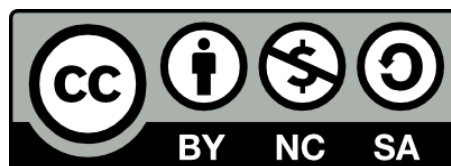




Annotated Bibliography

Gibson, Craig, Sarah Hartman-Caverly, and Christina LaRose. “Annotated Bibliography.” [Open Inquiry Toolkit](#).



This license allows reusers to distribute, remix, adapt, and build upon the material in any medium or format for noncommercial purposes only, and only so long as attribution is given to the creator. If you remix, adapt, or build upon the material, you must license the modified material under identical terms.

[Click here to learn more at Creative Commons.](#)

This living annotated bibliography will be continually updated with resources helpful for understanding and applying the Open Inquiry Toolkit, virtue epistemology, and intellectual virtues to research instruction.

Virtue Epistemology

Baehr, Jason. *Deep in Thought: A Practical Guide to Teaching for Intellectual Virtues*. Cambridge: Harvard Education Press, 2021.

Baehr provides an actionable guide of pedagogy principles, postures, and practices for integrating intellectual virtues into character education and teaching and learning. He defines intellectual character as “the ways you are disposed to act, think, and feel in the context of *epistemic* pursuits like learning, wondering, reasoning, observing, contemplating, and deliberating” (Baehr, 2021, p. 18). Intellectual character is comprised of intellectual vices (laziness, closed-mindedness, arrogance, gullibility (Baehr, 2021, p. 18)) and virtues, “the personal qualities or character strengths of good thinkers and learners” (Baehr, 2021, p. 3). Baehr outlines nine key intellectual virtues: curiosity, intellectual autonomy, attentiveness, carefulness, thoroughness, open-mindedness, intellectual courage, and intellectual tenacity (Baehr, 2021, pp. 35-49). Each intellectual virtue is comprised of a skill, the motivation to enact the virtue, and the discernment on when to call upon that virtue (Baehr, 2021, pp. 32-33).

Baehr, Jason. “Educating for Intellectual Virtues: From Theory to Practice.” *Journal of Philosophy of Education* 47, no. 2 (2013): 248-262.
<https://doi.org/10.1111/1467-9752.12023>
[https://digitalcommons.lmu.edu/cgi/viewcontent.cgi?article=1039&context=phil_fac]

Bivens-Tatum, Wayne. “Scholarly Conversations, Intellectual Virtues, and Virtue Information Literacy.” *Library Philosophy and Practice* 4981 (2021).
<https://digitalcommons.unl.edu/libphilprac/4981>.

Bivens-Tatum, Wayne. *Virtue Information Literacy: Flourishing in an Age of Information Anarchy*. Sacramento, CA: Litwin Books, 2022.

Bivens-Tatum’s work presents a theoretical grounding and defense of virtue information literacy (VIL), which he characterizes as an applied virtue epistemology to the practice of information literacy. Bivens-Tatum understands virtue ethics as the consideration of what character traits we should cultivate to experience flourishing, and virtue epistemology as virtue ethics applied to

theory of knowledge (Bivens-Tatum, 2022, p. 12). He explicitly proposes VII as a solution to innate cognitive biases – “the cognitive biases and errors we’re all prone to is why we need to cultivate intellectual virtues in the first place” (Bivens-Tatum, 2022, p. 111) – and as a solution to “information anarchy” – “self-organized activity without dominant, hierarchical (information) rulers or authorities controlling the flow of information and having the power to enforce deference” (Bivens-Tatum, 2022, p. 1) or when “no central information authority that controls access to information or that always must be obeyed or believed” (Bivens-Tatum, 2022, p. 221) and as an alternative to information authoritarianism (p. 2).

Bivens-Tatum references a number of intellectual virtue-vice dyads throughout the work, including:

- Open / closed-mindedness
- Intellectual humility (and modesty) / arrogance
- Intellectual courage / cowardice
- Intellectual caution / rashness
- Intellectual thoroughness / laziness
- Epistemic justice
 - Testimonial justice
 - Hermeneutical justice (citing Miranda Fricker)
- Information vigilance / distraction (similar to Baehr’s attentiveness) (Bivens-Tatum, 2022, pp. 4-5).

Like (Taylor, 2016), Bivens-Tatum characterizes intellectual virtues as Aristotelian means moderating vices of excess or deficiency in intellectual character traits (Bivens-Tatum, 2022, p. 112). He also situates intellectual virtues in the dispositions of the ACRL Framework, citing the work of ([McMenemy & Buchanan, 2018](#)) to map the information literacy frames onto related intellectual virtues (Bivens-Tatum, 2022, pp. 53, 57).

Boghossian, Peter and James Lindsay. *How to Have Impossible Conversations: A Very Practical Guide*. New York: Hachette, 2020.

Guzmán, Mónica. *I Never Thought of it That Way: How to Have Fearlessly Curious Conversations in Dangerously Divided Times*. Dallas, TX: BenBella Books, 2022.

Hahner, Leslie and Scott Varda. "Five Minutes of Fire: Introducing Debate to the Business and Professional Communication Classroom." *Texas Speech Communication Journal Online* (October 2011).

<https://www.etsca.com/tscjonline/0911-fire/>.

Lenker, M. "Open-Mindedness Is An Achievement: Prototyping a New Threshold Concept for Information Literacy," *LOEX Quarterly* 46/47: 10-12.

<https://commons.emich.edu/loexquarterly/vol46/iss4/5>

McMenemy, David, and Steven Buchanan. "Character building in children's online information behaviors: applying a virtue epistemology perspective to information literacy." In *Information Literacy in Everyday Life* (ECIL 2018), edited by Serap Kurbanoglu, Sonja Špiranec, Yurdagül Ünal, Joumana Boustany, Maija Leena Huotari, Esther Grassian, Diane Mizrachi, and Loriene Roy.

Communications in Computer and Information Science 989 (2018): 73-82. Cham:

Springer. https://doi.org/10.1007/978-3-030-13472-3_7

[https://pure.strath.ac.uk/ws/portalfiles/portal/86687766/McMenemy_Buchanan_ECIL2018_Character_building_in_childrens_online_information_behaviors.pdf]

Maps intellectual virtues to the ACRL Framework. As cited in (Bivens-Tatum, 2022, p. 57).

Taylor, Rebecca M. "Open-mindedness: An Intellectual Virtue in Pursuit of Knowledge and Understanding." *Educational Theory* 66, no. 5 (2016): 599-616.

<https://doi.org/10.1111/edth.12201>

Venturini, Tommaso and Anders Kristian Munk. *Controversy Mapping: A Field Guide*. Cambridge, UK: Polity, 2022.

Learning Design

Bury, Sophie and Ron Sheese. "Academic Literacies as Cornerstones in Course Design: A Partnership to Develop Programming for Faculty and Teaching Assistants." *Journal of University Teaching & Learning Practice* 13, no. 3 (2016).

<https://doi.org/10.53761/1.13.3.3>.

Coco, Pete and McClure, Hazel. "Rigging for Rigor: Guiding Classroom Faculty Toward Richer Research Assignments with the Research Guidance Rubric." *LOEX Conference Proceedings 2011*, 21: 121-25.
<https://commons.emich.edu/loexconf2011/21>.

Authors report on the use of a [Research Guidance Rubric \(RGR\)](#), an instructor-facing instrument to improve the quality of course-related research assignment handouts (p. 121). Authors find that a focus on "product over process" in handouts denies students the guidance needed for "full engagement with sources and the larger scholarly discourse that contextualizes them" (p. 122). Authors identified four facets of research handouts: Explanation/definition of sources and expectations, Rationale and context for resource requirements, Process-orientation, and Library engagement (p. 122). Each facet is assessed on a scale of [guidance level 0 through 4](#). Authors also discuss creating a student-facing tool that assists students in asking questions of instructors about research assignments (p. 123).

Gammons, Rachel Wilder, and Lindsay Taylor Inge. "Using the ACRL Framework to Develop a Student-Centered Model for Program Level Assessment." *Communications in Information Literacy* 11, no. 1 (2017): 168-184.
<http://archives.pdx.edu/ds/psu/22330>

Gregory, Alison S. and Betty L. McCall. "Building Critical Researchers and Writers Incrementally: Vital Partnerships Between Faculty and Librarians." In *Information Literacy: Research and Collaboration Across Disciplines*, edited by Barbara D'Angelo, Sandra Jamieson, Barry Maid, and Janice R. Walker, 371-386. Denver, CO: The WAC Clearinghouse; University Press of Colorado, 2016.
<https://doi.org/10.37514/PER-B.2016.0834.2.18>.

Authors assert that "information literacy is best learned incrementally" (p. 372), providing support for a scaffolded approach within curricula and assignments. Scaffolded approaches occupy a spectrum beginning with explicit instruction in IL skills and moving toward independent transfer of skills from one context to another (vis a vis informed learning) (p. 373). In their example, authors scaffolded IL development over a curriculum by starting with disciplinary article/source dissection, finding peer reviewed disciplinary literature, conducting a literature review, conducting a literature review culminating in an

original research question, and undertaking an original research study capstone project (p. 379-381). Collaborations between librarians and instructors, and relationships between librarians and students, are attributes of effective course-embedded IL programs (p. 375).

Head, Alison J. and Michael B. Eisenberg. "Assigning Inquiry: How Handouts for Research Assignments Guide Today's College Students." Project Information Literacy. Last modified July 12, 2010.

<https://files.eric.ed.gov/fulltext/ED535162.pdf>.

Authors conducted a content analysis of 191 course-related research assignment handouts submitted by instructors at 28 US colleges and universities (p. 2). Previous findings indicate that more than three-quarters of students find written guidelines useful for completing assignments (p. 2). They report that a majority of handouts show an overarching focus on "mechanics" rather than on "substantive information that students also needed, such as how to define and focus a research strategy" (p. 2). Little guidance about finding and using sources is provided (p. 3, 13). Authors conclude that the majority of handouts present "research as more of a linear checklist than an iterative process that requires critical thought, curiosity, ongoing discovery, and tenacity" (p. 27, emphasis added). They suggest that handouts could support student sense-making about the research process (p. 27) and recommended librarians and instructional designers as resources for faculty (p. 28).

Hicks, Alison. "Student Perspectives: Redesigning a Research Assignment Handout through the Academic Literacies Model." *Journal of Information Literacy* 10, no. 1 (2016): 30-43. <https://ojs.lboro.ac.uk/JIL/article/view/PRA-V10-I1-2>.

Hicks, Alison and Adrian Howkins. "Tipping the Iceberg: A Collaborative Librarian-Historian Approach to Redesigning the Undergraduate Research Assignment." *The History Teacher* 48, no. 2 (February 2015): 339-370. <https://www.jstor.org/stable/43264408>.

Locklear, Amy. "Redesigning the Research Arc of First-Year Composition: Renegotiating and Remapping an Approach to Information Literacy." *Journal of Teaching Writing* 31, no. 1 (2016): 61-96. <https://journals.iupui.edu/index.php/teachingwriting/article/view/21172>.

Lowe, M. Sara, Sean M. Stone, Char Booth, and Natalie Tagge. "Impact of Assignment Prompt on Information Literacy Performance in First-year Student Writing." *The Journal of Academic Librarianship* 42, no. 2 (March 2016): 127-134. <https://doi.org/10.1016/j.acalib.2016.01.002>.

Maybee, Clarence, Christine Susan Bruce, Mandy Lupton, and Kristen Rebmann. "Designing Rich Information Experiences to Shape Learning Outcomes." *Studies in Higher Education* 42, no. 12 (2017): 2373-2388. <https://doi.org/10.1080/03075079.2016.1148684> [https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1136&context=lib_fs_docs].

Information Literacy / Library Research Instruction

Association of College & Research Libraries. "Framework for Information Literacy for Higher Education." Last modified January 11, 2016. <https://www.ala.org/acrl/standards/ilframework>

The ACRL Framework for Information Literacy is a touchstone of library research instruction and establishes six threshold concepts for information literacy in higher education:

1. Authority is Constructed and Contextual
2. Information Creation as a Process
3. Information Has Value
4. Research as Inquiry
5. Scholarship as Conversation
6. Searching as Strategic Exploration.

Information literacy is defined as

“the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning.”

Bensen, Beth, Denise Woetzel, Hong Wu, and Ghazala Hashmi. "Impacting Information Literacy Through Alignment, Resources, and Assessment." In

Information Literacy: Research and Collaboration Across Disciplines, edited by Barbara D'Angelo, Sandra Jamieson, Barry Maid, and Janice R. Walker, 387-410. Denver, CO: The WAC Clearinghouse; University Press of Colorado, 2016. <https://doi.org/10.37514/PER-B.2016.0834.2.19>.

Authors reinforce collaboration among librarians and instructional faculty as critical to the success of IL programming and student learning of IL concepts (p. 393). They describe the adoption of IL learning modules in online curricula (p. 395-96), which represents a potential approach to scaffolding and 'flipping' IL instruction. Student IL mastery is assessed using fixed-choice (ex. multiple choice, T/F, etc.) methods; librarians also gather student feedback through satisfaction surveys (p. 397). Pre- and post-test analysis finds that completion of the IL module series had a statistically significant impact on IL mastery among self-identified African American students as compared to students who are White or of Other racial/ethnic identities (p. 405-06).

Blackwell-Starnes, Kat. "Preliminary Paths to Information Literacy: Introducing Research in Core Courses." In *Information Literacy: Research and Collaboration Across Disciplines*, edited by Barbara D'Angelo, Sandra Jamieson, Barry Maid, and Janice R. Walker, 139-161. Denver, CO: The WAC Clearinghouse; University Press of Colorado, 2016. <https://doi.org/10.37514/PER-B.2016.0834.2.07>.

Author reports on findings from the Learning Information Literacy Across the Curriculum (LILAC) study that students overestimate their mastery of IL practices and do not meaningfully engage with sources during the research process (p. 142), describing strategic 'satisficing' behaviors. Author recommends, "Educators need to separate the preliminary research and topic narrowing from the final assignment, encouraging a research process that narrows an interesting topic, determines the information needed, and effectively locates needed information" (p. 143), as well as formative assessments and opportunities for students to discuss research experiences and related learning (p. 143). Author scaffolds a research assignment with steps for preliminary research, narrowing research resulting in a research question, and citation chaining, throughout which students reflect on, discuss, and refine their research practices (p. 143-146). Author also scaffolds from the use of the open web and Google Scholar to use of academic library databases (p. 146-46), a

constructivist approach. Author emphasizes the value of the scaffolded approach (p. 148, 154).

Caulfield, Mike. “Information Literacy for Mere Mortals.” Project Information Literacy Provocation Series. Last modified December 14, 2021.
<https://projectinfolit.org/pubs/provocation-series/essays/information-literacy-for-mortals.html>.

Caulfield, Mike and Sam Wineberg. *Verified: How to Think Straight, Get Duped Less, and Make Better Decisions About What to Believe Online*. Chicago: University of Chicago Press, 2023.

D’Angelo, Barbara, Sandra Jamieson, Barry Maid, and Janice R. Walker. *Information Literacy: Research and Collaboration Across Disciplines*. Denver, CO: The WAC Clearinghouse; University Press of Colorado, 2016.
<https://doi.org/10.37514/PER-B.2016.0834>.

[See chapter list and annotations for individual chapters.]

Feebery, Angela, Lisa Emerson, and Gillian Skyrme. “Supporting Academics to Embed Information Literacy to Enhance Students’ Research and Writing Processes.” In *Information Literacy: Research and Collaboration Across Disciplines*, edited by Barbara D’Angelo, Sandra Jamieson, Barry Maid, and Janice R. Walker, 345-370. Denver, CO: The WAC Clearinghouse; University Press of Colorado, 2016. <https://doi.org/10.37514/PER-B.2016.0834.2.17>.

Authors undertook a participant action research (PAR) study of instructors in the Bachelor of Resource and Environmental Planning (BRP) program in a New Zealand University as they updated curriculum and pedagogy to develop students’ information literacy skills in response to accreditation review findings (p. 346). Participants comprised faculty, students, and librarians. The study is grounded in informed learning, the [ANCIL framework](#), and learner-centered pedagogy (p. 347-48), recognizing reflection (or metacognition) as an essential aspect of the learning process (p. 349). Authors also recommend incorporating formative assessment to emphasize the process of research and IL-skill attainment in addition to summative assessment which focuses on the assignment product (p. 349). Interventions under study included library workshops and assessments. Three library workshops were scaffolded across

the four-year curriculum and updated to emphasize active learning, metacognition, disciplinary alignment, increased faculty participation, and increased emphasis on source evaluation (credibility and relevance) (p. 353-53). Course assessments were also updated to emphasize scaffolding IL competencies, the research and writing process, formative feedback, “wider and deeper reading of quality sources,” metacognition, and collaborative learning (p. 353). Authors found that “when explicit support in designing learning tasks and assessments that facilitate IL development is provided, student engagement in IL is improved” (p. 358). Authors also found collaboration between instructors and librarians to be important to the initiative to infuse disciplinary curricula with IL concepts (p. 358).

Fister, Barbara. “Principled Uncertainty: Why Learning to Ask Good Questions Matters More Than Finding Answers.” Project Information Literacy Provocation Series. Last modified February 16, 2022. <https://projectinfofolit.org/pubs/provocation-series/essays/principled-uncertainty.html>.

Fluk, Louise R. “Foregrounding the Research Log in Information Literacy Instruction.” *The Journal of Academic Librarianship* 41, no. 4 (July 2015): 488-498. <https://doi.org/10.1016/j.acalib.2015.06.010>.

Kissel, Francia, Melvin R. Wininger, Scott R. Weeden, Patricia A. Wittberg, Randall S. Halverson, Meagan Lacy, and Rhonda K. Huisman. “Bridging the Gaps: Collaboration in a Faculty and Librarian Community of Practice on Information Literacy.” In *Information Literacy: Research and Collaboration Across Disciplines*, edited by Barbara D’Angelo, Sandra Jamieson, Barry Maid, and Janice R. Walker, 411-428. Denver, CO: The WAC Clearinghouse; University Press of Colorado, 2016. <https://doi.org/10.37514/PER-B.2016.0834.2.20>.

Authors report on the development of a librarian-faculty community of practice for information literacy at Indiana University-Purdue University Indianapolis (p. 418). Authors note challenges in students’ IL skills, including defining manageable research topics, finding and accessing relevant information, and “superficial use of sources” (p. 413). Authors also identify a gap in faculty delivery of IL learning experiences, and in students’ “reluctance” to reach out to librarians for research assistance (p. 414). Authors point to a

need to shift in thinking of IL as a skillset to thinking of IL as a practice that is embedded within disciplines, so that students do not “merely parrot scholarly discourse, but learn to participate in a scholarly conversation” (p. 415). AN initiative of the community of practice was two workshops, one to identify the IL learning outcomes of an assignment, define criteria for student success, and scale the criteria for grading; and the other to explore disciplinary threshold concepts to include its research processes (p. 424).

Kuglitsch, Rebecca Z. “Teaching for Transfer: Reconciling the Framework with Disciplinary Information Literacy.” *portal: Libraries and the Academy* 15, no. 3 (July 2015): 457-470. <https://doi.org/10.1353/pla.2015.0040>

Margolin, Stephanie and Wendy Hayden. “Beyond Mechanics: Reframing the Pedagogy and Development of Information Literacy Teaching Tools.” *The Journal of Academic Librarianship* 41, no. 5 (September 2015): 602-612. <https://doi.org/10.1016/j.acalib.2015.07.001>.

Maybe, Clarence and Michael Flierl. “Motivating Learners Through Information Literacy.” In *Information Literacy: Key to an Inclusive Society* (ECIL 2016), edited by Serap Kurbanoglu, Joumana Boustany, Sonja Špiranec, Esther Grassian, Diane Mizrachi, Loriene Roy, and Tolga Çakmak. *Communications in Computer and Information Science* 676 (2016): 698-707. Cham: Springer. https://doi.org/10.1007/978-3-319-52162-6_68 [https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1159&context=lib_fs_docs].

Miller, Sara D. “Diving Deep: Reflective Questions for Identifying Tacit Disciplinary Information Literacy Knowledge Practices, Dispositions, and Values through the ACRL Framework for Information Literacy.” *Journal of Academic Librarianship* 44, no. 3 (May 2018): 412-218. <https://doi.org/10.1016/j.acalib.2018.02.014>