MEASURING MEDIA LITERACY IN A NATIONAL CONTEXT: CHALLENGES OF DEFINITION, METHOD AND IMPLEMENTATION

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ABSTRACT *General consensus among policymakers and academics is that media literacy is the ability to access, analyse, and evaluate media in multiple forms and communicate competently within these forms. Yet this seemingly straightforward definition presents methodological challenges in measurement, especially within a national context. Conceptually, approaches to measuring media literacy are often broadly inclusive, without necessarily considering how media literacy is enacted or identifying specific examples of media literate actors within daily contexts. Logistically, indicators are often defined in terms of existing data or data that can be easily collected, rather than choosing stronger measures identified through empirical research. This article examines the methodological challenges associated with measuring national levels of media literacy using the recent* Testing and Refining Criteria to Assess Media Literacy Levels in All EU Member States *as a case study. The article concludes by recommending more focused measures that account for practices, contexts, and shifting policy priorities.*

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INTRODUCTION

In 1970, when discussing low literacy rates among adults in the U.S., University of Chicago professor Helen M. Robinson argued:

Essentially the emphasis has been on ability to read for employment. Another aspect which has not created so much public concern is the gullibility of the masses *of citizens who believe political promises which are never kept; who believe rash claims for patent medicines, food products, and the like. One wonders if the* ability to read critically, and to reject unsound ideas *in print might be as important as minimal reading competence.* (Robinson, 1970: 77, emphasis added)

In the decades since Robinson issued her challenge, public stakeholder groups such as teachers, librarians, researchers, human rights advocates, policymakers, and members of industry have identified media literacy as a critical issue with the high stakes of developing and maintaining a citizenry that does not blindly accept media messages, but rather understands the context in which they are produced and questions elements such as bias, accuracy, and purpose. The increased availability of media through new technologies has additionally motivated research and policy in this area. However, media literacy research continues to face two critical challenges, one methodological and the other political.

General consensus among policymakers and academics is that *media literacy* is the ability to "access, analyse, and evaluate media" in multiple forms and "communicate competently" within these forms (O'Neill and Hagen, 2009; CEC, 2007a, 2007b; Livingstone, Van Couvering and Thumim, 2005). Critical approaches to media have been recognised as essential for an informed citizenry. Of particular importance when identifying areas for further training and education are understanding that media messages are constructed, have a purpose, may be affected by potential biases, and are subject to regulatory issues that potentially affect access (Martens, 2010; Ofcom, 2008).

What follows from this seemingly straightforward understanding of media literacy are contentious practicalities, in particular choices regarding what should be included and excluded from conceptual frameworks, how media literacy is enacted, and the context in which media literacy is developed and enacted (Catts and Lau, 2008; Jacquinot-Delaunay, 2008; Livingstone et al., 2005). This definitional ambiguity presents a challenge in terms of identifying measurable dimensions of media literacy. A majority of large-scale quantitative research therefore focuses on frequency of media use as a measurable dimension of media literacy (O'Neill and Hagen, 2009). However, if justifying the purpose of media literacy efforts as fostering a more critical populace, media use levels potentially represent only a surface measure of literate practice. While indisputably representing dimensions of media literacy, considered apart from behavioural practice such as evaluation and critical thinking, there is a risk in overinterpreting findings related to numbers of users or frequency of use.

In reviewing recent national directives and research, Brian O'Neill and Ingun Hagen (2009) caution that political pressure may lead to defining media literacy in terms of what is easily measurable, rather than addressing the complexities and challenges of

literate practice. Given pressures to promote national media literacy, but limited by time and resource restrictions, policymakers often rely on available aggregate data, such as broadband subscriptions or mobile phone accounts as proxy measures for media literacy. This approach starts from available data and how it might be applied to measuring media literacy, rather than from a starting point of determining what measures would best represent the media literacy levels of a particular population. Possible justifications are that more time spent with media leads to more proficient use or, more circuitously, that broadband subscription or mobile phone ownership reflects a certain level of technical skill, which contributes to media literacy. While partially true, usage statistics provide an incomplete understanding of a country's media literacy profile.

The UK's Office of Communication (Ofcom) provides a counter-example in developing measures to study more advanced practices of media literacy, such as understanding and content creation. Ofcom surveyed UK adults nearly annually between 2006-2012. In addition to asking about frequency of media use, respondents were also asked about their evaluation practices, e.g., how they judge whether a site is trustworthy and how they approach news information. Other noteworthy surveys, such as the Oxford Internet Surveys (Dutton, Helsper, and Gerber, 2009; Dutton and Blank, 2011) asked respondents what types of information sources they trusted in different contexts (e.g., entertainment, news, health, education). These surveys provide preliminary models for moving past a limited focus on use and toward a deeper understanding of media literate practice.

In 2007, the European Parliament adopted the Audiovisual Media Services Directive, which among other media provisions, required media literacy levels for all Member States be reported by December 2011 (AVMS, Article 33, 2007). The European Commission awarded funds to the European Association for Viewers' Interest (EAVI) to first identify indicators of media literacy and in a second study to test and refine these indicators. For the second study, EAVI formed a consortium that included the Danish Technological Institute (DTI) and the Oxford Internet Institute (OII). This article examines methodological and political challenges associated with measuring national levels of media literacy using *Testing and Refining Criteria to Assess Media Literacy Levels in All EU Member States* (2011) as a case study.

CASE STUDY

The study *Testing and refining criteria to assess media literacy levels in all EU Member States* (2011) presents a useful case since it follows a format common in research projects funded by the European Commission and similarly large bodies in terms of organisation and expectations. Additionally, many of the methodological challenges encountered by project members are similar to those identified in other European work in media literacy, such as definitional ambiguity and measurement feasibility (Bazalgette, 2008; Livingstone, Van Couvering and Thumim, 2005). Pressure to satisfy various stakeholder groups and members of the Commission also played a role in determining the definition, conceptual framework, and recommendations (Hasebrink, Ólafsson and Štětka, 2009; Buckingham,

2008). The mix of both methodological and political challenges makes this case broadly applicable to other large-scale efforts to measure media literacy.

The main objective of this study was to assess and recommend existing national-level measures that could fulfil the reporting obligation of the 2007 AVMS directive using indicators from the report submitted to the European Commission by the EAVI Consortium, titled *Study on Assessment Criteria for Media Literacy Levels* (Celot and Pérez Tornero, 2010). The report broadly addressed aspects of media literacy using theory, country-level indicators, some individual-level indicators, such as from *Eurostat* and *Eurobarometer* surveys, and a survey of media literacy experts. The framework drew from leading theory about media literacy as reported by Ralph Catts and Jesús Lau (2008), Sonia Livingstone, Elizabeth Van Couvering, and Nancy Thumim (2005), José Manuel Pérez Tornero (2004), and David Buckingham (2003). In total, the report recommended 58 indicators that included a range of measures and sources. Paolo Celot details the drivers behind the initial report in his article "EAVI Studies on Media Literacy in Europe" also in this special issue.

The scope of the study was to assess the theoretical and applied validity of the media literacy framework proposed in the 2010 report, and to provide the European Commission with a revised tool that assessed and ranked the countries in terms of their media literacy levels. The geographic scope of the study was the 27 EU Member States but also included three countries from the European Economic Area. The Commission required the Consortium to deliver a tool that measured media literacy levels across a range of ages, education levels, income levels, access levels, and geographic locations. Taking into consideration that Eurostat would likely be the major agency to statistically monitor the developments of media literacy levels in the EU, the study covered primarily the age groups between 16 and 74.

Building upon the extensive literature review and expert consultation conducted for the initial report, a thorough literature review of policy papers and academic literature was undertaken to identify definitions and methods of assessment of media literacy. Expert consultations further refined the list of indicators and methods of measurement. The initial report identified 58 indicators of media literacy. The present study assessed these indicators at conceptual and practical levels to determine precision, feasibility, comprehensiveness, and scope of the measures. Project members undertook the challenging task of narrowing the comprehensive list of indicators to a sub-set that was feasible to pursue given the potential country-level constraints of administering a large survey.

LITERATURE REVIEW OF DEFINITIONS AND METHODS

In the initial 2010 report, a range of perspectives and definitions were included in the framework. The challenge for the present study was to find a way to narrow these perspectives into a definition that could lead to measurable indicators of media literacy. Since media literacy is complex both as concept and practice, whatever definition

or framework was used needed to be flexible and broad enough to account for this complexity (Catts and Lau, 2008; Hobbs, 2006). Project members therefore used the European Commission's (2006) definition[1] as a starting point and compared it with global and pan-European research by reviewing peer-reviewed academic publications, national surveys, international surveys, policy documents, and practitioner literature.

Consistencies across the studies emerged, with most adopting phrasing from the 1992 National Leadership Conference on Media Literacy (NLCML), to "access, analyse, evaluate, and produce both print and electronic media" (Aufderheide, 1993). The UK's Office of Communication (2008) added *contexts* to their definition: "the ability to access, understand, and create communications in a variety of contexts". Livingstone, Van Couvering and Thumim's (2005) report for Ofcom provided descriptions of specific behaviours occurring within the broader categories of access, evaluation, and communication. The European Commission definition further included that media literacy "should help citizens recognise how the media filter their perceptions…empower them with critical thinking and problem-solving skills to make them judicious producers of information" (European Commission, 2006). A comprehensive literature review by Hans Martens (2010) confirmed the consistency of these concepts in global media literacy definitions. Eight key studies were used as comparators with the initial 2010 report (see Table 1). Findings from the literature review validated the use of the European Commission's definition of media literacy in the initial report and this served as the operational definition in the present study.

In addition to identifying conceptual consistency, the project team studied research methods used in prior work, with a special focus on how critical thinking was quantified in large-scale surveys. We found that critical thinking was often conflated with problem-solving, rather than defined as a critical evaluation of media messages, the latter being more consistent with global descriptions. Around the same time, UNESCO, PISA, and Eurostat were developing promising survey measures for critical thinking. In terms of method, we found Ofcom (2008, 2010a, 2010b), Activewatch Romania (Fotiade and Popa, 2008) the Oxford Internet Survey (Dutton, Helsper and Gerber, 2009; Dutton and Blank, 2011) and EU Kids Online (Livingstone et al., 2011) most useful in providing measures for critical approaches to media. Instead of simply measuring attitude (e.g., do you think there are differences in the way news is portrayed on different channels?), these surveys presented brief scenarios that solicited responses about behaviour. While serving as strong examples of many dimensions of media literacy, these surveys especially served to develop our critical thinking measures.

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[1] "Media Literacy may be defined as the ability to **access, analyse and evaluate** the power of images, sounds and messages which we are now being confronted with on a daily basis and are an important part of our contemporary culture, as well as **to communicate competently in media** available on a personal basis. Media literacy relates to all media, including television and film, radio and recorded music, print media, the Internet and other new digital communication technologies.
The aim of Media Literacy is to increase awareness of the many forms of media messages encountered in their everyday lives. It should help citizens to **recognise how the media filter their perceptions** and beliefs, shape popular culture and influence personal choices. It should empower them **with the critical thinking and creative problem-solving skills** to make them judicious consumers and **producers of information.** Media Education is part of the basic entitlement of every citizen, in every country in the world, to **freedom of expression and the right to information and it is instrumental in building and sustaining democracy.**" (Emphasis added in final report as part of analysis) http://collection.europarchive. org/dnb/20070702132253/ec.europa.eu/avpolicy/media_literacy/index_en.htm (05.12.2012).

Table 1. **Review of existing literature evaluated conceptual consistency in existing work**

EAVI Media Literacy framework		EC	Ofcom	CML	NAMLE
Environmental factors	Media availability				
	Media context				
Personal competences	Use	Access	Access/Use	Access	Access
	Critical understanding	Analyze	Understand	Analyze and explore	Analyze
		Evaluate		Evaluate	Evaluate
Social competences	Communicate	Communicate	Create communications	Express or create	Communicate
	Citizen participation			Participate	

EAVI Media Literacy framework		ACME	PIAAC	Livingstone	Martens
Environmental factors	Media availability				
	Media context				
Personal competences	Use	Access	Acquire	Basic access and ownership	
				Navigate	
				Control	
				Regulate	
	Critical understanding	Analyze	Evaluate	Comprehend	Analyze
		Interpret		Critique	Evaluate
Social competences	Communicate	Create	Perform	Create	Produce
		Communicate	Communicate		
	Citizen participation			Interact	

Studies included: European Commission, 2006; Ofcom, 2008; Center for Media Literacy, Elizabeth Thoman and Tessa Jolls, 2008; National Association for Media Literacy Education, 2007; Action Coalition for Media Education, 2010; Programme for the International Assessment of Adult Competencies, 2009; Livingstone, Van Couvering, and Thumim, 2005; Martens, 2010.

STATISTICAL VALIDATION OF INDICATORS

The media literacy framework of the initial report included 5 main categories organised under *Individual Competences* and *Environmental Factors*. These categories included: use skills (technical), critical understanding, communicative abilities, media literacy context, media availability. To account for the complexity of media literacy in practice, the initial framework included 19 sub-categories, with a total of 58 indicators (see Figure 1).
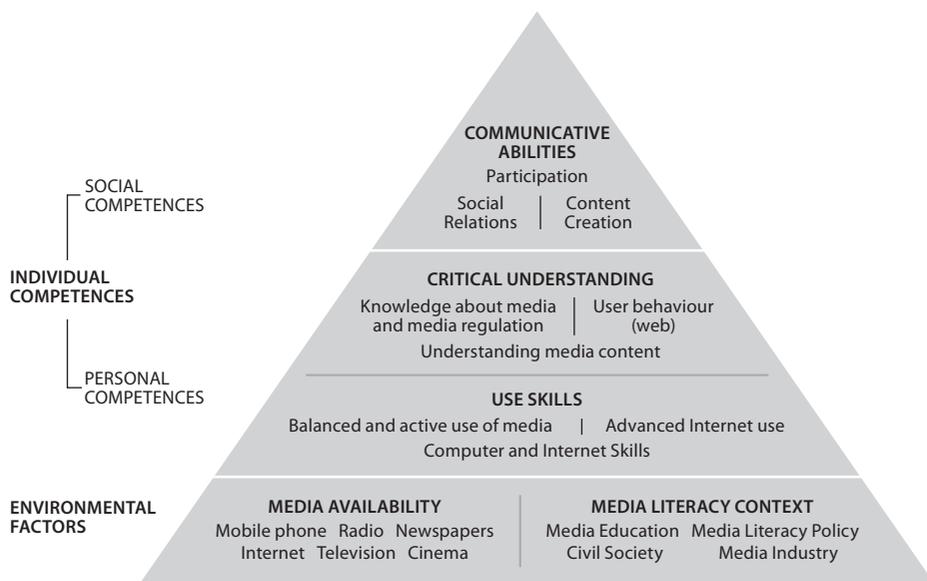
▲ *Figure 1.*
Initial media literacy framework
(Celot and Pérez Tornero, 2010)

Media literacy experts acknowledge that narrowing this complex concept into discrete measurable components is challenging (Buckingham, 2008; Livingstone, Van Couvering and Thumim, 2005) and accounting for demographic differences and the variety of contexts in which media literacy is enacted exceeds what can reasonably be accomplished in a single study. In the present study, we attempted to pair data with concepts to determine which indicators from the original framework could be feasibly measured.

Refining the list of indicators

Statistical validation involved three phases: (1) identify data associated with indicators listed in the initial report, (2) determine feasibility of measuring existing indicators, (3) identify gaps, redundancies, and make recommendations for additional indicators.

To gain a broad picture of the data available for statistical validation, we first mapped each indicator to its source data. In cases where an indicator appeared in more than one category, yet drew upon the same dataset, we noted the duplication. This preliminary exercise resulted in identifying which indicators had data associated with them.

Evaluation Criteria – A large percentage of the 58 indicators were theoretical in nature and thus did not have data associated with them. For example, of the 17 indicators within the *Critical Understanding* category, 10 had no data associated with them, six drew from national data available only for Romania or the UK, and one indicator was based on data from the OECD, which excluded six EU countries. Over time, these indicators could draw from future datasets published by *Eurostat* and the *European Social Survey*, but for this phase of the statistical validation, data were unavailable.

We next considered comparability of the diverse datasets. For example, some of the indicators were based on data that was not comparable due to collection dates (1997-2004). For instance, data about television and radio coverage based on equipment counts from 1997 were excluded because the Consortium agreed the data were outdated. We attempted to achieve comparability in the measures by using data collected within a three-year time period and available for the majority of EU member states (no less than 23).

Next, we assessed the reliability and validity of each indicator. In some cases, individual-level indicators existed, such as Eurostat's 2007 and Eurobarometer's 2008 surveys of Internet and computer skills. We identified these datasets as most useful compared with the expert ratings and broader aggregate measures. This type of data formed the core of our set of media literacy measures. These include the indicators listed within the *use skills* and *media availability* categories.

For the *Media Literacy Context* measures, the initial framework attempted to address questions of media policy and media education by surveying national media literacy experts. While important to collect feedback from experts, cross-national statistical comparison of these qualitative ratings posed serious risks to validity. Data collection involved asking one or more experts in each given country to make judgmental ratings on a number of criteria within their respective nation. Responses of experts to these questions were assigned values and weighted to form an assessment of media literacy policy and education, which subsequently resulted in a rank ordering of countries. Statistically, this data potentially posed a fundamental risk to the validity of the index, which is the reliance on the judgment of individual country experts. The problem is that these are not comparable cross-nationally. For example, an expert in Britain might have different expectations and be more negative in his/her ratings than an expert in Netherlands. So the index measured the subjective biases of raters rather than the actual levels of media literacy. Additionally, the nature of the variables (dichotomous response) differed from other variables so did not lend themselves well to comparison. This data was therefore excluded from the statistical validation.

This process highlights the challenges of moving from concept to measurement. The initial framework drew from literature review, European studies, European Commission directives, and expert input. It reflected a consensus model, with many components of media literacy accounted for, but potentially de-prioritising core components as identified by empirical research in favour of addressing expectations of various stakeholder groups (e.g., broadcast media, commerce, advocacy). In the present study, after pairing indicators with source data, we presented our preliminary findings to the Consortium, with recommendations to remove redundant indicators and consider a more focused framework.

ANALYSIS OF REMAINING INDICATORS

Drawing from existing datasets[2], we conducted correlational analysis to identify relationships among the indicators within the categories of *Use Skills*, *Communicative Ability* and *Media Availability*. As mentioned earlier, *Critical Understanding* and *Media Literacy* were necessarily excluded because of lack of existing data.

We next conducted a factor analysis of indicators within each of the three categories to identify similarities between the indicators and determine the appropriateness of grouping these measures. Full details of the statistical analysis can be found in the report *Testing and refining criteria to assess media literacy levels in all EU Member States* (2011), archived on the European Commission website[3].

CONNECTING AGGREGATE DATA TO INDIVIDUAL USE

Statistical analysis helped to illustrate the challenge in using pre-existing datasets. To perform a valid statistical analysis, we selected datasets that were comparable in data collection dates, coverage of EU countries, reliability and validity. At this stage, we did not have enough data to draw meaningful comparisons between, for example, number of televisions per household and attitudes toward truth in information presented in television programmes. Since a primary objective of this study was to identify available aggregate data that could be used to measure media literacy in EU Member States, we suggested a hybrid model of data collection.

Since individual-level data on media literacy was not yet widely collected or available for a majority of EU Member States at the time of our study, we used aggregate data as a surrogate for measuring individual competencies in the initial statistical validation. While the limitations of aggregate indicators are well known, we believed it was possible to provide some estimates on the basis of aggregate data that could be combined with individual level data and validated with selected survey data.

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[2] Datasets included Eurobarometer (2008a and 2008b), Eurostat (2010), International Telecommunications Union Report (2010), Internet World Stats (2010), World Press Trends (2009).
[3] http://ec.europa.eu/culture/media/media-content/media-literacy/studies/final-report-ml-study-2011.pdf (05.12. 2012).

For example, the initial report recommended newspaper circulation as a measure for the *Balanced and Active Use of Media* category. When considering newspaper subscriptions versus actual readership or, more importantly, how readers critically approach news articles, a hybrid model of collection could test individual use measures (such as whether a person read a newspaper that day or compared information between two newspapers) against country-level aggregate data (daily circulation). Since a concern about using existing country level data are their suitability in connection with media literacy, are newspaper circulation counts the best measure of media literacy? What this data does not tell us is how many people actually read the newspapers and whether these readers have a critical approach to the content. It is entirely possible that a single newspaper copy is read by three or more people, or none. When possible, for example, a measure such as "have you read a newspaper in the past 24 hours?" would provide more accurate data about actual use. Coupled with questions about awareness of funding of the publication, as well as its regulation, as suggested by Nicoleta Fotiade and Mihai Popa (2008) and Ofcom (2008), this measure would support the informed citizenry dimension of the initial framework. These types of questions could further measure respondents' ability to self-regulate their news and media consumption, as suggested by David Buckingham (2007) and Brian O'Neil and Ingun Hagen (2009). If a media index could be developed based on these critical approaches to news, it could potentially be compared against aggregate circulation data to determine relationships between the data and whether aggregate data can reflect individual critical use.

We acknowledged the risk of making incorrect assumptions about individuals based on aggregate data, such as newspaper circulation or broadband circulation alone. Such assumptions can promote an 'ecological fallacy' by overinterpreting aggregate data as a means to explain *how* individuals are using a resource, as well as *how often*, but most importantly, whether they are critically engaging, *understanding* the purpose of the media, potential *biases* affecting the messages, and *regulatory issues* affecting the media they access (Martens, 2010; Ofcom, 2008). Aggregate data provides data about a population, such as the proportion with access to media, but it is risky to draw inferences about any individual in the population on the basis of that aggregate. However, Bojana Lobe and Kjartan Ólafsson (2012) offer a counter-perspective, that comparing individual and country-level data additionally avoids an 'individualist fallacy' by considering country level factors that may affect individual responses. Just as drawing assumptions from aggregate data about individual media literacy levels poses risks in overinterpreting, Lobe and Ólafsson argue that forming assumptions based on individual data in isolation from country-level contexts is also risky. Thus, country-level and individual-level data can serve a complementary purpose when balanced within an analysis and have potential for providing a stronger picture of national media levels.

SURVEY DEVELOPMENT

The next step in developing a measurement tool was to create a pilot survey that would serve two important functions: (1) test critical understanding questions and (2) determine whether aggregate information, such as education, income, broadband and mobile phone subscriptions could on some level indicate media literacy levels of a particular country. To achieve these goals, we developed a survey based on the literature review and statistical validation that would yield a media literacy index, an individual score for literate practice. We could then compare these scores with the aggregate data to create a national score for media literacy.

Informed by the literature review, expert consultation, and statistical validation, the project team first developed a list of the types of questions to be included in the survey. The five categories of the initial report served as a framework for the survey. We decided to reduce the number of use questions and focus more strongly on critical engagement questions (suggested as a modification to 'critical understanding') since this was an area with limited pre-existing data. The survey primarily drew from field-tested questions from Ofcom (2008), Activewatch (Fotiade and Popa, 2008), OxIS (Dutton, Helsper and Gerber, 2009; Dutton and Blank, 2011), EU Kids Online (Livingstone, Haddon, Görzig and Ólafsson, 2011) as well as Eurostat (2006, 2007) and Eurobarometer (2008a, 2008b). Acknowledging limitations of self-report data, the survey seemed the most promising means of understanding how country-level data related to individual-level responses.

Though the Consortium had conceptually agreed to reducing the number of indicators to better focus the framework, there was disagreement about what aspects of the initial framework should be included in the survey. Discourse during this time reflected the political pressures involved in developing a media literacy measurement tool for the European Commission (Hasebrink, Ólafsson and Štětka, 2009), with some members justifying inclusion of measures based on different stakeholder groups' anticipated expectations and others arguing based on empirical grounds. In the end, the survey underwent several revisions. The pilot survey was conducted online in seven Member States (Denmark, France, Hungary, Italy, Lithuania, Poland, and the United Kingdom) with a total of 7,051 participants plus an additional oversample was conducted offline through telephone survey of 252 participants. Unfortunately, in the implementation, a critical question about Internet use was re-worded in a confusing manner, resulting in 15% of respondents to the online survey responding "never" or "don't know" to questions about whether they had ever used the internet. Since the resulting data were potentially systematically biased in unknown ways, we could not test how this individual data related to country-level aggregate data. The final report drew from a few measures asked earlier in the survey, before the internet use question and reported media literacy levels based on a combination of aggregate and individual data.

Even without the desired comparison between country-level and individual data, the process of consulting experts, engaging in an extensive literature review, analysing existing aggregate measures related to media literacy, and developing the survey, did yield interesting insights into potentials for future measures. Additionally, the study complemented ongoing studies of media literacy through project members' participation in discussions of national measures across Europe. Discussed in the next section are main findings and recommendations resulting from the study.

RESULTING RECOMMENDATIONS
FOR CROSS-NATIONAL SURVEY MEASURES

The process of developing and administering our tool for measuring media literacy in EU member states informed recommendations for further development. A common challenge in measuring literacy generally and media literacy in particular is refining the scope of possible indicators. Since media literacy is part of everyday life and is associated with a variety of influences, contexts, and actions, surveys alone cannot provide a comprehensive assessment, but do provide interesting insights into individual's attitudes toward the media and perspectives on their use.

Pair questions about attitude or perception with action

Compared with data collection methods such as observation or recording actual behaviour, surveys are inherently limited to self-reporting. A majority of questions in the surveys we reviewed queried attitudes toward use or perceptions of use, without further measuring implications in terms of actions taken or inaction. The current tool advances these measures by pairing measures of attitude with resultant action.

For example, a question in the pilot survey asked, "Do you believe there are differences in the information presented on different TV channels?"

If users responded "yes," a follow-up question asked:

Q5. When you notice such differences, do you usually...
a) Disregard or ignore them.
b) Try to compare with information elsewhere (e.g., books, encyclopaedia, another TV channel, newspaper).
c) Ask friends or family members for their opinion.
d) Ask an expert or specialist.
e) Share concerns with a civic or social organisation.

Thus, the measure starts to assess the depth of response to the first question. The respondent who notices differences but ignores them may not be aware of options for seeking additional information to compare disparate information, or possibilities for reporting discrepancies.

Another example question asked "How interested would you say you are in politics?" Responses ranged from "not all interested" to "very interested" on a 4-point scale. The follow-up question paired this interest with action:

Q7. In the past year, have you done any of the following? (Yes/No)
a) Contacted a politician or political party.
b) Donated money to a political organisation or group.
c) Sent an e-mail or message supporting a social or political cause.
d) Commented on a political or social issue in a blog post, on twitter or on a social networking site.

Responses to this question attempt to move beyond measuring political interest into determining levels of engagement.

A modular approach to measuring media literacy

Given the breadth of contexts and behaviours associated with media literacy, a simple 20-minute survey, no matter how well-designed[4], cannot provide the comprehensive measures necessary to inform policy and thus make recommendations for funding allocations in the areas of education and training or regulation in terms of access and availability.

Based on lessons learned from developing our pilot survey and on consultations with experts regarding the challenges of measuring media literacy, we recommended a modular approach. Attempting a comprehensive measure within a single survey is neither feasible, nor recommended. To achieve both breadth and depth, we recommended (1) a survey that focuses on core issues of media literacy that are regularly measured and (2) developing a rotating portion of the survey that focused on specific components of media literacy and could be flexible to adapt to new findings or priorities. For example, the modules could focus on media literacy as practiced in the workplace, home, or schools.

Figure 2 presents an overview of contexts and competencies associated with media literacy. Here, media literacy (middle rectangle) is an outcome of individual and national contexts. Individual contexts that affect media literacy include age (Livingstone and Helsper, 2006), income, education, gender, and location (Martens, 2010). National contexts that potentially affect an individual's demonstration of media literacy include culture and policy, as well as industry (O'Neill and Hagen, 2009). Media education provides awareness of media organisations' influence and control over broadcast messages and tools for interpreting these messages and determining the underlying values motivating the actions (Buckingham, 2003; Bazalgette, 1989).

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[4] Additional note about survey design: The possibility of respondent fatigue (resulting from too many questions or questions that are complex or confusing to answer) further constrains survey design as does the need to keep the wording of questions straightforward enough to increase accuracy of responses.
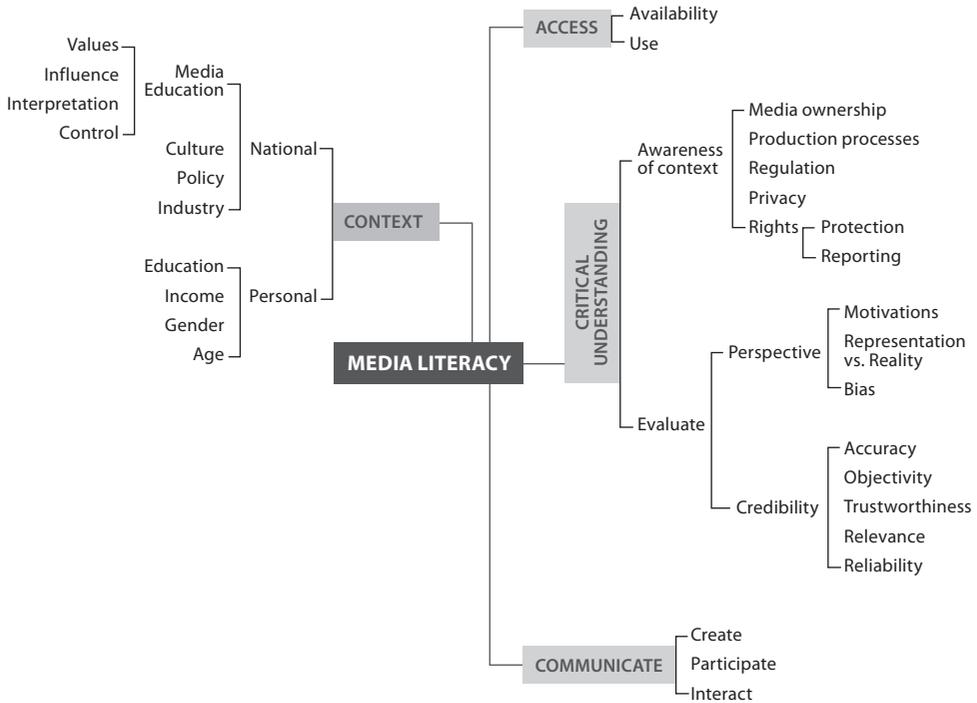
▲ *Figure 2.*
Overview of media literacy contexts and competencies

The competencies shown here reflect those identified in the initial report and supported by further review and expert consultation. In particular, the competencies correspond with the definition of media literacy developed by members of the Media Literacy Expert Group convened by the European Commission (2011).

Figure 3 shows the areas that were consistently identified as core areas of measurement in media literacy as supported by the literature review and expert consultation (in bold font). A majority of these elements represent a low response burden because they ask demographic information, for example, age and income in the case of personal context.
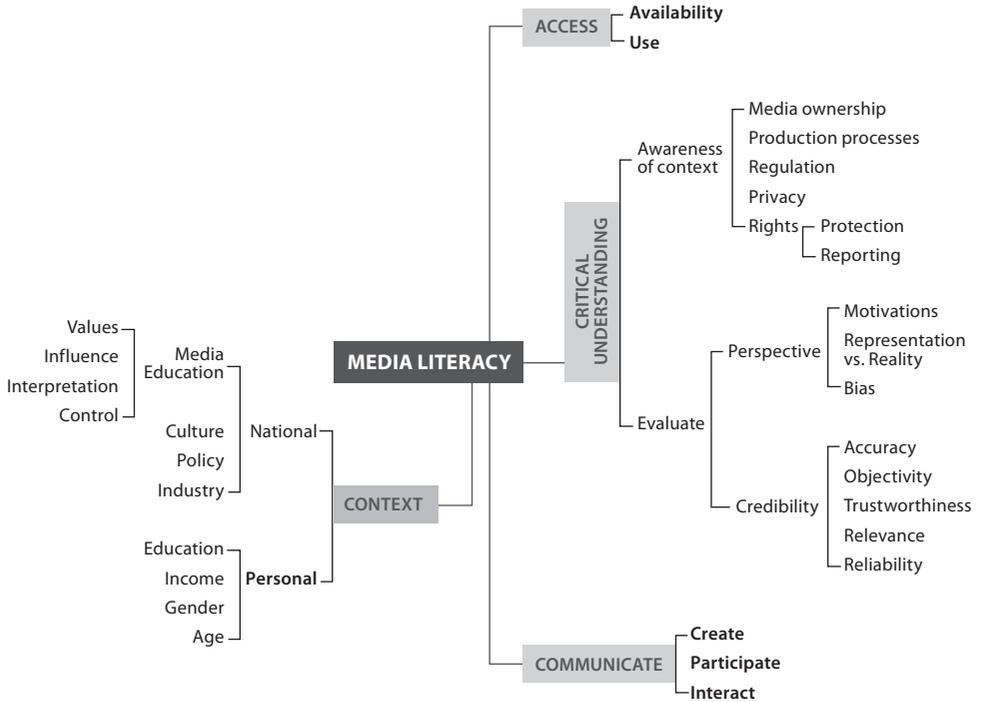
▲ *Figure 3.*
Core areas of measurement
(Personal demographics, Access, Communicate)

    Figure 4 shows the areas recommended as rotating components of the survey (in bold font). These components measure critical understanding, requiring deeper thinking on the part of the respondent. For example, these questions address awareness of bias in the media, or an understanding that lifestyles or body images presented on television may not accurately reflect real life. More depth of information can be gained by focusing on different modules of the framework rather than attempting to measure all in a single survey.
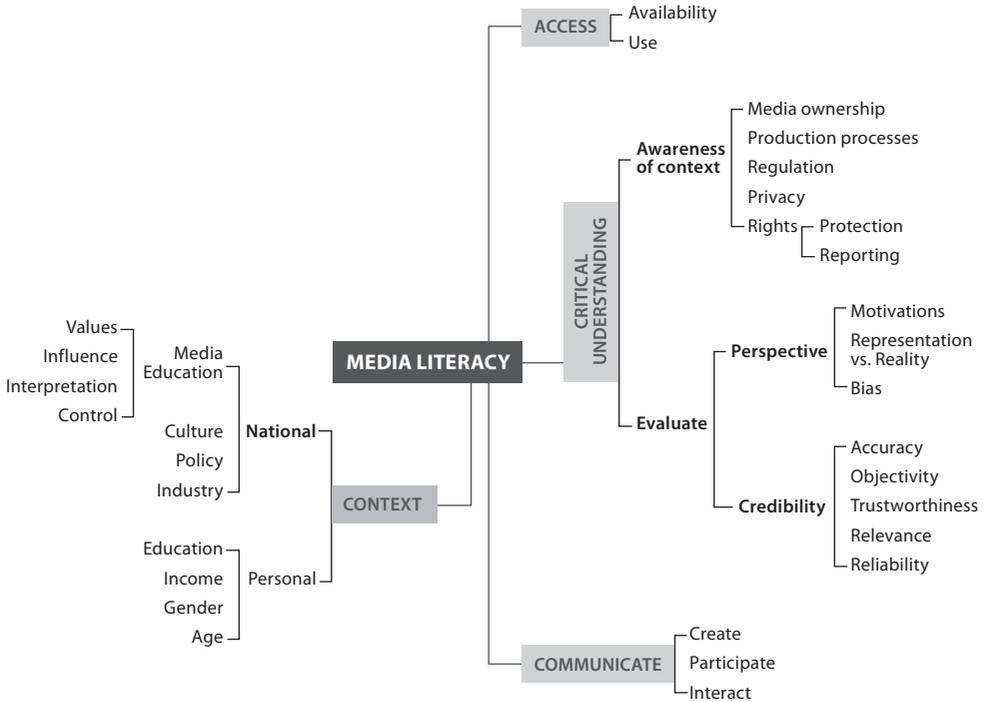
▲ *Figure 4.*
Rotating Components
(Critical Understanding, National Context)

Also illustrated by Figure 4 are a rotating component of questions related to the national context. Understanding the cultural, regulatory, economic, and educational context in which media literacy is developed and enacted is essential to further developments in policy and training. A rotating survey addressing context can allow for more in-depth exploration of the national context's resultant effects on media literacy.

Recommended implementation

We recommended a 5-year period in which the rotating survey could take place in Member States to collect in-depth responses to questions related to critical understanding and awareness of the national media context, while also measuring annual changes in access, use, and participation. Collecting and analysing data on diverse aspects each year would gradually develop a concise list of indicators and identify core media literacy measures by the end of the 5th year. It would at the same time prompt targeted policy making on the specific annual topic. In the sixth year, Member States could start reporting along concise, key policy indicators. This period would drive different research opportunities each year in Europe on media literacy, would allow streamlined funding dedicated to media literacy, and would also help Member States to prepare the necessary platforms of cooperation with the different stakeholders and the media industry for data collection.

Outcomes

While fulfilling the reporting obligations of the AVMS directive, to date no Member States have used the tool. A commissioner in the DG Information Society and Media Unit was not certain why the tool had not been used. The European Commission was not aware of countries using their own indicators to measure media literacy levels, with the exception of the United Kingdom's Ofcom. Lack of use seemed to be related to media literacy not being a funding priority (2012).

CONCLUSIONS

Cross-national media literacy efforts seem to be as Robinson (1970) described literacy efforts 40 years ago: a general concern, generally addressed by governmental directives, 'impassioned addresses,' and limited piecemeal funding. Efforts lack a systematic approach that would identify specific problems and delegate responsibility for specific solutions. As Robinson (1970) warned: "These problems cannot be solved by a few over-burdened leaders in the field, nor by a few conscientious teachers, nor by a limited number of adequately trained researchers..." (Robinson, 1970: 77) yet, for the most part, this is precisely the approach evident in ongoing media literacy efforts (Bazalgette, 2008; Buckingham, 2008; Jacquinot-Delaunay, 2008; O'Neill and Hagen, 2009). Despite a multi-stakeholder approach advocated by Divina Frau-Meigs (2006) and Livingstone, Van Couvering and Thumim (2005), media literacy efforts continue to stagnate.

A consistent challenge in cross-national initiatives is that often stakeholders are grouped together in projects without a strategic plan for maximising expertise (Hasebrink, Ólafsson, and Štětka, 2009; Bazalgette, 2008). Involving diverse groups in European projects means that members bring unique and varied perspectives, potentially direct experience with stakeholder groups, or specialised practitioner knowledge. A potential drawback is a clash of expectations. Several media experts have addressed potential

conflicts between the expectations of different stakeholder groups and how these may run counter to media literacy research and education programming (Bazalgette, 2008; Buckingham, 2008; Jacquinot-Delaunay, 2008; O'Neill and Hagen, 2009). Cary Bazalgette (2008) describes the risks in convincing policymakers and industry leaders to invest resources in promoting media literacy at the potential expense of well-designed research and curricula. Related to Bazalgette's concerns are assumptions held by the different groups about the aims and methods of their collaborators.

A further challenge for cross-national research and policy initiatives is uneven expertise in terms of quantitative and qualitative methods of research. Isis Hjorth (2009) provides interesting insights into these fundamental differences in approach. She quotes a member of the European Commission's Media Literacy Expert Group referring to "unevenness in membership of the group" (Hjorth, 2009). This member described the process of developing a definition of media literacy:

There are all kinds of unevennesses, disagreement… one unevenness is the membership of the group… there are academics like ourselves from different countries, there are media educators from outside the academic world…there are representatives from the industry, who in my view are not necessarily media literacy experts. I mean they might be experts in the production of newspapers or whatever that might be, but that doesn't mean they know very much about what we would consider to be media literacy. (Hjorth, 2009: 27)

This unevenness in expertise can potentially lead to differences in expectations and disagreements regarding quality metrics, data collection, and potential bias when developing frameworks or analysing and reporting findings. These differences in expectations and assumptions are a challenge inherent in working across specialisations, cultures, perspectives, and experiences.

Given the conceptual complexity of media literacy, initiatives face challenges on several levels, in particular methodological and political. This case study provides an example of attempts to pair theory with data and further pair national-level aggregate data with individual data. It highlights methodological challenges and attempts to overcome them while also addressing political challenges facing media literacy initiatives. Despite its troubles, (as described in Livingstone and Wang, 2013), the UK's Ofcom provided a strong example of both a strong media literacy measurement tool and effective stakeholder involvement. Ofcom consistently involved stakeholders and media literacy experts in discussions of their findings and future plans, creating a space for active dialogue. International efforts such as UNESCO's media literacy programme and EU Kids Online, among others, additionally provide examples of strong measurement tools resulting from a network of experts. As resources for the study of media literacy continue to diminish, a promising direction would be for these efforts to join up and pool their data and collected expertise.

How can the tool developed in the case study contribute to future joining up of media literacy research efforts? The tool drew upon existing field-tested questions as part of a

larger framework developed in consultation with media literacy experts. The framework is consistent with UNESCO's structuring of media literacy in terms of individual and environmental contexts and with most European studies of media literacy. It may suffer from being too inclusive. By including so many indicators in the framework, identifying what truly defines media literate practice is potentially difficult; however, since literate practice varies with context and purpose, the tool provides flexibility in measuring different aspects of practice. The main contribution of this tool is the modular framework, which could provide a means of measurement for different countries or organisations that accommodates shifting priorities and concerns.

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M. E. Bulger : MEASURING MEDIA LITERACY IN A NATIONAL CONTEXT: CHALLENGES OF DEFINITION...

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MJERENJE MEDIJSKE PISMENOSTI U NACIONALNOM KONTEKSTU: IZAZOVI DEFINIRANJA, METODA I PRIMJENE

Monica E. Bulger

SAŽETAK *Političari i znanstvenici dijele mišljenje da je medijska pismenost sposobnost pristupanja, analize i vrednovanja medija u različitim formama te kompetentna komunikacija unutar tih formi. Ipak, ta definicija koja se čini preciznom predstavlja metodološke izazove u mjerenju, posebno unutar nacionalnog konteksta. Na razini teorije pristupi mjerenju medijske pismenosti često uključuju mnoge aspekte i elemente, bez nužnog razmatranja kako je medijska pismenost usvojena ili identificiranja konkretnih primjera medijski pismenih aktera u svakodnevnim kontekstima. U praksi su pokazatelji često definirani postojećim podacima ili podacima koji se mogu lako prikupiti, a ne odabirom jačih mjera koje su identificirane kroz empirijsko istraživanje. Ovaj članak istražuje metodološke izazove povezane s mjerenjem medijske pismenosti na nacionalnoj razini koristeći kao studiju slučaja nedavno objavljeno "Ispitivanje i ponovno definiranje kriterija za procjenu razine medijske pismenosti u svim zemljama članicama EU". Na kraju se predlažu preciznije mjere koje se odnose na praksu, kontekste i promjenu političkih prioriteta.*

KLJUČNE RIJEČI
MEDIJSKA PISMENOST, OBRAZOVANJE ZA MEDIJE, KRITIČKO MIŠLJENJE, METODE ISTRAŽIVANJA PISMENOSTI

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