Online Resources for Introducing Bioethics through Case-Studies and Active Learning

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This is a review of two online resources for introducing bioethics: Bioethics 101, created by the Northwest Association for Biomedical Research (NWABR) in 2012 (2), and Exploring Bioethics, created by the National Institutes of Health Office of Science Education in 2008 (1). Both are carefully designed unit plans including active learning, formative and summative assessments, and scoring rubrics. Bioethics 101 has ample resources for a skilled teacher to encourage critical thinking about contemporary issues. Exploring Bioethics offers detailed instructional support for a teacher seeking to introduce bioethics, use active learning techniques, and reinforce biological concepts. Both use case studies and perspectives rooted in the principle-based ethics (Beauchamp and Childress) and utilitarianism (Stuart and Mills), as described in the NWABR Ethics Primer (3). Neither curriculum addresses the diversity of philosophical approaches to bioethics.

Bioethics 101 comprises five sequential lessons designed for 55-minute class periods. The educational objectives are: identification of ethical issues; differentiation among subjective, objective, and judgment questions; application of bioethical principles; identification of stakeholders; development of strong justifications for supporting a position; and reasoning using a rational decision framework. Lessons take students through an introduction to relevant concepts. As the students discuss the application of those concepts, they develop their skills in critical thinking and evidence-based discourse. The unit uses five case studies based on actual events. The lesson plans are skeletal, allowing the instructor to adapt the program and encouraging students to develop a personal ethical framework. Student-generated skits, role-playing, silent debates, and group work engage the students in active learning. Formative assessments include worksheets, essays, and dramatizations. The summative assessment is a pre- and posttest in which the student applies all the concepts to a single case study. The case studies and worksheets are complete and ready for distribution. The rubrics are well written and detailed. Bioethics 101 is appropriate for sophisticated undergraduate and graduate students willing to grapple with abstract concepts and an instructor skilled in leading engaging discussions. Bioethics 101 is particularly effective at encouraging critical thinking.

Exploring Bioethics comprises six lessons designed for 45-minute class periods. The units are not sequential but the first unit introduces the framework for discussions and is required for all subsequent sessions. Units two through six are independent. There are five major goals: recognition of the interrelationships of science, society, and ethics; recognition of bioethical concepts and perspectives; critical reasoning; recognition of the importance of scientific knowledge in making ethical judgments; and respectful dialogue among individuals. Background information, lesson plans, instructions for students, assignments, and scoring guides are comprehensive. The case studies used in this program are directly drawn from issues current in 2008; however the online support information has not been updated and one of the first cases discussed is Pistorius and the 2008 Olympics. This case should be used with caution in light of the recent murder trial. Exploring Bioethics provides sufficient guidance to help any teacher succeed at active learning. This resource is well suited to undergraduates in introductory biology or microbiology courses.

The ethical frameworks of both are organized around principle-based ethics and utilitarianism. Discussions center on four key principles: respect for persons/autonomy, justice, non-maleficence, and beneficence. Other ethical perspectives such as deontology, Aristotle’s virtue ethics, pragmatism, and ethics of care are only briefly considered. This is a major disservice to students and, for some, this perspective will be incomplete. In the United States, in 2014, principle-based ethics is the dominant approach. However, other frameworks exist and are both valid and valuable. Although both Bioethics 101 and Exploring Bioethics are excellent resources for introducing this topic, instructors should do considerable background research to ensure that other philosophical frameworks are given sufficient coverage.
REFERENCES


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