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European journal for Research on the Education and Learning of Adults 8 (2017) 1, S. 103-125



Quellenangabe/ Reference:

Moekotte, Paulo; Brand-Gruwel, Saskia; Ritzen, Henk: Participatory perspectives for the low skilled and the low educated: how can media literacy influence the social and economic participation of the low skilled and the low educated? - In: European journal for Research on the Education and Learning of Adults 8 (2017) 1, S. 103-125 - URN: urn:nbn:de:0111-pedocs-140024 - DOI: 10.25656/01:14002

<https://nbn-resolving.org/urn:nbn:de:0111-pedocs-140024>

<https://doi.org/10.25656/01:14002>

in Kooperation mit / in cooperation with:



<http://www.ep.liu.se>

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Participatory perspectives for the low skilled and the low educated: how can media literacy influence the social and economic participation of the low skilled and the low educated?

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Abstract

We assume that social media use contributes to employability and sociality and media literacy complements a basic set of skills. Especially the low skilled and low educated lack media literacy, which contributes to their precarious situation and increases a participation gap. A database search for peer reviewed articles covering effective elements of media literacy did not return any useful results. The retrieved literature was scarce and media literacy concepts were inconclusive, conflated or ambivalent. We then broadened our scope, using a snow ball technique and Harzing's Publish and Perish for control purposes. This approach lead to literature indicating that self-presentation and self-profiling are important literacy practices, involving knowledge and skills related to participation in social and economic contexts and understanding of the relations between sociality, employability and networks. Media literacy is best approached as hands-on, situated and experiential, taught in a democratic and critical fashion and related to the attitudes and perspective of the low educated and the low skilled. There is however no clear answer what the complementary role of informal learning is and how literacy related skills and knowledge demanded for lifelong learning may change during the life course. It is also important that policies focussing on inclusion and participation broaden their perspective beyond individualistic notions and , consider the influence of structuralizing mechanisms that create inequality and extend their explanations beyond those framed by economic theories, models and categories.

Keywords: media literacy; low skilled; low educated; social participation; economic participation

Introduction

The information age and proliferation of new media pose new questions and dilemmas. Research indicates that the proliferation of social media has widened a participation gap, also known as the digital divide, which affects mainly the low skilled and the low educated, because they are not media literate enough, to use digital information in an effective, helpful and strategic way (Van Dijk, 2009). The risk of labor market exclusion has been worsened by employment flexibilization and deregulation of employment and spread systematically in specific, already disadvantaged labor market groups like young adults and labor market entrants. The risk of social exclusion is in turn highly dependent on their success in the labor market and on their access to stable long-term employment (Buchholz & Kolb, 2011). Evidence-based initiatives have demonstrated that there are major potential benefits to equip low social-background students and low-skilled workers, to acquire better skills and compete for better-paying jobs (OECD, n.d.). We therefore narrow our study to the categories of low educated and low skilled.

In our study, we are especially interested in the role media literacy can play in coping with flexibilization and deregulation of employment and competing for jobs. In order to determine the empowering role of media literacy, a number of problems have to be addressed that relate to the concept of media literacy, the literacy practices that may influence social and economic participation and the question how the literacy concept and practices may inform educational policies and contribute to learning opportunities devised to close this gap.

First problem: the concept of media literacy

The first problem we encounter relates to the inconclusiveness of the concept of media literacy. Media literacy and literacy practices have been studied in disciplines like social science (Derksen & Beaulieu, 2011), media studies (Ito, Horst, Bittanti, boyd, Stephenson, Lange, Pascoe, Robinson, 2008; Valkenburg & Peter, 2011), media education (Buckingham, 2007, 2013), youth studies (Drotner, 2008) and educational design (Suthers, 2006). This disciplinary diversity has led to tensions and struggles concerning conceptual framing and definition, which in turn has resulted in a variety of concepts and a diversity of advocates who champion these concepts vigorously (Bawden, 2001; Martens, 2010).

Second problem: literacy practices that may close the participation gap

Many studies follow or propose a dichotomous perspective, divide the general population for example into literates and illiterates and propose an autonomous, 'right literacy' for all. Great divide theories, theorizing fundamental differences in human cognition and social conditions, related to literacy, already emerged in the post-World- War II period and were conceived as 'technology of the intellect' (Collins & Blot, 2003). This presents the idea of 'literacy' being an autonomous, individual matter of intellect, in combination with education as an important social condition, that augments the cognitive abilities.

The recently touted problems of the 'information poor' do not necessarily indicate a mere literacy-related digital divide that can be attributed to an individual lack of access and/or a matter of intellect or skills. Problems of the 'information poor' may for example relate to relationships, social networks and being the first in the appropriation of information (Van Dijk, 2013). Exploitation and opportunity hoarding (Tilly, 1998) may result in

distantiation, or a stretching continuum of social positions across the population (Van Dijk, 2013) and can best be countered by ‘rapprochement’ or the ‘catching up’ by those who lag behind (Therborn, 2009). This presents the idea of ‘literacy’ being an ideological matter of situated interaction between intellect and socializing constraints or opportunities. It points to a certain behavior, ranging from the behavior of those who are hoarding opportunities to keep their lead to those who are trying to catch up and diminish their backward social position. Hence, literacy could also be framed as the ‘technology of the social’.

It is as yet unclear how social media use relates to a the threat of economic obsolescence and social exclusion and how media literacy may help solve this problem. Before we frame our research questions we first clarify what specific type of media we refer to when talking about media literacy in relation to participation issues. We also briefly introduce the concepts ‘low skilled’ and ‘low educated’ we distinguish and the literacy levels that generally apply to these concepts.

Social Media: classifying the concept

For a simple classification of the concept of ‘social media’, we use the key theoretical concepts of ‘social presence’ and ‘self-presentation’, which define the degree of perceived presence or salience and the degree of deliberate control on one’s impression (Kaplan & Haenlein, 2010) as well as ‘social relevance’ and ‘professional quality’, which define the relevance and quality of ‘participation’ in online networks (Carpentier, 2009). Following Kaplan and Haenlein (2010), we define social media as:

(...) a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content. (2010, p. 61)

Following Kaplan and Haenlein’s definition, when using the term social media we also refer to social networks or platforms. Following Carpentier we consider participation as co-deciding in a communicative process. We argue that affordances provided by social media that promote interactivity and participation enhance users’ social and economic opportunities.

Social presence is influenced by the intimacy (interpersonal vs. mediated) and immediacy (synchronous vs. asynchronous) afforded by the medium. These aspects influence the degree to which media allow for exerting social influence: higher levels of perceived (interpersonal and synchronous) presence allow for higher degrees of influence.

New media are also seen as interactive or participatory media. According to Carpentier and De Cleen (2009), participation is a two-way, discursive process of decision-making whereby the degree of participation (ranging from minimalist to maximalist) is partly determined by the audience’s perception and valuing of the quality and relevance of the information that is presented and shared. Professional quality refers to basic conventions about aesthetic, narrative and technical quality that audiences still expect, even when confronted with products of online mediated participation. Social relevance is expressed by the degree to which information is perceived by the audience as transcending the private and personal.

By adopting these concepts for classification purposes, we explicitly frame literacy practices as being situated practices that involve socializing, starting with the technology-mediated presence and self-presentation. Literacy practices are also interactive and

participatory practices that involve learning, starting with the quality and relevance of the content or information to be generated and shared.

The Low Skilled and The Low Educated

In general, the low skilled and the low educated are defined on the basis of the occupational level (ISCO08 9th occupational category) respectively their level of educational attainment (attainment up to the ISCED 2 level). It is not uncommon to equate both categories in research and statistics, effectively presuming a direct relation between the two.

Research questions

Media literacy is an important element of the social and professional development of students in vocational education. At the same time, media literacy is a problematic issue in vocational education because it is both scientifically and pedagogically contested and therefore surrounded with ambiguity and uncertainty. Because media literacy lacks a common understanding, it also suffers from a limited functional operationalization in classrooms. In recent years, exploratory and theoretical studies have been produced with regard to media literacy education (Buckingham, 2013; Martens, 2010; Van Deursen & Van Dijk, 2014). What is still lacking however are insights and publications that specifically address, theorize and explain how media literacy relates to participation in society and on the labor market by low educated and low skilled. Empirical evidence is scarce and fragmented, leaving teachers at odds how to design programs that effectively address the media literacy of low educated and low skilled. To sum up, there is a need for an overview of empirical research on proven design principles concerning effective media literacy related interventions and the outcomes of these interventions. In our study we treat literacy practices from a social and economic perspective in the context of vocational education targeting young adults.

The aim of this review is to contribute to a sound, evidence informed conceptualization and operationalization of media literacy. Our main question is:

What are effective elements of media literacy that contribute to the preparation of low educated and low skilled youth for a profession, getting into a job and staying employed?

We are not only interested in finding out what kind of approaches or interventions are used in vocation oriented educational settings to develop the media literacy of the low skilled and low educated. We want to explore how certain uses of social media produce positive economic and social outcomes. That is, we are interested social media use or literacy practices that contribute positively in closing the participation gap. A second question we aim to answer is:

How does social media use contribute in a positive way to the social or economic participation of the low skilled or the low educated?

Our research questions are mainly framed by the context of secondary vocational education and training (VET). Labor market entrants as well as low educated and low skilled who are at risk, are often if not predominantly served by VET and vocational programs. We argue that vocational programs and training should offer disadvantaged

groups the media literacy skills and attitude that support disadvantaged in coping with flexibilization and deregulation in an increasingly competitive labor market.

Method

We used three academic databases (Web of Science, Academic Search Elite and ERIC) as our primary sources for selecting relevant studies. Solely restricting the search to publishers' databases can be too rigid and is not necessarily the most efficient method, regardless of the number of databases used. Complementing our search with a snowball approach can also avoid bias in favor of any specific publisher. We therefore complemented our database search with the snowballing technique and controlled for author related relevancy with Harzing's Publish or Perish. We finally studied literature and reports with regard to literacy practices pertaining to social and economic participation.

The databases were searched with a combination of key words: 'media literacy', 'social media', 'social network sites', low/lower/less skilled, low/lower/less educated, 'youth at risk' and 'early school leavers'. We added the last two terms because descriptive statistics by government agencies tend to categorize the low skilled or the low educated up to the age of 23 years old as 'youth at risk' or 'early school leavers'. As a result, the latter two categories effectively represent the low skilled or low educated in research concerning youth up to the age of 23. We used and combined three categories of terms to search for studies that possibly related the concept of media literacy with socio-economic categories, that is, being low skilled or low educated, and the use of certain types of media. We used different filter settings, provided by the academic databases to narrow the search to education related journals (Table 1). In all cases we searched for academic peer reviewed articles published in English in the period 2007-2014, that are related to the field of education. Not all databases provided exactly the same kind of options to filter and narrow the search.

Our snowballing approach consisted in different steps (Wohlin, 2014) and started with identifying key documents, followed by using references and citations for backward and forward snowballing. Snowballing, that is, looking at where papers are actually referenced and cited, complements the findings of database searches in a systematic way. As a means of controlling for our snowball approach and narrowing the growing amount of material we used Harzing's Publish or Perish (5.0) to narrow this amount by using Hirsch's h-index to look for the impact of authors in the field.

Criteria for Studying Exclusion and Inclusion

We excluded articles that focused on traditional media, such as television and newspapers, studied literacy merely in a local context, producing diverse skill-based literacies but that were ignorant of the broader political, economic, social and personal contexts and the rationales that shape social, economic and educational policies and local practices (Myers, 2006; Moore, 2006; Papen, 2005).

We included studies that viewed social media as online applications or platforms that allow participatory and collaborative creation and exchange of information or content. We included studies that approached literacy as a situated practice, that acknowledged the plurality of literacies and explored the governing rationales. In part, we additionally

used secondary studies by the OECD for descriptive purposes regarding reported literacy-related skills levels.

The articles we selected were processed and filtered after screening the title for leads, next screening the abstract and finally screening the body text of the article.

Results

In this section the results will be presented. In next section we will analyze the results and return to aspects related to education and learning relevant for the low skilled and the low educated.

Conceptualizations of Media Literacy Related to Social and Economic Participation

In this section we address our first research question:

“What are effective elements of media literacy that contribute to the preparation of low educated and low skilled youth for a profession, getting into a job and staying employed?”

Table 1 gives initial results for the number of hits for the different search strings and their combinations. The final number of unique hits was 12 (Web of Science), 6 (Academic Search Elite) and 6 (ERIC) (appendix A).

Search engines:	WoS/ASE/ERIC	WoS/ASE/ERIC
<ul style="list-style-type: none"> • WoS (Web of Science) • ASE (Academic Search Elite) • ERIC 		
Search strings	(“youth at risk” OR “early school leavers”)	(“low-skilled” OR “low-educated”)
Search mode	Boolean/Phrase	Boolean/Phrase
Refined using available limiters and filters provided by the respective search engines.	25/83/25	26/53/29
AND “social media”	0/3/0	0//0/0
AND “media literacy”	5/0/0	1/0/0
AND (“social media” AND “media literacy”)	0/0/0	0/0/0
AND (“social media” OR “media literacy”)	3/3/0	0/0/0

AND “social network sites”	0/1/0	0/0/0
Search strings	(“social media” OR “media literacy”)	(“social network sites”)
Search mode	Boolean/Phrase	Boolean/Phrase
Refined using available limiters and filters provided by the respective search engines.	290/290/521	26/88/39
AND (“low-educated” OR “lower educated” OR “less educated”)	3/2/1	0/1/1
AND (“low-skilled” OR “lower skilled” OR “less skilled”)	3/0/1	0/0/0
AND (“youth at risk” OR “early school leavers”)	0/3/2	0/2/1

Table 1 *Media literacy practices in education related peer reviewed journals*

Although we searched Web of Science with the explicit terms ‘media literacy’, the search engine still returned alternatives like ‘critical literacy’ (1), ‘web literacy’ (1) or ‘media health literacy’ or health related alternatives (5). This would indicate that the search mode, that is Boolean phrase, is less accurate than expected. Neither do all articles target low(er) educated, low(er) skilled or youth at risk. The articles retrieved via Academic Search Elite neither provided any relevant hits. ERIC also provided articles that referred to different types of literacy - computer literacy or information literacy (2), different age groups - K12 or preschool children (2), or activities that are not relevant for our study like breast feeding and dating. This left us with only three articles that were remotely related and interesting but, after screening the body text of the article, nevertheless provided no concrete information about design principles or labor market related practices or outcomes. As we considered this number of relevant articles too small for our purposes, we did not pursue studying the selected articles (see Appendix A) in further detail.

Our snowballing technique produced the following two definitions of media literacy that are often quoted and most used by scholars (Martínez-Cerdá, Torrent-Sellens, & Pegurer Caprino, 2015):

- A. “the ability to access, analyze, evaluate, and create messages in a variety of forms”

- B. “the ability to access, analyse, evaluate and create messages across a variety of contexts”

It is unclear how these two alternative definitions came into existence. It is also unclear how the definition changed over time from ‘a variety of forms’ to ‘a variety of contexts’. Definition A was found 47 times with Google Scholar, and mainly cited as drawn from a few different sources (e.g., Aufderheide, 1993; Aufderheide & Frost, 1993; Christ & Potter, 1998; Livingstone, 2004). Definition B was found 44 times with Google Scholar and cited as drawn from a similar set of different sources (e.g., Aufderheide, 1993; Christ & Potter 1998; Livingstone, 2003, 2004).

Neither of these two definitions was actually reported by Aufderheide. Aufderheide’s definition is: “the ability of a citizen to access, analyze, and produce information for specific outcomes” (1993, p. 6) and appeared in the report of the National Leadership Conference on Media Literacy. This conference did not agree upon a specification of effective outcomes but did however produce the fundamental objective of media literacy as *critical autonomy in relationship to all media*.

The definition that is mostly used in non-scientific literature and reports has been adopted by the European Commission: ‘the ability to access the media, to understand and to critically evaluate different aspects of the media and media contents and to create communications in a variety of contexts’. (2007; p. 3)

Both the National Leadership Conference and the European Commission stressed the importance of literacy for all, leaving no one out, and the importance of a critical attitude towards media and critical assessment of online content, regarding both quality and accuracy, as key elements with regard to literate behavior.

Using the snowballing technique, we found that media literacy concepts are not only sometimes conflated with concepts like ICT-literacy, computer literacy, digital literacy, library literacy and so on, but that these concepts may also encompass each other. For some it includes the ‘competence’ aspect, i.e. the ability to make effective use of information, as this term has gained leverage in education (Ala-Mutka, 2011). Framing literacy as competence, may give the impression of a new perspective on media literacy, that is ‘new literacy’, as media literacy pertains to new media and not old media (Van Dijk & Van Deursen, 2010). Following the EU’s point of view that media literacy relates to all media (2007), and the use of this extended literacy concept in large surveys (Fraillon, Schulz, & Ainley, 2013), we propose an extended concept which presupposes a convergence of old and new media (Jenkins, 2006).

Due to its relation with the concept of competency, the aspect of learning, and thus formal education, has evolved as a consistent theme and context in the development of the concept of media literacy (Bawden, 2001). Researchers who take a broader, socio-cognitive or socio-cultural perspective, view media literacy as situated and defined in context (Buckingham, 2013; Street, 2003). Situatedness has produced a number of skill-based literacy definitions, a growing range of emphases in media literacy training as predicted by Aufderheide (1993, p. 1) and no end to the continuing conceptual struggle (Collins & Blot, 2003). Following Bawden (2008) these kinds of skill-based definitions and successive training lack substance, when they are not complemented with:

- ‘underpinnings’, i.e. the basic skill sets without which little can be achieved, like literacy and numeracy;
- ‘background knowledge’, i.e. the necessary understanding of the way in which digital and non-digital information is created and communicated, and of the various forms of resources which result;

- ‘attitudes and perspectives’, including moral/social literacy, i.e. the idea that the ultimate purpose of digital literacy is to help each person learn what is necessary for their particular situation.

‘Attitudes and perspective’ link an emerging concept to older ideas that should be grounded in some moral framework and understanding of what it means to being an educated person and are the most difficult to teach. With regard to levels of basic skills, the literature shows that advanced, technology-related communication skills and interpersonal skills are extremely important for sociality and employability, as well as social and creative intelligence. Sometimes referred to as soft skills, these skills are conceptually controversial and contested, difficult to measure and therefore difficult to teach and assess and as a result rarely present in modern-day curricula. Bawden’s elaboration of attitudes and perspective actually implies that a grounding moral framework and understanding of the creation and communication of information demands an individual to transcend the mere personal and material when one is learning ‘what is necessary for their particular situation’.

Elements of Literacy Practices Relating to Economic and Social Participation

In this section we address our second research question:

‘Which elements of media literacy are proposed as being relevant to the economic or social participation of the low skilled and low educated?’

In seeking to answer our second question, we first report on technology-related or -mediated participation in economic contexts and then turn to technology-related or -mediated participation in social contexts. In essence we are trying to determine the effect of social media use on participatory processes and in this process, attempt to combine understanding, meaning and context, as proposed by Bawden (2001). Finally, we compare our findings from these two contexts, in a search for similarities and commonalities that may .

The economic context

Computers have served as a substitute for labor for many routine tasks or exhibited strong complementarities with labor performing cognitive non-routine tasks (Borghans, Ter Weel, & Weinberg, 2014; Wulff Pabilonia & Zoghi, 2013). The skill-biased technology change model devised by Autor, Levy and Murnane (2004) proved helpful for more than a decade in predicting and visualizing these effects of computerization on tasks in a range of studies that replicated their first results. Yet the model did not incorporate the shift in skills demand in low skilled jobs that resulted in the demand for so-called new basic skills like, math, problem-solving, communication skills and creative and social intelligence (Frey & Osborne, 2013; Maxwell, 2006). As late as 2003, it was still claimed that there was no need to offer computer related courses or training to low skilled employees: “large investments in computer skills and intensive educational programs to teach pupils how to use computers are unlikely to be effective. Computer skills are therefore unlikely to become a basic skill, such as writing and math. (Borghans & Ter Weel, 2003, p. 16)” According to Stroobants, Jans and Wildemeersch (2001), individual learning during the life course requires establishing meaningful connections between individual life and society, via work and adult education. Suggesting a kind of biographicity, an engaging type of informal, socializing media use in different social contexts is seen as an opportunity to get disadvantaged groups, like low educated or low skilled online, engaged

and have them develop the necessary skills to ensure that they participate actively (De Haan & Adrichem, 2008; Livingstone, Van Couvering, & Thumim, 2005; Paus-Hasebrink, Lampert, & Hasebrink, 2009).

The low skilled or low educated are often profiled as not able or willing to maintain or increase their skills. Because of this profiling, employers are not willing to invest in the development of low skilled workers and education is not focussed on designing programs for the low educated or low skilled (Buisman, Allen, Fouarge, Houtkoop, & Van der Velden, 2013). An individual's educational attainment level however is by no means fixed or static, as it may rise through lifelong learning and drop through age-related factors (Buisman et al, 2013; Grotlüschen, Mallows, Reder, & Sabatini, 2016). There is even a surprisingly large proportion of educated workers employed in low skilled jobs (Toner, 2011) and an unexpected high number of adults with a low proficiency level that do not exhibit the expected characteristics concerning socio-economic background and level of educational attainment (Grotlüschen et al., 2016). There are also workers with a lower level of education attainment and lower proficiency level in jobs that require extensive training. These people may very well possess complementary skills not measured by the PISA and PLAAC initiatives, like complex communication, and use these to compensate for the lack of skills that are measured (Buisman & Houtkoop, 2014). So the use of certain social categories and the profiling techniques may negatively affect the opportunity structure, that is the provision of for example public employment services and education.

Resources that can be used as an opportunity, are not necessarily limited to those provided for by employers or the ones that have been created with colleagues and co-workers. Learning opportunities can also emerge from other resources, as for example professional communities on the Internet (Brown, Bimrose, & Merrill, 2014). Converting, that is, accessing, adopting or appropriating these kinds of resources has become increasingly important. But this process of converting resources into opportunities is also determined by the way existing networks constrain solutions of organizational problems. Explaining the structuralizing effects of technology on the distribution of opportunities, in terms of individual's access, adoption or appropriation of information, requires a relational view, meaning that an individual's position within networks and the relation with other network members can explain the effects that produce, reproduce or reinforce inequality (Van Dijk, 2013). This is apparent when we look at the gender and income inequality that is still visible in an innovative and meritocratic domain as ICT, corroborated by the fact that even Silicon Valley, well-known for innovation and meritocracy, remains a white and male-dominated landscape where black Americans and women are significantly underrepresented (Valsamis, De Coen, & Vanoeteren, 2016). Factors that are not directly related to individual characteristics and attributes, like age, ethnicity and gender, are less frequently reported or stressed in research.

Self-profiling and career control

Changing and challenging job conditions or career transitions, like those induced by technological change, are best met with networked, informal learning activities (De Grip, Loo, & Sanders, 2004; Kirschner, Caniëls & Bijker, 2012). Two individual career competencies seem particularly relevant to informal learning when low skilled are challenged by the changing conditions of their job: self-profiling and career control (Preenen, Verbiest, Van Vianen, & Van Wijk, 2015). Self-profiling is conceptualized as a communicative competency, while career control is considered a behavioral career competency.

‘Self-profiling’ refers to presenting and communicating one’s personal knowledge, abilities and skills to the internal and external labor market. This career competency becomes visible in the proficient use of social media in and across organizations targeted at self-profiling that is, pro-actively showing others what one wants to achieve in one’s career (Akkermans, Brenninkmeijer, Huibers, & Blonk, 2013). Disclosing this personal career related information is the first step in a process towards achieving valuable career goals. Low-skilled workers’ self-profiling is hindered by a number of factors. The most commonly reported factors are motivation and conflicting preferences, namely, future orientation, versus preference for leisure (Fouarge, Schils, & De Grip, 2013).

‘Career control’ relates to actively influencing work and learning processes related to one’s career by setting goals and planning how to reach them (Akkermans et al., 2013). Informal learning at work depends, among other factors, on individual actions like the development of relations with colleagues and co-workers (Brown et al., 2012). In part, setting intermediate goals and planning activities targeted at relational development, involves the use of influencing skills, engaging people for particular purposes and supporting the learning of others (Brown et al., 2012).

For individual, self-responsible learners, accessing and developing knowledge and resources through social media requires an active attitude and network competencies (Kirschner et al., 2012; Stauber & Walther, 2005). Low skilled workers’ career control is mostly hindered by personality traits, namely, locus of control, exam anxiety, and (lack of) openness to experience (Fouarge et al., 2013). Education meanwhile has little attention for the attitude and competencies that relate to developing knowledge and resources at work (Kirschner, Caniëls & Bijker, 2012).

The social context

Social interaction and participation are deeply affected by social media. Cooley, who coined the term social media, saw media and communication as an evolutionary mechanism determining the reach and influence of the environment in affecting social change and the growth of individuality. He observed the emergence of new means of communication causing a liquefaction of society by a multitude of small changes or ‘waves’ and producing “as many social media as there are specialized groups of sympathetic and communicating individuals” (1897, p. 80). Over the past decade, social media have penetrated deeper into the mechanics of everyday personal life, affecting people’s informal, social interactions and professional routines as well as the formation of new social, economic and institutional structures (Ester & Vinken, 2004; Van Dijck & Poell, 2013). Due to these affordances, new interactive media are often dubbed social media without further clarifying the distinctiveness that is suggested by the use of the adjective (Derksen & Beaulieu, 2011). Opinions and facts about these socializing effects that are afforded and mediated by technology are diverse.

As an instantiation of social technology, social media are seen as part of the experimental assemblages or arrangements that represent new, distinctive types and forms of sociality (Derksen & Beaulieu, 2011). Human based needs, interests and the motivation to communicate and evocate interaction, act as drivers for these participatory actions through media (Drotner, 2008; Ito, Horst, Bittanti, boyd, Stephenson, Lange, Pascoe, & Robinson, 2008; Jenkins, 2006; Turkle, 2004). The distinctiveness of the social may be illustrated by social media use that supports, affords or structurizes the expressive and evocative creation and exchange of information serving the creation of identity and sociality.

Social media use for example enhances the reach and fabric of social networks as part of one’s opportunity structure. Many migrants and low-skilled for example obtain

employment through social networks and ICT's enhance the reach of social networks and possibilities to create social capital (Green, De Hoyos, Barnes, Owen, Baldauf, & Behle, 2013; Zinnbauer, 2007). Social media use can positively co-constitute new, alternative and innovative forms of solidarity, connectedness and civic engagement (Ester & Vinken, 2004), but also contribute to a fragmentation or tribalization of social life (Sunstein, 2001). Social media use may co-constitute developmental tasks, such as the formation of one's identity and of social relations (Paus-Hasebrink et al., 2009). Social media however also threaten individuals' psychological well-being by fragmenting identity in terms of a difficult to manage and maintain a multiplicity of identities (boyd, 2014). The effects of social media use are diverse and it is not always clear whether these effects are the result of individual intent and choice or of structuralizing forces.

So how should social media use be framed and conveyed in order to support strategies for self-realization and socialization of the low skilled and low educated?

Selective self-presentation and participation

Benefitting from social media as resources or spaces of sociality (Walther, Stauber, & Pohl, 2005; Zinnbauer, 2007) often requires network membership or tangible 'social relevance' in networked structures (boyd, 2014). How are users then to take their first steps in becoming accepted and appreciated members of a network? This relevance may be achieved by producing social presence (Kaplan & Haenlein, 2010; Carpentier, 2009). An important aspect of online social interaction in networks, and therefore of networking abilities, with the goal of achieving some kind of desired outcome is strategic or 'selective' self-presentation.

Selective self-presentation

Selective self-presentation is an important aspect of identity formation (Valkenburg & Peter, 2011) and can best be understood as the intentional control of how one is perceived by others by selectively presenting aspects of one's self to others. Self-presentation relates to social processes of identification and socialization and is influenced by one's ability to create a fashionable or favorable impression. It also relates to one's degree of self-disclosure, that is the disclosure of personal information. As pointed out before, information should transcend the personal in order to evoke appreciative reactions.

Social media provide new environments and ways for identities to be constructed, visually presented and narrated (Paus-Hasebrink et al., 2009; Valkenburg & Peter, 2011) and to establish or maintain relations and friendships (Valkenburg & Peter, 2011). These online identities and relations offer positive, enabling outcomes (Valkenburg & Peter, 2011). Connected peers are important 'others' that recognize new patterns of behavior (Drotner, 2008; Strano, 2008) and function as resources within an opportunity structure (Walther et al., 2005).

Participation

'Participation' primarily deals with motivated action exercised in social formations which share a degree of interaction, common objectives, and interests (Jenkins, 2006). Explicit participation mostly refers to discursive decision-making in terms of collective understanding about the purposes and policies that govern networked activities (Preece & Shneiderman, 2009) accompanied by the assembly or appropriation of technology use in terms of ways of thinking and fixed patterns of interaction (Derksen & Beaulieu, 2011; Schäfer, 2008).

Online identities are embedded in socio-communicative relationships, that is, they are bounded by the extent to which audiences recognize the quality of the disclosed information (Carpentier, 2009). They are also often grounded in offline relationships, thus participation is also bounded by the extent to which desirable or favorable identities result in a positive offline ‘Hegelian’ recognition of subjectivity and social sanctions (Strano, 2008). This implies that participation in online networks not naturally results in the creation and use of egalitarian opportunities and that participation can be constrained or structured by mechanisms, like power relations, that extend from the offline world to online communities and networks and vice versa (Mariën, Heyman, Saleminck, & Van Audenhove, 2016; Van Dijk, 2013).

Networked learning and socializing activities posing demands that refer to participation, entail:

- ‘orientation’, which means developing interests and goals and dealing with setbacks and demands;
- ‘adaptation’, which means relating needs and capabilities to the environmental setting and conditions, compromising on goals, balancing competencies;
- ‘networking’ (Stauber & Walter, 2006).

Low educated and low skilled lack the a future orientation (Fouarge et al., 2013) and see networks as places for hanging out with friends or to keep in touch with relatives (Ito et al., 2008; Van Deursen & Van Dijk, 2012). They favor leisure network activities and lack the skills to present themselves strategically in online networks (Van Deursen & Van Dijk, 2012). They also lack the ability to reflect on their social media use and are not aware of social media’s relevance and potential for social and economic participation (Moekotte, Brand-Gruwel, Ritzen, & Simons, 2015).

The educational context

Although schools have been useful in addressing the first digital gap, that of access, they lack a sense of direction that would help in tackling the second digital divide (Pedró, 2010). Or as Livingstone, Papaioannou, Grandío Pérez, & Wijnen put it:

(...) the responsibility for those that do not learn all that is needed in a digital age is differently conceived depending on whether media literacy is considered an individual or a societal prerequisite. (2012, p. 3)

Part of the subtlety of this problem lies in educational and institutional policies governing the implementation of technology in schools and their curricula. National policies tend to limit media literacy issues to the economic and commercial use of ICT and to limit the skills that match this use to educational outcomes that reside on economic agendas (Celot, 2012; Livingstone & Bulger, 2013). Institutional policies tend to limit the use of ICT and the skills that match this use to aspects of the organizational and administrative effectiveness of the school organization (Hrastinski, Keller, & Lindh, 2009). Meanwhile, the rather functionalist classroom perspectives on technological skills that came with the large-scale introduction of technology, hampered expectations about equality and performance (Myers, 2006; Pedró, 2010). For example, Dutch teachers criticize the lack of consensus within schools about the role and function of ICT in pedagogy and curricula, which affects intrinsic issues concerning second-order barriers such as motivation, confidence and beliefs. Dutch education still lacks a comprehensive media literacy

program. However, school leaders are more concerned with addressing traditional first-order barriers such as infrastructure and resources (Meelissen, Punter, & Drent, 2014).

When we look at the motivation and trainability of the low skilled and low educated, a media literacy *program* would suggest the need to further investigate student needs, as well as students' motives and preferences (Christ & Potter, 1998; Kerstiens, 1975). People with low proficiency are easily caught in a what is called a 'low skills trap', as they are less likely to experience the need for participation in learning activities, are not literate enough to perceive, recognize and take advantage of opportunities or rationalize their non-use in an attempt to cope with their anxieties and failures. As a result of this reported attitude and capability, they may even be excluded from further analyses and deliberately left out when interventions are arranged (Buisman et al., 2013).

Although social media use entails informal learning which may produce positive social and economic outcomes and peers or audiences exert mitigating 'socializing effects', youth still display or inadequate use and risk behavior, and are in need of mediation, guidance or instruction (Livingstone, Mascheroni, Dreier, Chaudron, & Lagae, 2015; Pfaff-Rüdiger, Riesmeyer, & Kümpel, 2009). Knowledge concerning the adequate use of social media in terms of adequate social behavior seems to be the least significant predictor of adequate behavior (Pfaff-Rüdiger et al., 2009). Media literacy learning is therefore best approached as hands-on, situated and experiential (Buckingham, 2007), democratic and critical (the teacher is researcher and facilitator), and process-driven (Aufderheide, 1993).

Finally, the low educated and low skilled face an increasing number of critical transitions in their life course. They are in need of support in a time where support structures are dismantled, rapidly digitalized or rigidly inadequate. Non-traditional learners have profoundly different motivations and agendas for their education. These learners have to recognize and accept the structuring principle of self-realization forced upon them by modernity and have to learn how to cope with challenges and convert the provided or structured opportunities into capabilities. And if opportunities are not provided as support structures erode, these learners have to learn how to create these opportunities for themselves. This requires rethinking education geared towards lifelong learning, that is, help students cope with transitions and structure and convert opportunities. Future post-initial learning opportunities outside of the education system are believed to be largely dependent on and supported by technological innovation, that is the provision on online courses and online educational resources (Redecker, Leis, Leendertse, Punie, Gijsbers, Kirschner, Stoyanov, & Hoogveldtherborn, 2010).

Kerstiens (1975) was probably one of the first to suggest that the use of various media could provide a way of "de-monopolizing instructional space", for example, decoupling programs for non-traditional learners from brick and mortar schools, allowing non-traditional learners the choice of when and where to encounter instructors in order to develop and prove their competencies.

Education has to support low educated and low skilled develop different levels of media literacy at different stages in their life course. So in effect, educational institutions will have to adjust their programs to meet these needs in order to better prepare youth or adults who are at risk of facing a low skills trap and a precarious future. Education will also have to adjust their delivery modes in serving these youth and adult learners throughout their life course and provide new modalities that better fit the stage of the life course these learners are in and the kinds of challenges and issues they have to cope with during these stages.

Conclusions

Effective elements of media literacy

With regard to our first question we found no relevant notions or clues in peer reviewed articles concerning effective educational practices and design principles (see Appendix A). The type of research we queried, has not been conclusive with regard to the concept and the literacy practices educators should envision when designing programs for low educated and low skilled who face exclusion and a precarious future.

The definition proposed by the National Leadership Conference (1993) that is most commonly referred to research, although often misquoted. The misquoted version largely resembles the one adopted by the European Commission (2007) and was intended by the Commission to inform and direct educational policies in the member states. More important, both definitions are complemented with the fundamental objective of a critical attitude towards all media, old and new, and a critical assessment of media messages, including those online. The concept of media literacy also faces contamination from and competition with related concepts such as digital literacy, computer literacy, ICT literacy, information literacy, and the like (Bawden, 2001).

Researchers are seemingly only interested in certain specific groups, leaving the stories of many who struggle with literacy issues untold (Livingstone & Bulger, 2013). Their initiatives do not cover the possible relation of (critical) media literacy with the transitional needs or tasks during the adult life course (Heckhausen, Wrosch, & Schulz, 2010). These initiatives are rightly critiqued because they focus research on either a single, economic goal (Celot, 2014), a single generation or age group (Grimes & Fields, 2012) or a single type of network like Facebook (Lovink, 2012).

The research that we found on media literacy regularly limits itself to age-related developmental issues and questions. Narrow attention to age-related and age-graded topics, such as identity development in the formative years, is rightly critiqued (Grimes & Fields, 2012; Lovink, 2011), because certain age groups are underrepresented in the research, and certain alternative media and networks are not covered. Research literature indicates that challenging conditions emerge across the entire life course; there is no life stage without social and economic challenges that require learning through social interaction (Heckhausen et al., 2010). Yet non formal, lifelong learning, which has become extremely important for older generations of non-traditional learners, is sparsely addressed in research on media literacy. This means that developmental topics, which we consider essential in understanding the transformative years of adults and which relate to issues and questions of lifelong learning, are barely covered in research on media literacy.

Elements of media literacy practices relevant to social or economic participation.

From research literature and reports, it became clear that effective social and economic participation rely on the ability to create, share and evaluate information in collaboration. The ability to create and communicate information in an effective way requires different skills, starts with a learning process but most importantly demands continuous learning. Socio-communicative elements that are relevant and important for the creation of mutual understanding are:

- creating and managing a favorable or desirable impression of the self;
- technical skills;
- acceptable degrees of self-disclosure;

- awareness of network mechanisms and affordances
- willingness to invest time and effort.
-

Behavioral elements that are relevant and important for the creation of interpersonal relationships are

- influencing skills;
- communication skills;
- networking skills.
- willingness to invest in supporting of and sharing with others.

A broader view or frame of reference and generalisable criteria do however not suggest transferability of media literacy as a narrow set of skills, as for example proposed by Lonsdale and McCurry (2004). Either of these skills should be complemented by basic skills, a more general understanding of how information structures relations and opportunities and thus relates to power and equality, and attitudes and perspective related to morality and sociality (Bawden, 2008).

Education as a strategic building block.

Learning takes place in the context of opportunity structures within which individuals operate. These opportunities are either provided by institutions like public education or employment services, the employer or they have to be organized or created by the individual. According to Markauskaite (2006), the provision of learning opportunities and programs depends on the rationale who benefits: the individual or society. This implies that political choice can structure or constrain the opportunity structure and the resulting education system may even produce segregation or inequality (boyd, 2014; Mariën et al., 2016; Van Dijk, 2013).

Considering learners' preferences, traits, attitudes and perspectives as the bottlenecks of sociality and employability, we argue that attitude and motivation are the critical points of engagement that should be addressed by educational interventions aiming at enhancing the participation of the low skilled or low educated through a comprehensive media literacy programs. Addressing motivation and attitude however requires a situational approach without the bias of a-priori categorical pairs that may (be set out to) reproduce middle class behavior (Boonaert & Vettenburg, 2011; Verdegem & Verhoest, 2009).

The use of technology and social media appears as the overall normative stance of how Western societies are being organized. The Dutch government for example has chosen to digitalize all governmental services by 2017. The effects of deregulation and flexibilization on the majority of digitization processes, implemented by public and private institutions without an in-depth consideration, may lead to the formation of excluded or disadvantaged individuals (boyd, 2014; Mariën et al., 2016).

Low skilled face precarious situations instead of stable long-term employment. They will have to navigate support structures more often and more intensely when there are no lasting effects created during transitions. A similar effect, although unintended, may be produced when the process of reconfiguration and digitalization is ignorant of the educational opportunities that should accompany rapid changes in the precarious life course of the low skilled. There are for example concerns that the expansion of

employment mechanisms and services delivered through ICT risks leaving behind the most disadvantaged (Green, 2013).

Limitations of our study

The limitations of this study in part concern the methodology, that is, selection of a representative body of literature on the subject of media literacy in relation to the economic and social participation of the low skilled and low educated.

Searches in databases are challenging for several reasons, including selection of databases, publishers' bias, different interfaces for the databases, different ways of constructing search strings, different search limitations. Our approach to media literacy has a few important methodological caveats. The first concerns the use of the search terms, especially the term 'media literacy'. Looking for the impact of authors is problematic when there is no 'single field', that is when a field is paradigmatically or theoretically divided or when a concept can be traced back to authors in a number of comparable fields.

One of the limitations of using descriptive OECD statistics and reports is the fact that the measured constructs, such as basic skills, core skills or foundation skills, do not necessarily map onto the concept of 'media literacy'. They did, however, provide an impression of the corresponding levels of technology-related literacy that we assume being at least indicative of being low skilled and low educated.

Discussion

Looking back we can conclude that the relation between research and vocational education is one of the factors that may account for the lack of relevant findings concerning our first question. What education lacks is a set of generalisable criteria by which to operationalize and assess media access, adoption and appropriation in the context of social and economic participation.

For more than a decade, researchers have repeatedly stressed that ICT's in education has had no effect on the skills and use patterns of students (Van Dijk, 2009; De Haan & Sonck, 2012). The fast development of Internet technology and social media partly explain this problem. This indicates that most researchers are not able to predict the outcomes of technological development in all domains, explain how technology may influence differences in outcomes or may even produce inequalities (Van Dijk, 2013).

A prediction of patterns and benefits of social media use requires more than sticking to individualistic notions and adding variables as indicators for the (inequalities of) outcomes (Van Dijk, 2013). It is important to note here that not all individuals in low skilled jobs fit the profile of low skilled (Grotlüschen et al., 2016) and that there is ample reason to redefine the concept of low skillness (Kureková, Haita, & Beblavý, 2013). It is as yet unclear how causal relations between the training and development of core skills by adults, including media literacy, can possibly be measured and described, as scores achieved on core skills appear to be also positively related to various aspects of informal learning (Buisman et al., 2013). It is also questionable whether these surveys like PIAAC, measure all skills that relate to employability (Buisman & Houtkoop, 2014) and hence do not necessarily corroborate the validity of a one on one relation between educational attainment and occupational level. When low skilled persons learn how to profile

themselves, they may even escape these categorical mechanisms that predominantly profile them as unwilling or unable.

The profiles, predictions and policies concerning the low educated and low skilled based on economic theories and models alone, prove to be flawed and should at best be extended with insights and results from other fields and disciplines in order to explain mechanisms that produce social and economic gaps and combat the resulting inequalities. Our results indicate that policies should not solely be restricted to and based upon economic studies in order to esteem what low educated and low skilled workers of the 21st century need for their wellbeing and welfare. There is too much belief in the workings of economic mechanisms and too little consideration for and recognition of the precariousness of those who are profiled as low educated and low skilled. In line with these findings, educational programs should not be narrowed to functionalist and utilitarian approaches to literacy skills and practices.

The number of peer-reviewed articles we encountered turned out to be too small for our purpose of informing educational design, other than proposing a pedagogy that rests on critical reflection on situated literacy practices and complementing skills with purposeful understanding, that is sense making, and a sense of morality and sociality. We do, however, propose a model (Figure 1) that may function both as a heuristic framework for future research on media literacy, i.e. a field specific participatory habitus, and as a reflexive model that may inform critical pedagogy concerning media literacy in relation to social and economic participation and the media logic that governs both types of participation.

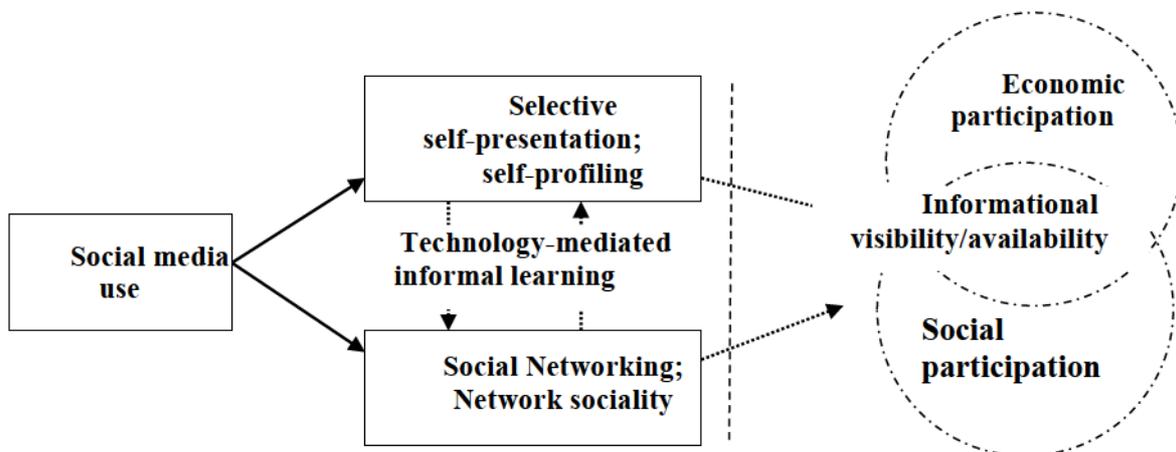


Figure 1. Technology-mediated informal learning

This framework presumes that the social and the economic contexts or participation are no longer strictly divided. Dissolving this demarcation implies that social and economic categories can be identified, studied and elaborated in unison. This would possibly be useful when economic issues, like the fact that a growth in productivity is not accompanied by a growth in income, keeps puzzling researchers. An example of such an elaboration is the economic concept of markets, which, according to Smith, ‘are not simply embedded in social relations, they *are* social relations’ (Stark, 2000, p. 3). An elaboration would be the 21st century labor market were meritocratic effects, like the qualifications of labor market entrants, are still trumped by categorical inequalities like gender or race. Another example is the concept of business value, which according to

Maes (2003) transcends monetary value and is socially constructed meaning in many business contexts and organizations.

Finally it would be relevant to explore whether the relations implied in our framework by the direction of the arrows may actually prove to be bi-directional. This would be relevant for our understanding of how the structure and functioning of networks and the relation with others in these networks, account for the inequality of social and economic outcomes.

Therefore it also seems important to consider and question whether individuals' motives measure up to the demands of being active, engaged and self-responsible learners. The question then is not simply whether individuals possess the skills to access and develop knowledge and resources by means of experiential learning in informal networks, or how the concept of media literacy can be operationalized and assessed for educational purposes. The question is mainly whether individuals are motivated to develop the attitude of active, self-responsible lifelong learners, what these motives consist of and what they are related to in diverse contexts. Perhaps acknowledging and exploring a third divide, that is the mechanisms of durable inequality, will bring us nearer to understanding the problems of motivation and attitude surrounding literacy practices and the gap these practices relate to.

Our framework presumes that technology use, that is access, adoption and appropriation, influences the participation in networks and hence can diminish social or economic inequalities within these networks in terms of the distribution of opportunities. The effects may however also work the other way. Van Dijk (2013) claims that the (re)configuration of networks may cause or influence the uptake and appropriation of technology and information and hence reproduce or reinforce inequalities in the distribution of opportunities. As such, online networks extend these mechanisms to the online world.

If our understanding of literacy practices and social and economic participation is to encompass processes of acceptance and rejection, inclusion and exclusion, appropriation and disappropriation, moralizing and justification, we have to broaden our view of media literacy and incorporate attitudinal and motivational factors related to technology use and literacy practices. If our scope and intention is to endow our youth with the capabilities to envision new knowledge (Langer, 2011), forge their own possible, social futures (The New London Group, 1996) and use networked sources as individualized systems of social capital (Stauber & Walther, 2006), there is no reason to leave out older generations who are apparently already living their futures. They have by no means forfeited their right to shape and redesign these futures by accessing and appropriating resources. So the major question remains whether learning opportunities concerning media literacy are offered at the right time, in the right form and distributed over the lifespan in the best possible way serving the needs of all who need support.

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