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Converging Traditions of Research on Media and Information Literacies: Disciplinary, Critical and Methodological Issues

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The Convergence of Literacies

New communications and information technologies pose significant challenges for their users. They require the rapid development and continual updating of a diversity of skills, competences and knowledge, from the already-familiar to the very-new, and from the most basic to the highly sophisticated. In academic research, these skills and knowledge requirements are increasingly framed in terms of "literacy". In this chapter, we map out a research agenda on new literacies. In so doing, we draw together the traditions of media literacy and information literacy.

As broadcast, audiovisual, and print media converge with telecommunications, computing, and information systems, research on media literacy and information literacy could hardly remain separate. Indeed, despite their contrasting disciplinary backgrounds, theories, and methods, these research traditions have an increasingly similar object of inquiry: the public's understanding of and effective engagement with media, information and communication technologies of all kinds. We advocate a converged or at least dialogical concept of media and information "literacies", arguing that each tradition has much to learn from the other, although we accept that some differences must remain.

The term "literacy" itself may need some defense, being often contested, seemingly restricted to a past world of print, and stigmatizing of those who lack it. We would point the reader to historical and contemporary debates about print literacy (Kintgen *et al.*, 1988; Luke, 1989), to the broad literature on 'reading the world' (Freire & Macedo, 1987), and to the fast-growing field of digital- or cyber-literacy (Kress, 2003; Tyner, 1998; Warnick, 2002). Williams (1983) traces the historical emergence of the term 'literacy' from 'literature'. 'Literature' once combined the adjectival meaning of being discerning and knowledgeable according to the 'standards of polite learning' with the noun which describes a body of writing of nationally-acknowledged aesthetic merit. Today, 'literature' refers to the latter alone, with its own adjective, 'literary', while from the end of the nineteenth century, 'literacy' (and its adjective, 'literate') "was a new word invented to express the achievement and possession of what were increasingly seen as general and necessary skills" (p. 188), this becoming necessary as the ability to read spread beyond the elite, resulting in ever more people with the skills to read but who were not familiar with the literary canon. Hence, with the rise of mass literacy, many people became literate but not literary, and the uses of literacy became increasingly subject to regulation (Luke, 1989); we see a similar process occurring today with new forms of media.

Technologies never stand still and, therefore, nor do the literacies associated with their use. While some scholars prefer to introduce new terms to characterize these supposedly new skills (e.g., "digital literacy", "cyber-literacy", "internet literacy", "network literacy"), others emphasize the continuities between old and new media and information communication technologies by extending the term "media literacy" or "literacy" in general to encompass a converged concept of media and information literacies. We favor the latter approach, for this invites us to seek out continuities and to examine claims to "newness" carefully, rather than to endorse a proliferation of new terms.

Such questions are pressing not only in academic discussions. In policy circles also, the notion of literacy is coming to the fore. In the UK, Section 11 of the Communications Act (2003) establishes a role for the communications regulator, to "promote media literacy" among the UK population, for "through confident use of communications technologies people will gain a better understanding of the world around them and be better able to engage with it" (Ofcom, 2004b, paragraph 3). Ofcom defines media literacy as "the ability to access,

understand and create communications in a variety of contexts". Media literacy is also being addressed at the European level, with the Council of Europe agreeing "to give special encouragement to training for children in media literacy, enabling them to benefit from the positive aspects of the new communication services and avoid exposure to harmful content" and therefore to "support steps to promote, at all stages of education and as part of ongoing learning, media literacy which involves active and critical use of all the media, including electronic media." (Council of Europe, 2005). Internationally, attempts are being made to construct a cross-national measure of ICT literacy to guide policy developments (Educational Testing Service, 2002).

As the public's ability to access, navigate, critique and contribute to the contents and services available via information and communication technologies becomes ever more important, policy-makers are seeking to extend media literacy to cover new media and information literacy to cover new information technologies. Further, a range of new kinds of literacy are being proposed (for example, financial literacy, computer literacy, health literacy), along with increased attention to cognate skill domains of importance to public policy (for example, citizenship, public understanding of science, consumer awareness). For example, a recent comprehensive review of health literacy carried out by the National Consumer Council on behalf of the UK's Department of Health, gave a definition of health literacy that parallels definitions of media and information literacy, namely: "the capacity of an individual to obtain, interpret and understand basic health information and services in ways that are health-enhancing" (Saranjit & Lennard, 2004).

Central to any discussion of literacy is the question of purpose. What is the purpose of media literacy, information literacy, or any other literacy, and why do they matter? From the literature discussed in this chapter, we draw out three broad purposes to which media and information literacies may contribute. These purposes also, though often only implicitly, drive the policy debates over literacy. First, democracy, participation and active citizenship: in a democratic society, a media and information-literate individual is more able to gain an informed opinion on matters of the day, and to be able to express their opinion individually and collectively in public, civic and political domains, while a media and information-literate society would thus support a sophisticated, critical and inclusive public sphere. Second, knowledge economy, competitiveness and choice: in a market economy increasingly based on information, often in a complex and mediated form, a media and information-literate individual is likely to have more to offer and so achieve at a higher level in the workplace, and a media and information-literate society would be innovative and competitive, sustaining a rich array of choices for the consumer. Third, lifelong learning, cultural expression and personal fulfillment: since our highly reflexive, heavily mediated symbolic environment informs and frames the choices, values and knowledge that give significance to everyday life, media and information literacy contributes to the critical and expressive skills that support a full and meaningful life, and to an informed, creative and ethical society.

The premise of this chapter is that, as theoretical conceptions of literacy both proliferate and converge (see the Introduction to this volume), research can benefit from a parallel convergence among research methods and methodologies. For the most part, different approaches to literacy draw on the broad knowledge base of social science methodology, and each must contend with critical debates over epistemology, research methods and disciplinary differences. While not presuming at the outset that convergence is necessarily "a good thing", though we suspect that it will prove to be so, such convergence is, in practice, taking place. Thus we take the opportunity in this chapter to consider the

methodological preferences, assumptions and dilemmas faced by different research traditions on literacy.

Our focus is on two dominant approaches, media literacy and information literacy. What can each tradition learn from the other? Are they compatible? What methods and directions should be prioritized? In what follows, we compare these approaches in terms of definitions, origins, focus, methods, findings and purposes, our aim being to sketch the agenda for research on these converging literacies.

Defining Media Literacy And Information Literacy

What lies behind these rather different yet now converging approaches to literacy? Media literacy has been defined and developed primarily in relation to well-established audiovisual media. Information literacy has been defined and developed more recently in relation to digital systems of representing and distributing information. Both draw on the longer tradition of researching print literacy.

In reviewing recent research on media literacy, Potter cites over twenty definitions (Potter, 2004). Many of these broadly concur with the clear and concise definition proposed by the National Leadership Conference on Media Literacy held in the USA in 1992: “The ability to access, analyze, evaluate and communicate messages in a variety of forms” (Aufderheide, 1993; Christ & Potter, 1998). Some differences of opinion persist, for example, over whether media literacy should be conceived as an individual accomplishment or a social and cultural practice, how much emphasis should be placed on critiquing the media, and whether media literacy is better achieved through education or citizenship initiatives (Buckingham, 2005; Hobbs, 1998; Livingstone, 2004).

Parallel definitions have emerged for information literacy in the context of computers and interactive media. A UNESCO-funded multinational gathering of experts organized by the US National Commission on Library and Information Science and National Forum on Information Literacy stated that “information literacy encompasses knowledge of one’s information concerns and needs, and the ability to identify, locate, evaluate, organize and effectively create, use and communicate information to address issues and problems at hand” (Information Literacy Meeting of Experts, 2003). Also known as *The Prague Declaration*, this document describes information literacy as “a prerequisite for participating effectively in the Information Society” and “part of the basic human right of life long learning”. In the UK, the Department for Education and Skills’ White Paper, “21st Century Skills, Realising Our Potential”, makes a similar commitment to help adults gain ICT skills as a third skill for life alongside literacy and numeracy, in order to “learn effectively online, become active citizens in the information age and …contribute productively to the economy” (Office of the e-Envoy, 2004: 11).

The way these parallel definitions and priorities have developed is perhaps not surprising. Media technologies are becoming more and more computerized (for example, digital television and digital radio). At the same time, computers are able to contain more media content (for example, streaming video delivered online). Thus the boundary between “information” and “media” is blurring, as are the ways in which people use technologies at work, at home, in education, in communities, as people integrate old and new media and information services in their everyday lives (Livingstone, 2002; Silverstone & Hirsch, 1992). An obvious example is people’s use of the internet at different and overlapping moments to find information, listen to digital music radio, participate in informal learning opportunities, and communicate with others.

Contrasting Media Literacy and Information Literacy Traditions

The parallels in the definitions of the two terms, media literacy and information literacy, are evident. Yet there are some crucial differences and, as the approaches converge, these pose a challenge to future research. One contrast lies in their theoretical focus, which precedes and also frames methodological decisions. In general, the media literacy tradition stresses the understanding, comprehension, critique and creation of media materials, whereas the information literacy tradition stresses the identification, location, evaluation and use of information materials. Metaphorically, we might say that media literacy sees media as a lens or window through which to view the world and express oneself, while information literacy sees information as a tool with which to act upon the world. Media literacy, then, aims at correcting the flaws in the glass. Information literacy, instead, aims at increasing the accuracy of the hand wielding the tool.

Both metaphors are problematic. The window metaphor has been criticized for its naïve realism, for asserting a "reality" against which bias in media representations can be assessed. Traditionally, a critical analysis of media content has relied on identifying a contrast between the media's view of reality and the daily experiences of the audience (Philo, 1993; Gamson, 1992; Gerbner *et al.*, 1996). However, as all experience becomes mediated in one way or another, it is unclear how to "distance" oneself from a mass mediated world view or to rely on "unmediated" experience in order to critique the media. This suggests the need for a more complex approach to critical literacy. The tool metaphor receives criticism for its instrumentalism, tending to reduce questions of *how* people gain information to the simpler questions of *whether* they have access to information and *how well* they have understood it. It is also problematic that both metaphors are pitched at the level of the individual (or aggregate of individuals), making it difficult to encompass the macro level of analysis (the "literate" society, the critical public sphere, the literacy requirements of democracy, etc.). Part of the promise of rethinking these traditions of research in a converging communications environment is to respond to these critiques in moving forward.

It is not surprising that, following these different theoretical foci, the research questions typically asked within the two traditions also differ. Information literacy research has attended more to questions of access, while media literacy research has paid more attention to questions of understanding. One reason for this is that the media literacy agenda was developed primarily in relation to media for which access has not, hitherto, been a significant problem (terrestrial television and radio). Indeed, it was precisely the widespread accessibility of broadcasting that led to concerns over the power of the media to dominate, since television tells "most of the stories to most of the people most of the time" (Gerbner *et al.*, 1986: 18). The consequence was a framing of literacy as critical distance from mediated messages. However, as the media and information environment diversifies, additional conceptions of literacy – especially concerned with access and inequality – now come to the fore (Murdock *et al.*, 1995).

The information literacy tradition, on the other hand, has developed primarily in relation to media that have been far from accessible, both because they are unequally distributed and because typically they are complex to find or use. Questions of barriers and enablers to access have, therefore, been foregrounded, spawning initiatives to increase diffusion and enhance equality of distribution. While important, this has distracted attention from critiquing the information sought. These different research questions have led to different methodological choices, a point we develop below.

The Origins Of Media Literacy and Information Literacy

First, we consider the disciplinary origins of these two literacy research traditions in more detail, for the empirical findings and methods we discuss next flow from these origins. Work on media literacy comes from the field of media studies, although much of the work has been applied and evaluated within an education research context, often focusing on children. However, the very notion of a *field* of media studies is problematic since it draws on two distinct traditions, the humanities and the social sciences (Levy & Gurevitch, 1994). In 1995, Corner identified "the knowledge problem" facing media studies thus:

> The arts and social science combination in media studies is essentially one which brings together "criticism" and "sociology" as modes of academic knowing. Criticism is a mode privileging individual percipience, in which knowledge is the product of sustained academic attention and intellection. [..] Sociology, on the other hand, in its classic and defining empirical project, is essentially a mode privileging method (Corner, 1995:148 -149:148 -149).

This "knowledge problem" continues to challenge media studies because of the (laudably) interdisciplinary nature of the field (Schroeder *et al.*, 2003). In relation to media literacy, the knowledge problem takes a particular form. Those more influenced by the arts and humanities see media literacy as a route to enhancing the public's appreciation of, and ability to contribute creatively to, the best that the cultural and audiovisual arts have to offer. The focus is on pleasure and interpretation, creativity and diversity, originality and quality (Bazalgette, 1999; Buckingham, 2005; Kress, 2003; Sefton-Green, 1999). By contrast, the social science approach sees media literacy as a form of defense against the normative messages of the big media corporations, whose commercialized, stereotyped, unimaginative and parochial world view dominates mass culture in capitalist societies (Hobbs, 1998; Kubey, 2004; Potter, 2004). The focus is therefore on uses and gratifications, influences and cultivation effects, and everyday cognitive and social mediations of mass culture. Clearly, different evaluations of the media themselves are at stake here, with the media being seen, on the one hand, as having the potential to enhance cultural value and, on the other hand, having the potential to undermine social values (Buckingham, 1989; Hobbs, 1998).

Our second tradition, information literacy, has been hailed as "a major focus and purpose of librarianship, an achievement that took a decade of work" (Marcum, 2002: 1). Its conceptual foundations lie in information processing; on how symbols become information and how information, in turn, becomes knowledge (Bawden, 2001; Marcum, 2002). Drawing on cognitive psychology, this approach has spawned a range of experimental studies in which tasks are performed and user reactions tested and tracked (Church, 1999; Hölscher & Strube, 2000). It also investigates users' attitudes and beliefs, and has developed psychological instruments to measure literacy (Richter *et al.*, 2001; Turner *et al.*, 2000).

Information literacy is linked historically to computer skills and computer literacy, and so research also examines people's (generally, adults') ability to manipulate hardware and software in order to find information efficiently and effectively. The related field of human-computer interaction (HCI), although it may not mention the concept of information literacy explicitly, treats literacy as an interaction between skilled users and well-designed interfaces. However, there are other kinds of influences in information literacy, particularly from educationalists and librarians who have been instrumental in distinguishing technical skills from information skills (Brown, 1999). Some discuss people's motivation and the appropriateness of content as a key barrier, rather than technical skills. Still others focus on

problems of comprehension, understanding, and weighing information (Britt & Gabrys, 2002; Tuathail & McCormack, 1998).

These different areas of information literacy studies overlap in practice. One common feature is that most studies are couched in a context of work and competitiveness, either personal or national (Bruce, 1999; Clausen, 1997). The information-literate person is able to participate in the world of work, for example by being an "information worker" or a "knowledge worker". Conversely, the person who lacks information literacy risks being undervalued by or excluded from an increasingly competitive, information-oriented labor market. In this respect, information literacy research differs from that of media literacy although, recently, arguments for media literacy begin to stress the economic value to a nation of a skilled creative workforce for its cultural industries.

Research And Social Critique

It is clear from these short characterizations that while they address broadly the same theme, media literacy and information literacy do so from different standpoints. The language of skills and abilities, everywhere to be found in information literacy discussions, is rarely present in media studies, being considered psychologically reductionist, neglecting the important ways in which actions are culturally and historically conditioned. As Hartley (2002: 136) argues:

> [L]iteracy is not and never has been a personal attribute or ideologically inert "skill" simply to be "acquired" by individual persons... It is ideologically and politically charged – it can be used as a means of social control or regulation, but also as a progressive weapon in the struggle for emancipation.

Similarly for McChesney (1996: 100), the risk is that a focus on literacy distracts cultural critics from questions of power for, as he puts it, the question is less what people do with the technology than "who will control the technology and for what purpose?" In contrast to the strong focus in information literacy research on the individual, this critical perspective directs research towards an integrated analysis of production, text (or technology) and audiences (or users) (Livingstone, 1998). In media literacy research, all actions are seen as contextually dependent, and there is little attempt to discern levels of competence underlying observable performance, something that is a priority in information literacy research. Reflecting not only the importance of contextualism but also the discursively constructed nature of cultural contexts, Agre (2004: 28) attacks the information sciences thus:

> [T]he great naiveté of computer science …[is that it imagines itself] to operate on domains rather than on discourses about domains, it renders itself incapable of seeing the discourses themselves, or the social controversies that pull those discourses in contradictory directions.

In short, the disciplinary origins of media studies and information studies result in different approaches to social critique. In the early days of mass communication research, Lazarsfeld distinguished the approaches of positivist or liberal scholars from those in the Marxist tradition by labeling the former "administrative research", which, he said, "is carried out in the service of some kind of administrative agency of public or private character" (Lazarsfeld, 1941). This he contrasted with "critical research", which "is posed against the practice of administrative research, requiring that …the general role of our media of communication in the present social system should be studied". His purpose was to distinguish research that takes its agenda from, and produces recommendations useful for, public policy or commercial gain, from research that maintains a critical independence from established institutions. The former takes on the responsibility of actively shaping social and

technological change; the latter seeks to produce independent knowledge that critiques the strategic activities of the establishment.

While Lazarsfeld, in mapping out the future options for the then-new research domain, attempted an even-handed approach, these two positions have been hotly contested in subsequent decades (Levy & Gurevitch, 1994). For example, in asserting the critical over the administrative, Morrow and Brown (1994: 218) reject the way that "the logic of statistical generalizations has more of an affinity with the interests of social engineering, rather than social theorizing". For them, social theorizing must, unlike social engineering, analyze critically the "structural relations within and between mediations – relations that turn on the dialectic between human agency and social structure". But for their detractors, passing up the opportunity to influence public policy for the good is too great a price to pay for independence, even if setting goals for media and information literacy initiatives does seem like social engineering.

Research within media literacy and information literacy divides on this issue. Some work in the field of media literacy embodies the administrative approach, seeking directly to contribute to and influence policy on media literacy (for example, tracking ICT diffusion and access via government or commercial surveys). Other work takes a critical approach, exploring how people use media for their own sometimes non- or counter-normative purposes (Bird, 2003; Gillespie, 1995; Hoover *et al.*, 2004). In the informational domain, research on the search engine illustrates a similar bifurcation. In the administrative tradition, survey-based studies examine access to and familiarity with search engines (Fox, 2002), the skills of different types of users (Hölscher & Strube, 2000), or the sophistication of users' search queries (Spink *et al.*, 2001). And studies using ratings and metrics examine the demographic trends in search engine choice and use, often to inform the advertising industry. On the other hand, some research takes a critical viewpoint, integrating economic analysis, observation and experiments in order to question the adequacy of search engine provision for the public good and to critique the private structure of the industry and its lack of transparency in information provision (Introna & Nissenbaum, 2000; Machill *et al.*, 2004; Van Couvering, 2004).

Access

Notwithstanding the differences within and between media literacy and information literacy traditions, each has had some success in advancing the analysis of literacy, including the development of methodologies (research questions, insights, and methods) of potential value to the other approach. One of the strengths of information literacy research is that it acknowledges the differences in people's access to media texts, construing access as a key dimension of literacy. "Access" in this sense is a complex concept, which reveals the skills and competences required by the public to sustain and update their access to the range of fast-changing media and communication technologies (Bolter & Grusin, 1999; Flichy, 2005; Liff *et al.*, 2002; Selwyn, 2004). The priority in research now is to develop an equally thorough an account of differences and inequalities for non-computer based media. New media also demand attention: as yet, little is known of access issues in relation to digital television, mobile phones, digital radio, or non-PC platforms for internet access (Livingstone, Van Couvering & Thumim, 2005).

While access includes physical possession of a piece of hardware and sufficient time to use it, these are not the only considerations. A key element of access in information literacy is navigation – the ability to find relevant content. Information literacy researchers are coming to recognize that navigation and understanding are crucially linked in the online

atmosphere of media plenty. For example, compare new media with print and audiovisual texts. Print and audiovisual texts were traditionally produced in a context of scarcity, with few people having access to the systems of production and distribution. This maintained a strong distinction between producers and consumers, with key filters operating to select material to be distributed in accordance with criteria of cultural quality, editorial values, professional production conventions, and political or market pressures. While this pre-filtering and organization of written information placed fewer demands on the individual's critical/information skills in terms of locating an authoritative source, media literacy teaching centered on understanding and critiquing the operation and consequences of these filters.

Now that almost anyone can produce and disseminate internet content, with fewer and different kinds of filters, the basis of critical literacy (or critical viewing) must alter. On the internet, the information literate person must be able to find the information he or she wants by searching among a wide range of relatively disorganized sources and by being able to compare and evaluate them, sorting authoritative from non-authoritative and relevant from irrelevant documents. A less information literate person faces difficulties in navigating online, even if they have some technical skills, precisely because they lack the skills for comparing and evaluating information evaluation. For example, adults using the Web face challenges to the values they have learned to associate with (printed) texts in school (Walton & Archer, 2004): instead of the authoritative and carefully selected texts that one might find in a library, a huge variety of primary sources confronts the often under-prepared user online. In addition, people's rather broad searching strategies, which work well in a closely-monitored database such a school library, for example, are unsuitable for large-scale search engines, which return a vast number of often unsuitable results.

Empirical findings regarding information literacy suggest that the media literacy agenda research must now encompass questions of access and ability to use new media technologies. This may require some new approaches to method. Productive examples include Drezner and Farrell's (2004) use of link analysis and statistical techniques to "map" the universe of online blogs, or "blogosphere", Hargittai's (2004) experimental observation of the public's searching skills, and Machill et al.'s (2004) study combining random telephone surveying, observation and experiments on the public understanding of search engine income, operation and regulation (see also Baym, 2005; Hine, 2001; Lyman & Wakeford, 1999; Slater, 2002).

Understanding

Media literacy research, by contrast, stresses critical understanding, for example by examining the public's understanding of the news, although questions of critical evaluation and trust also arise in other genres. Television is the main source of national news (for 73% of the UK public; Ofcom, 2004a), with 2 in 3 trusting television to provide fair and unbiased news. Audience research shows, however, that trust in the news is not the same for everyone: "critical rejection" is partly a matter of education, and is also characteristic of some disadvantaged or marginalized populations (Michalski *et al.*, 2002; Towler, 2001). Moreover, despite high public trust in the objectivity of television news, research consistently reveals a failure to convey news as intended: few people can recall news items watched just a few minutes before, and many confuse or misunderstand key aspects of the message content (Graber, 1988). Key barriers are identified as the use of jargon, lack of explanatory context, the rapidly shifting news agenda, and mismatches between visual and verbal information. More generally, when the media challenge their values, audiences are faced with a conflictual negotiation over meanings – as in the case of pro-life women watching pro-abortion drama

(Press, 1991), or men watching male violence against women (Schlesinger et al., 1998). Gender, class, ethnicity and religion also emerge as key differentiators of audience understanding (Christiansen, 2004; Gillespie, 1995; Hoover et al., 2004; Michalski et al., 2002).

So, just as media literacy research should incorporate the study of access, convergence also means that the study of critical understanding should be incorporated into research on information literacy. This too has methodological implications, for much critical literacy research takes a more in-depth qualitative approach than is typical of research on information literacy. One example is the elaboration of the focus group method, extending the time taken and the complexity of the tasks, games or dilemmas presented to respondents, in order to draw out more subtle responses to specific media texts and technologies than simple opinion statements (Barbour & Kitzinger, 1999; Eldridge, 1993; Lunt & Livingstone, 1996; Schlesinger et al., 1998). For example, in studying audiences' critical understanding of television news, focus group participants may be asked not only about their understanding of a particular conflict and the information sources they draw upon, but also to imagine that they are journalists and write a news story using series of photographs from television news coverage of the conflict (Philo, 1993).

Another trend is the turn to ethnography, a tradition much better established in media than in information studies (Press & Livingstone, in press). For example, qualitative research on family dynamics within households seeks to understand the domestic context of access and use of broadcast media, uncovering the issues of gender, generation and class (Gillespie, 1995; Livingstone, 2002; Morley, 1992; Silverstone & Hirsch, 1992). Such methods permit the researcher to observe behavior in its physical and social context, to integrate and sometimes contrast talk and action, and to analyze relations among different groups (pupils and teachers, parents and children, those who visit and those who work in online centers) (Bird, 2003; Ginsburg *et al.*, 2002; Hoover et al., 2004). In relation to information literacy, ethnographic research is conspicuous by its absence, although contexts of usage are clearly important in internet and mobile phone practice (Ling, 2004). However, looking to the emergent "internet studies" traditions, we do find ethnographic studies which highlight cultural and personal context and motivations as key elements of the development of sophisticated practice (Bakardjieva & Smith, 2001; Miller & Slater, 2000); these studies could be expanded to explore the uses, meanings and contradictions of literacy in diverse social contexts.

Creation

By contrast with print literacy research, which has always balanced the study of reading with the study of writing, both media and information literacy research have paid more attention to questions of access, selection and understanding than they have to the creation of content. Both risk positioning the audience or user, therefore, as recipient rather than producer. And this is a bias that both must address as it becomes ever easier for members of the public to create and disseminate messages in the new media and information environment. Both information and media literacy traditions are now turning their attention to the study of content creation, though this research so far tends mainly to ask who creates content. Their purposes in so doing, the conditions that hinder or facilitate, and the skills and competences involved all remain relatively unknown. For example, if we look at video or audio production by members of the public, one study found that 17% of participants in the study owned a camcorder but it reported little on how this was used (Gauntlett & Hill, 1999). It may be that the published literature underestimates the extent of amateur audiovisual

production. Anecdotal evidence on the use of home video, combined with the sales of camcorders, web-cams, scanners, suggests that such activity may be widespread, as suggested, for example, by research on fan cultures, where "fan art is important as a means of commenting on the original program, as a form of cultural creation with its own aesthetic principles and traditions" (Jenkins, 1992). It is often argued in relation to children that the experience of content production facilitates the development of media literacy (Buckingham, 2005; Sefton-Green, 1999) and possibly also, the provision of opportunities to create content could enable media literacy for adults.

Also by contrast with print literacy, where some grand expectations for democratic participation have been pinned to the rise of literacy, both historically and cross-nationally, neither the fields of media nor information literacy have elaborated such grand hopes, though in a complex media and information environment, the literacies necessary to participate are undoubtedly vital. Arguably, for these hopes to be realized, the public must be sufficiently media and information literate, and sufficiently connected to civil society, not only to receive but also to produce and distribute content. Producing content may be conceived fairly minimally – sending emails, visiting chat-rooms, creating a web-page – but even this, if used for civic or cultural goals is of significance. Producing content may also be conceived more ambitiously, in a manner generally not possible for audiovisual media, precisely because in relation to the internet the limitations on volume and accessibility of content, and on the tools to produce content, are modest. The World Wide Web includes many sites constructed by ordinary members of the public, both as individuals and as part of their local or community roles.

Some innovative work is emerging from initiatives to establish resource-rich sites in which people themselves can create media content. Analyses of interviews, observations and user-generated contents reveal the enablers of content creation and people's implicit understanding of the media more generally (Gauntlett, 1997). Some research concerns community-based creative projects (e.g. Phipps, 2000; Travers, 2002). Although this case study approach is vulnerable to differences across projects, for these are indeed diverse, it can also be sensitive to the contextual factors that influence *how* and why adults use the technologies, *what* content they make (Thumim, 2004; Yin, 2003).

Measurement, Standards And Progression

Literacy has never been easy to measure. This is evident in relation to print in the critical debates surrounding the OECD reports on literacy and the OECD PISA reports on young people's literacy in education (Hamilton & Barton, 2000; OECD, 2004; Roberts, 2000). Theories of media literacy, especially in relation to adults, are notably silent on the question of levels, standards and progression, being wary even of dividing skills into the basic and the advanced. In many countries, despite the existence of a media education curriculum for children, a national standard for adults has yet to be formulated. What skills, in short, are required, by whom and at what level, if media literacy is to contribute to the goals of citizenship, cultural choice, identity and expression or a vibrant cultural sector?

In its general statement on media literacy, the UK's Department for Media, Culture and Sport stressed the importance of critical viewing skills and technological competences as a foundation of media literacy (DCMS, 2001), including the ability to distinguish fact from fiction, understand mechanisms of production and distribution, distinguish reportage from advocacy, recognize and assess commercial messages in programs, recognize the economic, cultural and presentational imperatives in news management, explain and justify media choices in order to inform choice and sustain appropriate degrees of critical distance, and

develop technical competence towards information and communication tools, including "navigation skills" and the ability to create internet content.

While this is helpful, the lack of agreed standards of media literacy makes the evaluation of pedagogic and policy initiatives particularly challenging. By contrast, practitioners in information science have worked to develop literacy standards to help assess the levels of competence, typically for adult learners. For example, the Association of College and Research Libraries (ACRL) in the USA has developed a series of standards, performance indicators and outcomes for information literacy in higher education . Each level is associated with performance indicators and outcomes and specifies that the information literate student should be able to: determine the nature and extent of the information needed (level 1); access needed information effectively and efficiently (level 2); evaluate information and its sources critically and incorporates selected information into his or her knowledge base and value system (level 3); use information effectively, individually or as a member of a group, to accomplish a specific purpose (level 4); and understand many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally (level 5).

In the UK, the Society of College, National and University Libraries (SCONUL) has formulated an alternative model based on 'seven pillars' of information literacy (SCONUL Advisory Committee on Information Literacy, 1999). In this model, information literacy consists of the following skills, in each of which performance can be graded at levels from novice to advanced beginner, competent, proficient or expert: recognize information needs; distinguish ways of addressing gaps; construct strategies for locating information; locate and access information; compare and evaluate information; organize, apply and communicate information; and synthesize and create information. This model differs from the ACRL model by including basic library skills and IT skills as foundational elements, and by stressing strategies for the location of information as well as the creative dimension of information literacy.

This specification of standards is clearly crucial if education, skills and training programs are to be developed and evaluated (see NIACE, 2004;Williams *et al.*, 2003). While several standardized measures of computer literacy have been proposed (Bradlow *et al.*, 2002; Richter et al., 2001; Turner et al., 2000), basic library skills - the other set of foundational skills in the SCONUL model - have not been adequately assessed in the adult population. Nonetheless, the application of such approaches from the study of information literacy to that of media literacy may be beneficial, especially in relation to adults, inviting a broader consideration of how media and information literacy standards can be developed and measured in a converged environment.

For children there are more developed media education programs that specify age-appropriate skills, progression across levels, and methods for evaluating the delivery of a formal curriculum according to age-graded levels of achievement. For adults, such work remains to be undertaking. One path forward might be to follow the model of the public understanding of science, where survey methods are used to measure aspects of public understanding and knowledge in the scientific domain (e.g. Bauer & Gaskell, 2002). In relation to print literacy, measurement is based on educational testing (OECD, 2004), while the effectiveness of public health communication campaigns is evaluated through opinion surveys based on self-reported health practices and health literacy (Livingstone & Thumim, 2003).

However, Buckingham notes that "it remains very difficult to provide any definitive evidence about the *effectiveness* of media education, despite the evident enthusiasm and commitment of its advocates" (2005:51). Furthermore, the application of levels and standards in children's media education relies on psychological models of development which have been criticized on a number of counts: they do not distinguish between competence and performance; they neglect the role of social and familial context; and, as Buckingham observes; "a third, more radical, critique suggests that developmental models are implicitly normative, and involve the imposition of particular preferred definitions of "adult" behaviour" (2005: 26). This last point takes us back to the critical/administrative distinction in research discussed earlier: an enterprise based on establishing a curriculum, standards, models of progression, criteria for evaluation, and so forth, falls firmly within the administrative camp, and critical scholars raise many methodological, epistemological and political concerns regarding such an effort.

Although work on information literacy in relation to standards is undoubtedly more developed, it is not that media literacy research has simply overlooked this question, for there has been a long-standing struggle to get media education onto the school curriculum, albeit with only sporadic success (Christ, 1998). Buckingham (1998) notes that teaching critical literacy has meant teaching literary or aesthetic criticism (training students in discrimination so as to preserve the literary heritage and to inoculate them against mass media manipulation), rather than enhancing employment-related skills to promote the competitive skill base required by the creative and cultural industries. However, the often-implicit purposes underlying media education (following from an equally implicit disagreement regarding the cultural value of media texts) have often threatened to derail the media education movement entirely, a tension that continues to shape contemporary discussions over the appropriate *uses* of newly-gained ICT literacy (Hobbs, 1998). By contrast, information literacy is primarily promoted and supported for its benefits to the training of a highly skilled workforce, thereby advancing employment and economic competitiveness. While funding is plentiful for this work, how people critically understand texts, crucial to the ideal of the "informed citizen" (prominent in media literacy research), receives a low priority in relation to information literacy initiatives.

Key questions remain, notably – how can the emphasis on skills, important to employers and policymakers, be reconciled with the attempt to understand critically the symbolic and cultural value of media practices? For example, critical research on the social construction of the child as computer expert (e.g. Facer *et al.*, 2001) does not examine whether the child "really" is the expert – in other words, whether the construction is veridical. Conversely, attempts to measure the "actual" levels of internet skills among the public show little interest in how this expertise affects social relations within the home or workplace.

Methodological Convergence And Its Challenges

The existence of some fruitful complementarities between media and information literacy traditions does not mean that multidisciplinary or multi-method research will be easy to conduct, not least because literacy – being concerned with people's implicit, complex and subtle understanding of symbolic representations – is intrinsically difficult to research (Livingstone, 2004). Literacy concerns things people cannot do or may not have recognized the importance of and, when asked, social desirability may lead people to claim greater knowledge than is warranted. Put simply, how do you ask people if they are aware of, say, advertising on websites or bias in the news, without introducing the idea, even the expectation that they should recognize, such a phenomenon in the first place? Specific kinds

of knowledge may be tested, following the model of formal education, but this may say little about awareness or, indeed, actual practices in everyday contexts.

Partly in response to these and other difficulties, a wide range of research methods are employed in media, communication and information studies, and these have been applied to the study of media and information literacies across diverse populations and across multiple media and information channels and sources. Broad trends in media and communications research, as elsewhere in the social sciences, lean towards the elaboration of existing methods rather than their replacement with wholly new methods, and towards the triangulation of qualitative and quantitative methods rather than the prioritization of any one approach (Alasuutari, 1995; Bertrand & Hughes, 2005; Deacon, 1999; Schroeder et al., 2003).

In adopting multimethod research designs, the aim is to overcome, or compensate for, the disadvantages of certain methods over others. For example, even with good design and a range of checks to limit biases and social desirability factors, surveys still rely on self-reported attitudes and practices, inviting observational methods to complement them. Similarly, qualitative methods sacrifice the advantages of surveys in terms of the diversity and representativeness of the population surveyed, they gain in the ability to pursue issues in greater depth, to contextualize findings, to capture ambivalences and uncertainties, and to cross-check claims against observational data. Thus many researchers seek to lay to rest the old battles between qualitative and quantitative research, though some continue to argue for one side or the other. In seeking to bridge the epistemological/ideological battleground that has long existed between proponents of quantitative and qualitative methodologies in the field of media and communications, Jensen (2002: 256) writes:

> A first step in bridging the apparent abyss between the two paradigms is to ask whether some division of labour can be sustained. At least in principle, most contemporary research would recognize that its choice of methods must depend on what aspect of mediated communication is being examined, and on the purpose of the study – the "how" of research depends on its "what" and "why" …Few researchers would want to argue (or admit) that their conceptualizations and designs are driven by certain methods that are preferred as such.

Methodological triangulation offers a way forward since it offers a way to combine methods, and even, as Flick (2002: 227) suggests, may make it possible to combine epistemological approaches:

> Triangulation was first conceived as a strategy for validating results obtained with the individual methods. The focus, however, has shifted increasingly towards further enriching and completing knowledge and transgressing the (always limited) epistemological potentials of the individual method.

Newly converging research on media and information literacies faces some significant practical as well as epistemological challenges. The skills basis of many studies into information literacy is faltering, as it chases the moving target of technology change. Media studies, on the other hand, must broaden to confront the new capabilities of new generations who are growing up with a significantly altered media and information environment – mobile, ubiquitous, networked (Lievrouw & Livingstone, 2005).

We also note other methodological problems. Longitudinal studies remain scarce, making it difficult to determine the specific factors that improve (or undermine) media or information literacy among the population (although see Anderson et al., 2004; Kraut et al., 2002). Cross-sectional panel studies tend to ask different questions in different waves and are less satisfactory when identifying causal explanations for observed changes over time,

making the identification of barriers and enablers hazardous (Pew, 2005). Particular care must be taken when assessing media and information literacies through opinion surveys, as favored by administrative approaches, for such data are difficult to interpret out of context. This applies especially to research on the subtleties of access, on understanding, and on most questions relating to the creation of communications. For example, the British Social Attitudes survey finds that, while 65% of broadband users trust the internet as a source of news (the same proportion that trust newspapers), the internet is less trusted among non users (59% trust newspapers versus 19% trust who internet news) (Bromley, 2004). A critical response to such research would ask whether greater trust indicates higher or lower levels of media literacy - greater discernment or greater naivety – or, indeed, whether there is a "right answer" to questions of trust.

Qualitative work may be promising here (Warnick, 2004). One small-scale study of 15 women investigated in-depth how the public comes to trust online medical information (Sillence *et al.*, 2004). This found three stages in developing trust. First, users quickly determine whether a site is suitable for further investigation; at this stage, regardless of the content of the site, users often reject sites for their design features (e.g. an inappropriate name, complex layout, lack of navigation, "boring" design, pop-up adverts, slow introductions, too much text, inadequate search or corporate look). Second, users become more analytic, evaluating the content of the site in more depth, and at this stage content becomes a major factor (with sites being rejected for being sponsored by pharmaceutical companies, for example, or accepted if the site author resembles the information-seeker). In the third stage, users begin to build an ongoing trusted relationship with the site as a trusted information provider (or brand). On the other hand, for straightforward measures of access and behavior, for charting areas of public concern, and for tracking change or differences across subgroups, opinion surveys have a clear value (Rice & Haythornthwaite, 2005). Yet such research may not be able to provide direct measures of literacy, leaving one to infer literacy from use: for example, as internet access continues to rise, it may be assumed – though it has not been demonstrated - that internet-related skills are also rising.

Priorities For The Converging Research Agenda

The differences between these two complex and well-developed traditions, as discussed in this chapter, together with the potential for convergence, are summarized in Table 1. Does the convergence of theory and method towards the exploration, evaluation and tracking of changing media and information literacies map out a future research agenda? We suggest that it does.

--- Insert Table 1 about here ---

At present, it appears that the strengths of information literacy research lie in its complex analysis of questions of access, while media literacy research raises key issues about critical understanding. In both approaches, however, we see the growing extension of existing methods to new objects of study, together with the use of multiple methods in research. There are some key research gaps, however.

We know more about basic questions of access than we do of more advanced forms of access: research is needed to track specifically-identified key navigational skills such as internet searching, use of interactive facilities on digital television, searching using public data bases, using the full functionality of mobile phones, and so forth. Tracking is also needed for the barriers to and inequalities in the acquisition of key operational and control skills (installing, operating, interconnecting, updating and protecting domestic technologies, including the ability to manage payment systems). As the content available expands greatly,

many are concerned that people can manage their personal media environment: what are the issues in the prioritization or avoidance of certain kinds of content and services for different constituencies of the population? This includes understanding the options for regulating content entering the home, including tracking of parental concerns, competences and practices in managing and regulating their children's access to and use of different forms of electronic communication, together with children's experiences of being regulated and their growing skills in self-regulation (Livingstone & Bober, in press).

The balance of research reverses in relation to the dimension of literacy concerned with understanding. Here, most research has been conducted on broadcast media, and as yet very little exists for new media (internet, digital television, mobile communications, and other converged or new electronic information services). The priority here is to develop a subtle and detailed account of how people understand, trust and critically evaluate information and communication contents delivered on new platforms and disseminated and regulated in unfamiliar ways, that can match the analysis already developed for audience's understanding of (mass, broadcast) television content. Specifically, more research is needed into how people understand online news and political information, including what they define as news in the online environment. The question of trust is central, but under-theorized and so findings are often contradictory or unreliable. Survey research here should be complemented by qualitative work, leading to the development of a subtle account of critical literacy in this domain.

Although viewers are well aware of advertising when they are confronted with commercial messages on television (Sancho & Wilson, 2001), the changing conditions of advertising, including sponsorship, branding, merchandising, paid-for-content, and other forms of promotion through broadcasting, the internet and mobile phones, set new literacy requirements. Little research exists on adults' critical awareness of such promotional practices, nor on how better to support parental mediation of promotion to children (Kunkel & Wilcox, 2001; Montgomery & Pasnik, 1996). Perhaps here research can learn from "advertising literacy" research on children and television, now applied to new information and communication environment (Oates *et al.*, 2002).

Research is also needed into the degree of content "legibility" as a complement to levels of public literacy: if a book is badly written or type-set, we do not call the reader illiterate; if the news provides no accessible information about its sources, journalist conventions or editorial policy it is not the viewer who is at fault in struggling to evaluate the message; if a search engine appears to offer unbiased access to information resources while operating with commercial priorities invisible to the user, this limits how the user can critically evaluate the information accessed. This suggests that literacy should be conceived in relational terms, as in usability research, where good understanding is seen to depend on both a *usable* website and a *skilled* user.

Problematically, in discussions of literacy and, especially, of the population's failure to achieve certain levels of literacy, it is often implicitly assumed that interfaces are well-designed, that the resources are clearly available and merely await appropriate use. But interfaces also obscure, impede, undermine, this being especially significant in the new media and information environment where conventions of representation are not yet familiar, cues to interpretation are inconsistent or confusing, and a cultural critique of the available information (beyond the crucial but simple questions, can you trust it, who put it there?) is not widespread. Isaacs and Walendowski (2002) argued that widely-used, supposedly 'user-friendly' software regularly flouts standard conventions for face-to-face conversation -–

offering inappropriate or unnecessary information, performing in an unpredictable way, requesting irrelevant information or providing misleading information, and offering confusing or even rude messages. Transgressions of these everyday rules include requiring users to make unnecessarily clicks, failing to retain preferences, pop-ups which break the user's flow, asking daft or confusing questions, presenting users with muddled and overfull webpages, failure to give feedback on whether a process worked or how long it might take and, lastly, the blaming of the user – 'fatal error', 'illegal' or 'invalid'.

A similar focus, on the relation between texts and readers, has been prominent in audience reception studies, inviting lessons to be transferred across from this field to that of new media and information literacies (Press & Livingstone, in press). On this view, media literacy depends on an effective interaction between the public and the media, with "literacy" being thought of as a dynamic process rather than a property of individuals. This process may be both enabled and impeded by individual or societal factors as well as by the institutional, textual and technological factors which shape the interface with the user or audience (Kress, 2003; Snyder, 1998). For example, Burbules (1998: 110) invites a critical semiotics of the online environment to match a critical literacy analysis, arguing that "a thoughtful hyperreader asks why links are made from certain points and not others; where those links lead; and what values are entailed in such decisions".

As noted earlier, by comparison with research on access and understanding, neither tradition has fully explored the core literacy issue of content creation by the public, although a glance at doctoral research topics in media studies departments reveals that this is a burgeoning area of study. What is the range of emerging creative and productive literacies among the population, and what are the barriers and enables in operation? Such questions are pressing, since the changing media environment potentially serves to democratize content creation and dissemination in hitherto unprecedented ways. Never before have the tools to make content been so widely available.

Research priorities include charting the emerging range of experiences with content creation: how many people have created content, what content have they made and, especially, how far do they achieve their ambitions? We also need to know more about the social benefits of apparently mundane content creation (sending text messages to friends, for example) as well as about the conditions to enable self-evidently significant content creation (artistic content perhaps, or democratic participation). And we need to understand the barriers and enablers - the skills people need and the difficulties they face, for encouraging content creation and interactivity seems more difficult than commonly supposed (Sparkler, 2004). We note also that although it is widely believed that creating content results in an increased critical understanding of media production processes, little research has examined, still less established, that this is the case (Kunkel *et al.*, 2004). Does making content really improve a critical reading of professionally-produced contents? What are the benefits and, possibly, the disadvantages of increasing the ways in which the public not only receives but also responds to, interacts with, and creates its own content?

Finally, having recently conducted a wide-ranging literature review for both media and information literacy (Livingstone *et al*., 2005), we were struck by how little attention has been paid to the relations among the various dimensions of literacy. Can people be high on media literacy, say in relation to access-related skills and competences, but low in terms of critical understanding? It is widely assumed that skills of access precede the more "advanced" skills of content creation, and also that experience of content creation enhances

critical literacy. Nonetheless, the coherence and interdependence of the dimensions of media literacy has received little research attention.

On The Importance Of Media And Information Literacies

In the introduction to this chapter we asked, what is the purpose of media literacy, information literacy, and all the other literacies, and why do they matter? We highlighted three purposes to which literacies are expected to contribute, first, democratic participation and active citizenship, second, knowledge economy, competition and choice, third, lifelong learning, cultural expression and personal fulfillment. Having looked at the field in relation to these undoubtedly ambitious aims, it is clear that there is much more research to be done, and many more literacy initiatives to be developed and supported.

This is most evident in the more active, participatory and creative aspects of engaging with new forms of media. For example, while there are many hopes for the potential for members of the public to participate in online debate, the actual levels of participation are often very low (Jankowski, 2005; Schneider, 1997). To take another example, a Pew Internet phone survey conducted in 2003 in the USA found that "44% of Internet users have created content for the online world through building or posting to Web sites, creating blogs, and sharing files" (Lenhart *et al.*, 2004); however, only "13% maintain their own website, and between 2% and 7% of internet users publish a web-log". Research also shows repeatedly that those who are "more literate" in these various ways tend to be those privileged already, according to traditional measures of inclusion and participation (Doring, 2002; Gunnell, 2002; Livingstone, Bober & Helsper, 2005). Thus it seems as though largely the same issues which shape who gets involved in the creation of old media are also shaping who gets involved in the creation of digital media, and who does not. As Mansell points out:

> Despite the growth in the numbers of internet users, a rather small minority of these users has the capability to use the internet in ways that are creative and that augment their ability to participate effectively in today's knowledge societies (2004: 179).

In this chapter we have mapped some ways forward for media and information literacies research, identifying model studies and fruitful ways of converging two hitherto distinct traditions, as well as identifying some methodological challenges. In the end, we return to theory and urge an ambitious framework for research on new literacies. Media and information literacies do not simply concern the ability to the electronic program guide for digital television, or to complete one's income tax return online. Nor are the purposes restricted to becoming a more informed consumer or getting a better paid job, though in methodological terms, these may be more readily evaluated against tangible outcomes. For literacy concerns the historically and culturally conditioned relationship among three processes: the symbolic and material representation of knowledge, culture and values; the diffusion of interpretative skills and abilities across a heterogeneous population; and the institutional management (by public and private sector bodies) of the power that access to and skilled use of knowledge brings to those who are "literate".

This relationship is grounded in a centuries-old struggle between enlightenment and critical scholarship, setting those who see literacy as democratizing and so as empowering of ordinary people against those who see it as a source of inequality and so as elitist and divisive (Kellner, 2002; Livingstone, 2004; Luke, 1989). Debates over literacy are, in short, debates about the manner and purposes of public participation in society. Without a democratic and critical approach to media and information literacy, the public will be positioned merely as selective receivers, consumers of online information and communication. The promise of

literacy, surely, is that it can form part of a strategy to reposition the media user - from passive to active, from recipient to participant, from consumer to citizen.

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Table 1

Comparison of Media Literacy and Information Literacy Research Traditions

	Information literacy tradition	Media literacy tradition
Technological focus	• Telecommunications • Computing • Information systems	• Broadcasting • Audiovisual media • Print
	Comment: As digital/mobile/online media and information technologies converge, both traditions will increasingly share an overlapping focus	
Definition of literacy	"Knowledge of one's information concerns and needs, and the ability to identify, locate, evaluate, organize and effectively create, use and communicate information." (Information Literacy Meeting of Experts, 2003)	"The ability to access, analyze, evaluate and communicate messages in a variety of forms." (Aufderheide, 1993)
	Comment: If a converged unified approach rather than proliferation of literacies is favored, the similarities between these definitions are promising	
Main research focus and gaps	• Barriers/enablers to access and use • Evaluation of skills and abilities	• Understanding • Critical literacy • Creative/productive literacies
	Comment: The information literacy tradition could benefit from more critical analysis of information; the media literacy tradition could benefit from a more complex account of access. Both approaches lack a sustained analysis of content creation, construing people more as receivers than producers of information/texts.	
Disciplinary origins	• Engineering/computer science • Library science and education • Design, especially human/computer interaction	• Arts and humanities, especially film studies & cultural studies • Social sciences, especially sociology & social psychology
	Comment: Both approaches are internally divided in their relation to social critique (here theorized in terms of administrative vs. critical research)	
Strengths	• Models of standards, levels and progression • Separation of competence from performance • Complex analysis of access • Measures of the effectiveness of information literacy education • Accessibility guidelines	• Models of content understanding, e.g., encoding/decoding, uses & gratifications • Integrated analysis of production/text/ audience • Analysis of literacy at meso and macro levels (not just as an individual attribute)
	Comment: Research has yet to consider how far the strengths of each approach can benefit the other	

Preferred methods	Quantitative orientation (surveys, experiments, measurement, evaluation)	Qualitative orientation (interviews, focus groups, ethnographic observation)
	Comment: Both approaches are developing some innovative ways forward in meeting new empirical challenges, thus furthering triangulation of methods in literacies research	
Justification/ purpose	Employability and competitiveness in the labor market	Critical appreciation, cultural participation, and resistance to dominant media
	Comment: A converged approach to media and information literacies must explicate and debate these and other justifications for the promotion of literacies, recognizing their underlying epistemological and political differences	