

A Beginning Bibliography on Interdisciplinarity*

Navigating the large literature on interdisciplinarity can be challenging, since it is scattered across disciplines, interdisciplinary fields, and professions. However, this bibliography provides a starting point. Groups may use resources in common for general discussion and for workshops and training modules. Both groups and individuals may use them to inform specific projects and research and education programs. And, they provide authoritative definitions for presentations, publications, and grant applications.

Additional bibliographies appear at separate sublinks: “Resources for Interdisciplinary Education” and “Resources for Team Science.” In each case, scrutinizing bibliographies will lead to a deeper level of resources and earlier works not in this compilation of recent works.

URLs: All URLs were accessed 11 June 2014. If a link for Google Books does not open, simply type the name of the book into a Google Books search and the text will appear.

* **Updated from** “RESOURCES,” in Klein, J.T. (2010). *Creating Interdisciplinary Campus Cultures* (pp. 161-79). San Francisco: Jossey Bass and the Association of American Colleges and Universities. With permission of Jossey Bass.

FAQ #1: Where should I start for authoritative introductions and overviews?

• **For the most comprehensive and updated overview: Frodeman, R., Klein, J. T., and Mitcham, C. (Eds.). (2010). *The Oxford Handbook of Interdisciplinarity*. New York: Oxford University Press.** An international collection of essays by invited experts in a wide range of disciplines and fields across science and technology, social sciences, humanities, and the professions. Wayne State University Purdy-Kresge Library copy: BD 255 .094 2010.

Table of Contents viewable at <http://global.oup.com/academic/product/the-oxford-handbook-of-interdisciplinarity-9780199236916;jsessionid=E29FA9F986E88A46C935F842D84ADA12?cc=us&lang=en&>

• **For an overview of problem-oriented transdisciplinary research involving a wide range of stakeholders: Hadorn, G.H, et al. (Eds). (2008). *Handbook of Transdisciplinary Research*. Berlin: Springer.** An anthology of essays and case studies covering areas such as global and local environment, migration, new technologies, health, and socio-cultural change. Includes topics of problem identification and structuring, problem analysis, participation, values, management, education, and integration. Wayne State University Science and Engineering Library Storage copy: Q 180.55 .I48 H36 2008. Table of contents viewable at <http://www.springer.com/environment/book/978-1-4020-6698-6>

• **For results of a major national task force: *Facilitating Interdisciplinary Research*. (2004). Washington, D.C.: National Academies Press.** A broad-based report accounting for the four major drivers of interdisciplinarity today, institutional structures and strategies, the role of funding organizations and professional societies, and evaluation. Wayne State University Purdy-Kresge and Science and Engineering Storage Library copies: Q 180.55 .I48 F33 2005.

Table of contents and free downloadable PDF file at

http://www.nap.edu/catalog.php?record_id=11153

• **For a collection of major reprinted essays: Newell, W. H. (ed.). (1998). *Interdisciplinarity: Essays from the Literature*. New York: The College Board.** An anthology covering the nature of interdisciplinary studies, philosophical analyses, administration, programs, disciplinary contexts, and research and education in social sciences, humanities, natural sciences, and interdisciplinary fields. Also contains a guide to syllabus preparation and a closing synthesis of core questions about IDS and integration. Table of contents viewable at <http://www.units.muohio.edu/aisorg/pubs/aisbib.html>

For guides to materials and updated information, go to two key organizations.

• **The Association for Interdisciplinary Studies** is a professional organization based in the US. It hosts an annual conference, publishes a newsletter and a journal, and has an annotated list of publications on interdisciplinarity on the organization's website at <http://www.units.muohio.edu/aisorg/>

• **The Network for Transdisciplinary Research <td-net>** is an international multi-lingual platform based in Switzerland. It supports interdisciplinary research and teaching with pertinent materials, including an updated bibliography of resources on the website at <http://www.transdisciplinarity.ch/>

FAQ #2: Where can I learn about strategies for change?

• **For a comprehensive account of interdisciplinary research dynamics: Lyall, C., et al. (2011). *Interdisciplinary Research Journeys: Practice Strategies for Capturing Creativity*. London: Bloomsbury Academic.** A guide for researchers and research managers focused on active strategies for designing projects, managing teams, training, career pathways, knowledge transfer, and evaluation. Wayne State University ELECTRONIC BOOK-ebrary/OPEN ACCESS BOOKS. Individual sections are viewable free at <http://www.bloomsburyacademic.com/view/Interdisciplinary-Research-Journeys/book-ba-9781849661782.xml>

• **For a conceptual framework and portfolio of strategies for change, see Klein, J.T. (2010). *Creating Interdisciplinary Campus Cultures: A Model for Strength and Sustainability*. San Francisco: Jossey Bass and Association of American Colleges and Universities.** A systematic approach to identifying current activities and interests, leveraging resources, benchmarking best practices, building capacity and critical mass, targeting strategic initiatives, and general loosening of barriers, along with criteria for evaluation and the career life-cycle. Wayne State University ELECTRONIC BOOK-ebrary and the Purdy-Kresge and Technology Resource Center Libraries: LB 2361.5 .K54 2010. Table of contents viewable at <http://www.wiley.com/WileyCDA/WileyTitle/productCd-0470550899.html>

• **For an ASHE Higher Education Report digest, see Holley, K. A. (2009). *Understanding Interdisciplinary Challenges and Opportunities in Higher Education*. San Francisco: Jossey**

Bass. An overview of strategies for interdisciplinary change with a focus on structure and rewards in academic institutions, with chapters on definition, academy, research practice, and learning and education. Vol. 35, no. 2. In the ASHE series. Text downloadable in PDF file with membership in Academia.edu research sharing network at http://www.academia.edu/5390376/Understanding_Interdisciplinary_Challenges_and_Opportunities_in_Higher_Education

FAQ #3: Where can I find scholarly studies of interdisciplinarity?

- **For a literature review, see Chettiparamb, A. (2007). *Interdisciplinarity: A Literature Review*. The Interdisciplinary Teaching and Learning Group, Subject Centre for Languages, Linguistics and Area Studies, School of Humanities, University of Southampton.** Guides readers to works on the nature of disciplinarity, realms of practice, teaching, and higher education policy context in the UK. Downloadable file at www.heacademy.ac.uk/ourwork/networks/itlg/.
- **For an in-depth study based on literature review and interviews with faculty: Lattuca, L. *Creating Interdisciplinarity: Interdisciplinary Research and Teaching among College and University Faculty*. (2001). Nashville: Vanderbilt University Press.** Covers the nature, practice, and contexts of interdisciplinary inquiry in humanities, social sciences, and sciences. Wayne State University Purdy-Kresge Library copy: LB 2361 .L33 2001. Description and table of contents at <http://www.wiley.com/WileyCDA/WileyTitle/productCd-0470550899.html>
- **For a conceptual framework for studying interdisciplinary practices: Klein, J. T. (1996). *Crossing Boundaries: Knowledge, Disciplinarity, and Interdisciplinarity*. Charlottesville, VA: University of Virginia Press.** Establishes contexts of interdisciplinarity then presents case studies of six fields (urban, environmental, border, area, women's, and cultural studies), chapters on literary studies and on science and technology, and a 30-page updated bibliography. Wayne State University Purdy-Kresge Library copy: BD 255 .K538 1996. Table of contents viewable at http://books.google.com/books/p/university_of_virginia_press2?id=bNJvYf3ROPAC&printsec=frontcover&dq=klein+%2B+Crossing+Boundaries&cd=1#v=onepage&q=klein%20%2B%20Crossing%20Boundaries&f=false
- **For a broad-study study of history and definition: Klein, J. T. (1990). *Interdisciplinarity: History, Theory, and Practice*. Detroit: Wayne State University Press.** The first comprehensive study of the historical development, contexts of practice, and relationship to disciplines, with overviews of nature and management of problem-focused research, health care, and higher education. Accompanied by 94-page bibliography up to the late 1980s. Law and Purdy-Kresge Library copies: BD 255 .K54 1990. Table of contents and partial text viewable at <http://books.google.com/books/about/Interdisciplinarity.html?id=4uM8fjxhjq5C>

FAQ #4: Where can I learn more about interdisciplinarity in science and technology?

• **For pertinent chapters in *The Oxford Handbook of Interdisciplinarity*, ed. R. Frodeman, J. T. Klein, and C. Mitcham (Eds.) (2010). Oxford, New York: Oxford University Press:**

-R. P. Crease, “Physical Sciences” (pp. 79-102)

-W. Burggren, et al., “Biological Sciences” (119-32)

-P. J. Culligan and F. Peña-Mora, “Engineering,” (pp. 147-60)

-S. Jasanoff, “A Field of Its Own: The Emergence of Science and Technology Studies” (191-205)

• **For an earlier anthology of essays: Weingart, P. and Stehr, N. (Eds.). (2001). *Practicing Interdisciplinarity*, Toronto: University of Toronto Press.** Covers the topics of interdisciplinary discourse, the changing topography of science, the role of funding bodies, and international contexts of research practice, with bibliography leading to earlier resources. Table of contents and partial text viewable at

http://books.google.com/books?id=MS92DLz4gksC&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

See also:

• **Atkinson, J. and Crowe, M. (eds.). *Interdisciplinary Research: Diverse Approaches in Science, Technology, Health and Society*. West Sussex, UK: John Wiley & Sons, 2006.** A collection covering historical and theoretical contexts of interdisciplinary research with topics across the quantitative-qualitative spectrum, including complexity, sustainability, statistics, information systems, perception, modern history, media and cultural studies, and health science. Description at <http://www.wiley.com/WileyCDA/WileyTitle/productCd-1861564708.html>

FAQ #5: Where can I learn more about interdisciplinarity in social sciences?

• **For the most recent state-of-the-art account: Calhoun, C., and Rhoten, D. “Integrating the Social Sciences: Theoretical Knowledge, Methodological Tools, and Practical Applications.” In R. Frodeman, J. T. Klein, and C. Mitcham (Eds.) (2010). *The Oxford Handbook of Interdisciplinarity* (pp. 103-19). New York: Oxford University Press.**

Presents insights from area studies and quantitative research methods, followed by analysis of interdisciplinary fields based on classification of problems, issues of public concerns, and/or professional practice.

• **For an overview of the historical patterns and the plurality of practices: Klein, J.T. “Interdisciplinary Approach.” In S. Turner and W. Outhwaite (Eds.). (2007). *Handbook of Social Science Methodology* (pp. 32-49). Thousand Oaks, CA: Sage.** Includes discussion of core terminology and differing practices, and key methodological issues, with Works Cited leading to earlier works.

• **For an overview of forms on interdisciplinarity in social sciences: Smelser, N. J. (2004). “Interdisciplinarity in Theory and Practice.” C. Camic and H. Joas (Eds.). *The Dialogical Turn: New Roles for Sociology in the Postdisciplinary Age* (pp. 43-64). Lanham, MD:**

Rowman & Littlefield. An analysis of disciplines in behavioral and social sciences, the institutional and intellectual embodiments of interdisciplinarity, and the intellectual architecture of the *International Encyclopedia of the Social and Behavioral Sciences*. Wayne State University Purdy-Kresge and Undergraduate Library copies: HM 461 .D5 2004

See also:

• **Kessel, F., Rosenfield, P.L., and Anderson, N. B. (Eds). (2003). *Expanding the Boundaries of Health and Social Science: Case Studies in Interdisciplinary Innovation*. New York: Oxford University Press.** An anthology covering conditions and strategies that promote ID and TD research on health at the nexus of behavioral, social, and biological sciences, with domain introductions and examples in cardiovascular health and disease, affective and cognitive neuroscience, positive health, longevity, and HIV/AIDS management. Wayne State University ELECTRONIC RESOURCE-ebrary. Table of contents and partial text viewable at http://books.google.com/books?id=YMq9TPmU2RYC&printsec=frontcover&source=gb_s_summary_r&cad=0#v=onepage&q&f=false

FAQ 6: Where can I learn more about interdisciplinarity in humanities?

• **For a proposal and illustrations of concepts as the methodological core for interdisciplinary cultural analysis: Bal, M. *Travelling Concepts in Humanities*, Toronto: University of Toronto Press, 2002.** Analyzes the roles of meaning, metaphor, narrative, myth, image and other concepts, with particular interests for art history, visual and cultural studies, literary studies, bibliographical studies, and feminist theory. Wayne State University Purdy-Kresge Library copy: AZ 101 .B34 2002. Table of contents and partial text viewable at http://books.google.com/books?id=wBZ49g-RhugC&printsec=frontcover&source=gb_s_summary_r&cad=0#v=onepage&q&f=false

• **For an overview of historical and contemporary theory and practice of interdisciplinary humanities: Klein, J. T. *Humanities, Culture, and Interdisciplinarity: The Changing American Academy*. Albany: SUNY Press, 2005.** Defines the relationship of humanities, culture, and interdisciplinarity, with case studies on the disciplines of literary studies, art history, and music as well as the fields of American studies, African-American studies, and women's studies. Wayne State University ELECTRONIC BOOK-ebrary and Purdy-Kresge Library copies: AZ 183 .U5 K57 2005. Table of contents and partial text viewable at http://books.google.com/books?id=0vAXVe80ko8C&printsec=frontcover&source=gb_s_summary_r&cad=0#v=onepage&q&f=false

• **For an investigation centered on literary and cultural studies: Moran, J. *Interdisciplinarity*. London and New York: Routledge, 2002.** Examines the ways that disciplines divide and shape knowledge, how those divisions are transformed and transcended, and how new forms of knowledge are created. Includes Theory, textuality and history, and new connections between literary studies and sciences. Wayne State University Undergraduate Library copy: PR 21 .M67 2002. Table of contents and partial text viewable at http://books.google.com/books?id=6ZtS_srz8TAC&printsec=frontcover&source=gb_s_summary_r&cad=0#v=onepage&q&f=false