacy education.

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Appendix T

Promoting Media Literacy Learning: Comparison of Various Media Literacy Models**,** p. 49

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Promoting media literacy learning - a comparison of various media literacy models

Promuovere la media literacy. Una comparazione tra differenti modelli di media literacy

Daniela Cornelia Stix[1], Tessa Jolls[2]

[1] University of Cologne, Germany
[2] Center for Media Literacy, USA
E-mail: daniela.stix@uni-koeln.de; tjolls@medialit.com

Abstract. With our paper we analyze four renowned media literacy models from Ger- many, UK and USA to derive, through comparisons, the necessary core competencies which apply to all professions and that are valid across disciplines. In the results, as key-competencies, we identified critical analysis as essential to be able to act as self- determined individuals in so called mediatized societies. Further results show that media literacy learning can be developed in formal learning settings, as well as in non- formal and in informal learning settings that complement each other. Media literacy promotion is therefore a cross-disciplinary task for all kinds of professionals in the educational and social systems. With referring to the concept of mediatization, we also show the deep social impact of media on people's lives and explain why it is helpful to see media literacy learning as part of lifelong learning. We finally conclude, that the terms «teaching media literacy» and «media literacy education» are no longer applica- ble. Instead, we highly recommend the terms «promoting media literacy» and «media literacy learning». By seeing media literacy learning as a cross-disciplinary task and as a process of lifelong learning, our findings can help to unify discussions about media literacy on a global level.

Keywords: media literacy models, teaching media literacy, promoting media literacy learning, media literacy education, media literacy competencies.

Abstract. Con il nostro articolo analizziamo quattro modelli di media literacy prove- nienti da Germania, Regno Unito e Stati Uniti per confrontarli e far emergere le com- petenze chiave necessarie che possono essere applicate a differenti professioni e che tagliano trasversalmente le diverse discipline discipline. Tra queste competenze fonda- mentali l'analisi critica è stata considerata come essenziale al fine di partecipare come individui attivi all'interno delle società contemporanee in cui è forte la presenza dei media. Ulteriori risultati mostrano che l'apprendimento media literacy può essere svi- luppato in contesti di apprendimento formale, nonché in contesti di apprendimento non formale e informale che si completano a vicenda. La promozione della digital lite- racy è quindi un compito interdisciplinare per tutti i tipi di professionisti che operano nei sistemi educativi e sociali. Facendo riferimento al concetto di mediatizzazione, in

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Parole Chiave: modelli di media literacy, media literacy, media education, competenze mediali. **1. INTRODUCTION & RELEVANCE**

Almost every country has now recognized that media education is significant. Educational concepts and media literacy competence models are developed. If you look from a meta-level, you notice a certain kind of national border. Many of these national concepts and models are often only known and only received in their respective countries. Many different national models stand side by side with no reference.

With this paper we will take a first step towards crossing the border. We are going to present and com- pare two prominent media literacy models from Germa- ny, one prominent media literacy model from UK, and one prominent media literacy model from USA. These models reflect various times, purposes and backgrounds, which provide different contexts for their development. We will analyze and compare the four presented media literacy models according to World-view, Agency, Struc- tures, and Objectives. By comparing and contrasting we want to show similarities and differences as well as pos- sible mutual extensions and additions. Furthermore, we hope that at least these four models will achieve a high- er degree of international recognition, enriching both national discourse and the international discourse on media literacy promotion.

2. MEDIA LITERACY MODELS

Our sampling consists of two prominent media literacy models from Germany (four Dimensions of Media Literacy by Baacke, 1996 and Magedburger Mod- el of Media Education by Jörissen/Marotzki, 2009), one prominent model from UK (18 Principles by Masterman, 1989), and one prominent model from USA (Q/Tips and the Empowerment Spiral by Thoman, 1993; Jolls/Wilson, 2014). The models vary in regards to the times, purposes and backgrounds they were developed. We will present contexts for each of the four models and then summa- rize the core statements of the respective models.

2.1. Four dimensions of media literacy (Baacke, 1996)

CONTEXT: The model of «media-related compe- tency» was conceptually prepared by Dieter Baacke in his 1973 habilitation about communication competen- cy. According to Baacke, media literacy is a requirement for an adequate understanding of media communication tools and for self-determined usage of these. Media lit- eracy enables the user to handle the new possibilities of information processing confidently, to participate in the progress and to navigate in it. Beyond the individual, Baacke also demands media literacy practitioners to look broader and to consider the economic, social, cultur- al and technical implications of the «information soci- ety» (Baacke, 1996). In the 1990s his model was adopted more and more in science, in the (media) pedagogical practice, and in politics and became particularly famous. Baacke transferred his concept to a low-threshold proj- ect learning arrangement for future teachers. This prac- tical learning project later was used as an argument to bring the internet into schools to promote a participa- tion process. Baackes' media literacy model is the most famous one in Germany with practitioners and scientists (Baacke, 2001).

CONTENT: In Baackes' model one finds four dimensions: Media Criticism, Media Knowledge, Media Usage, and Media Production.

1. **Media Criticism means to differentiate and identify**

   existing knowledge and experiences in a reflective way. The dimension of Media Criticism consists of the sub-dimensions a) analytics (background knowl- edge to question media developments), b) reflection (relate and apply ones' analytical and other knowl- edge to oneself and one's personal actions, and c) ethics (coordinates and defines analytic thinking and reflexive reference as socially responsible).

2. **Media Knowledge means pure knowledge of today's media and media systems including the two sub- di- mensions a) informative (classical knowledge stocks:**

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journalist ethics, genres), and b) instrumental (ability to operate the new devices).

3. **The dimension Media Usage is composed of a)**

   receptive-applying (program-use competency, seeing movies demands reception skills), and b) interactive action (making use of today's multitude of options for action and interaction).

4. **Media Production is based on the fact that media are constantly changing. For Baacke media produc- tion can be innovative (further development of the media system within the applied logic) and/or cre- ative (crossing boundaries of communication rou- tines, new dimensions of design and theming).**

2.2. Eighteen basic principles (Masterman, 1989)

CONTEXT: Len Masterman is a now-retired university professor and teacher in the UK. He first perceived that media education was not about studying a particular medium or topic or content -- it was about studying the representation of a particular topic or content through media channels. «Media education is nothing if it is not an education for life» (Morgenthaler, 2010, n.pag.).

Masterman's objectives were to change views on the teacher's role, which is not to advocate a particular view – but instead should be a promotion of reflexivity and analytical skills regarding media, and one's own view. Masterman wanted to liberate pupils from the expertise of the teacher, and to challenge the dominant hierarchi- cal transmission of knowledge which takes place – until nowadays – in most classrooms (Morgenthaler, 2010). Masterman is called the first person who proposed the serious study of the mass media in schools. He developed a certain set of key ideas and concepts that provide a way of studying, in a rigorous and disciplined way, the diverse range of media content (Morgenthaler, 2010).

CONTENT: Highlights of Masterman's Eighteen Principles include some of the following statements.

– Content, in Media Education, is a means to an end.

That end is the development of transferable analytical tools rather than alternative content.

– Ideally, evaluation in Media Education means student self-evaluation, both formative and summative.

– Indeed, Media Education attempts to change the relationship between teacher and student by offering both objects for reflection and dialogue.

– Media Education is essentially active and participa- tory, 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.

– 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.

– Media Education is a holistic process. Ideally it means forging relationships with parents, media professionals and teacher-colleagues.

– Media Education is committed to the principle of continuous change. It must develop in tandem with a continuously changing reality.

– Underlying Media Education is a distinctive epistemology. Existing knowledge is not simply transmit- ted 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 knowl- edge is actively created by students and teachers.

2.3. Q/TIPS (Thoman, 1993 and Jolls/Wilson, 2014)

CONTEXT: The core concepts of media literacy were originally developed in Canada in the 1980's by leading practitioners including Barry Duncan and John Puengente, whose work was informed by Masterman's approach to media literacy education. The Canadians posed eight core concepts; these were later adapted in the U.S. to comprise five core concepts (Thoman, 1993) that describe how global media symbolic systems operate: All media messages are constructed (Authorship); Media messages are constructed using a creative language with its own set of rules (Techniques/Format); Different people experience the same media message

differently (Audience); Media have embedded values and points of view (Framing/Content); and most media mes- sages are organized for profit and/or power (Purpose). Using these concepts can afford the critical analysis of media messages in an Empowerment Spiral of aware- ness, analysis, reflection and action, an action learning model developed through the work of Paulo Freire, a Brazilian educator. Utilizing these core concepts pro- vides a common base for critical analysis of the glob- al symbolic media system, and for building pedagogy around the understanding of these concepts in acquir- ing, contextualizing and applying content knowledge. These concepts provide consistent and transferable knowledge that can be organized into a pedagogy and taught globally.

From a pedagogy standpoint, it's best to make learn- ing a process of inquiry and discovery -- something that students and teachers alike use to learn together. This adheres to Masterman's principles.

CONTENT: Jolls'/Willson's, model builds on the

previously presented concepts and summarizes them in five deconstructive key questions for media users, called Questions/TIPS (Q/TIPS):

– Authorship: Who created this message and why are

they sending it?

– Techniques: What techniques are being used to

attract my attention

– Audience: What lifestyles, values and points of view

are represented in the message?

– Framing: How might different people understand

this message differently from me?

– Purpose: What is omitted from this message?

These five deconstructing questions cannot only be used to deconstruct and analyse media but also be applied when producing one's own media products.

2.4. Magdeburger model of media education (Jörissen/ Marotzki, 2009)

CONTEXT: The German university professors Winfried Marotzki and Benjamin Jörissen published their concept of media education in 2009. Before, the German scientific community had a lively and long-lasting discussion about the terms of media liter- acy (Medienkompetenz) and media education (Medienbildung). The term media literacy is a popular term that is used (and miss-used) in praxis and theory as well as in many different professional fields (see Gap- ski, 2001, p. 30). Through his prominence the term media literacy is not very accurate and subsumes a variety of concepts which mostly have a perspective on usage practice. Whereas the less common term media education is a more heuristic one, the concept of media education is not supposed to be transferred into prac- tice and it is not didactics of media pedagogy. «Media education does not primarily refer to the media as an object -- rather, media literacy is the framework of all education» (Jörissen, 2013). As noted above, disposition knowledge is a necessary, but not yet sufficient, condi- tion of media education. It is not enough to understand how to use the technology itself; critical reflection must be part of the process that users undertake. Critical reflection is particularly required when it comes to risk structures and cultural implications of modern tech- nologies, and when questions of the possible consequences are addressed.

CONTENT (with reference to the paper *Medienbil- dung in 5 Sätzen* by Jörrissen, 2013):

1. Media education is education in a media-mediated

2. Media education is therefore not just education through the media (media literacy) and not just edu- cation with the media (elearning).

3. "Education" means changes in the way individuals see and perceive the world (and themselves) in such a way that in an increasingly complex world, they are coping with less and less predictable biographies and careers, and gaining orientation and behaving in a critical-participatory way towards this world.

4. The media essentially determine the structures of worldviews, both at a cultural and individual level: Oral cultures, scripture and book cultures, visual cultures and digitally networked cultures each bring different possibilities of articulation (of thinking, of expression, of communication, the sciences, the arts).

5. Media education is therefore the name for the fact that the world and self-relations of people with medial (or constituted) cultural worlds emerge, that they change with them - and, above all, that educa- tion

processes can produce new things: new forms of articulation, new cultural / individual perspectives and not least, new media structures.

3. COMPARING AND CONTRASTING THE MEDIA LITERACY MODELS

The following section analyzes and compares the four presented media literacy models according to World- view, Agency, Structures, and Objectives. Subse- quently, the recurring key competencies of the models will be summarized.

3.1. World-view

Each of the four models sees media literacy as a core element in what Friedrich Krotz describes as medi- atized culture (2001). While Baacke's model contains a more pragmatic view which focusses on the skills one needs to use the variety of media, Masterman, Thoman/ Jolls/Wilson and Jörissen/Marotzki turn their focus more on the individual lifelong learning. That individ- ual needs competencies to navigate his/her life as an active and participating citizen in a mediatized world. Referring Masterman, these necessary competencies will be gained through formal teacher education in schools. Education and media education are seen as inextricably linked to empower the individual in today's mediatized world.

3.2. Agency

Any of the four models aims to encourage peo- ple to take (more) responsibility and control for their own lifelong learning process (in mediatized societ- ies). Being educated in this case means a change in the way individuals perceive the world and themselves. It means to be empowered, to have gained orientation and behaviour patterns – resiliency – to be able to cope with less and less predictable surroundings (i.e. technolo- gies, biographies). Therefore content, in media (literacy) learning, is a means to an end. That end is the devel- opment of transferable analytical tools rather than an alternative content.

3.3. Structures

Despite the above-mentioned similarities, the con- cepts clearly differ in their elementary structures but also build on each other's elements. Masterman's model as well as the model of Jörissen/Marotzki both see media as mediators. Media do not reflect the world but re-pres- ent it. Therefore, media essentially determine the struc- ture of worldviews, both at a cultural and at an indi- vidual level. Following Jörissen/Marotzki, each technol- ogy brings different possibilities of articulation which, following Masterman, makes it neccessary to learn to decode media sign systems. Baacke and Thoman/Jolls/ Wilson identify several elements to explore the glob- al symbolic media system. According to Thoman/Jolls, the exploration has to question media content in terms of authorship; techniques, format and technology; audi- ence; framing and content; and purpose. In

Baacke's model these elements can be summarized in the dimen- sion of Media Knowledge in combination with the dimension of Media Critiques, that takes into account a reflection on consequences. Baacke's pragmatic model is the only one in which the way of gaining media literacy is considered (dimension of Media Production).

3.4. Objectives

The ultimate goal of all four media literacy models is to make wise choices possible. But new technologies arise and mediatized cultural worlds emerge. For this reason, existing knowledge cannot be simply transmit- ted and conventionally taught anymore. Steady personal development is required and therefore people need skills on a more abstract and transferable level. According to the models of Baacke as well as the model of Thoman/ Jolls/Wilson this should be a systematic approach that

helps all citizens to better assess and evaluate their risks and rewards, individually and in community.

3.5. Critical analytical ability as key competency

Since the models have such different structures, we found it difficult to identify consistent key competen- cies. A critical analytical ability could be identified as the core competency that is central to all four models: «media criticism on an analytical level» (Baacke), «trans- ferable analytical tools» (Masterman), «gaining orienta- tion and behaving in a critical participatory way» (Jöris- sen/Marotzki), and «provides a common base for critical analysis of the global symbolic media system» (Jolls/ Wilson).

The models of Masterman and Jörissen/Marotzki are moving on a meta-level, addressing the general mean- ing of media education. Jörissen/Marotzki remain on the theoretical level. Masterman goes further and spe- cifically mentions how teachers behave pedagogically to support the learning and maturing process. The concrete competencies of what it takes to live as a self-determined individual in a mediatized society, describes Baacke. Although Baacke's model is often depicted as shortened to the four dimensions, it also starts from the meta-level, namely the general meaning of a communicative competency. Practical instructions on how to understand the media system and thus to demonstrate a critical analy- sis are given by Jolls/Wilson with their concrete Q/TIPS. Their media literacy model is thus mainly on a level of practical formulation and recommendations for action for any kind of media usage setting and learning setting.

The comparison has, in addition to the findings above, produced further exciting meta-insights. These seem to be also of great importance to the international discourse on media literacy competencies, as they help to understand the different national frameworks to pro- mote media literacy learning.

4. MEDIA LITERACY LEARNING AS CROSS- DISCIPLINARY TASK

The comparison has shown that there are different preconditions for the promotion of media literacy in the different countries. Media literacy learning can take place in formal, non-formal or informal learning settings. Learning in a formal setting is defined as curricular learning that takes place in education institutions and leads to degrees and qualifications. For example, the teaching of media and information literacy is anchored in formal education and in libraries in the USA. In Germany, the promotion of media literacy as part of media education was recently anchored in the federal school curriculums (KMK, 2012). Previously, the promotion of media literacy learning was primarily a task of institutions in the non-formal or informal education system in Germany. By definition learning in a non-formal set- ting takes place in an organized way (e.g. in civil soci- ety organizations, groups such as youth organizations or in music and sports courses). Participant certificates are either awarded or can be assigned within existing structures. Informal learning takes place integrated into everyday life contexts. Unlike formal and non-formal learning, informal learning is not necessarily intentional learning, which is why informal learning 'outcomes' are often – individually and socially – not or inadequate-ly perceived. The professionals working in the libraries or community and youth centers can support both the non-formal and the informal media literacy learning. In Germany one finds institutions or initiatives that sup- port media literacy (e.g. youth centers, community cen- ters). People can attend computer courses or a video production course to gain media literacy competency. But media literacy learning also takes place in many infor- mal learning settings as Abrahamsson (2018) shows for public libraries, where the professionals encourage visi- tors to find a work of art no longer subject to copyright or helping visitors to use mobile banking authentication. Abrahamsson shows, that the daily routines in libraries offer many interactive opportunities with the visitors for informal learning situations. The same applies to social work, community work and youth work where people come to ask for help and support - of cause not always concerning media but probably somehow related to the problem or the solution. Therefore, it is important to see that informal learning environments «play host for both traditional tasks and newer ones» (Abrahamsson, 2018, p. 10). To support people's understanding of how to use the digital tools, always leads back to traditional tasks as source criticism.

Professionals further can be motors and role models in reflexive media usage. They could show the possibilities that social media offer for participative and creative pro- cesses. They could show how to use social media to step up and articulate needs or support others in need. They also could motivate the clients / students to expand the range of use by using social media themselves in a more active and productive way. They could be a role model and encourage questioning and thinking critically. Profession- als can offer themselves as contact persons, and be avail- able and in touch for people's urgent needs (see Stix, 2019).

To foster the international discourse on promoting media literacy learning, we think it would be helpful to

see the promotion of media literacy learning as a task for all helping professions in the social and educational sys- tem. Since the clients' / students' / visitor's lifes are highly influenced by media, media has to be taken into con- sideration in support processes for learning and helping. We recommend to see the promotion of media literacy learning as a cross-disciplinary task of all professions in the social support system. All kinds of

social helpers like social workers, teachers, librarians, community workers etc. should support people to be able to navigate a mediatized landscape and to gain the necessary skills in for- mal, non-formal and informal learning settings.

This realization led us to further considerations. The considerations concern the common English terminologies «teaching media literacy» and «media literacy edu-cation». Given that media literacy rests on a continuum of knowledge, where 'mastery' is an everlasting quest, the concept of lifelong learning is an important part of advocating for media literacy.

5. SHIFT IN TERMINOLOGY I: PROMOTING MEDIA LITERACY

With realizing that the promotion of media literacy learning is not a task for professionals in formal learning settings everywhere, we questioned the com- mon terminology of «teaching media literacy». Teach- ing is defined as activity in which «relatively complex contexts are explained to others in a longer process of argumentation» (Giesecke, 1997, p. 79). Teaching usual- ly takes place in a certain distance to everyday life as it takes place in special places and the situations are kind of artificial. But in view of a mediatized everyday life in which young people acquire the most diverse knowl- edge in informal learning processes, the most important task for the teacher is to accompany the young people in their development, so that they can develop the resourc- es and potentials they informally acquired in the organized education process. This goes hand in hand with the increasing questioning of teacher-centered teaching and the increasing consideration of student-centered learning scenarios. Teacher-centered instruction is where all the main impulses, actions and decisions come from the teacher. This is problematic as the students remain methodically and informally dependent on the teacher. They are predominantly receptive and initially limited in their criticism for lack of own knowledge and knowledge gain. In a student-centered lesson, on the other hand, learning is essentially determined by learners and their interests, questions, impulses and actions. The teacher rather assumes the role of the learning companion. The teacher turns from 'a sage on the stage to a guide at the side' and includes pedagogical actions of informing and advising. With this shift in consideration and having in mind that media literacy is a cross-disciplinary task for non-formal, informal, and formal learning settings, we saw that learning scenarios must be dialogical and no longer start from the omniscient teacher or social helper. Therefore, we strongly recommend to use the term «promoting media literacy learning» instead of «teaching media literacy», as we do already in this paper.

6. MEDIATIZED SOCIETIES AND LIFELONG LEARNING

We have already introduced the term mediatization above. At this point, we would now like to go into more detail on the underlying concept developed by Krotz and thus theoretically substantiate our thoughts in a first step. In a second step, we will show why it is important to understand media literacy as an element of lifelong learning.

Friedrich Krotz created the term mediatization (2001) to describe the phenomenon in which we realize that our societies and cultures have changed, with media being an integral part of our daily lives, and that media influence our social interaction and how we live together.

Krotz investigated how everyday life, identity, culture and society are influenced by the development of the media (Krotz, 2006, p. 62). He comes to the insight that media work in two ways. To a small extent, media have an effect on the content presented. To a greater extent, however, the media have an effect through their «communication potentials». This means that media influence people by the fact that people specifically orient themselves to media through their use of media. People orient their networks of relationships and their action spaces and produce themselves, their identity, as well as society and culture in a different way through media. People then perceive media differently and with different meanings than before (Krotz, 2007, p. 12 and Krotz, 2006, p. 62).

In other words, for Krotz, media technology devel- opments and their cultural and social consequenc- es have, above all, a social impact. The change results from the fact that more and more people differentiate their media usage habits and interests. Increasingly, they relate their social and communicative actions to a larger number of media (Krotz, 2001). According to Krotz, mediatization leads to cultural changes. He sees the technical starting point in the digitization and con- vergence of media as well as the associated emergenceof new »communication potentials« (Krotz, 2001). Peo- ple acquire media, make use of it for their own purpos- es and thus develop a self-evident everyday practice. Krotz's analysis concerning the importance of media is underlined by the vast numbers of people using media. According to the Internet World Stats (2019), there are 4.4 billion internet users all over the globe. Social media users, according to Clement / Statista (2018), stand at 2.77 billion. In the USA alone, this represents 72% of the population (PEW Research Center 2019). According to the German JIM-Study (mpfs, 2018), young people reported that they were online for an average of three and a half hours each day (mpfs, 2018, p. 31). The favorite websites and apps are currently the social media platforms YouTube, WhatsApp and Instagram (mpfs, 2018, p. 32).

This deep impact on people will continue as media technologies are changing continuously and rapidly, but this is a challenge for people to adapt to. Lifelong learn- ing is called for, to be able to transfer and adapt old knowledge to new technological and social situations. Things that used to be said across the dinner table can now find their way online and be disseminated more widely. Lifelong learning does not only concern technological skills, but such ongoing learning also concerns acquiring social skills and understanding cultur- al norms. These and other related skills are generally understood through media literacy.

Thus, we think in mediatized societies it is import- ant to see media literacy competency as part of a lifelong learning process. Media literacy is an important skill for any individual in a mediatized landscape to use media responsibly, in a considered, reflective and purposeful way suitable for one's own needs and with regard of oth- er's needs. In view of the continuously and rapidly devel- oping technologies, it takes an ongoing effort to cope with the cultural and technological changes. Assum- ing that these competencies are developed, renewed, or adapted in a lifelong learning process, they can be devel- oped in formal learning settings, but they can also be acquired in non-formal and especially in informal learning settings that complement each other.

But it is important to have in mind, that the social and educational system which provides these learning settings are mediatized as well.

6.1. Mediatized social and educational systems

Mediatization affects all social levels in which human interaction takes place. Various social and educational institutions already have embedded diverse types of media; the mediatization cause disruptive changes for social and educational institutions. Kutscher et al. (2015) illustrate this process based on their trian- gular model *Dimensions of Mediatization in Social Work*:

Starting from the three corners (clients, profession- als and organizations), the authors show the mediatized dimensions between and within the corners. For exam- ple, professionals exchange information with one anoth- er in specialist forums or via mailing lists. Professionals offer clients online advice, they show opportunities for participation and also provide them with relevant information about the organization (Kutscher et al., 2015, p. 4). The use of specialized software in processes of diag- nostics, planning, documentation and evaluation of interventions also shows the influence of mediatization in social work (Kutscher et al., 2015, p. 3f.).

Although this triangle applies by way of example to the field of social work, it can nevertheless be transferred to other social and educational institutions. The institutions must adapt to the changed conditions. They have to be prepared for the fact that the help or support peo- ple are looking for has to do with the media itself, media usage, and communication. It becomes obvious that the actions of the professionals must adapt to the changed, mediatized conditions on the one hand and on the other hand they also co-create these conditions. Mediatization creates new tasks for the professionals not only at the organizational level, but also and especially in the inter- action with the clients / students / visitors.

7. SHIFT IN TERMINOLOGY II: MEDIA LITERACY LEARNING

Consequently, in this paper we are avoiding the terms of «media literacy education», and preferably use the term of «media literacy learning». Our approach puts the (self-)learning individual at the center and not the imparting of knowledge by the teacher. We define learn- ing as an active process of acquiring new knowledge or skills or expanding it. With the term education, we associate it with a passive attitude of the educated person or as a result, based on the everyday verbal use of the word. To educate means to experience education as a 'treat- ment'. This person is therefore passive, and can be seen metaphorically as a 'container' fed with knowledge. To be educated, on the other hand, denotes the result. Both interpretations contradict our previous arguments that media literacy is part of a lifelong self-directed learning process. In German, this process is also referred to as 'self-education'. However, in order to ensure a clear con- ceptual distinction, we have decided against this term and for the concept of media literacy learning. Last but not least, education is often associated with educational institutions. With avoiding the term media literacy edu- cation, we like to illustrate and underline, that media literacy is nothing to be learned only in educational institutions. It is a cross-disciplinary task for all educational AND social institutions.

8. CONCLUSION

This paper started with a comparison of different prominent models of media literacy and ended with fundamental considerations on the appropriateness of certain terms.

The four media literacy models presented have in common that they consider media literacy to be import- ant for a self-determined life in a mediatized culture. All models therefore aim at empowering people and 'to make wise choices possible' — not only in the present but especially in the future. This means that there is a need for competencies that are also transferable to pending technological developments. Consequently, critical thinking could also be identified as a core competence of the four media competence models analyzed.

The analysis of the four models has also shown how important it is to understand media literacy learning as a cross-disciplinary task and no longer to see it as a task for schools alone. It is much more important that all areas in which people are offered social support also impart basic media literacy skills. Media literacy learning thus covers all areas of formal, non-formal and informal learning. We therefore recommend making this explicit in a terminology shift and using the term «promoting media literacy» instead of the term «teaching media literacy».

In the follow-up to the previous discussions, we argue that, in view of a constantly technologically evolv- ing mediatized culture, it is also important to consider media literacy learning as part of lifelong learning. Following on from this and the considerations above on informal learning and the role of active learners, we point out that it is also conducive to the professional dis- course to use the term «media literacy learning» rather than the term «media literacy education».

We believe that due to the different structures in the educational systems of the different countries and the consequently different classification of media literacy learning, the international discourse benefits from establishing the term «promoting media literacy learning» and we hope to have raised readers' awareness with this paper.

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Appendix U

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Appendix V

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