

*The Journal of  
Multimodal Rhetorics*  
Volume 4, Issue 2



**Invisible Labor in the Academy**

# Digital Literacy as a Form of Free Labor

Malaka Friedman, North Carolina State University

----

## **Abstract**

*Invisible labor within the academy unfortunately is not a new concept. There is a general understanding that when it comes to navigating the spaces of academia students need to “pay their dues” by working hard both within and outside the classroom spaces. Students, staff, and faculty are expected to have an understanding of the required skills needed to function within the ever-changing space of academic institutions, even when the guidelines for those skills may not initially be apparent. This invisible labor does not account for gaps in some of these skills, particularly when it comes to an understanding of digital literacy skills within academia. Furthermore, the work to have these skills becomes a form of free labor that is regularly expected from all members of the academia in order to succeed when it comes to taking courses, teaching, and conducting research. This paper argues that digital literacy is a form of free labor (Terranova, 2004) that is not only expected, but also required to continue to function within the digital economy of the United States academic sphere regardless of barriers that may prevent such a fluency from occurring. This expectation and assumption prove further to be a dangerous assumption that affects individuals through a pipeline effect as they move from undergraduate students to potential graduate students to potential instructors.*

**Keywords:** *Free labor, digital literacy, invisible labor, academia.*

## **Education and Digital Literacy**

Back to school lists are a common practice within America’s public school system. Parents and guardians take their children to stores with a specific list that tells them their child will require a notebook, pens, glue sticks, and a box of tissues for the upcoming year. This practice is ubiquitous that by the time these students move on to higher levels of education that do not require lists, students know what types of materials are required of them. Within the walls of the academy, however, these lists are then replaced by materials requested by the instructor of a course through the syllabus and bookstore (pending if their instructor placed their request in time). Again, the materials are unsurprisingly and contain items such as blue books and pens, depending on the subject. Essentially there are a lot of lists for education and yet every single one will be missing something essential: digital literacy.

Digital literacy is an abstract concept that has been defined by many and in a variety of ways. Paul Gilster (1997) defines digital literacy as revolving around the idea of “mastering ideas, not

keystrokes.” In comparison, digital literacies can also be defined as referring “to the practices of communicating, relating, thinking, and ‘being’ associated with digital media” (Jones & Hafner, 2012, p.13). Both statements hold true to the nature of digital literacy as often it is one thing to have the tool of a computer itself, it is another to know how to use it for the communication processes necessary to excel within the academy. And yet it is not something that is inherently taught across the board to all students despite its importance. With the advancement of technology within education there now exists an assumption that all students have the knowledge of what it takes to compete on these diverse platforms in order to secure not only a good education, but also a good job post-graduation. The truth is actually further from that reality entirely. The labor that goes into digital literacy itself is not noted as it covers a broad area of socioeconomics, geographic, racial, and other divides that extend beyond general notions of the digital divide.

The digital divide of how is able to access technology has been explored in previous scholarship over time and has led to a variety of perspectives as to how institutions and other entities intend to improve the digital literacy of students. Often when reflecting on issues with capitalism in institutions there is an inclination to focus on the tangible financial aspect. Christopher Newfield acknowledges that same facet when discussing how institutions have been responding to markets in the 1970s and 1980s, specifically when it came to how technology was implemented on college campuses. Newfield (2016) notes how the wiring of campuses to support the needed technology at that time was essential as “Any university that failed to wire, rewire, and dewire would have fallen behind in perceived quality of service and become uncompetitive” (p.150). This competitiveness would lead to implementation of massive open online courses (MOOCs) that were used as a way to “fix” budgetary concerns of institutions. What these courses did not fix, and what was acknowledged by supporters of these corporations, was how online courses further damaged individuals who were already at a disadvantage by the current institutional system due to issues of race, gender, socioeconomics, and geographic system inequalities. Newfield found in their research that companies that follow these formats only serve to make racial disparity worse while also affecting nontraditional students and lower-income students (p.246). While Newfield’s research did not specifically look at the role of digital literacy in these instances, it can be inferred that should individuals who struggle with digital literacy would be further disadvantaged by an institutionalized system that was meant to reach them. It is further assumed that universities require these students to be more active in their own labor production at a distance when it comes to knowledge of navigating the necessary skills to access all the various platforms, technologies, etc. that they need in order to pass their online courses. Newfield’s work also helps to support this notion that universities themselves care more about the production of degrees than necessarily the skills needed beyond the academy and within it. They in essence become similar to David Noble’s (1998) notion of digital diploma mills; mass-produced for the sake of it rather than to create essential knowledge skills (in this case digital literacy) that would affect students in the long run.

While Newfield considers how institutions themselves have intended to address the need for digital literacy, government programs themselves have attempted to close gaps for issues with

digital literacy. Intervention programs geared towards targeting students in regions that are deemed lower in socioeconomics have led to initiatives such as by the Clinton administration that intended to close the digital divide by providing resources to students. Providing technology to students however does not solve the issue of digital literacy, namely how students are expected to develop their own digital literacy. Sadly, this trend has continued to governmental practices today, with the 2017 National Educational Technology Plan Update noting how providing technology appears to be the main focus for programs. When support for learning how to use digital literacy is noted, it is only through the presence of HIVE networks (a possible reference to how the Internet itself is often viewed as a hive network) that are created through an initiative by the Mozilla Foundation that call for the community itself to become involved in developing the digital literacy of students. Spaces are noted such as libraries, museums, schools, after-school programs and individuals like educators, designers, and artists are referenced as possible ways to involved digital literacy lessons to students (p.17). However, this often overlooks the fact that getting access to these spaces often falls to benefit individuals with ready access rather than being an equal distribution for all individuals. Issues of space and this expectation raise additional questions about the types of labor that are expected from students when it comes to developing their digital literacy and what this labor can be called, as in fact the work that some students do to “catch up” is in of itself a form of invisible labor.

### **Free Labor, Academic Labor, and Digital Literacy**

Terranova defines free labor as “simultaneously voluntarily given and unwaged, enjoyed, and exploited” (2004, p. 74). In the context of digital technologies this type of labor takes a different form as often there is the notion of the society-factory model when it comes to how digital economies work. Evaluating how the internet has affected this definition is essential to consider as though it may not as apparent, class does play a role in the type of knowledge economy that students experience when understanding how digital technologies and communicating with them impact their own knowledge and potential social capital. Furthermore, when considering digital literacy as free labor there needs to be consideration of the fact that it is in essence unwaged labor. Brown (2014) breaks down five main facets of unwaged digital labor to include the following: its inherent autonomy, its exploitative nature, instances of resistance and struggle, its intrinsically collaborative and cooperative nature, and its biopolitical impact on the constitution of subjectivity (p.695). Digital literacy itself carries all five facets, but in particular its ability to be exploitable. Brown notes how digital labor is exploitative due to the low value itself (and how that digital value is determined, mind you) is directly generated by the content created by users. Digital literacy and having an understanding of it as such allows education institutions to explore options of distance learning and making vocations themselves within academia vocational and thereby even more exploitable (Bratich, 2008, p. 120). Value itself is then taken up by capitalist systems already in place in the institution by prioritizing certain programs for classes and the need for specific types of technology itself due to the type of digital content that students are expected to produce. That being said there are some scholars who view issues with the exploited nature of digital labor need to be reevaluated to consider how unwaged digital labor needs to instead be reframed as digital reproductive labor, in doing

so acknowledging that there is a type of labor being produced that affects the boundaries of personal and work lives (Pencolé, 2018).

When considering the role of the spaces, especially as they blur, we need to consider the types of labor that exist within the domestic sphere. In Silvia Federici's chapter "Wages against housework" from her book *Revolution at point zero: housework, reproduction, and feminist struggle*, audiences can note how women are often exploited within the domestic space both at that time and even now consistently. In particular, Federici notes how housework has become a "natural attribute of our female physique and personality," making it an expected form of labor that is assigned to women to create a form of biopolitical labor (p.16). And yet a defining attribute of college students entering institutions today is that they possess some form of knowledge with regards to digital literacy. This expected attribute often takes the form of required materials for courses themselves at an institution level, but also at a course level. Take for instance the statement on computer requirements put forward by North Carolina State University:

NC State **does not require** you to have a computer, but your college or department may have a requirement or specific recommendation; Most professors **expect** you to have access to a computer, either a personal one or a lab computer; We **strongly encourage** you to have one. (NC State Office of Information Technology, 2020; emphasis in original)

This statement, meant to be more of a recommendation than guidance, is often standard for most universities. It does inherently make an assumption of not only the technologies students already possess, but also the types of spaces that students do have access to. This discussion of space speaks to Fortunati (2011) when they discuss how the outsourcing of labor has often led to a "machination of the domestic space" via technology (p. 426). Fortunati breaks down the various types of technology into three categories: means of transportation, domestic appliances and sewing and cooking machines, and mass media, ICTs, and new media. These different machines are used to reinforce the idea that machines have always existed within the domestic space, specifically women's bodies, and have led to an outsource of emotions and labors for workers. In some ways this perspective is important to consider as it is not as surprising that a new form of labor, in that of students learning digital literacy skills in personal spaces, but that does not mean it is necessarily an assumed right that all students get.

### **Digital Labor Within the Academy**

There are several economic students that students, staff, and faculty must navigate when existing within the institution realm. There is the digital labor that they must navigate, while also the aspect of academic labor it inhabits, and the more daunting knowledge labor. All three are intertwined and build off one another, which can be seen throughout history. Allmer (2019) notes that education's role as a means to get out of poverty has always involved the role of the institution in labor politics. The individuals who participate within this system in some ways embody the class of the proletariat, where united they can create a communist society but are inherently oppressed according to Marx. These workers are directly producing value by producing some form of knowledge that can be then used by universities for various means (Allmer points to an amusing Chomsky and Foucault reference where a student called out

Chomsky for the hypocrisy of him being based at MIT while being aware of its connection to the Vietnam War).

So how does digital media and digital literacy fit within this structure? Digital media has only worked to reduce the perceived labor cost for institutions by expanding the ways universities function when it comes to teaching, recruiting, inviting more international students, and creating satellite campuses in pursuit of a cost-effective model. This model establishes a class hierarchy of who benefits from digital literacy knowledge in the long run, namely the universities themselves. The best summation of how students themselves are affected can be summed up by Noble (1998) where they remark “the poor get a computer, the rich get a computer and a teacher.” Students within this system are viewed more as workers within this system, where learning of digital literacy can only occur if their socioeconomics will allow it.

For undergraduate students, gaining digital literacy skills from the onset of college proves to be difficult even before they apply to the university system. Current digital literacy educational initiatives often call for the role of schools, libraries and other community spaces to help assist students, but the translation of that into action is not as straightforward. That is why the work done by Robinson and Gran (2018) is important to consider as they evaluated the emotional labor that California students felt attempting to apply for college. Often students had to resort to using spaces on their own time that infiltrated their view of the domestic, an area that Aristotle argues needs to be protected from the state (p.1416). Students from lower socioeconomic backgrounds who were lucky enough to have access to a home computer experienced issues with spatial privacy, as their families were aware of what colleges they were applying for and what types of digital literacy skills they were attempting to learn when it came to applying for assistance such as FAFSA. Students had to further explain themselves to their family members as to why they were using their free time to attempt to expand these skills when their families were dismissive of their educational goals. Students who did not have a computer at home and instead had to seek out libraries with computers also experienced these issues of spatial privacy, namely when it came to gatekeepers who controlled the amount of time allotted to students to use computers themselves. Students would often have to disclose that they were attempting to apply for college in front of library patrons, in addition to having patrons view their digital communication. Of course, this only the process of applying to college itself and having the knowledge of how to do so. Simply having access to the technology, itself did not help with questions regarding letters of intent or applications themselves. Students within this study often had to seek out individuals who possessed the digital literacy skills of how to fill out electronic forms and navigate these online networks.

The difficulty in acquiring digital literacy extends beyond Robinson and Gran’s (2018) study once students arrive at institutions. Often computer classes are not required at various institutions and when they are it is merely a review of Microsoft Office. Students are expected to engage with multiple learning management systems (LMS) to complete their work, while also completing their coursework themselves. It also does not help that with a shift of technology in the New Economy in the 1980s and 1990s for universities that there is also a shift towards universities catering more towards industries, specifically because industries are aware of how

universities that were “rich in human and knowledge capital” could benefit industries themselves (Newfield, 2008, p.9). With this shift there is now that expectation as well that students know how to navigate these networks to build a social network to retain social relations that could impact their future, furthering notions of this type of digital labor being unwaged (Fuchs, 2018). All result in digital literacy skills becoming a form of social capital that students themselves are expected to understand and produced. This acquisition of these digital literacy skills extends to graduate students within the academy, who are then instructed to produce more knowledge underneath the umbrella of academic labor for the purposes of informational capitalism that benefits institutions (Briziarelli and Flores, 2018). Graduate students and also instructors themselves are then expected to possess the digital knowledge and literacy skills to not only assist students, but to also help them further navigate these systems when they themselves face a declining academic job market since the 1990s recession (Newfield, 2008, p.142). Perhaps that is why some institutions are now attempting to offer graduate certificates, such as the University of Rhode Island, in digital literacy. These certificates however do little to solve the issue at hand of the current United States university system that continues to exploit the digital literacy skills students have, while neglecting those who do not match up to each institution’s standards.

## **Conclusion**

At the end of the day, it becomes a question of who is currently benefitting from the current infrastructures of universities and the types of free labor they are demanding from students. To an extent, it seems not much has changed from previous reports found by Selfe (1999), for instance, that note how white men usually benefit in education systems when it comes to gaining access and understanding digital technologies. We truly exist now in an “age of information” and “knowledge society” within America, where those who are unable to match academic technology expectations are let down (Newfield, 2008, p.125). It further does not help how students are not able to build their digital literacy skills by not being able to access the tools they need. Fortunati (2011) notes how “Technology...is both very difficult to realize and furthermore is aimed at a section of the population with limited purchasing power inside the family” (p.430) which only serves to reinforce notions of how class plays a part into developing digital literacy skills.

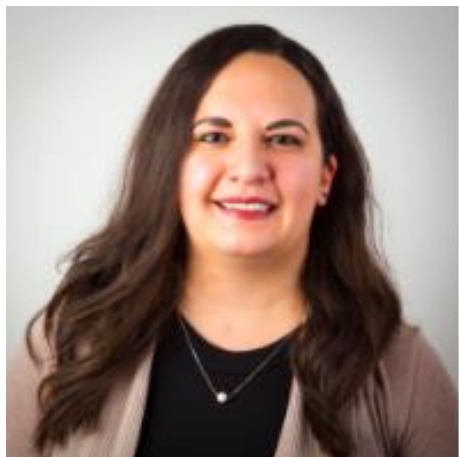
There is now a question when it comes whether students within academia a choice have when it comes to obtaining these digital literacy skills deemed so important. If we are to consider the new trend of Silicon Valley schools who choose to go “low tech” the answer is yes, there is still a choice. But this reality of choice in some ways may truly just be an illusion. We are now at a stage of society where we are becoming cyborgs, merging of both the animal and machine to create less of a duality when it comes to our own technology. To take this Haraway (1991) perspective into account is to note that there is no longer a choice, that like the industries currently driving the need for digital literacy that these expectations do not care for taxonomies as much as the ability for students to continue to produce knowledge at their own expense. All that truly matters is if the cyborgs that inhabit these spaces are able to install the newest

update of digital literacy skills needed to function or if those who are already at a disadvantage will be deemed obsolete by the same system meant to help them.

## REFERENCES

- Allmer, T. (2019). Academic labour, digital media and capitalism. *Critical Sociology*, 45(4–5), 599–615.
- Briziarelli, M., & Flores, J. L. (2018). Professing contradictions: Knowledge work and the neoliberal condition of academic workers. TripleC: Communication, capitalism & critique. *Open Access Journal for a Global Sustainable Information Society*, 16(1), 114–128.
- Brown, B. (2014). Will work for free: The biopolitics of unwaged digital labour. TripleC: Communication, capitalism & critique. *Open Access Journal for a Global Sustainable Information Society*, 12(2), 694–712–694–712.
- Federici, S. (1975). *Wages against housework*. Falling Wall Press.
- Fortunati, L. (2011). ICTs and immaterial labor from a feminist perspective. *Journal of Communication Inquiry*, 35(4), 426–432.
- Fuchs, C. (2018). Capitalism, patriarchy, slavery, and racism in the age of digital capitalism and digital labour. *Critical Sociology*, 44(4-5), 677-702.
- Gilster, P. (1997.) *Digital literacy*. John Wiley & Sons, Inc.
- Haraway, D. (1991.) *Simians, cyborgs, and women: The reinvention of nature*. Routledge.
- Jones, R. H., & Hafner, C. A. (2012). *Understanding digital literacies: A practical introduction*. Routledge.
- National Education Technology Plan. (n.d.). Retrieved from <https://tech.ed.gov/netp/>
- NC State Office of Information Technology. (2020). Retrieved from <https://oit.ncsu.edu/my-it/hardware-software/your-computer/#:~:text=Theft%20deterrence-,NC%20State%20student%20computer%20requirement%3F,one%20or%20a%20lab%20computer>
- Noble D (1998) Digital diploma mills: The automation of higher education. *First Monday*, 3(1).
- Pencolé, M. (2018). Digital labour. *Krisis*, 2. Retrieved from <https://archive.krisis.eu/digital-labour/>
- Robinson, L., & Gran, B. K. (2018). No kid is an island: Privacy scarcities and digital inequalities. *American Behavioral Scientist*, 62(10), 1413–1430.
- Selfe, C. L. (1999). *Technology and literacy in the 21st century: The importance of paying attention*. SIU Press.
- Terranova, T. (2004). *Network culture: Politics for the information age*. Pluto Press.





**Malaka Friedman** is a Ph.D. student in the Communication, Rhetoric and Digital Media program at North Carolina State University and the current Graduate Extension Assistant for the Hill Library Makerspace. She is also a member of Making Space, which works to provide a series of talks and workshops to confront bias and systemic barriers to inclusion within STEM fields, and a member of the Virtual Martin Luther King Jr. (vMLK) Project Team. Originally from Albuquerque, Malaka has worked in teaching in various contexts including: high school, college, and continuing adult education courses. Malaka's research

interests have been impacted from what she has learned from her students, particularly the challenges facing students when it comes to accessing the necessary tools to complete their education. Subsequently, her research interests include digital literacy, access to digital technologies, digital divide, transfer rhetoric, online/hybrid instruction, multimodality, and digital/media ethnography.