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Learning by touch: books as objects

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Research suggests that object-based learning has the potential to increase learner satisfaction with libraries. Literature from literary theory, publication design, and material culture provide a balanced review of the book as an object. This is followed by teaching activities that suggest how to integrate print book object-based learning into library instruction.

Object-based learning

Object-based learning engages students in evaluating books as objects, rather than just by their textual content. As a pedagogical practice, object-based learning was developed by museum educators who sought to shift learning beyond looking at artifacts and reading labels to employing object handling that would prompt critical inquiry and motivate curiosity. The print book, specifically the codex, punctuates *realness* through its ability to be a tangible object that a reader inevitably encounters with all their senses. Books as objects emphasize how design contextualizes content, examining how physical characteristics suggest meaning.

Western educational practice favors the mind, as knowledge, over the body, as experience. Sight is the empowered sense 'associated with reason, detachment, objectivity.'[1] Students often have little or no opportunity to critically examine and learn from tangible objects. Especially now, text-based information becoming digital has bolstered 'blindness to the body.'[2] Library science enforces this rationalistic approach through sight-based information use and encouraging engagement with the written word through silent, solitary reading. David Nguyen and Jay Larson refer to this as 'learning from the neck up.'[3]

When learning through use of all the senses, student bodies are as engaged as their minds. Embodied or somatic learning involves physical action and the use of senses to create knowledge. Somatic is of or about the body, separate from the mind; embodied is of or about the body, with an emphasis on emotions. Through bodily engagement, learners take an active role in creating knowledge.

Though object-based learning is a teaching practice of museum educators, Scott Paris acknowledges that 'learning about, with, and through objects' embraces philosophies of experiential and embodied pedagogy as well as overlaps with anthropology and psychology.[4] Museums encourage visitors to engage with artifacts and exhibitions by bringing 'their prior knowledge and experience' in order to 'challenge accepted narratives' and invite critical self-reflection.[5] Handling objects has been shown to assist the learner in better developing three-dimensional knowledge than using sight alone.[6] Furthermore, when using touch, retention and recall of information can be nearly 90%, a benefit that cannot yet be replicated by digital reproduction.[7]

A physical object is easily defined because it has real and visible boundaries that help one focus on what is pertinent to learning. Exploring object-based learning with university students, Cheung-On Tam comments that they 'could decide where to touch, when to stop and how to handle the object. This is very different from being told what to do.'[8] The student becomes an active participant

1. Andrew M. Cox, "Embodied Knowledge and Sensory Information: Theoretical Roots and Inspirations," *Library Trends* 66, no. 3 (2018): 233, https://doi.org/10.1353/lib.2018.0001.
2. Cox, "Embodied Knowledge and Sensory Information," 225.
3. David Nguyen and Jay Larson, "Don't Forget About the Body: Exploring the Curricular Possibilities of Embodied Pedagogy," *Innovative Higher Education* 40, no. 4 (2015): 341, https://doi.org/10.1007/s10755-015-9319-6.
4. Scott G. Paris, *Perspectives on Object-Centered Learning in Museums* (Taylor & Francis, 2002), xiv, https://doi.org/10.4324/9781410604132.
5. Graham Barton and Judy Willcocks, "Object-Based Self-Enquiry: A Multi- and Trans-Disciplinary Pedagogy for Transformational Learning," *Spark: UAL Creative Teaching and Learning Journal* 2, no. 3 (2017): 231–32, https://sparkjournal.arts.ac.uk/index.php/spark/article/download/75/129?inline=1.

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in their own learning. This sense of control over the process can heighten curiosity and motivation to learn.[9]

Books as objects

The print book initiates embodied learning. Thomas McLaughlin writes,

> Eyes scan the page, hands hold the book, body postures align the entire musculoskeletal frame around the visual and manual requirements of reading, adapting to the materiality of the book and to the physical space the reading body inhabits.[10]

We can literally grasp and control information, using tactility and somatic experience to understand abstract concepts.[11] In this manner, the book is more than a mere container for textual information, but also an object situated within social, cultural, and aesthetic contexts. Philip Smith points out,

> The book is not the text, although it is traditionally associated with it, and these two elements appear often to be mistaken for the same thing.[12]

Now, with rapid developments in electronic media, we can make a choice 'to treat the printed book as an active cultural agent rather than a passive container.'[13] Studying the book as an object considers not only the text as subject, but the font and typography along with other tactile materials such as paper and cover design. This approach affirms a book's 'auratic materiality' that can only be experienced sensorially.[14] Physical books also carry an emotional weight. Many religious practices regard their texts as sacred, and this cultural attribution of spiritual significance seems to permeate all book objects.[15] Both its tangible presence and divine energy is what gives the book cultural permanence.[16] Heike Schaefer and Alexander Starre conclude, 'to read printed books, and not just to read *in* printed books, is therefore a significant shift in perspective' (emphasis mine).[17]

To interact with a print book is to interact with two bodies, the reader's and the object's. The language of the book object reminds of this, applying terminology like spine, body (of text), header, and footnote or appendix.[18] The ratio of a typical page is similar to the human hand, described by Alberto Manguel as 'a skeleton supporting the skin of the text.'[19] Through time, the page has been made of and bound in skin. Allison Muri notes that eras of humanity have also used the book as metaphor for the body and that 'the human mind has traditionally been presented as a writing surface.'[20] The embodiment of the book, both its tangible and spiritual bodies, may allude to the cultural panic over the rise of the electronic text which is 'charged by the potential redundancy of the human body and loss of our humanity.'[21]

Thomas McLaughlin reminds us that,

> There is nothing obvious about how the body should address the book. We have to learn how to orient the book and the body, how to grasp and hold it, how to open and turn its pages, how to bear its weight.[22]

Book designers receive a dummy mockup from the binder company that mimics the size and material choices. This gives the designer the opportunity to consider the book as an object, prior to engaging with the book's textual content.[23] These design choices are important because, as we read text in different formats, such as a miniature holy book or an oversized coffee table book, we practice postures in response to size and weight. For example, Briony Anne Carlin suggests that oversized books may be 'less pleasurable' for some; one of Carlin's female respondents described '"unnecessarily large" books as a statement of phallic aggression,' voicing sex and gender identities in material choice.[24]

Today's codex amplifies three elements of the page: its materiality, its architecture as exemplified by the arrangement of text and image, and its symbolism inherent in the former two elements, or how materiality and architecture mirror cultural practices.[25] Charles Spence notes 'salient sensory characteristics' of the page through use of different paper textures, either consistent throughout the text block or varied to indicate shifts in textual subject.[26] Paper and print quality are also material factors of the page that affect

6. M. Gail Jones et al., "Comparison of Learning with Haptic and Visual Modalities," *Haptics-e, The Electronic Journal of Haptics Research* 3, no. 6 (2005): 1–20, https://ir.library.louisville.edu/faculty/137/.
7. A. Barlow, "Beyond Object Lessons: Object-Based Learning in the Academic Library," in *The Experiential Library: Transforming Academic and Research Libraries Through the Power of Experiential Learning*, ed. Pete Mcdonnell (Elsevier, 2017), https://doi.org/10.1016/B978-0-08-100775-4.00003-0.
8. Cheung-On Tam, "Three Cases of Using Object-Based Learning with University Students: A Comparison of Their Rationales, Impact and Effectiveness," in *Engaging the Senses: Object-Based Learning in Higher Education* ed. Helen J. Chatterjee and Leonie Hannan (Routledge, 2015), 129, https://doi.org/10.4324/9781315579641.
9. Tam, "Three Cases;" Judy Willcocks, "Power of Concrete Experience: Museum Collections, Touch and Meaning Making in Art and Design Pedagogy," in *Engaging the Senses: Object-Based Learning in Higher Education* ed. Helen J. Chatterjee and Leonie Hannan (Routledge, 2015), https://doi.org/10.4324/9781315579641.
10. Thomas McLaughlin, *Reading and the Body: The Physical Practice of Reading* (Palgrave Macmillan, 2015), 1, https://doi.org/10.1007/978-1-137-52289-4.
11. Marieke Sonneveld, "Being Touched," in *Can You Feel It?: Effectuating Tactility and Print in the Contemporary* ed. Freek Lomme (Onomatopee, 2016).
12. Philip Smith, "The Whatness of Bookness, or What is a Book," Book Arts Web, accessed October 6, 2025, https://www.philobiblon.com/bookness.shtml.
13. Heike Schaefer and Alexander Starre, "The Printed Book, Contemporary Media Culture, and American Studies," in *Printed Book in Contemporary American Culture: Medium, Object, Metaphor* ed. Heike Schaefer and Alexander Starre (Springer, 2019), 6, https://doi.org/10.1007/978-3-030-22545-2.
14. Amanda C. R. Clark, "An Appeal for the Physical Book," *The Christian Librarian* 63, no. 2 (2020): 120, https://doi.org/10.55221/2572-7478.2218.
15. Ann Roll, "Library Collections and Objecthood," *The International Journal of the Book*

reader engagement with text and images as well as contribute to social notions of value.[27] Because the page is never viewed in isolation, but paired, 'we are always aware, peripherally, of what is to come and what has come before, of the past and future of reading.'[28] Time passing is visual, marked by both the speed of the reader, influenced by the book's design of text and image, and the accumulation of pages on the left, in rhythm with a lessening of them on the right.

These physical characteristics carry social significance, particularly related to an object's perceived quality and monetary value.[29] Material worth is also denoted by a cover's imagery and typography which 'serve to communicate symbolically, on an almost emotional level, about the tone of the contents.'[30] Besides engaging touch and sight, the scent of a book may also be just as important in value judgement.[31] These physical elements, and our bodily engagement with those elements, also serve as 'contextual cues' that aid 'people in remembering, or in making the information salient.'[32]

Learning with books as objects

Object-based learning methods are already used in instruction for archives and special collections. Given the benefits of critically analyzing content with consideration to physical form, why not extend object-based learning practices to other print collections? Handling books without the use of scroll bars or search-and-find shortcuts forces a slowness in the reader and a closeness with the object. Robin Phillips suggests a slow pedagogical practice may advocate 'pushing back against the values of a society increasingly designed on cost-benefit models.'[33]

Browse

A key practice for learning about books as objects is browsing. 'Browsing is primarily interactive and collaborative with the information source or system' and can therefore be a good introductory activity to library collections.[34] Amanda Clark describes the performative behavior of moving through a library, inviting students to think of themselves as enacting the role of the scholar to help them become more comfortable with the library as a place for research and contemplation.[35] Comparing browsing the stacks to browsing the Internet will aid students in realizing they already engage in browsing behavior.[36] It may also be compared to in-store browsing, such as a grocery store, where similar items are shelved together.

Woodall suggests using the term 'rummaging' instead — 'more an imaginative instinct, rummaging is inspired purely by curiosity.'[37] This invites students to be open to new ideas and pursue interests without a known objective. For instance, students may notice that books about agriculture and landscape are often green. Or they may begin to recognize a specific publisher in their field by the design of the book cover and spine. 'Books meant for architects often look different from books for scholars of seventeenth-century European history.'[38] Learning about libraries by walking throughout the space with attention to book qualities such as color, texture, and smell encourages learners to take agency within the space and build their confidence as researchers. In addition, these physical objects act as 'spatial cues [that] aid later memory recall of the information.'[39]

Question

Object-based learning 'must challenge students to move beyond their mental models of objects and the role they play' in constructing meaning of the world around us.[40] A basic visual literacy exercise gives learners the foundational skills necessary to shoulder this challenge and understand the book as an object. Jules David Prown describes three methods of inquiry useful for any material culture artifact.[41] In description or observation we ask 'what can we see?' and engage with the physical book. This observation can sometimes include subjective knowledge about the learner's emotional reaction to or immediate judgements of the book. A novice may find it helpful to observe in comparison, such as how two different book objects treat the same subject. Starting simply with conversation about what is easily noticeable allows students to become engaged and confident. It is often

11, no. 4 (2014): 1–6, https://doi.org/10.18848/1447-9516/CGP/v11i04/37029.
16. Clark, "An Appeal for the Physical Book."
17. Schaefer and Starre, "The Printed Book," 9.
18. Karin Littau, *Theories of Reading: Books, Bodies, and Bibliomania* (Polity Press, 2006); Peter Stoicheff and Andrew Taylor, "Introduction: Architectures, Ideologies, and Materials of the Page," in *The Future of the Page* ed. Peter Stoicheff and Andrew Taylor (University of Toronto Press, 2004), https://doi.org/10.3138/9781442657250-002.
19. Alberto Manguel, "Turning the Page," in *The Future of the Page* ed. Peter Stoicheff and Andrew Taylor (University of Toronto Press, 2004), 27, https://doi.org/10.3138/9781442657250.
20. Allison Muri, "Virtually Human: The Electronic Page, the Archived Body, and Human Identity," in *The Future of the Page* ed. Peter Stoicheff and Andrew Taylor (University of Toronto Press, 2004), 235, https://doi.org/10.3138/9781442657250.
21. Stoicheff and Taylor, "Introduction," 20.
22. McLaughlin, *Reading and the Body*, 78.
23. Jost Hochuli and Robin Kinross, *Designing Books: Practice and Theory* (Hyphen, 1996).
24. Briony Anne Carlin, "Bindings, Boundaries and Cuts: Relating Agency and Ontology in Photobook Encounters" (Thesis, Newcastle University, 2022), 77, https://theses.ncl.ac.uk/jspui/handle/10443/5615.
25. Stoicheff and Taylor, "Introduction."
26. Charles Spence, "Multisensory Experience of Handling and Reading Books," *Multisensory Research* 33, no. 8 (2020): 910, https://doi.org/10.1163/22134808-bja10015.
27. Carlin, "Bindings, Boundaries and Cuts;" Bettina Lockemann, "Photobook an Approach Incorporating Aspects of Activity," in *Refresh the Book: On the Hybrid Nature of the Book in the Age of Electronic Publishing* ed. Viola Hildebrand-Schat, Katarzyna Bazarnik, and Christoph Benjamin Schulz (Brill, 2021), https://doi.org/10.1163/9789004443556.
28. John Dagenais, "Decolonizing the Medieval Page," in *The Future of the Page* ed. Peter Stoicheff and Andrew Taylor (University of Toronto Press, 2004), 62, https://doi.org/10.3138/9781442657250.

an opportunity to voice concern about research, libraries, and scholarly reading. By viewing the book as an object, learners can also objectify their information anxiety.

Next, deduction introduces the object in relation to the world, including the learner, who asks 'what do we know?' Specifically, deduction includes sensory engagement and 'consideration should be given to the physical adjustments a user would have to make to its size, weight, configuration, and texture.'[42] This requires the learner to be mindful of their own embodied participation in the practice. By taking time to examine the book as a manufactured object, students concentrate on elements that indicate 'issues relating to consumer preferences, changing tastes and ethics.'[43] Finally, learners speculate based on what has been described and deduced by determining what questions about the world might be answered by the book.[44] Learners consider not just the subject of the text, but the production of the book in a particular cultural timeframe and through their personal identities. The questions posed are then more likely to be situated within a broader discipline, society, and time period. Tabitha Tuckett and Elizabeth Lawes refer to this practice as '"object literacy" for books.'[45] In this socially constructed activity, students reflect on their own personal experience and lead the activity. Hardie observes that 'the objects are required to *talk* to the students rather than the lecturer's transmission of facts.'[46]

Create

Deeper engagement with print books might also come from studying each item's social history. This could look like visualizing a book's circulation over time or examining the book for traces of patron use such as marginalia or conditional wear from being held. Emphasizing situational awareness of library books helps students place themselves in a larger, and ongoing, community of scholars, noticing disciplinary and curricular trends through time. Conversations grounded in visual literacy aid learners in becoming aware of their physical relationship to the book and how this informs inquiry and curiosity in research.

This may be further extended by borrowing a lesson from Ilene Raynes and Naomi Heiser's work with print maps. They asked students to design the best and worst versions of a map by using features found within their collection such as typographic features and decorative design elements. Such an activity brings critical awareness of full engagement with the object. They conclude by articulating the social nature of learning, stating,

> These exercises are specifically designed to elicit student observations and interactions with one another. Through this process their own authority in observation is bolstered, as objects are explored in an open-ended, fresh way.[47]

Students are able to learn about themselves and others through making. Cynthia N. Malone suggests moving beyond discussing print books to creating them. While Malone's students are learning about artist's books instead of the traditional published codex, the outcome remains the same: 'Making a book demands that students face multiple formal possibilities at every step and make a choice that bears consequences for later decisions.'[48] It may be especially beneficial for students to make a book that includes text they have written. In this process, the learner becomes attuned to how material choices will impact the reader's senses and therefore their engagement with the text. One of Malone's student comments, 'books, as I see them now, are no longer static, but instead are continually changing entities.'[49]

Conclusion

A key outcome of object-based learning activities is that students become aware of the complexity of information sources and their value, 'shifting the focus to more flexible concepts of authority and knowledge production.'[50] In addition, object-based learning is a social practice wherein students challenge assumptions about their discipline, their connections to others, and how they

29. Carlin, "Bindings, Boundaries and Cuts;" Spence, "Multisensory Experience."
30. Spence, "Multisensory Experience," 907.
31. Sami Sjöberg, Mikko Keskinen, and Arja Karhumaa, *The Experimental Book Object: Materiality, Media, Design* (Routledge, 2023), https://doi.org/10.4324/9781003334293.
32. Christopher Lueg and Michael Twidale, "Designing for Humans, Not Robots (or Vulcans)," *Library Trends* 66, no. 4 (2018): 418, https://doi.org/10.1353/lib.2018.0010.
33. Robin Phillips, "Academic Library Book Digitization and Contemplative Reading," *The Christian Librarian* 66, no. 1 (2023): 7, https://doi.org/10.55221/2572-7478.2402.
34. Ronald E. Rice, Maureen McCreadie, and Shan-Ju L. Chang, *Accessing and Browsing Information and Communication* (MIT Press, 2001), 173, https://doi.org/10.7551/mitpress/1066.001.0001.
35. Amanda C. R. Clark, "Library As Place: Being Human in a Digital World," *The Christian Librarian* 57, no. 1 (2014), https://doi.org/10.55221/2572-7478.1438.
36. Nancy Fawley, "Cultural Differences and Information Literacy Competencies," in *The Handbook of Art and Design Librarianship* ed. Amanda Gluibizzi and Paul Glassman (Facet Publishing, 2010).
37. Alexandra Woodall, "Rummaging as a Strategy for Creative Thinking and Imaginative Engagement in Higher Education," in *Engaging the Senses: Object-Based Learning in Higher Education* ed. Helen J. Chatterjee and Leonie Hanna (Routledge, 2015), 139, https://doi.org/10.4324/9781315579641.
38. Richard Hendel, *On Book Design* (Yale University Press, 1998), 33.
39. Rice, McCreadie, and Chang, *Accessing and Browsing*, 229.
40. Nora Dimmock, "Object-Based Pedagogy: New Opportunities for Collaboration in the Humanities," in *Collaborating for Impact : Special Collections and Liaison Librarian Partnerships* ed. Kristen Totleben and Lori Birrell (Association of College and Research Libraries, 2016), 53.
41. Jules David Prown, "Mind in Matter: An Introduction to Material Culture Theory and Method," *Winterthur Portfolio* 17, no. 1 (1982): 1–19, https://doi.org/10.1086/496065.

personally contribute to communities of practice. Broadening the scope of object-based learning to include library materials beyond special collections ensures that students realize how an information source's physical design includes messages with cultural significance. As the learner becomes aware of their body and how it interacts with the world, they recognize how identities are constructed and how information is interpreted. In this manner, the learner brings their whole selves to library engagement and research.

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42. Prown, "Mind in Matter," 9.
43. Kirsten Hardie, "Engaging Learners through Engaging Designs That Enrich and Energise Learning and Teaching," in *Engaging the Senses: Object-Based Learning in Higher Education* ed. Helen J. Chatterjee and Leonie Hanna (Routledge, 2015), 32, https://doi.org/10.4324/9781315579641.
44. Barton and Willcocks, "Object-Based Self-Enquiry."
45. Tabitha Tuckett and Elizabeth Lawes, "Object Literacy at University College London Library Services," *Art Libraries Journal* 42, no. 2 (2017): 104, https://doi.org/10.1017/alj.2017.13.
46. Hardie, "Engaging Learners through Engaging Designs," 26.
47. Ilene Raynes and Naomi Heiser, "Cartographic Literacy through Object-Based Learning: The Value of Primary Sources in Instruction," *Journal of Map & Geography Libraries* 15, nos. 2–3 (2019): 204, https://doi.org/10.1080/15420353.2020.1739188.
48. Cynthia N. Malone, "Futures of Books: Technologies and Forms," *International Journal of the Book* 6, no. 1 (2009): 117, https://doi.org/10.18848/1447-9516/CGP/v06i01/36726.
49. Malone, "Futures of Books," 117.
50. Barlow, "Beyond Object Lessons," 38.