Resources for Interdisciplinary Education*

Navigating the large and sprawling literature on interdisciplinary education can be a daunting task. However, this beginning bibliography provides a sound starting point. Groups may use resources in common for general discussions. Groups and individuals may use them to inform particular projects and programs. And, they provide authoritative definitions for presentations, publications, proposals, and grant applications.

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

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

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

• **Website of the Association for Interdisciplinary Studies.** A major professional organization for interdisciplinary educators with a newsletter, journal, and annual conferences. Links include annotated bibliography of publications with tables of contents, selected reprints, guide for assessing programs, connections to other organizations, and directories of programs. http://www.units.miamioh.edu/aisorg/

• **Chandramohan, B. and Fallows, S. (Eds). (2009).** ***Interdisciplinary Learning and Teaching in Higher Education: Theory and Practice.*** **New York: Routledge.** A literature review covering interdisciplinary learning, quality assurance, resources, staff development, course design, assessment, student satisfaction, and research support, with examples from e-/distance/and work-based learning, mass communications, computing, engineering, business, social sciences, tourism, science, and health science. Wayne State University Undergraduate Library copy: LB 2361 .I488 2009

• **Klein, J. T. (Ed). (2002).** ***Interdisciplinary Education in K-12 and College: A Foundation for K-16 Dialogue*****. New York: The College Board.** The first collection of essays by experts across K-16 with reports on integrated and interdisciplinary curricula, course design, team teaching, use of technology, and administration and assessment of IDS programming. For table of contents see <http://www.units.muohio.edu/aisorg/pubs/aisbib.html>

• **Klein, J. T. (1999).** ***Mapping Interdisciplinary Studies*****. Washington, D.C.: Association of American Colleges and Universities.** A discussion brief for local campuses: Part I surveys trends in disciplines, interdisciplinary fields, and general education; Part II presents strategies for curricula, faculty development, planning, pedagogy, assessment, and institutional change. Copies in Technology Resource Center at Purdy-Kresge Library. For fuller description see AACU's Academy in Transition series at <http://www.aacu.org/publications/AcademyinTransition.cfm>

• **Klein, J. T. and W. H. Newell. "Advancing Interdisciplinary Studies." In J. Gaff and J. Ratcliff, J. (Eds.). (1997).** ***Handbook of the Undergraduate Curriculum: A Comprehensive***

***Guide to Purposes, Structures, Practices, and Change* (pp. 383-415*)*. San Francisco: Jossey Bass.** An authoritative overview of major topics including definitions, origins, and motivations, new developments, forms and structures, institutional change, teaching and learning, and assessment and evaluation of interdisciplinary work. Wayne State University Undergraduate Library copies: LB 2361.5 .H35 1997

FAQ #2: Where can I find information on interdisciplinary pedagogy and learning?

Haynes, C. (Ed). (2002). *Innovations in Interdisciplinary Teaching*. American Council on Education, Series on Higher Education. Westport, CT: Oryx Press/Greenwood Press. An anthology covering curriculum design, team teaching, and assessment with essays on intersections of IDS with writing-intensive and computer-assisted instruction, collaborative learning and learning communities, multicultural pedagogies, women's studies, inquiry- and performance-based approaches, study abroad, and adult education. Table of contents viewable at http://www.units.muohio.edu/aisorg/pubs/reports/aisbib.html

Davis, J. R. (1995). *Interdisciplinary Courses and Team Teaching: New Arrangements for Learning.* American Council on Education Series on Higher Education. Phoenix, AZ: Oryx/Greenwood Press. Guidelines and lessons for designing and implementing team-taught courses, with close analysis of five courses from University of Denver and 100 models spanning general education, professional and technical programs, integrative studies programs, capstone and integrative courses, and fields of women's and gender, multicultural and ethnic, and international studies. Copies in Technology Resource Center at Purdy-Kresge Library and Undergraduate Library: LB 2362.5 .D38 1995. Table of contents viewable at http://www.units.muohio.edu/aisorg/pubs/reports/aisbib.html

FAQ #3: Are there textbooks for students?

Repko, A. F. with R. Szostak and M. P. Buchberger. (2014). *Introduction to Interdisciplinary Studies.* Thousand Oaks, SAGE. Covers the nature of IDS, thinking critically about disciplinarity and integration, and an interdisciplinary research Road Map, with appendices on intellectual autobiography, student portfolios, service learning, and a broad rubric model. Table of contents and partial text viewable at http://www.amazon.com/Introduction-Interdisciplinary-Studies-Allen-Repko/dp/1452256608

Repko, A. F. (2012). *Interdisciplinary Research: Process and Theory*. Thousand Oaks: Sage. A textbook for student research covering the nature and theories of IDS with detailed guidelines for the research process of drawing on disciplines and integrating insights, accompanied by an appendix on resources and a glossary of key terms. Table of contents and partial text viewable at http://books.google.com/books?id=kDoYPVJONIoC&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

Oberg, Gunila. (2010). *Interdisciplinary Environmental Studies: A Primer*. New York: Wiley-Blackwell. A framework for interdisciplinary research with examples from student work

and environmental literature. Uses a problem-solving approach enhanced by tables on expectations, aspirations, and thinking and learning styles useful in any context. Wayne State University ELECTRONIC BOOK-ebrary copy. Table of contents and partial text viewable at http://books.google.com/books?id=iQ1VbFIfwQwC&pg=PP2&lpg=PP2&dq=Gunilla+Oberg+%2B+Interdisciplinary+Environmental+Studies&source=bl&ots=oB_OjwDgIO&sig=C5H6kyr67iDrMBXNEG7ROFHAwHI&hl=en&sa=X&ei=YnEHU7qGAu_y2gWu3ID4Bw&ved=0CEsQ6AEwBA#v=onepage&q=Gunilla%20Oberg%20%2B%20Interdisciplinary%20Environmental%20Studies&f=false

Augsburg, T. (2006). ***Becoming Interdisciplinary: An Introduction to Interdisciplinary Studies. Second Edition*****. Dubuque, IA: Kendall/Hunt**. First undergraduate text, covering nature of IDS and disciplines, writing of intellectual autobiographies, experiential learning activities, and research and problem solving, with supplementary readings and discussion of history of programs, process of integration, and portfolios. Table of contents viewable at http://www.units.muohio.edu/aisorg/pubs/reports/aisbib.html

FAQ #4: Where do I find resources for particular fields and subject areas?

The most effective way to locate resources for particular areas is to visit websites of organizations dedicated to particular fields and research and teaching areas. For example:

- The **American Studies Association (http://www.theasa.net) and the National Women's Studies (http://www.nwsa.org)** provide materials and publications for planning, Implementing, and evaluating interdisciplinary research and education.
- The **Team Science links elsewhere on this website** also lead to models and strategies in hybrid specialties.

In addition, the following broad-based resources will lead to other models, materials, and strategies:

• Fiscella, J. and S. Kimmel. (1999). ***Interdisciplinary Education: A Guide To Resources*** **is the most comprehensive annotated bibliography covering K-12 and college (New York: The College Board.** Includes educational foundations, curriculum, teaching, pedagogy, and administration with a final chapter with advice for keeping updated with information-seeking strategies. Table of contents at http://www.units.muohio.edu/aisorg/pubs/reports/aisbib.html

• Educational Resources Information Center (ERIC). An abundant source of searchable published and ''gray'' literature on a wide range of topics and subject areas. Includes reports, conference presentations, syllabi, curriculum materials, and commentaries. http://eric.ed.gov.

For Undergraduate Education, see also:

Carmichael, T. S. (2004). ***Integrated Studies: Reinventing Undergraduate Education.*** **Stillwater, OK: New Forums Press, 2004.** An account of University of North Dakota's integrated general education program with generalizable details on curriculum development,

pedagogy, assignments, classroom activities, faculty development strategies, and assessment. Fuller description and table of contents viewable at http://store.newforums.com/Integrated-Studies-Reinventing-Undergraduate-Education-BTB06.htm

Seabury, M. B. (ed). ***Interdisciplinary General Education: Questioning Outside the Lines.*** **New York: The College Board.** An anthology based on University of Hartford's All-University Curriculum. Includes course development and pedagogy, team teaching, and dynamics of asking questions, crossing boundaries, framing issues, dealing with problems, and creating supportive campus culture, accompanied by sample syllabi. Table of contents viewable at http://www.units.muohio.edu/aisorg/pubs/reports/aisbib.html

Smith, B. L. and McCann, J. (Eds). (2001). ***Reinventing Ourselves: Interdisciplinary Education, Collaborative Learning, and Experimentation in Higher Education.*** **Bolton, Massachusetts: Anker.** A collection of essays describing experiences and lessons from a cross-section of institutions including stand-alone institutions and alternative programs in traditional institutions as well as community colleges. Table of contents and partial text viewable at http://www.amazon.co.uk/Reinventing-Ourselves-Interdisciplinary-Collaborative-Experimentation/dp/1882982355

For Science and Health, see also:

BIO 2010: Transforming Undergraduate Education for Future Research Biologists**. (2003). Committee on Undergraduate Biology Education to Prepare Research Scientists for the 21st Century. Washington, D.C.: National Academies Press.** Blueprint for bringing undergraduate programs "up to the speed" of contemporary research with sustained attention to interdisciplinarity. Includes proposal for new curriculum, instructional materials and approaches, engaging students in laboratories, conveying vitality of the discipline, and implementing change. Wayne State University copy in ELECTRONIC RESOURCE-ebrary. Table of contents and text viewable plus copy downloadable free with registration at MyNAP http://www.nap.edu/catalog.php?record_id=10497

Holmes, D. E. and Osterweis, M. (1999). ***Catalysts in Interdisciplinary Education: Innovation by Academic Health Centers.*** **Washington, D.C.: Association of Academic Health Centers [AAHC].** Compilation of case studies of ID health professions education at seven institutions of the AAHC with focus on strategies of institutionalization to reverse subspecialization and fragmentation. Includes leadership styles, strategic planning, cross-institutional contracts, and development of a core curriculum.

Haire-Joshu, D. and McBride, T. D. (Eds.). (2013). ***Transdisciplinary Public Health: Research, Education, and Practice.*** **San Francisco: Jossey Bass.** Collection of essays on transdisciplinary in public health spanning definition, practice, teaching, policy, and research. Provides a comprehensive text that includes methods and criteria of evaluation in education and training. Description and contents at http://www.wiley.com/WileyCDA/WileyTitle/productCd-0470621990.html

See also:
The National Institutes of Health Team Science Toolkit, a searchable resource for curricula and training modules. https://www.teamsciencetoolkit.cancer.gov/public/home.aspx?js=1

FAQ #5: How do I design interdisciplinary learning assessment?

• **Boix Mansilla, V. (2010). "Learning to Synthesize: An Epistemological Foundation for Interdisciplinary Learning." In Frodeman, R., Klein, J.T., and Mitcham, C. (Eds).** ***Oxford Handbook of Interdisciplinarity*** **(pp. 288-320**.). **Cambridge, UK: Oxford University Press.** A pragmatic constructionist framework for interdisciplinary learning and assessment, focused on cognitive and epistemological dynamics with literature review and illustrations of a four-fold model of establishing interdisciplinary purpose, weighing disciplinary insights, leveraging integrations, and taking a critical stance.

Klein, J. T. (2002). ''Assessing Interdisciplinary Learning K–16.'' In J. T. Klein (Ed.), ***Interdisciplinary Education in K–12 and College: A Foundation for K–16 Dialogue*****. New York: College Board**. An overview of the contexts of IDS assessment in K-12 and college, criteria of quality in integrative learning, tools and common lessons. Includes insights from **Field, M., and Stowe, D. (2002). ''Transforming Interdisciplinary Teaching and Learning Through Assessment.'' In C. Haynes (Ed.). (2001).** ***Innovations in Interdisciplinary Teaching*****. Westport, Conn.: Greenwood Press.**