
Title	Skill vs social practice? Some challenges in teaching digital literacy in the university classroom
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Skill vs social practice? Some challenges in teaching digital literacy in the university classroom

INTRODUCTION

It is perhaps no exaggeration to say that many governments today view digital literacy as the panacea for states' economic, social and civic needs. As a strategic priority area, digital literacy has made its way into educational policies and curricula, and educational institutions at different levels have been tasked with developing their students' digital literacy skills through cross-curricular approaches (such as teaching it as part of language classes) or dedicated subjects. This can present many challenges, including lacking teacher professional development, uneven digital infrastructure across schools/school districts or unequal access to digital media among students. In this paper, I focus on a different challenge that stems from differing definitions of digital literacy among educational researchers, teachers and educational policy makers and the tensions that can arise from these differences for teachers who are tasked with developing learners' digital literacy. Specifically, I discuss how I have merged a curricular mandate for a skills-heavy digital literacy policy with my theoretical conviction of literacy as social practice in my teaching of a tertiary course on digital literacy.

This dilemma may face teachers in other contexts as well, given the frequent framing of digital literacy as tech-skill in global policy discourse. But it is particularly pertinent in Singapore, where the government has recently launched a digital literacy curricular reform across all educational levels. The enhanced digital literacy curriculum for universities is aimed primarily at boosting students' digital skills such as computational thinking and data competencies (Ministry of Education, 2020). In this paper, I critically examine this curriculum with reference to a larger divide between conceptualizations of digital literacy as technical, decontextualized skills related to employability on the one hand and as social

practice rooted in students' lived experiences on the other. While I present these perspectives as separate, they should not be thought of as mutually exclusive. In fact, the second part of the paper describes my efforts to develop pedagogies that bring them together, illustrated through assignments and activities aimed at developing a complex set of digital literacies that encompass technical skills, critical engagement with digital media, as well as playful and creative communicative practice.

DIGITAL LITERACY: SKILL VERSUS SOCIAL PRACTICE

Scholars writing about literacy in relation to new technological developments have long been wary of approaches that reduce the complex skills, competences and dispositions needed to navigate digital technological terrains to mere 'tool use' (e.g., Buckingham, 2008). They take issue with a definition of digital literacy that is centered upon technical-technological skills and sees those as the key feature of "effective citizenship" in today's networked societies. Yet such a perspective is widespread among global educational organizations as well as national bodies. For instance, in the UNESCO's *Global Framework of Reference on Digital Literacy Skills*, digital literacy is comprised of "computer literacy, ICT literacy, information literacy and media literacy" (Law et al., 2018, p. 6), stressing computation. Another recent example for governmental embrace of digital competencies is the European Commission's *European Skills Agenda*, which aims to ensure that 70% of the population of the European Union acquires "basic digital skills" within the next five years, primarily to aid the post-COVID-19 economic recovery process. The European example highlights a further crucial corollary to skills-focused definitions: digital literacy is couched in economic arguments and discourses of employability. That is, digital literacy (i.e., technical know-how) skills are argued to increase workforce participation for the individual, which then boosts national and global economic metrics. As European Commission Vice-President Mr. Margaritis Schinas

stated at the launch of the European Skills Agenda, “*This **unprecedented crisis** needs an unprecedented answer. [...] We already know that skills are what allow people and our economies to thrive. Now, it is time to join hands and unlock a **skills revolution**, leaving nobody behind.*” (European Commission, 1 July, 2020, my emphasis).

These arguments eerily echo those periodically made about (traditional) literacy skills by governments over the last one hundred years and point to the highly political nature of language and literacy education. Lamentations about declining literacy skills in many Western societies throughout the 20th century often generated a sense of crisis and impending social disaster from which the only way out was a return to ‘the basics’ of reading and writing (Luke, 2004). The “digital skills crisis” that Mr. Schinas referred to can also only be solved by focusing resources and education on “quantitative objectives for upskilling and reskilling” (European Commission, 1 July, 2020). Fueling such sentiments is what Graff (1979) called the literacy myth; a belief that “the acquisition of literacy is a necessary precursor to and invariably results in economic development, democratic practice, cognitive enhancement, and upward social mobility” (Graff, 2011, p. 35). The parallels to how digital literacy is often described in public discourse are striking.

It is precisely against views of language and literacy learning as the acquisition of discrete skills that New Literacy scholars developed the notion of literacy as social practice (Street, 1984; Gee 1990). This perspective starts from the observation that people communicate for social purposes; to inform others, to express themselves or to connect with others, and they do so according to a given community’s textual practices, cultural values and social norms. Being literate thus entails but goes beyond facility with tools and technologies of meaning-making (i.e., knowing how to decode a text or knowing which buttons to push to send a text message) to include significant knowledge of the cultural-communicative appropriacy of form-function connections as well as the differential valuations attached to

different literate practices within a particular group. Literacy is thus firmly intertwined with identity since it is expressive-communicative behavior people engage in as members of various groups. In digital times, such groups tend to form around affinity spaces rather than more stable communities (Gee, 2004) and interactions online often orient to digital cultural norms that favor conviviality, playfulness and humorous creativity (Vásquez, 2019). At the same time, literacy in the formulation of New Literacy Studies is also explicitly acknowledged as an ideological practice whereby the cultural-semiotic forms and norms of some groups come to be associated with institutional domains such as schools. As a result, other literacies become undervalued or excluded from such settings and their communities potentially stigmatized.

DIGITAL LITERACY AND (ENGLISH) LANGUAGE LEARNING

Digital literacies as social practice can thus be seen as an extension of a socially-grounded and ideologically attuned definition of what it means to be literate, applied to the digital communicative landscape of the 21st century (Lankshear & Knobel, 2008; Jones & Hafner, 2012). More fundamentally, within the notion of digital literacy we also see a convergence of scholarship and teaching relating to first language and second or foreign language learning and education. This is because new technologically mediated spaces have created new contexts for communication and socially occasioned uses of language (Thorne & Black, 2007), no matter whether it involves L1, L2 or multi/translingual practices. This is especially true for learners of English, given that English still dominates as the language with the highest percentage of web content (25.9%) (Johnson, 2021). Early research in this vein documented how new media spaces such as fanfiction sites or online multiplayer games provided meaningful contexts for English learners' language and literacy development (Black, 2008, 2009), demonstrating that successful literacy learning was deeply embedded in

the development of literate *identities* (Thorne and Black, 2007). Following this largely ethnographic work came classroom-based studies of digital literacy within EFL/ESL education (e.g., Hafner 2013, 2014; Wu and Miller, 2021). These studies have attempted to infuse English language classrooms with the social and participatory elements characterizing affinity spaces (such as audience) and promote digital literacies within a social practice framework.

Recent scholarship has also sought to draw attention to the inequalities facilitated by differential participation patterns in digital and new media spaces particularly among ESL learners, which largely unfold along social class (Darvin 2018). As Darvin (2019) argued, these documented differences impact young people's learning and career trajectories and must be addressed in digital literacy instruction. Specifically, he stressed the need to teach "digital literacies that matter" (p. 223); online *communicative* competencies that facilitate youth's social mobility while fostering their critical dispositions to challenge and transform the institutional mechanisms of digital inequality.

Whether one emphasizes functional technical-technological skills or critical, communicative competence within digital literacy will have clear implications for instruction (Pangrazio et al., 2020). At the same time, it is important to recognize that both are necessary. Basic technical skills are vital for having a digital life but to have a say in that digital life one must grasp the cultural, political, economic forces shaping it and have the communicative competence to harness and critique them. Instructional approaches will also need to contend with discourses, policies and instructional legacies that make up the educational ecology within which teaching and learning are always situated.

DIGITAL LITERACY EDUCATION: THE SINGAPORE CONTEXT

Singapore's government has, over the past decades, consistently implemented policies and initiatives to encourage technological solutions to commerce, governance, national security as well as societal well-being. In fact, the country has often featured at the top of various global rankings measuring technology readiness and adoption (e.g., the World Economic Forum's Global Information Technology Report; Baller, Dutta & Lanvin, 2016). As a nation, Singaporeans are highly connected and are avid technology users, with 98% of households accessing the internet via broadband connection and 89% of the population having access to a computer at home (Infocomm Media Development Authority, n.d.). Unsurprisingly, digital literacy is largely seen as being within the remit of educational technology policy, rather than language learning, although the latest national curriculum for English mandates the inclusion of digital texts into teaching and learning as well as the creation of digital and multimodal texts.

In 2020, the Ministry of Education (MOE) introduced a program aimed at enhancing current efforts of digital literacy education. The common framework underlying this reform emphasizes four components of digital literacy (MOE, 2020): (1) *Find*; (2) *Think*; (3) *Apply* and (4) *Create*. Within this general framework, the implementation focus for each education level differs. For primary, the emphasis is on cyber wellness and coding, for secondary, the program is aimed at enhancing computational skills with an explicit goal to “create a stronger computing talent pipeline” (MOE, 2020). For tertiary level, the objective of the program is to enhance “baseline digital competencies, including computational thinking and data competencies (e.g., quantitative reasoning)” though reference is also made to the need to foster cyber wellness/digital well-being and ethics. To guide implementation, the MOE has made available to universities a detailed set of skills or ‘baseline competencies’ (see Table 1) clustered around six main components.

[Insert Table 1 here]

These competencies provide the basis for digital literacy instruction at the tertiary level, and lecturers are expected to take account of them and develop courses that foster these skills.

TEACHING AT THE NEXUS OF CURRICULUM AND DIGITAL LITERACY AS SOCIAL PRACTICE

Looking at the baseline competencies, several observations can be made. They are a decontextualized set of skills largely centered around effective tool use, efficient and purpose-driven data handling, and ethics, all within a generally conformist orientation to “appropriate” use. There is rather minimal consideration of the social, cultural or political-economic dimensions of digital participation/production as communicative practice. Are these the “digital literacy skills that matter” (cf. Darvin, 2019)? They are certainly the ones that matter to the Singapore government as they are thought to be foundational for ensuring a workforce ready to participate in the knowledge economy. But these competencies are far from sufficient to “empower students to discover knowledge on their own” (Darvin, 2019, p. 223), much less to “critique and transform dominant worldviews, and to reimagine the role of technology in constructing more equitable futures” (Darvin, 2019, p. 224). I would also add that it is not a list that takes into account students’ lived experiences and identities, which is an important aspect of digital literacy as social practice.

It is within this curricular milieu that I teach the course *Digital and media literacy* every semester. The profile of students varies; some are preparing to be English teachers in local primary or secondary schools, while others are studying a range of degree programs, mostly from the humanities and social sciences. Of course, university lecturers in Singapore are given autonomy to design courses in line with current scholarship and their own research expertise. In designing the course, my aim was to ensure that a good number of the skills

from the MOE list are incorporated within a complex conceptualization of digital literacy, shaped by the following considerations: 1) Digital literacy is online communicative competence that encompasses mastery of functional-technical skills, multimodal-semiotic forms as well as cultural and compositional norms of communication; 2) Digital literacy is situated within particular affinity spaces/spaces of affect where it enables people to negotiate identities, collaborate with others and derive pleasure from doing so; 3) Digital literacy entails critical awareness of the politics of communication; 4) Digital literacy encompasses understanding of technological development as shaped by historically contingent political-economic infrastructures, and the capacity to imagine alternative trajectories of technological progress. Below I illustrate through a selection of activities and assignments how I have put these four principles into practice.

Digital literacy as complex online communicative competence

The course has a group assignment for which students have to create a brief video about a digital skill. As such, the content of the video itself is related to digital literacy while creating the video pushes students to engage in a complex process of multimodal production. As for the skills, I provide a baseline list from which students can choose (and which include some of the skills of priority to MOE in Table 1, such as *computational thinking*, *strategies for ensuring personal data privacy*, *copyright basics for students*) or they may also choose their own. To add complexity to the task, the video needs to follow an instructional/informational genre, although students can choose their target audience and format (live/animation).

This assignment fosters a complex set of digital communicative competences. First, the research students need to do on their chosen skill clearly broadens their knowledge of what these key skills actually comprise. Second, they need to be able to transmediate this knowledge into a short video, which necessitates consideration of purpose, audience and genre. Perhaps

most importantly and challengingly, students must think about and design intermodal semiosis (visual, audio and text) in their videos. Of course, we discuss and debate these considerations in class and students are given helpful resources such as a multimodal storyboard template and readings. Finally, the assignment also encourages collaboration based on strengths by helping students to break up the task into components (e.g., storyboarding, editing) and to assign those to group members. Once completed, the videos are shared by the groups for viewing and I also encourage them to post the videos on Youtube or some other non-class platform (though this is not compulsory). The digital literacy fostered through this assignment also encompasses several competencies in the MOE's list, such as information search/evaluation, digital learning and creation.

Digital literacy as rooted in affinity/affect and students' identities

One of the individual assignments sees students creating memes, after memes have been introduced in class as objects of academic research. Memes are a digital genre which require an understanding of visual-linguistic conventions, deep familiarity with context, and the twin design demands of imitation and mutation (cf. Shifman, 2016). Apart from giving students opportunities to foster complex communication skills through digital production (a category on the MOE list), the creation of memes enables them to engage in creative digital play rooted in life experience, which is extremely rare in the formal language classroom context of Singapore (Weninger, 2017) and completely missing from the MOE competencies. Students are free to choose the meme genre or topic, and many of them produce memes relating to aspects of student life. Creating memes however should not be seen as mere frivolity since creativity and criticality can be intertwined (Darvin, 2020) so that playfulness and verbal art become resources in the transformative speech acts of digital humor (Jones, 2013; Weninger & Li, 2022). Indeed, many students create memes that while making light of shared negative

experiences (e.g., exam stress, transportation issues) also display an acute and critical understanding of the institutional roots of those experiences.

Digital literacy as critical awareness of the politics of communication

While this dimension of digital literacy pervades many of the topics and activities we undertake throughout the semester, there is one assignment that is specifically designed to hone students' abilities at critical analysis. While the previous two examples focused on production, in this assignment students choose a text they have encountered online and analyze it to highlight how the text constructs values, identities and points of view. For the analysis, students utilize Barthes' (1977) approach to visual semiosis, supported by van Leeuwen's (2001) extension which offers a framework for students to identify and discuss diverse signifiers in the images and their denotative and ideological meanings. Through their analyses, students learn to see online language/communication as ideological, highly persuasive and always involving a particular representation (Hobbs, 2011). Such a critical element is completely lacking from the MOE's list, whose competencies under Literacy and Communication are overwhelmingly functional.

Digital literacy as historical understanding of technological development

In my course, I try to foster a kind of historical vision as part of digital literacy; seeing how our understanding of technology is contingent upon the social and cultural frameworks within which they are meant to be used. In one activity, we listen to a dramatized reading of Ray Bradbury's 1951 science-fiction short story *The Veldt*. The story is about an American family who live in a house where everything is automated and the children's nursery is in today's terms a VR room that entertains them— to a tragic end. In our discussion, we then focus on how much Bradbury's dystopian vision of life where technology replaces human relations has come

true 70 years later. As a sort of visioning exercise, we then also generate a list of technological developments that we think will produce social inequality/instability 70 years from now; bionic enhancements, robots/AI and enduring human bias in creating new technology topped the list the last time around. This way of thinking about digital progress is a crucial first step to imagining how changes we make today could result in different future trajectories. In that way, it enhances the MOE's competency of *Digital Learning and Adoption* by not only reflecting on the social impact of emerging technologies but also anticipating and critiquing them.

CONCLUSION

This essay discussed how Singapore's educational and policy context with its specific vision concerning digital literacy and digital competencies has impacted the design and teaching of my university course on digital literacy. I argued that the emphasis on decontextualized digital skills is not restricted to Singapore but rather symptomatic of global policy discourse which parallels the history of literacy education as the tug-of-war between autonomous and sociocultural conceptualizations (Weninger, 2019). More broadly, though, digital literacy instruction in classrooms, be it through language classes or some other subjects, will always be shaped by curricular mandates, teachers' professional expertise and institutional priorities. Definitions and frameworks for teaching digital literacy articulated by scholars and governments are helpful in guiding teaching and learning. But ultimately, as educators we must undertake a critical appraisal of contextual factors impacting digital literacy education so that we can design instruction that is social, critical, incorporates functional skills and is responsive to local demands and challenges.

References

- Baller, S., Dutta, S., & Lanvin, B. (2016). The global information technology report 2016: Innovating in the digital economy. Geneva: World Economic Forum/INSEAD.
- Barthes, R. (1977). Rhetoric of the image. *Image–Music–Text*. Trans. Stephen Heath (32-51). New York: Hill and Wang.
- Black, R.W. (2008). *Adolescents and online fan fiction*. New York: Peter Lang.
- Black, R.W. (2009). Online fanfiction, global identities, and imagination. *Research in the Teaching of English*, 43(4), 397-425.
- Buckingham, D. (2008). Defining digital literacy. What do young people need to know about digital media? In M. Knobel & C. Lankshear, *Digital literacies: Concepts, policies and practices* (pp. 73-89). New York: Peter Lang.
- Darvin, R. (2018). Social class and the unequal digital literacies of youth. *Language and Literacy* 20(3), pp. 26–45.
- Darvin, R. (2019). Youth, technology, and the hidden curriculum of the 21st century. *Youth and Globalization*, 1(2), 210–229.
- Darvin, R. (2020). Creativity and criticality: Reimagining narratives through translanguaging and transmediation. *Applied Linguistics Review*, 11(4), 581-606.
- European Commission (1 July, 2020). Commission presents European skills agenda for sustainable competitiveness, social fairness and resilience. Retrieved from https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1196
- Gee, J.P. (1990). *Social linguistics and literacies: Ideology in Discourses*. London: Falmer.
- Gee, J.P. (2004). *Situated language and learning: A critique of traditional schooling*. New York: Routledge.
- Graff, H. J. (1979). *The literacy myth: Literacy and social structure in the nineteenth-century city*. New York, NY: Academic Press.

- Graff, H. J. (2011). *Literacy myths, legacies and lessons: New Studies on literacy*. New Brunswick/London, UK: Transaction Publishers.
- Hafner, C. A. (2013). Digital composition in a second or foreign language. *TESOL Quarterly*, 47(4), 830–834.
- Hafner, C. A. (2014). Embedding digital literacies in English Language Teaching: Students' digital video projects as multimodal ensembles. *TESOL Quarterly*, 48(4), 655–685.
- Hobbs, R. (2011). *Digital and media literacy: Connecting culture and classroom*. Thousand Oaks, CA: Corwin.
- Infocomm Media Development Authority. (n.d.) Infocomm Usage: Households and individuals. Singapore: IMDA. <https://www.imda.gov.sg/infocomm-media-landscape/research-and-statistics/infocomm-usage-households-and-individuals>
- Johnson, J. (27 January, 2021). Most common languages used on the internet. *Statista*. Retrieved from <https://www.statista.com/statistics/262946/share-of-the-most-common-languages-on-the-internet/>
- Jones, J.P. (2013). Parody, performativity and play: The reinvigoration of citizenship through political satire. In John Hartley, Jean Burgess & Axel Burns (eds.), *A companion to new media dynamics*, 396–406. London: Blackwell.
- Jones, R.H., & Hafner, C.A. (2012). *Understanding digital literacies: A practical introduction*. London: Routledge.
- Lankshear, C. & Knobel, M. (2007). Sampling “the new” in new literacies. In M. Knobel & C. Lankshear, *A new literacies sampler* (pp. 1-24). New York: Peter Lang.
- Lankshear, C., & Knobel, M. (2008). Introduction: Digital literacies—concepts, policies and practices. In C. Lankshear & M. Knobel (Eds.), *Digital literacies: Concepts, policies and practices* (pp. 1-16). New York: Peter Lang.

- Law, N., Woo, D., de la Torre, J., & Wong, G. (2018). A global framework of reference on digital literacy skills for indicator 4.4.2. Montreal, Canada: UNESCO Institute for Statistics.
- Luke, A. (2004) Literacy and educational fundamentalism: An interview. *English Quarterly*, 36(4), 12–17.
- Ministry of Education. (2020). Strengthening digital literacy. Singapore: MOE.
<https://www.moe.gov.sg/microsites/cos2020/refreshing-our-curriculum/strengthen-digital-literacy.html>
- Pangrazio, L., Godhe, A.L., & Ledesma, A.G.L. (2020). What is digital literacy? A comparative review of publications across three language contexts. *E-learning and Digital Media*, 17(6), 442-459.
- Shifman, L. (2016). *Memes in digital culture*. Cambridge, MA: MIT Press.
- Street, B.V. (1984). *Literacy in theory and practice*. Cambridge: Cambridge University Press.
- Thorne, S. & Black, R. W. (2007). Language and literacy developments in computer-mediated contexts and communities. *Annual Review of Applied Linguistics*, 27, 133-160.
- van Leeuwen, T. 2001. Semiotics and iconography. In T. van Leeuwen & C. Jewitt (Eds.), *The handbook of visual analysis* (pp. 92-100). London: Sage.
- Vásquez, C. (2019). *Language, creativity and humour online*. New York: Routledge.
- Weninger, C. (2017). The ‘vernacularisation’ of global education policy: Media and digital literacy as 21st century skills in Singapore. *Asia Pacific Journal of Education*, 37(4), 500-516.
- Weninger, C. (2019). *From language skills to literacy: Broadening the scope of English language education through media literacy*. London: Routledge.

Weninger, C. & Li, D. (2022). Performing microcelebrity: Analyzing Papi Jiang's online persona through stance and style. *Language in Society*, 1-32.

<https://doi.org/10.1017/S0047404521001020>

Wu, J.G., & Miller, L. (2021). Raising native cultural awareness through WeChat: A case study with Chinese EFL learners. *Computer Assisted Language Learning*, 34(4), 552-582.