Proposing a Metaliteracy Model to Redefine Information Literacy

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REFLECTING ON THE STANDARDS [ARTICLE]

PROPOSING A METALITERACY MODEL TO REDEFINE INFORMATION LITERACY

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ABSTRACT

Metaliteracy is envisioned as a comprehensive model for information literacy to advance critical thinking and reflection in social media, open learning settings, and online communities. At this critical time in higher education, an expansion of the original definition of information literacy is required to include the interactive production and sharing of original and repurposed digital materials. Metaliteracy provides an overarching and unifying framework that builds on the core information literacy competencies while addressing the revolutionary changes in how learners communicate, create, and distribute information in participatory environments. Central to the metaliteracy model is a metacognitive component that encourages learners to continuously reflect on their own thinking and literacy development in these fluid and networked spaces. This approach leads to expanded competencies for adapting to the ongoing changes in emerging technologies and for advancing critical thinking and empowerment for producing, connecting, and distributing information as independent and collaborative learners.

The work of the Association of College and Research Libraries (ACRL) Information Literacy Competency Standards for Higher Education Task Force reflects an impetus for change that has been building steadily. The information environment has altered so dramatically in the last decade that earlier attempts to codify what it means to be information literate are no longer sufficient. This has led to recent increased activity in the realm of information literacy-related models, standards, and learning objectives. The year 2011 alone saw the publication of Society of College, National and University Libraries' (SCONUL's) revised *Seven Pillars of Information Literacy*; the United Nations Educational, Scientific and Cultural Organization's (UNESCO's) *Media and Information Literacy Curriculum for Teachers* (2011); ACRL's *Visual Literacy Competency Standards for Higher Education*; *A New Curriculum for Information Literacy* (Secker & Coonan, 2011); Townsend, Brunetti, and Hofer's "Information Literacy and Threshold Concepts" article (2011), and the authors' article "Reframing Information Literacy as a Metaliteracy," (Mackey & Jacobson, 2011), which proposed a collaborative and metacognitive model emanating from and building upon information literacy.

Metaliteracy is especially relevant to this discussion because it expands the standard conception of information literacy to include social media, online communities, and open learning as central concerns. The original information literacy standards implied that learners would use technology and synthesize information in original academic expressions. Metaliteracy, however, makes the connection to technology more overt than did the original definition by promoting the creative production and sharing of information through collaborative social media. This is

an expanded framework for information literacy that incorporates a metacognitive perspective, encouraging learners to think about their own thinking and to continuously reflect on their experiences in these environments. This approach supports individuals to think about their own literacy as well, especially within the context of emerging technologies and open spaces for teaching and learning. In so doing, the learner is empowered to adapt and change to evolving media landscapes while gaining a critical thinking perspective that is core to the original information literacy definition.

As part of this new model, metaliteracy provides a unifying and overarching construct for related literacy types. Rather than arguing for discrete and disconnected literacies that address separate literacy needs, we proposed in our original 2011 article that we need to locate similarities among common literacy types and incorporate these perspectives in an integrated metaliteracy model. As we noted in that first article, the commonalities among related literacies have been overlooked (Mackey & Jacobson, p. 70). This meta perspective is distinct from acknowledging multiple literacies as parallel concerns because 21st century learning environments are social, multimodal, interactive, and open, requiring an integration of visual, textual, aural, media, digital, and collaborative competencies. At this pivotal time in higher education, we need to acknowledge the essential role that the foundation elements of information literacy (determining, accessing, evaluating, incorporating, using, and understanding information) play in related literacy types such as visual literacy, media literacy, digital literacy, and critical literacy. In addition, we must learn from connected literacies and build key components associated with visual, textual, aural, media,

and interactive information into a comprehensive metaliteracy model. The new information literacy standards must be expanded to include the collaborative production and sharing of new knowledge in participatory environments, or what we see as an overarching metaliteracy.

We have been engaged in a great many activities related to metaliteracy since our original article proposing this new framework was published in *College & Research Libraries* in 2011. Through our partnership, we have written a book on the topic, presented at conferences, and worked with a team of State University of New York (SUNY) colleagues as part of a grant-funded initiative to create a Metaliteracy Learning Collaborative. This endeavor led to the development of metaliteracy learning objectives, the launch of a new Metaliteracy.org blog, the design of a Metaliteracy Massive Open Online Course (MOOC) in fall 2013, and the development of a badging system to support the learning objectives. We have also seen the influence of metaliteracy on a revision of the information literacy learning objectives at the University at Albany, SUNY.

Since we first argued for the concept of metaliteracy as a way to reframe information literacy, an intense debate has emerged in higher education regarding Massive Open Online Courses (MOOCs). This conversation has brought new attention to open and online learning and has challenged traditional assumptions about the development and delivery of instruction through open collaborative technologies. The MOOC discussion has also raised questions about the role of degree-granting institutions in this new reality and may lead to dramatic changes in how we envision and credential learning opportunities. Internationally, UNESCO developed the

2012 Paris OER Declaration to promote open educational resources (OERs) as a means to share knowledge and bridge the digital divide. These radical developments in higher education, with an emphasis on open and networked learning, further underscore the need for an expanded conception of information literacy as a metaliteracy. Today's learners are faced with a range of options for lifelong discovery and knowledge that defies traditional boundaries of time, place, access, content, and modality. Metaliteracy empowers learners to participate in interactive information environments, equipped with the ability to continuously reflect, change, and contribute as critical thinkers.

APPLYING THE METALITERACY MODEL

In this section, we outline the seven elements of metaliteracy in practice from the original article, *Reframing Information Literacy as a Metaliteracy*. These specific assertions, in addition to the theory of metaliteracy, provide a useful model for ACRL to consider in revising the standards by envisioning information literacy as a metaliteracy.

The key tenets of metaliteracy accord well with the learning experiences academic librarians seek to provide to their students. Many of the core elements of this framework clearly reflect the connected environment in which we live. Metaliteracy challenges us to think about our teaching in new ways and to incorporate metacognitive reflection in learning design. This approach challenges us to consider creative ways to teach with the emerging technologies that have become such a ubiquitous part of our daily lives. Initially, we proposed seven important ways to transform the more

theoretical conception of metaliteracy into teaching opportunities (Mackey & Jacobson, 2011, 70-76); and we have continued that work by developing specific learning objectives for metaliteracy at Metaliteracy.org.

In our work with the Metaliteracy Learning Collaborative to define specific learning objectives, we returned to the original article and began with the seven elements that outlined metaliteracy in practice. These seven objectives are designed for exploration in learning environments and draw upon vital fundamentals from information literacy, but develop them in new ways. The seven elements include the following:

1. *Understand Format Type and Delivery Mode.*

2. *Evaluate User Feedback as Active Researcher.*

3. *Create a Context for User-generated Information.*

4. *Evaluate Dynamic Content Critically.*

5. *Produce Original Content in Multiple Media Formats.*

6. *Understand Personal Privacy, Information Ethics and Intellectual Property Issues.*

7. *Share Information in Participatory Environments.*
(Mackey & Jacobson, 2011, 70–76)

The first objective acknowledges that the range of format types and delivery modes has grown exponentially in the last decade.

They may not have the traditional markers researchers relied on in the past such as a reputable publisher to judge the value of the material. And if they did, today's students might not be familiar enough with such indicators to understand them. The value of information does not correspond to its packaging, or *wrapper*. Some blogs may provide the highest quality information, while others do not. The ability to distinguish between the two differs little from traditional forms of information, but there can be mixed signals in relation to new format types and delivery modes. Students may be warned away from sources solely because of their type or modality. For example, in academic settings, blogs and wikis may not be seen as academic and, thus, discounted as reliable sources although each has the potential to make important contributions to a search process. Suspicion may surround information that appears inherently different from traditional scholarly sources, in either its format or the way it is received. For instance, audio, video, and digital images may accompany or replace traditional text, requiring an expanded ability to interpret each type. At the same time, readers are producers in social media settings who can work with the same set of resources to offer their own contribution. Increasingly, the democratization of information publication and review adds an additional layer to be scrutinized as open communities define their own versions of peer review. The importance of critical thinking abilities remains vital but needs to be expanded and honed in order to face increasingly multi-faceted and complex information packaging and delivery. Today's learners must be knowledgeable about these changing modalities and cognizant of their ability to participate in these spaces.

The second objective, *Evaluate User*

Feedback as Active Researcher, recognizes that just as information production and publication has been democratized, so too has critiquing information. No longer does one have to be an expert to be able to share one's opinion widely. Previously, book reviews were written by scholars; and comments about journal articles, also written by scholars, showed up on the letters to the editor pages. Today, everyone has an opinion and their own soapbox, complete with megaphone. In order to be an effective researcher and contributor to the conversation, individuals need to be able to evaluate the feedback and determine whether it provides enough critical information that is reliable. Added to the mix is the fact that this information is constantly changing. Effective researchers may need to become a part of the conversation, rather than remain simply spectators. They also need to differentiate between experts in the field and observers or participants, without discounting the views of those effectively contributing through social media.

The third objective, *Create a Context for User-generated Information,* is yet another area that highlights the necessity for well-developed evaluation proficiencies and is closely related to elements of the first two objectives. Many who teach information-related abilities to students bemoan the disappearance of the information source context that was previously obvious. When our students use search engines, be they generic or specialized, they may not have

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the knowledge or experience to identify the nature of the entries that comprise the results. Now that information appears as discrete units, no longer tethered to once-recognizable, cohesive entities, this issue has become increasingly obvious. The traditional hierarchies for delivering information have been replaced by online communities that create and share a multitude of digital materials. Understanding and contextualizing the information presented, and being able to evaluate and place it within the sphere of knowledge on a topic, and within the distinct need of the researcher, is a challenge with which metaliterate learners must engage. As with the other objectives, metacognitive reflection is critical to recognizing that this process is often not inherent and can be further developed and learned.

Evaluate Dynamic Content Critically is the fourth of the original objectives and addresses the widespread access to extremely abundant information that alters shape and content continuously. The fluidity of the information environment requires critical assessment abilities on a variety of fronts, from recognizing the value of less formal methods of communication to understanding how to synthesize and reconcile conflicting information or viewpoints that may shift before one's eyes and determining how to separate opinion from fact. These concerns are not new, but the vast quantity of information that is now globally accessible has highlighted the

nuanced and vital nature of this objective. The evaluation of dynamic content in networked spaces is continuous since this information is generated by multiple sources, both synchronously and asynchronously, and takes many forms. In addition, there is a new layer to this objective requiring consideration: It is now possible for individuals to actively engage in conversations surrounding these issues. That is, the user is producer and is empowered to make original contributions in an ongoing dialogue with others. This leads to the last three objectives that further support metaliteracy as an active framework for learning in collaborative social spaces.

The fifth objective, *Produce Original Content in Multiple Media Formats*, is central to the metaliteracy model. Individuals may insert themselves into discussions in order to help understand the participants' viewpoints and positions, as described in the previous objective. This involvement may affect the content and needs to be respected within the evaluation process. But individuals may also create and share unique content using social media for a wide range of reasons, from describing their daily life to teaching others about a topic on which they are expert. The nature of the information will affect the format that it takes, particularly for a metaliterate individual, who has the ability to differentiate among distinct format types and to express original ideas effectively. While the ability to *Produce Original Content in Multiple Media Formats* may be a personal effort, it is also easily accomplished in conjunction with others, enhancing or repurposing the material in a way that might have been difficult to achieve in the past.

The sixth objective, *Understand Personal Privacy, Information Ethics and Intellectual*

Property Issues, is not entirely new, but its importance has become magnified in today's de-centered information environment. Personal privacy has taken on a new meaning in collaborative social settings when users are willing to share so much information online. At the same time, the ways in which personal privacy can be violated have grown considerably. Awareness about information security in these contexts is a related concern as well. In addition, some users may view intellectual property as material for the taking without considering or seeking out Creative Commons licenses or community standards for permission and attribution. Individuals may not even be aware of a host of other information ethics issues that regularly arise in both structured and amorphous environments. Thoughtful reflection is needed, but this only happens when people are aware of these issues and have gained the knowledge and critical thinking perspective to tackle such complex concerns. Familiarity, or at least ubiquity, may lead to a laissez-faire attitude that is harmful, both individually and to society. If one laments, but accepts, that one's personal information is going to be used in a wide variety of ways and assumes this is beyond one's control, or if individuals do not fully understand the proper ways to remix and repurpose content, a careful examination of the issues will not occur. The metaliterate individual will be sensitive to such issues and confront new ones as they arise.

In order to produce information that may have value to others, it is important to understand the nature of the mechanisms, technologies, and spaces that promote successful communication. The last objective, *Share Information in Participatory Environments*, acknowledges the ease with which content can be included in spaces that potentially reach a global

audience. This possibility brings with it responsibility that differs greatly from the traditional situation of producing information for a very small, very localized group of readers. Individuals must understand the most appropriate ways to share content, the particularized nature of various venues, the rights issues, and the continuing responsibilities authorship on this scale entails. Metaliterate learners must strive for independent, democratic participation, while being open to the free flowing contribution of others. They also need to gain proficiency with emerging technologies that advance the development and distribution of ideas in social networks.

As mentioned within the description of each learning objective, many, but not all, of these issues were present within the realm of information literacy. However, the new technologies are revolutionary and transformational and require a new approach. This leads to new components to be addressed when developing learning situations. Time and space constraints, as well as expectations by those requesting course-related instruction, may introduce challenges to incorporating select metaliteracy-related elements into one's instruction. Obviously, those who have more extensive time with students, such as teachers of information literacy courses or first year seminars, have a broader scope in which to use the metaliteracy scaffolding. However, many of the metaliteracy learning objectives are a natural fit both with today's information environment and students' experience of it. Foregrounding the metacognitive component of metaliteracy is an excellent starting point that will provide a likely entrée to further elements of this model.

CONCLUSION

Metaliteracy requires us to think beyond discrete skills development in one-shot library sessions and embed metacognitive reflection in dynamic and collaborative learning activities. Metaliterate learners continuously reflect on their own thinking to expand their knowledge and adapt to evolving technologies. The new standards then must consider the ways that learners are encouraged to create and share original and repurposed expressions as critical consumers and producers of information. Metaliteracy moves knowledge acquisition beyond search and retrieval to include the production, distribution, and communication of information in open and online environments. This work must take place across the curriculum, requiring research librarians to build stronger collaborations among faculty and librarian colleagues and to influence learning objectives in a variety of studies and disciplines.

As noted earlier, we worked with a grant-funded Metaliteracy Learning Collaborative to develop a preliminary set of learning objectives for metaliteracy. This work has already informed a revision of the information literacy learning objectives at The University at Albany, SUNY, which is the first institution to adapt the metaliteracy objectives. We see our initial document at Metaliteracy.org as an Open Educational Resource (OER) that is available to everyone to adapt and repurpose as needed. We look forward to continued collaboration around these goals and objectives.

Although the work of developing the metaliteracy learning objectives began as a grant-funded SUNY initiative, we would like to solicit comments and suggestions on the continued evolution of the learning objectives. We have already made several

changes based on feedback received through the Metaliteracy.org site and always appreciate the chance to mull over new ideas. We see this open collaborative practice as a model for producing and sharing ideas in participatory environments. The outcome of this work, in addition to our original article on metaliteracy, contributes to an expanded meta-perspective on the collective understanding of information literacy. As our work in this area continues, we would like to highlight teaching initiatives and exercises that include metaliteracy elements. Please feel free to contact either of the authors or share your ideas with this growing community at Metaliteracy.org.

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