

High School Bioethics Education Programs & Resources

(a sampling)

University-Based Programs

Kennedy Institute of Ethics, Georgetown University, Washington, DC

High School Bioethics Curriculum Project (HSBCP) (1997/1998, 1st workshop 1999)

<http://bioethics.georgetown.edu/hsbioethics>

Laura Bishop, Ph.D., Program Director, bishopl@georgetown.edu; (LeRoy Walters, Ph.D., Principal Investigator)

Case studies and curriculum materials; video lending library; bibliographies - fiction, non-fiction, commercial, educational films; syllabus exchange, email help and reference support; (teacher workshops 1999-2002), and other resources. Interdisciplinary in focus. Funded by The Greenwall Foundation, NY, NY and an anonymous bequest to Georgetown University.

Center for Bioethics, University of Pennsylvania, Philadelphia, Pennsylvania

High School Bioethics Project (2001, 2003 1st workshop)

<http://www.bioethics.upenn.edu/highschool/>

Dominic Sisti, M.B.E., Program Director, sistid@mail.med.upenn.edu (Arthur Caplan, Ph.D., Principal Investigator)

Teacher workshops; online homework help; Bioethics Web Fair (DATES); teacher workshops (2003-present based on Georgetown model); active and excellent Website (including some digital videos) and technical staff. Funded by a grant from the U.S. Department of Education, The Greenwall Foundation, and The Haas foundation.

Markkula Center for Applied Ethics, University of Santa Clara, Santa Clara, California

Character Based Literature (CBL) Program (late 1990s); Ethics Camps for Teachers (mid-1990s)

<http://www.scu.edu/ethics/publications/cblp/administration/homepage.html>

Steve Johnson, Director, sjohnson@scu.edu

Character Based Literacy Source Book (online); CBL summary and planning materials; classroom activities; 4-day ethics camp for teachers (camps for teachers in different disciplines and educational settings). California-focused and based around California's Recommended Readings in Literature (humanities core). Major funding from the Walter S. Johnson Foundation and the Markkula Family Foundation. [The Center also hosts the "Architects of Peace" Web site and related curriculum and offers "A Framework for Moral Decision Making"]

Biotechnology Center, University of Iowa, Ames, Iowa

Office of Biotechnology, Bioethics Outreach

<http://www.bioethics.iastate.edu/contact.html>

Kristen Hessler, Ph.D., Bioethics Outreach Coordinator, khessler@iastate.edu

Summer teacher workshops (Summer 2003-present); 3 week online courses in "Teaching Bioethics," "Ethics and Biotechnology," and "Ethics and Animals" (Spring 2001-present); and bioethics extension outreach to classrooms. Biotechnology and agriculture focus; predominantly science teachers (biology).

Genetics Science Learning Center, University of Utah, Salt Lake City, Utah

Genetics Science Learning Center

<http://gslc.genetics.utah.edu>

Louisa Stark, Ph.D, Director; <http://gslc.genetics.utah.edu/gslc/contact.cfm>

Curriculum resources and activities on genetics disorders, biotechniques, stem cells, pharmacogenomics, cloning, and gene therapy with questions related to bioethics; Utah teacher workshops summer labs; genetics kits for loan; student part-day summer camps and research projects; wonderful, wonderful Web site and Web resources. Science teacher focus. Multiple past and present funders, see <http://gslc.genetics.utah.edu/gslc/support.cfm>

Pharmaceutical Companies

Roche Pharmaceuticals, New Jersey

New Choices, New Responsibilities

http://www.rocheusa.com/about/nj_supervisors.html

Contact through Lola Szobota, M.A., M.Ed., Science Supervisor for Northern Valley Regional High School District Szobota@nvnet.org. Ms. Szobota was one of the teachers trained in the initial years of this program and now is a trainer. She is also a lead teacher for the KIE's High School Project.

A partnership instigated by the New Jersey Science Supervisors Association contributing pedagogical experience and science knowledge, funded by Roche Pharmaceuticals, with ethics expertise contributed by the Hastings Center. Summer teacher workshop (2 day) with followup day in October; decision-making model and curriculum guide with cases prepared by Hastings Center, "New Choices, New Responsibilities: Ethical Issues for the Life Sciences." Roche has also funded bioethics and genetics curriculum materials (2005).

Roche Pharmaceuticals, New Jersey

Biotechnology Institute (2004)

<http://www.biotechinstitute.org/about/>; http://biotech.newcitymedia.com/programs/t_leader_program.html

Kathy Frame, M.S., Vice President of Educational Programs, kframe@biotechinstitute.org; Biotechnology Institute, 1840 Wilson Boulevard, Suite 202, Arlington, Virginia 20001; info@biotechinstitute.org

Also funded by Roche to add bioethics component to the existing wet-lab offerings for science teachers by building on the "Shoestring Biotechnology Project" and existing National Biotechnology Teacher Leader Programs.

Private Non-Profits / Individuals

Northwest Association for Biomedical Research (NWABR)

Collaborations to Advance Understandings of Science and Ethics (CAUSE)

<http://www.nwabr.org/education/>

Jeanne Ting Chowning, Education Manager, jchowning@nwabr.org, Seattle, Washington

NWABR's education programs include the annual "Ethics in the Science Classroom" summer workshop for teachers; teacher developed curriculum units (HIV vaccine, stem cells) and ethics and science lesson plans. Visit the website a good list of for resource links to bioethics programs and resources. The CAUSE program is funded by an U.S. NIH Science Educational Partnership Award and builds on previous teacher workshops funded by Washington State.

Institute for Global Ethics, Camden, Maine (1990)

Ethical Fitness Seminars

<http://www.globalethics.org>; 800-729-2615 (U.S.)

Rushworth M. Kidder, president

Offers "Ethical Fitness" seminars and teacher workshops; online ethical dilemmas in the areas of business, education, family, medicine, philanthropy, personal, and military. Other resources in the area of curriculum mapping and written resources such as Kidder's [How Good People Make Tough Choices](#).

Individual Schools

The Potomac School, McLean Virginia

Linda Anderson, M.A., Linda_Anderson@potomacschool.org

1301 Potomac School Road, McLean, VA 22101

Linda is a lead teacher for the Kennedy Institute of Ethics high school project. She has team taught an elective bioethics course for juniors and seniors for about 4 years. The primary text that she uses is [The Basics of Bioethics](#), 2nd edition, 2003 (Prentice Hall) by Robert M. Veatch. She supplements this text with readings from other sources and daily news reports.

Sidwell Friends School, Washington, DC

Susan Wooden, Science Teacher woodens@sidwell.edu

3825 Wisconsin Avenue, N.W., Washington, DC 20016

Susan and her colleague Laura Byerlee (alum of the KIE Workshop Nov. 2001) have developed an elective bioethics course for second semester seniors. They have taught the course for 2 years and are now planning to commit the syllabus to writing. The current requirements are that students must have taken the introductory year courses in biology, chemistry, and physics (almost 90% of students meet this requirement and accommodations may be made, so the requirement is not exclusionary). The pre-requisite classes ensure that students have sufficient science background that teaching the science dominates the discussion. Susan and Laura's experience is interesting because they have tried various approaches requiring other classes and linking to other subjects. Two written case analyses, a major class presentation (3 days) and mini-presentation are required. Current texts used are: Rushworth Kidder's How Good People Make Tough Choices: Resolving the Dilemmas of Ethical Living (1996) (Institute for Global Ethics); Basics of Bioethics, 2nd ed. (2003) by Robert M. Veatch; and Vice and Virtue in Everyday Life: Introductory Readings in Ethics, 5th ed. (2000) by Christina Hoff Sommers and Fred Sommers (published by Wadsworth).

St. Joseph's Academy

Linda Harvison (and colleagues), Principal harvisol@sjabr.org

3015 Broussard Street, Baton Rouge, LA 70808

Linda (now school principal, but also economics and history), along with her colleagues Lori Harper (biology/physical sciences), Carol Boudreaux (religion); Vicki LaPlace (biology/physical sciences); and Adele Lacinak (religion), have created a team and collaborative approach to including ethics in all of their classes. They use KIE case studies that they have modified and augmented with lesson plans and additional readings. Projects include presentations and poster sessions. These 5 SJA teachers serve as Louisiana Lead Teachers for the KIE project and hosted our first regional teacher workshop in April 2002. They are alums of the KIE workshops in 1999 and 2000.

Wilton High School

Martha Gregory, Ph.D. gregorym@wilton.k12.ct.us (bioethics)

395 Danbury Road, Wilton, CT 06897

Martha (chemistry) attended the KIE workshop in Nov. 2001. She has developed an elective bioethics course at Wilton High School that incorporates ethical theory and science. She uses videos and Cases in Bioethics: Selections from the Hastings Center Report, 3rd ed. (1998), St. Martin's Press. She also teaches a forensics course and now is coordinating staff development for her district and tries to include ethics presentations among the selections.

Norfolk Collegiate School

John H. Zimmerman, Ph.D., Department Chair, Science

Bioethics course syllabus at <http://oak.norfolkcollegiate.org/zimmerman/bioethics.html>

7336 Granby Street, Norfolk, VA 23505

John has a background in entomology. Using resources at the National Reference Center for Bioethics Literature he developed an elective course in bioethics that is linked to the AP biology course that he also teaches.

Buffalo High School

Boyd Emmel, bemmel@buffalo.k12.mn.us

877 Bison Boulevard, Buffalo, MN 55313

After attending the 2000 KIE teacher workshop, science teacher Boyd and his students came up with a plan to bring bioethics to their whole school. Working with his science students, the students developed sessions on various topics in bioethics. All the students at the high school participated in a 2-day school-wide bioethics symposium, choosing various sessions and workshops to attend.

Sidwell Friends School, Washington, DC

Susan Banker bankers@sidwell.edu

3825 Wisconsin Avenue, N.W., Washington, DC 20016

Susan Banker teaches English at Sidwell Friends. She attended the KIE Intensive Bioethics Course several years ago

and now tries to address ethics themes through literature with her students.

Elyria High School

Timothy Widman, widmantimothy@elyriaschools.k12.oh.us

Tim teaches social studies and U.S. history and government. After attending the 2000 KIE teacher workshop, he incorporates ethics discussions into all of his classes. He requires students to address such questions in papers.

(Many other teachers are making similar efforts - those listed are just a sampling)

Other Resources

1992 Biology Institute - Bioethics, Woodrow Wilson Leadership Program in Biology, Woodrow Wilson National Fellowship Foundation, Princeton, New Jersey

<http://www.woodrow.org/teachers/bi/1992/>

Online information about teaching bioethics in classrooms, leading bioethics discussions, writing case studies, ethical systems, etc. In 1992, the entire summer institute focused on bioethics, but teachers in other years also produced bioethics-related cases and teaching materials, e.g., 1994's Institutes was "Population to Molecules;" Section VI contains materials related to genetic diseases, genetic counseling and bioethics

<http://www.woodrow.org/teachers/bi/1994/>

National Center for Case Study Teaching in Science, University of New York at Buffalo, Buffalo, New York
<http://ublib.buffalo.edu/libraries/projects/cases/case.html>. Clyde (Kip) F. Herreid, Distinguished Teaching Professor, Biological Sciences Department herreid@acsu.buffalo.edu and Nancy A. Schiller, (Co-director) Associate Librarian, Arts & Sciences Library schiller@acsu.buffalo.edu.

Focused mainly on teaching science at the undergraduate level using case studies, the Center offers annual teacher training workshops that share an approach and method for planning, writing, and teaching case studies in the sciences. In addition, trained teachers send in cases that are added to a free depository of cases. Access is gained by password that is freely available upon request.

Center for Teaching Excellence, University of Medicine and Dentistry of New Jersey.

Active Learning/Case-Based Learning http://cte.umdnj.edu/active_learning/active_case.cfm

This site lists and links to many resources related to planning, writing, and teaching using case studies. It is focused primarily on teaching in the undergraduate medical, dental, and other health sciences classrooms but has applicability to the secondary school level.

Biological Sciences Curriculum Study (BSCS)

<http://www.bsccs.org>

BSCS has 50 years of experience in developing curriculum resources for science education. It now offers resources under its Centers for Curriculum Development, Professional Development, and Research and Evaluation. It is a non-profit organization. The BSCS curriculum resources often contain a bioethics focus.

US NIH, Office of Science Education

<http://science.education.nih.gov/supplements>

These online science education units covering topics, such as, cell biology, cancer, infectious diseases, human genetic variation, sleep disorders, neurobiology, addition, chemicals, the environment, do include an ethics component that teachers may use.

Canadian Biotechnology Education Resource Centre (CBERC)

ENGAGE: Stem Cells. The Science, Ethics and Regulation of a New Technology developed by the Ontario Genomics Institute by Genome Canada, the Stem Cell Network and the Joint Centre for Bioethics, University of Toronto - see class modules at <http://www.stemcellnetwork.ca>.