

Murray State's Digital Commons

Faculty & Staff Research and Creative Activity

Faculty Works

2022

A Proliferation of Images: Trends, Obstacles, and Opportunities for Visual Literacy

Dana Thompson Murray State University, dstatton@murraystate.edu

Follow this and additional works at: https://digitalcommons.murraystate.edu/faculty

Part of the Information Literacy Commons

Recommended Citation

Thompson, D.S., Beene, S., Greer, K., Wegmann, M., Fullmer, M., Murphy, M., ... & Saulter, T. (2022). A proliferation of images: Trends, obstacles, and opportunities for visual literacy. Journal of Visual Literacy, 1-19.

This Journal Article is brought to you for free and open access by the Faculty Works at Murray State's Digital Commons. It has been accepted for inclusion in Faculty & Staff Research and Creative Activity by an authorized administrator of Murray State's Digital Commons. For more information, please contact msu.digitalcommons@murraystate.edu.

Title: A Proliferation of Images: Trends, Obstacles, and Opportunities for Visual Literacy

Words: 7,596 (without abstract, includes list of references) **Pages:** 30

Abstract: (109 words)

Visual literacy equips learners with the dispositions to critically create, analyze, use, and share visual information. As one component of a discerning, ethical citizenry, visual literacy has become even more essential in a rapidly evolving information ecosystem. Against this backdrop, the current Association of College and Research Libraries Visual Literacy Task Force conducted qualitative research from 2019 to 2021, interviewing visual and information literacy experts to identify emergent trends, challenges, and opportunities shaping visual literacy in the twenty-first century. The findings from this study broaden current understandings of visual literacy and empower learners, educators, and practitioners to critically create, share, evaluate, and use visuals in an ever-changing information landscape.

Keywords: Visual literacy, ACRL Task Force, empirical research, trends, challenges, opportunities

Primary Author: Dana Statton Thompson, Associate Professor Research and Instruction Librarian Murray State University University Libraries 213 Waterfield Library Murray, KY 42071 Phone: 270-809-6221 Email: dthompson29@murraystate.edu ORCID: <u>https://orcid.org/0000-0001-7967-3694</u>

Corresponding Author: Stephanie Beene, Assistant Professor

Fine Arts Librarian for Art, Architecture, and Planning The University of New Mexico <u>sbeene@unm.edu</u> Phone: 505-277-0679 Address: The University of New Mexico Fine Arts and Design Library 435 MSC05 3020 1 University of New Mexico Albuquerque, NM 87131-0001 ORCID: <u>https://orcid.org/0000-0003-3884-3962</u>

Katie Greer, Associate Professor

Fine and Performing Arts Librarian Oakland University <u>greer@oakland.edu</u> Phone: 248-370-2480 Address: 247 Kresge 100 Library Drive Oakland University Rochester, Michigan 48390

Mary Wegmann, Collection Development Librarian Sonoma State University mary.wegmann@sonoma.edu Phone- 707-664-3983 Fax- 707-664-2090 Address: Sonoma State University Library Jean and Charles Schulz Information Center 1801 East Cotati Avenue Rohnert Park, CA 94928-3609

Millicent Fullmer, Acquisitions and Cataloging Librarian University of San Diego <u>mfullmer@sandiego.edu</u> Work phone: 619-260-2336 Work fax: 619-849-8301 Mailing address: Copley Library, University of San Diego 5998 Alcalá Park San Diego, CA 92110

Maggie Murphy, Visual Art and Humanities Librarian/Assistant Professor UNC Greensboro <u>mmurphy@uncg.edu</u> Work phone: 336-334-4525 Work fax: 336-334-5399 Mailing address: Walter Clinton Jackson Library, UNC Greensboro PO Box 26170 Greensboro, NC 27402 Author: Sara Schumacher, Architecture Image Librarian Texas Tech University sara.schumacher@ttu.edu 806.834.1245 Texas Tech University Architecture Library, MS2091 Lubbock, TX 79409

Author: Tiffany Saulter, Accessibility Consultant Deque Systems tsaulter2@gmail.com

A Proliferation of Images: Trends, Obstacles, and Opportunities for Visual Literacy Abstract

Visual literacy equips learners with the dispositions to critically create, analyze, use, and share visual information. As one component of a discerning, ethical citizenry, visual literacy has become more essential in a rapidly evolving information ecosystem. Against this backdrop, the current Association of College and Research Libraries Visual Literacy Task Force conducted qualitative research from 2019 to 2021, interviewing visual literacy and information literacy experts to identify emergent trends, challenges, and opportunities shaping visual literacy in the twenty-first century. The findings from this study broaden current understandings of visual literacy and empower learners, educators, and practitioners to critically create, share, evaluate, and use visuals in an ever-changing information landscape.

Introduction

While methods for creating, distributing, and interpreting visuals vary across personal, professional, and academic contexts, visual literacy equips learners to critically create, analyze, use, and share visual information (Bowen, 2017; Hattwig et al., 2013; Beatty, 2013; Brumberger, 2011; Callow, 2008; Avgerinou, 2007). Within the last ten to fifteen years, the proliferation of images has dramatically escalated, as transformational technologies have made creating and sharing information easier. This oversaturation of images has also led to widespread misinformation, malinformation, and disinformation (Fazio, 2020; Mina, 2019; Stubbs, 2019; Wardle & Derakshan, 2017; Guy, 2017). Considering this rapidly changing visual information ecosystem, the Association of College and Research Libraries (ACRL) Visual Literacy Task Force (TF) set out in 2018 to reconsider what it means to be visually literate in the twenty-first

century. From 2019-2021, the TF interviewed scholars, educators, and practitioners to ascertain the visual literacy trends, challenges, and opportunities for the twenty-first century. As the data was analyzed and organised, the authors grouped participants' responses according to trends, potential obstacles, and challenging opportunities. The authors aim to move the field of visual literacy towards a more critical understanding, empowering learners to succeed in a rapidly changing world.

Literature review

Since the late 1930s, visual literacy has interested scholars (Peña Alonso, 2018); it is now investigated in a range of disciplines, including the arts, sciences, education, communication, business, videography, photography, instructional technology, health, and computer applications (International Visual Literacy Association, 2020). Despite visual literacy's significance to a wide array of disciplines, very few researchers have conducted qualitative studies to identify visual literacy trends, challenges, and opportunities affecting practitioners and scholars. Indeed, research has shown a lack of empirical studies on visual and media literacies (Baylen & Lucas, 2014, p. 42; Brumberger, 2019). However, a few studies have identified visual literacy trends through quantitative research. For example, Baylen and Lucas (2014) found several common themes in visual literacy literature, such as a need for teaching visual and media literacy. facilitating critical thinking through using visuals and media, improving student performance through the inclusion of visuals, and motivating students via visuals (p. 38). Since the early 2000s, they also found that there has been a 'shift among authors to research more on the value, benefit or impact of VML [visual media literacy] rather than simply trying to define the field' (p. 42). A similar study in scope was Brumberger's 2019 analysis of research questions and topics included in articles published by the Journal of Visual Literacy. She found that most were

pedagogical case studies (p. 5) or theoretical (p. 10) rather than research studies. Over time, she discovered a 'consistent focus on teaching and learning' within the field of visual literacy, which has always been 'closely tied to technology' (p. 10). The research questions she identified suggest four strands of inquiry: disciplinarity, pedagogy, practise, and social impact (p. 11). Peña Alonso (2018), in contrast, identified three 'waves' throughout visual literacy's history as a field. The first wave was visual literacy's affiliation with art education, as evidenced by Tyler Davis's definition of the term in 1939 in that context (p. 113). The second was the association of visual literacy with John Debes at the inaugural International Association of Visual Literacy conference in 1969 amid the popularization of audiovisual technology, photography, and television (p. 116). The final wave was the cultural shift in understanding the concept of literacy alongside the multiliteracies and multimodality movements (p. 119). Except for these recent studies, the majority of visual literacy (Williams & Debes, 1970; Hortin, 1980; Avgerinou, 2003; Brill et al., 2007; Kędra, 2018).

Discourse in the field has recently begun to coalesce around the visual literacy definition offered in the 2011 ACRL *Visual Literacy Competency Standards for Higher Education (Visual Literacy Standards)* (Thompson & Beene, 2020). There, visual literacy is defined as:

a set of abilities that enables an individual to effectively find, interpret, evaluate, use, and create images and visual media that 'equip a learner to understand and analyze the contextual, cultural, ethical, aesthetic, intellectual, and technical components involved in the production and use of visual materials (Association of College and Research Libraries, 2011).

Several years after the release of the standards, librarians began integrating complex teaching and learning theories such as threshold concepts, authentic learning, metacognition, and metaliteracies into their praxis (Meyer & Land, 2005, 2010; Land et al., 2008, 2016; Wiggins & McTighe, 2005, 2011; Mackey & Jacobson, 2011, 2014). This work is reflected in the 2016 ACRL Framework for Information Literacy for Higher Education (Framework) (Association of College and Research Libraries, 2016). Since the Framework's publication, many fields have begun to embrace more nuanced complexity in interdisciplinary scholarship and multimodal literacies (Provenzo et al., 2011; Serafini, 2014). Meanwhile, new terms now describe the evolving information landscape, including the 'social web' (Golbeck, 2013), 'surveillance capitalism' (Zuboff, 2019), and 'information literacy's third wave' (Fister, 2019), to acknowledge the rise of big technology companies like Google, Facebook, and Amazon, and their role in shaping global information across social media, educational technology, financial technology, and political realms. In turn, some educators have proposed new methods for the critical analysis of images (Romero Walker, 2020; Faccin-Herman, 2020; Thompson, 2019; Tishman, 2018; Herman, 2017; Spalter & van Dam, 2008), while others have advocated for an explicit shift from visual literacy to critical visual literacy (Beene et al., 2020; Grimm & Meeks, 2017; Newfield, 2011; Falihi & Wason-Ellam, 2009).

Addressing these trends, ACRL assembled several task forces charged with developing Framework companion documents to update disciplinary literacies (Association of College and Research Libraries, 2020). As one of these groups tasked by ACRL, the second Visual Literacy TF was created in 2018 to update the 2011 Visual Literacy Standards. Nevertheless, the conversation surrounding visual literacy and related literacies is ongoing, reframing current conceptualizations of critical dispositions for future lifelong learners.

Methodology

Overview of study

The TF conducted an IRB-approved qualitative research study from fall 2019 to spring 2021. As part of the study, the authors interviewed a broad community of stakeholders to answer the research question: What trends, challenges, and opportunities are reshaping visual literacy in the twenty-first century? The interviews were completed in early 2020, and data analysis was finished in early 2021. Data analysis led to a better understanding of how information professionals, artists, designers, and educators define visual literacy, how they educate others about the concept of visual literacy, and what skills and competencies they perceive to be crucial components of visual literacy. This article examines the trends, potential obstacles, and challenging opportunities identified by participants. The study's results contribute to broader discourse within visual literacy, education, library and information science, visual resources, the arts and design professions, and affiliated disciplines. The TF used the themes that emerged from this research to inform the development of the resulting document, *Framework for Visual Literacy in Higher Education* (2021) (See Appendix A).

Data collection

The TF collected data through asynchronous, semi-structured, in-depth email interviews between November 2019 and April 2020. Due to the challenges of a geographically disparate, multi-site study, the TF identified email interviewing as the preferred methodology for its qualitative research. Email interviewing involves multiple email exchanges between the interviewer and interviewee over an extended period of time (Meho, 2006); it has been identified as a reliable method for data collection (Fritz & Vandermause, 2018; Kazmer & Xie, 2008). The authors interviewed participants with an IRB-approved list of questions (Appendix B), which asked participants about the definition of visual literacy offered by the *Visual Literacy Standards*, their experiences with teaching, assessing, and using visuals, and any visual literacy concerns, challenges, and opportunities they foresee for the twenty-first century. The authors then systematically reviewed respondents' answers and crafted follow-up questions. Completed interviews went through two rounds of questions: the initial IRB list of questions and the followup questions.

Limitations

The research study was designed to be exploratory, small-scale, and grounded in approach because its purpose was to inform the TF's work on a *Framework* companion document (Association of College and Research Libraries, 2020; Association of College and Research Libraries Visual Literacy Task Force, 2021). Therefore, the pool of interviewees was intentionally selective and limited to visual literacy and information literacy experts. As a result, the study's findings represent only the opinions of the individuals who responded to the queries and are not generalizable. Additionally, the interview questions included examples that may have influenced participants' responses (Appendix B); however, inductive coding allowed the authors to discuss and limit the influence of these examples during data analysis.

Recruitment of participants

The authors acknowledge the influence of their positionalities (Bourke, 2014) on the data and subsequent findings, which broadly align with the demographics of librarianship, an overwhelmingly white and female profession (Cooke, 2020; AFL-CIO, 2020; Hathcock, 2015;

Bourg, 2014). Despite efforts to minimise assumptions and biases, the qualitative nature of the research invites subjectivity into the data collection and analysis processes. Acknowledging the limitations of their worldviews, the authors recruited participants from the wider visual literacy community of stakeholders. The TF recruited stakeholders through purposive sampling, sending the interview to 113 specialists in visual literacy and affiliated fields, as evidenced by their research and involvement with organisations such as the ACRL, the International Visual Literacy Association (IVLA), the European Network for Visual Literacy (ENViL), the Art Libraries Society of North America (ARLIS/NA), and the Visual Resources Association (VRA), among other organisations. From the pool of 113 interviewees, sixty-two responded to the initial interview questions, representing a 55% response rate. Forty-four participants answered followup questions crafted by the TF, representing a 39% sustained response rate. Information professionals comprised the majority of solicited participants (73%, n=83 of 113), initial responses (77%, n=48 of 62), and completed interviews (80%, n=35 of 44). A majority of the 113 potential interviewees worked in the United States at the time of this study (94%, n=106 of a total of 113 identified scholars). This trend continued in the returned initial responses (95%, n=59 of 62 total responses) and the completed interviews (93%, n=41 of 44 total). Additional responses came from Finland, Germany, Greece, Sweden, and the United Kingdom. Demographics were not collected during the interview process.

Data analysis

The authors blind-coded the forty-four anonymised transcripts representing the completed interviews (i.e., those interviewees who answered follow-up questions). From May to December 2020, the TF coded these transcripts using a grounded theory approach, relying on inductive interpretation (Corbin & Strauss, 2014; Saldana, 2015). Initially coding in groups of

two, the groups compiled codebooks, which were then brought to the larger TF for consolidation. The TF agreed upon a shared codebook using Dedoose for analysis, which allowed for online collaboration and analysis (Salmona et al., 2019). After investigating Dedoose's affordances and drawbacks, the TF sought intercoder reliability by re-coding the same transcript in Google Documents and discussing each coder's methodology, prevalent codes, coding segments, and relationships across codes. Returning to Dedoose, the researchers split back into smaller teams to re-code fifteen anonymised transcripts. All told, the TF coded forty-four transcripts twice, except for one interview, which was coded three times. Thus, the codebook underwent three iterations over seven months as concepts emerged. During this process, a text analysis subgroup was formed to investigate all sixty-two of the interviews that had been initially returned, which included those participants who had not responded to follow-up questions. This corpus was subjected to text analysis and supplemented the data gleaned from coding. This work is ongoing and will be explored in future research.

Findings and Discussion

Through inductive coding, the TF identified three major trends shifting the field of visual literacy towards a more critical stance: 'reading' visuals, social justice, and access and accessibility. The first identified trend was the notion of 'reading' a visual as one does text and how that incorporates multilayered concepts of interpretation, comprehension, and contextualization. The second trend was the increased urgency of social justice and how visuals promote or undermine it. The last major trend was the accessibility of visuals and how the field can better provide access to those with physical and visual impairments. The authors also identified two potential obstacles perceived by interviewees: advocating for visual literacy and creating as a requisite component of visual literacy. Advocacy for visual literacy was revealed to

be a potential obstacle for various reasons, ranging from feelings of professional contingency to a lack of visual literacy training. When asked specifically about the ACRL *Visual Literacy Standards* definition, many participants noted concerns with the inclusion of 'creating' and its relationship to visual literacy, as this skillset is heavily associated with the art and design fields. Lastly, two challenging opportunities were identified: visual literacy's relationship to other literacies and the importance of criticality in a discerning citizenry. Together, these challenging opportunities represent the changing nature of visual literacy in an increasingly connected and global information landscape.

Trends

'Reading' Visuals

Visual media's relationship to text was reflected in the notion that to view a visual is to 'read' it, with the development of visual literacy requiring as much scaffolding and nuance as required to read text. Thus, many participants used the term 'reading' when describing their definition of visual literacy. For example, Participant 30 noted:

> I define visual literacy as the ability to read images in the same way that one would read a text – being able to understand the nuances behind an image, the context of it, and how it was created, ultimately understanding that images are works of labor, just as texts are.

Participants made connections between 'reading' an image and interpretation, a process that Participant 9 characterized as 'deconstructing the elements of the image, describing what these elements [are], and then applying interpretation and meaning to the elements as a whole'. Participants also connected the concept of 'reading' to comprehension. For example, Participant 27 noted 'just as words (traditional 'reading') exist within a framework of language and reflect a language, imagery or the visual is composed of forms and compositions that hold and express meaning'. These connections between the concept of reading, interpretation, and comprehension belie the nebulous nature of the concept of 'reading an image' and complicate the notion of visual literacy. However, through the lens of reading, participants crafted an analogy that may be helpful for others looking for a language to teach complex concepts of visual literacy to those unfamiliar with it.

The idea of becoming 'fluent' in visual literacy is also one that emerged in some interviews. For example, participant 95 summarizes the sentiments of several responses, writing:

Ultimately, I think that being able to read visual communication is, for most people, the critical core of visual literacy. But, even if you are a fluent reader, the ease of manipulation that technology has enabled (or, at the least, facilitated) makes visual literacy slippery... [*sic*] Layered onto that is the complexity that accompanies [globalisation]. We aren't just reading visual communication created by and for our own community, culture, or country. Our reading is colored by preconceived ideas and cultural biases, so visual literacy has to incorporate [an] understanding of history and culture.

As Participant 95 deftly summarised, the increasingly globalizing and rapidly spreading visual communication means that a discerning eye is ever more critical. Learners need to practice self-discernment to overcome embedded biases, preconceptions, and worldviews, especially when reading visuals.

Social Justice

As the information landscape transforms, creators and users of information are rightfully bringing attention to how visuals reinforce dominant ideologies, including white supremacy and colonisation. Many participants noted a lack of representation of racially and ethnically diverse individuals in visual media, or, when these individuals are depicted, participants commented on their inaccuracy, appropriation, or misrepresentation. Others commented on the need to promote diverse content creators and the sensitivity required, especially for Indigenous creators. Finally, participants asserted the essential role of visual literacy in building a more just society through equitable representation, as summarised by Participant 65: 'Visual media in all forms can play a role in helping to inspire liberation or enable oppression'.

Speaking to this feeling, participants noted how the overrepresentation of whiteness has contributed to a false sense of visual media's neutrality. For example, Participant 80 spoke to 'the fraught history of producing commercial [colour] film, and how it was calibrated to best capture white skin...[which] boils down to photographs NOT being neutral', while Participant 107 used an example from healthcare marketing: 'Just because an image seems neutral doesn't mean it is. If there is a health care ad with all middle-aged white men, that is telling you who that institution values'. Many participants further discussed the grave societal implications of misrepresentation in visual media, with Participant 10 pointing to 'how media outlets [have] portrayed Black victims of police violence and murder in a way to criminalize them in the eyes of the public. This contributes to the racial bias, continued violence, and oppression of Black people'. Participants used in their teaching. For example, Participant 37 used 'research that shows young Black men and women are often depicted or assumed to be much older, and by extension less 'innocent' than they are'. In another example, Participant 53 encouraged learners to consider 'the

varying image results when one searches for "beauty", for instance, or the racially-based sexualization that becomes apparent when searching for "[B]lack women" or "Asian women", bringing awareness to algorithmic structures that reorder reality to perpetuate social inequities.

Moreover, participants expressed concern about cultural appropriation and power dynamics in visual media, sometimes explicitly discussing the colonisation of Indigenous, First Nation, and Aboriginal peoples. For example, Participant 77 described cultural appropriation as 'especially painful' for 'communities with less power and influence', especially when social groups or individuals with more social capital use images with 'important cultural meaning'. Interviewees like Participant 10 conveyed the ongoing efforts to empower learners to recognize when cultural appropriation is occurring and how to subvert harmful power structures: 'Who benefits? How are they benefiting? Who is excluded? What are we doing to address exclusion??. As alluded to here, colonisation also led to exploiting historically marginalized peoples, their imagery, and their likenesses. Participant 96 encouraged visual literacy instructors to incorporate dialogue about the 'potential power imbalances that occurred (particularly in historical photographs) when outsiders took photos of Indigenous and other marginalized people'. Beyond historical images, visual literacy should include recognizing the harmful use of Native Americans or other racial and ethnic groups as mascots in advertisements and branding, which perpetuates marginalization and enriches powerful businesses. In sum, participants stressed that visual literacy must include an active and conscious examination of representation, power dynamics, equity, and representation.

Moving beyond recognition to action, respondents spotlighted the notion of informed consent and ethical creation and use. For example, Participant 16 stated that when using creators of colour in a project, '[you] must also ensure you give credit, provide compensation as

requested, and use the image as agreed', while Participant 24 spoke to the data sovereignty movement: 'traditional knowledge encourages a more expansive conception of the ethical uses of images... it talks to the space between what you can do (according to the government's laws) and what you should do (according to the people that created a work)'. By highlighting Traditional Knowledge labels, this participant foregrounded a growing movement within libraries, archives, and museums to build reciprocal relationships with Indigenous peoples and recognize that responsibility to these communities is an ethical requirement (Anderson et al., n.d.). Finally, some participants discussed teaching students this concept through social media examples. Participant 87 specifically tied social media to social impact: 'we looked at an [sic] instagram story focused on the homeless by a documentary photographer and talked about power relationships [and] consent'. Participant 96 challenged 'visual literacy practitioners [to] focus on methods and skills which help people see how images can perpetuate stereotypes and model how they can empower others to create more inclusive and equitable imagery'. Although it will take work and time, incorporating criticality and social justice into visual literacy can affect lasting changes so that a multitude of voices may be heard and acknowledged, aligning with Brumberger's finding that social impact is an essential aspect of visual literacy's future (2019, pp. 175-177).

Access and Accessibility

Interviewees described making visual media accessible to people with physical and visual impairments or learning disabilities by providing enhanced metadata, improved learning resources, and inclusive instruction. Defining accessibility, Participant 53 declared that the term:

relates to the ability for an individual to [utilise] our resources and can be physical (e.g., designing our books and websites for those with sight impairments) or

related to learning ability (e.g., using visual activities to support dyslexic children).

Participant 107 further defined tools and techniques to make images more accessible: 'For me, a big thing is having alternative text that doesn't just say "icon of..." but also actually says why it was included [...] so including text analysis, alternative text, and even historical review in your lessons could be useful.' Finally, participants like Participant 16 spoke to the need for visual literacy to explicitly include accessibility in its definition: 'One potential addition is the ability to understand how the use and design of visual materials affects those who learn in different modes or are differently-abled [...] it may be worthwhile to state it explicitly'.

Resource equity was a theme echoed by several respondents. For example, participants discussed the discrepancies between software and tools available to upper-income individuals and well-resourced institutions versus those available to lower-income individuals or under-resourced institutions. Participant 70 discussed needing to provide more technologies for students, but 'in a resource-scarce environment... they are falling behind peers from wealthier institutions'. Likewise, Participant 100 mused whether this schism impacts future learners' ability to 'become visually literate and create visual information.' This trend is reflected in the increased urgency with which open access and open educational resources initiatives are being embraced by organizations, as well as the push for widespread and robust broadband access. Speaking directly to the discrepancies between those who can access the internet and those who cannot, Participant 52 described visual media as contributing to an 'equity issue' and 'broaden[ing] the digital divide even more'. Issuing a challenge for the future of the field of visual literacy, Participant 107 proclaimed that, since educators and librarians regularly use, teach, and create visual materials, and 'are working on a definition of visual literacy in the

[twenty-first] century...we know we already play a role [in accessibility and inclusivity]; we need to step up to that'. To answer the call, accessibility best practises should be interwoven into visual literacy initiatives and every part of the visual media life cycle.

Potential Obstacles

Advocating for Visual Literacy

Multiple participants remarked that visual literacy receives less attention in education than information literacy, with some noting that information literacy has moved into general education curricula while visual literacy has remained on the sidelines. While many participants had a background in art and design fields and acknowledged that visual literacy is more likely to be taught in their disciplines, Participant 16 voiced what a majority conveyed, that 'the ability to think critically and apply knowledge about visual materials is interdisciplinary and valuable to all areas of study'. Some participants suggested more strategic and formalised assessments to better integrate visual literacy into the curriculum, with Participant 52 suggesting 'making [visual literacy skills] part of general education outcomes' and Participant 94 promoting 'incentivized' professional development opportunities for educators and librarians. Participant 95 explained that developing 'a solid empirical base on which to rest our claims about visual literacy—about how to define it, how to measure it, how to teach it, and even how important it is' is a crucial step in advocating for integrating visual literacy instruction into the curriculum, statements that echo earlier findings from Baylen and Lucas (2014) and Brumberge (2019).

Moreover, throughout the interviews, respondents noted the need for librarians and educators to advocate for visual literacy across disciplines and departments to help learners navigate the evolving visual information ecosystem. Participant 9 touched on this sentiment: 'Our world is becoming increasingly visual. Yet, our teaching styles remain very traditional and

focused on verbal ways of expressing and receiving information'. The current myopic focus on textual information during research instruction does a disservice to learners bombarded with visual media in other contexts outside of the classroom. Participant 16 noted the tension this causes for discernment and evaluation and the potential for visual literacy in alleviating that tension, writing that learners:

often walk a tight balance between trusting the authenticity of stories that saturate our media and acknowledging that bias is a serious concern. Visual literacy as a means to understand the ethical, legal, and commercial issues around news, fake news, and propaganda [is] a great jumping-off point for discussion.

As with other critical literacies, visual literacy is essential for learners engaged with increasingly complex visual information in their personal, professional, and academic lives. Participant 94 epitomized respondents' advocacy for visual literacy's integration into every facet of life: 'visual literacy skills are transferable, and may be useful when students read news stories, look at social media, and search for information online related to their personal lives'. Participant 11 explained that 'there should be more of an emphasis on the relationship between the professional and personal when we discuss/teach visual literacy', similar to how information literacy teaches 'skills [that] can be transferred between professional and personal [contexts]'. As with information literacy, which has expanded beyond an academic context, visual literacy must also embrace personal and professional contexts to foster the kind of critical thinking and reflection that is integral to an informed citizenry.

Creating as a Skill

The inclusion of 'create' in the Visual Literacy Standards definition confounded many participants, who identified as lifelong learners and professionals often tasked with producing creative materials without the robust training they felt was needed in order to feel confident in their creative ability. Participant 100 explained the need for more specificity, which was echoed by many respondents: 'The ability to create images [...] suggests that only artists can be visually literate, which I hope isn't the case'. While some participants discussed their own creative practice, there were far more who discussed struggling with their creativity, even though they disagreed about whether this inability would disqualify them from being visually literate. Some participants, such as Participant 52, expressed less confidence in themselves as creators but verbalised strong opinions about the need for learners to develop creative skills: '[I] will say that I do not consider myself to be very strong with the [creation] of images [but] I think that creating media projects should be as important as (or even replace) the standard research paper'. This discrepancy in expectations conveyed the ambivalent relationship with this competency, further expressed by Participant 95: 'I'm not entirely sure that creating images and visual media should be considered a critical component of visual literacy.' Additionally, Participant 18 suggested that creating could be considered 'a "bonus" but not a required skill' to be considered visually literate. For these participants, the inclusion of the term 'create' indicated the nurturance of creative practice and signaled something beyond a fundamental visual literacy.

In contrast to these respondents, a minority of interviewees emphasised the centrality of creation in the definition of visual literacy. Indeed, again reflecting the need for the transferability of skills between the professional and the personal, Participant 68 argued that 'everyone's a creator' with the advent of social media, and because there are 'more creative tools/platforms than ever, there will need to be even more emphasis on what it means to create

and share'. Some participants expressly recognised that creation is an important component of visual literacy, including Participant 68: 'I'm very glad to see mention of "create", "production" and "contribution". Those aspects are essential for all learners and could probably be emphasized even further'. Those who considered this a crucial competency seemed to centre the social aspects of creating and the accompanying ethical and social justice concerns.

Challenging Opportunities

Visual Literacy's Relationship to Other Literacies

Respondents recognised that visuals are unique in the information landscape but struggled to articulate how visual literacy relates to other literacies and whether it should stand alone. Participants attempted to categorize visual literacy in distinct ways: as a distinct literacy among a multitude of literacies, as a literacy that should be combined with another overlapping literacy, or as something that should ultimately be considered under the rubric of information literacy. The most common response was to subsume visual literacy under information literacy, which could be because most participants work in library science. Indeed, Participant 43 suggested that visuals could be evaluated as one component of a larger information ecosystem: 'I think so much of what is at the core of Information Literacy is the ability to contextualize and critically look at information – whether that is images, text, or film'. As part of conceptualising visual literacy under the larger umbrella of information literacy, participants expressed a preference for an iterative rather than a linear model, reflecting librarianship's shift away from checklists towards an embrace of critical mindsets and behavioural dispositions. Interviewees like Participant 22 conveyed a reticence with the term 'skills' more broadly:

My wariness comes from my thinking of skills almost as a checklist – like, if you can identify the following [five] things about an image (for example), congratulations, you're

visually literate! Whereas I think the LIS/viz lit field [is] more encouraging of viewing literacies as a set of behaviors or tendencies (at least recently) rather than skills.

The embrace of a newer learning model indicates that demonstrating skills or accomplishments of tasks does not necessarily indicate that a learner has developed the habits of mind that educators desire. Moreover, respondents indicated a need for more attention to the lifelong learning process in terms of assessing and describing visual literacy. Participant 22 continued::

I simply think of the word "process" as more active, where[as] "ability" seems to be a destination a person reaches [...] the word "process" implies that visual literacy is a journey. Whereas if I say that I have an "ability" to be visually literate, it's almost like that is set in stone.

Other respondents, such as Participant 76, envisioned learning as 'a continuum of visual literacy development from birth to "competent" visually literate person'. Respondents' concerns revealed that the journey to becoming visually literate, as with any literacy, is formative and ongoing.

One of the challenges that emerged was how visual literacy related to other literacies, such as digital literacy, data literacy, and media literacy. While rarer, the concepts of multiple literacies, transliteracy, metaliteracy, and creative literacy were also mentioned. For participants, digital literacy hinged on digital media, including software and the skills required for proper file naming and understanding privacy issues of online digital information. However, like Participant 80, some interviewees viewed the overlap between digital and visual literacy as the 'digital component of visual literacy... how graphics render, pixelation, recognizing digital alteration'. Other respondents referred to data literacy as the ability to properly read and create graphs, charts, diagrams, and even medical imagery. Several participants mentioned infographics and data visualizations. While specific analysis tools and techniques like text mining and SPSS were mentioned sparingly, their presence in this study is evidence of the changing nature of visual communication. Participant 71 voiced what many more participants commented on: the perceived overlap between media and visual literacies, where media literacy refers to 'critical thinking and understanding of items related to the news—mass media, photos and images related to this, news reporting and articles'.

More broadly, some participants pondered the applicability of overarching terms like transliteracy, creative literacy, metaliteracy, and multiliteracy, attempting to locate visual literacy among them. Participant 53 explained their confusion about the overlap and distinction between creative literacy and visual literacy, clarifying that 'creative literacy is broader than visual literacy' and includes the process of idea generation, project planning, and creative research. Participant 99 was one of the few interviewees who questioned visual literacy's relationship to metaliteracy: 'It may be possible to address visual literacy as a "subfield" of metaliteracy, but that defeats the point of metaliteracy [...] Perhaps metaliteracy has replaced visual literacy'? Similarly, Participant 112 pondered, 'We may also need to consider if the word "literacy" is still relevant today to be combined with the 'visual'. Maybe we should think about "visual competency''? So, while participants recognised 'visuals' as unique in the information landscape, it remained unclear to respondents how to categorise visual literacy as one literacy among many.

Visual Discernment and Criticality

When addressing the current challenges facing higher education, many participants mentioned that learners struggle with evaluating the images they encounter, especially in an online environment. Recognizing an 'over-saturation of images', Participant 28 stated, 'people are so accustomed to seeing so many images that we no longer stop to consider what they mean, and what is missing from them'. Respondents frequently expressed the need to develop this critical sensibility and mentioned that this was a significant challenge. For example, Participant 9 asked, 'How do we create spaces for individuals to slow down and really study what they are seeing'?

Several participants connected this critical reflection process to another method, described in various interviews as 'deep looking,' 'slow looking,' or 'critical viewing'. Respondents implied that students could become more discerning and critical in their engagement with images through this process. Participant 30 explained:

"Deep looking" is a much more time and [labour]-intensive process, in which the viewer pays attention to the details of the work, spending time reading it from all perspectives to understand more about the image. This is done to understand the image more thoroughly rather than simply [...] quickly [looking] at the image.

Through this deep looking process, learners spend significant time with an image in observation and study. Respondents described engendering a persistent curiosity through continual noticing, particularly of visual media.

Moreover, respondents like Participant 94 extended this labour-intensive process to include assessing images for technical manipulation: 'I would hope that our users would become more sophisticated in their evaluation of images, given advancing technology which makes it possible to obscure, manipulate, or overwrite visual information'. Participant 20 noted the critical role visual information plays in 'influenc[ing] our lifestyles, political decisions, our attitudes and beliefs'. At the same time, Participant 68 expressed '[concern] about students' ability to navigate a media landscape where images/video are often polarizing and persuasive'.

Additionally, the rise of fake news, misinformation, malinformation, and disinformation in the digital environment allows learners to draw on visual literacy competencies to critically interrogate and evaluate visual information. Finally, Participant 71 highlighted that 'discovery processes (searches) are not neutral', with Participant 26 noting that it has become harder to discern authorship for images, partly due to the 'many images available via [*sic*] google'. With artificial intelligence and machine learning driving social media platforms and search engines, so-called influencers and bots have begun optimizing images as clickbait to drive viral media coverage. As Participant 9 explained:

How do we prepare students of all ages to be able to discern what is real[?] If images are not factual, I think it is important for students to be able to develop the capacity to describe the purpose of the image for themselves.

To become discerning citizens, learners must move beyond consuming visuals to consider how their actions contribute to and influence society. As noted by participants, social media has emerged as a place where opportunities for sharing, using, and creating images have rapidly expanded. Still, it's a place where credibility and trustworthiness are strained. Learners must appreciate the great responsibility that comes along with creating, using, and sharing in today's visual media environment, reinforcing research that demonstrates a paradigm shift toward critical thinking facilitated through visuals and media use (Baylen & Lucas, 2014). Issues surrounding the integrity of images will continue to challenge readers to balance trust and skepticism and may become increasingly difficult in the future. Problematic representation and exploitation will most likely continue, so teaching learners how to critically evaluate and share visuals and responsibly create visuals will become more acute. Finally, recent technological advancements in

visual media formats and communications indicate that in this globalized, online, increasingly connected world, a visually literate citizenry is a more ethical and responsible one.

Conclusion

This study examines how a selective, predetermined group of visual literacy scholars and practitioners in a range of disciplines approach engaging with visual information creatively, critically, and ethically, as well as the perceived barriers to doing so. These specific experts have largely embraced a vision of visual literacy learning as iterative and process-based rather than a set of rote skills. The trends, obstacles, and opportunities that emerged from this research, though not generalizable, reflect particular concerns regarding preparing twenty-first-century learners for active contribution in a visual world rife with new technologies, disinformation, and ongoing social, political, and economic injustice. The authors hope this study can provide a foundation for further research and continued advocacy for integrating visual literacy into higher education curricula by academic librarians, disciplinary scholars, and practitioners. As a field, visual literacy must continue to evolve to meet the challenges of an ever-changing twenty-first-century information landscape.

References

 AFL-CIO. (2021, June). *Library professionals: Facts and figures*. Department for Professional Employees. Retrieved November 2, 2021, from <u>https://www.dpeaflcio.org/factsheets/library-professionals-facts-and-figures</u>

Anderson, J., Christen, K., Hudson, M., & Francis Sr., J. (n.d.). *TK labels – Local contexts*. <u>https://localcontexts.org/labels/traditional-knowledge-labels/</u> Association of College and Research Libraries. (2016, January 11). *Framework for information literacy for higher education*. Standards, Guidelines, and Frameworks. Retrieved November 2, 2021, from <u>https://www.ala.org/acrl/standards/ilframework</u>

Association of College and Research Libraries. (2011, October). *ACRL visual literacy competency standards for higher education*. Standards, Guidelines, and Frameworks. <u>http://www.ala.org/acrl/sites/ala.org.acrl/files/content/standards/visualliteracy.pdf</u>

Association of College and Research Libraries. (2020, February). *Tips for developing framework companion documents*. Information Literacy Frameworks & Standards Committee. <u>https://www.ala.org/acrl/resources/policies/tip_substandards</u>

- Association of College and Research Libraries Visual Literacy Task Force. (2021, August 26). *Framework for visual literacy in higher education* (second draft). Retrieved November 2, 2021, from <u>https://acrlvltf.org/draft-2/</u>
- Avgerinou, M. D. (2003). A mad-tea party no more: Revisiting the visual literacy definition problem. In R. E. Griffin, J. Lee, & V. S. Williams (Eds.), Turning Trees (pp. 29-41).
 International Visual Literacy Association Press.
- Avgerinou, M. D. (2007). Towards a visual literacy index. *Journal of Visual Literacy*, 27(1), 29–46. <u>https://doi.org/10.1080/23796529.2007.11674644</u>

Baylen, D. M., & Lucas, K. (Eds.). (2014). Visualizing learning for the next generation:
Visual and media literacy research, 2000-2014. In M. Simonson (Ed.), *37th annual proceedings of the Annual Convention of the Association for Educational Communications & Technology (AECT), Jacksonville, FL, November 4-8, 2014, 1,*paper 6. https://members.aect.org/publications/proceedings/2014.asp?id=1

- Beatty, N. A. (2013). Cognitive visual literacy from theories and competencies to pedagogy.
 Art Documentation: Journal of the Art Libraries Society of North America, 32(1), 33–
 42. <u>https://doi.org/10.1086/669987</u>
- Beene, S., Soito, L., & Kohl, L. (2020). Exhibition catalogs unbound: Overcoming challenges through models of engagement. Art Documentation: Journal of the Art Libraries Society of North America, 39(1), 24-43. https://doi.org/10.1086/709449
- Bourg, C. (2014, March 4). The unbearable whiteness of librarianship. *Feral Librarian*. Retrieved November 2, 2021, from <u>https://chrisbourg.wordpress.com/2014/03/03/the-unbearable-whiteness-of-librarianship/</u>
- Bourke, B. (2014). Positionality: Reflecting on the research process. *The Qualitative Report*, *19*(33), 1–9. <u>https://doi.org/10.46743/2160-3715/2014.1026</u>
- Bowen, T. (2017). Assessing visual literacy: A case study of developing a rubric for identifying and applying criteria to undergraduate student learning. *Teaching in Higher Education*, 22(6), 705–719. <u>https://doi.org/10.1080/13562517.2017.1289507</u>
- Brill, J. M., Kim, D., & Branch, R. M. (2007). Visual literacy defined The results of a Delphi study: Can IVLA (operationally) define visual literacy? *Journal of Visual Literacy*, 27(1), 47–60. <u>https://doi.org/10.1080/23796529.2007.11674645</u>
- Brumberger, E. (2011). Visual literacy and the digital native: An examination of the millennial learner. *Journal of Visual Literacy*, *30*(1), 19–47.

https://doi.org/10.1080/23796529.2011.11674683

Brumberger, E. (2019). Past, present, future: Mapping the research in visual literacy. *Journal of Visual Literacy*, *38*(3), 165-180.

https://doi.org/10.1080/1051144X.2019.1575043

- Callow, J. (2008). Show me: Principles for assessing students' visual literacy. *The Reading Teacher*, *61*(8), 616–626. https://doi.org/10.1598/RT.61.8.3
- Cooke, N. A. (2020). Sr Thea Bowman lecture on social justice in library and information science, Oct 21, 2020 [Webinar]. The University of South Carolina. https://www.youtube.com/watch?v=vJeG2_0TRIo&t=1s
- Corbin, J., & Strauss, A. (2014). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (4th ed.). SAGE Publications.

Faccin-Herman, V. (2020). Visual literacy education: Developing a curriculum for designers and non-designers (Publication No. 18071) [Masters thesis, Iowa State University]. Iowa State University Digital Repository. <u>https://doi.org/10.31274/etd-20200624-250</u>

- Falihi, A., & Wason-Ellam, L. (2009). Critical visuality: On the development of critical visual literacy for learners' empowerment. *International Journal of Learning*, *16*(3), 409–417. <u>https://doi.org/10.18848/1447-9494/CGP/v16i03/46176</u>
- Fazio, L. (2020, February 14). Out-of-context photos are a powerful low-tech form of misinformation. The Conversation. <u>http://theconversation.com/out-of-context-photos-are-a-powerful-low-tech-form-of-misinformation-129959</u>
- Fister, B. (2019, February 24). Information literacy's third wave. *Barbara Fister*. Retrieved November 2, 2021, from <u>https://barbarafister.net/libraries/information-literacys-third-wave/</u>
- Fritz, R. L., & Vandermause, R. (2018). Data collection via in-depth email interviewing: Lessons from the field. *Qualitative Health Research*, 28(10), 1640–1649. https://doi.org/10.1177/1049732316689067

Golbeck, J. (2013). Analyzing the social web. Morgan Kaufman Publishers.

- Grimm, S., & Meeks, A. (2017). Break the stereotype! Critical visual literacy in art and design librarianship. Art Documentation: Journal of the Art Libraries Society of North America, 36(2), 173–190. <u>https://doi.org/10.1086/694238</u>
- Guy, H. (2017, October 17). *Why we need to understand misinformation through visuals*. First Draft. https://firstdraftnews.org:443/latest/understanding-visual-misinfo/
- Hathcock, A. (2015, October 7). White librarianship in blackface: Diversity initiatives in LIS. *In the Library with the Lead Pipe*.

https://www.inthelibrarywiththeleadpipe.org/2015/lis-diversity/

- Hattwig, D., Bussert, K., Medaille, A., & Burgess, J. (2013). Visual literacy standards in higher education: New opportunities for libraries and student learning. *Portal: Libraries and the Academy*, *13*(1), 61–89. <u>https://doi.org/10.1353/pla.2013.0008</u>
- Herman, A. (2017). *Visual intelligence: Sharpen your perception, change your life*. Mariner Books/Houghton Mifflin Harcourt.

Hortin, J. A. (1980). Visual literacy and visual thinking (ED214522). ERIC.

https://eric.ed.gov/?id=ED214522

International Visual Literacy Association. (2020). *About us*. Retrieved November 2, 2021, from <u>https://ivla.org/about-us/</u>

Kazmer, M. M., & Xie, B. (2008). Qualitative interviewing in internet studies: Playing with the media, playing with the method. *Information, Communication & Society*, 11(2), 257–278. https://doi.org/10.1080/13691180801946333

- Kędra, J. (2018). What does it mean to be visually literate? Examination of visual literacy definitions in a context of higher education. *Journal of Visual Literacy*, *37*(2), 67–84. https://doi.org/10.1080/1051144X.2018.1492234
- Land, R., Meyer, J. H. F., & Flanagan, M. T. (2016). *Threshold concepts in practice* (Vol. 68). Sense Publishers.
- Land, R., Meyer, J. H. F., & Smith, J. (2008). *Threshold concepts within the disciplines* (Vol. 16). Sense Publishers.
- Mackey, T. P., & Jacobson, T. E. (2011). Reframing information literacy as a metaliteracy. *College & Research Libraries*, 72(1), 62–78. https://doi.org/10.5860/crl-76r1
- Mackey, T. P., & Jacobson, T. E. (2014). *Metaliteracy: Reinventing information literacy to empower learners*. American Library Association Press.
- Meho, L. I. (2006). Email interviewing in qualitative research: A methodological discussion. Journal of the American Society for Information Science and Technology, 57(10), 1284–1295. <u>https://doi.org/10.1002/asi.20416</u>
- Meyer, J. H. F., & Land, R. (2005). Threshold concepts and troublesome knowledge (2):
 Epistemological considerations and a conceptual framework for teaching and learning. *Higher Education*, 49(3), 373–388. https://doi.org/10.1007/s10734-004-6779-5
- Meyer, J. H. F., & Land, R. (2010). *Threshold concepts and transformational learning* (C. Baillie, Ed.; Vol. 42). Sense Publishers.
- Mina, A. X. (2019). *Memes to movements: How the world's most viral media is changing social protest and power* (Illustrated edition). Beacon Press.
- Newfield, D. (2011). From visual literacy to critical visual literacy: An analysis of educational materials. *English Teaching: Practice and Critique*, *10*(1), 81–94.

- Peña Alonso, E. J. (2018). Visualizing visual literacy [Doctoral dissertation, University of British Columbia]. University of British Columbia Theses and Dissertations Digital Repository. <u>https://doi.org/10.14288/1.0368982</u>
- Provenzo Jr., E. F., Goodwin, A., Lipsky, M., & Sharpe, S. (2011). Introduction: Literacy for the 21st century. In E. F. Provenzo, Jr., A. Goodwin, M. Lipsky, & S. Sharpe (Eds.), *Multiliteracies: Beyond text and the written word* (pp. xix–xxv). Information Age Publishing Inc.
- Romero Walker, A. (2020). A new media literacy: Using film theory for a pedagogy that makes skills courses more inclusive, representative, and critically media literate. *Journalism & Mass Communication Educator*, 76(2), 241-249. https://doi.org/10.1177/1077695820960631
- Saldana, J. (2015). *The coding manual for qualitative researchers* (3rd edition). SAGE Publications.
- Salmona, M., Lieber, E., & Kaczynski, D. (2019). Qualitative and mixed methods data analysis using Dedoose: A practical approach for research across the social sciences. SAGE Publications.
- Serafini, Frank. (2014). *Reading the visual: An introduction to teaching multimodal literacy*. Teachers College Press.
- Spalter, A. M., & van Dam, A. (2008). Digital visual literacy. *Theory into practice*, 47(2), 93–101. <u>https://doi.org/10.1080/00405840801992256</u>
- Stubbs, J. (2019, September 26). Viral visuals driving social media manipulation on YouTube, Instagram: Researchers. Reuters. <u>https://www.reuters.com/article/us-facebook-disinformation-idUSKBN1WB0ED</u>

- Thompson, D. S. (2019). Teaching students to critically read digital images: A visual literacy approach using the DIG method. *Journal of Visual Literacy*, *38*(1–2), 110–119. <u>https://doi.org/10.1080/1051144X.2018.1564604</u>
- Thompson, D. S., & Beene, S. (2020). Uniting the field: Using the ACRL visual literacy competency standards to move beyond the definition problem of visual literacy. *Journal* of Visual Literacy, 39(2), 73–89. <u>https://doi.org/10.1080/1051144X.2020.1750809</u>
- Tishman, S. (2018). *Slow looking: The art and practice of learning through observation*. Routledge Books.
- Wardle, C., & Derakshan, H. (2017). Information disorder framework report (DGI 2017-

09). Council of Europe. Retrieved November 2, 2021, from

https://multimedia.ciberimaginario.es/OERs/2020/CRESCEnt/2.1.3/

- Wiggins, G., & McTighe, J. (2005). *Understanding by design* (2nd Expanded edition). Association for Supervision & Curriculum Development Press.
- Williams, C. M., & Debes, J. I. (Eds.). (1970). Proceedings of the First National Conference on Visual Literacy, Rochester, NY, March 23–26, 1969. Pitman Publishing Corporation.
- Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power* (1st ed.). Public Affairs Books.

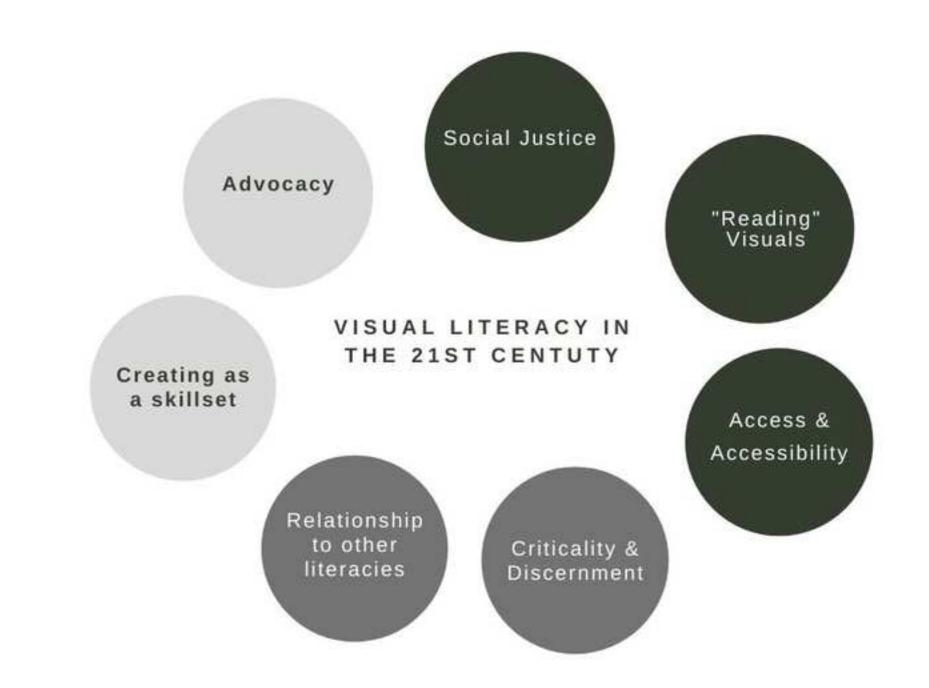


Figure 1. Dark grey bubbles are trends, medium grey bubbles are challenging opportunities, and light grey bubbles are potential obstacles. Each bubble represents a finding from the ACRL Visual Literacy Task Force's empirical research, 2019-2021.Visualization created by Stephanie Beene.

suals Learners practice visual discernment and criticality	 isuals critical evaluation of visuals to discern authority and legitimacy contextual information in visual interpretation personal positionality in shaping visual evaluation visual evaluation visuals playing a role in the accepance and spread of misinformation 	ugh visual practice	 disruption and legacy of the visual canon systems of power shaping visual experience
Learners perceive visuals as communicating information	 disciplinary conventions of visuals in research visual messages using multiple modes personally-created, repurposed, and mixed visuals visual production factors impacting creators and consumers 	Learners pursue social justice through visual practice	 accessibility practices and principles for visual information necessity of diverse voices in visual creation and content
Learners participate in a changing visual information landscape	 attribution of visuals to acknowledge the labor of others privacy issues in social media and emerging technologies visual life cycle, including creation, distribution, description, consumption, and iteration analog and digital visuals for creative inspiration 	Learners p	 ethical considerations for cultural and intellectual property regarding visuals technological, economic, or

•

•

•

appropriation in visual creation or

visuals representing different ways

of knowing

accessibility barriers to accessbias and commercial interest in

•

•

algorithms

use

Interview Questions

- 1. How do images and/or visual media figure into your work or research?
- 2. Describe your own path to visual literacy.
 - a. Did you receive formal training in how to read, interpret, and contextualize visual materials? Whether yes or no, please elaborate.
- 3. How do you define visual literacy?
- 4. Consider the following definition of visual literacy: Visual literacy is a set of abilities that enables an individual to effectively find, interpret, evaluate, use, and create images and visual media. Visual literacy skills equip a learner to understand and analyze the contextual, cultural, ethical, aesthetic, intellectual, and technical components involved in the production and use of visual materials. A visually literate individual is both a critical consumer of visual media and a competent contributor to a body of shared knowledge and culture.
 - a. Is this definition sufficient for 21st-century learners? If not, how would you improve it?
- 5. Does educating others figure into your work?
 - a. If so, how?
- 6. What visual literacy skills and competencies do you consider necessary for success in your discipline?
- 7. What do you consider to be the unique visual literacy concern(s) or challenge(s) for students or audiences in your area of expertise?
- Is assessing the visual literacy competencies of others part of your work?
 a. If so, could you elaborate on your assessment methods?
- 9. What do you consider to be the most pressing concern(s) (e.g. credibility, diversity, equity, inclusion, manipulation, technology, and/or trust) surrounding images and/or visual media today? Please explain your reasoning.
- 10. How do you see new technologies (such as augmented reality, deep fakes, etc.) affecting our understanding of visual literacy?
- 11. What challenges and opportunities do you see for the field of visual literacy moving into the 21st-century?

Profile questions

- 1. What is your academic discipline/subject expertise in?
- 2. What are your research interests/areas of study?
- Are you currently--or have you in the past been--involved in visual literacy initiatives?
 a. If so, please describe.
- 4. Are you a member of any associations or organizations that advocate for visual literacy?
 - a. If so, please list.