INTRODUCTION

Students consider questions with answers based on fact, preference, or reasoned judgment, and determine where those questions fall along the range of purely subjective to purely objective. Students then improvise short skits to illustrate familiar concepts such as fairness, respect, and “doing good.” This sets the foundation for the Principles of Bioethics: Respect for Persons, Maximize Benefits/Minimize Harms, and Justice. Students then apply these bioethical principles to the pandemic flu ethical dilemma they were introduced to in Lesson One.

KEY CONCEPTS

• Ethical discussions are not “my opinion vs. your opinion” but require reasoned judgment and logical thought.
• Students already have an awareness of ethical principles, though they may not have the vocabulary to explain them as such.
• Bioethical dilemmas can be evaluated using various ethical perspectives.
• The Principles of Bioethics introduced are:
  o Respect for Persons (Respecting the inherent worth of an individual and their autonomy)
  o Maximize Benefits/Minimize Harms (Beneficence/Nonmaleficence)
  o Justice (Being Fair)
• Exposure to ethical perspectives provides students with the language to give shape to their thoughts, and supports them in justifying their reasoning.

LEARNING OBJECTIVES

Students will be able to:
• Understand that different types of questions require different types of answers.
• Describe major bioethical principles.
• Understand the relationship between stating a position, or claim, and the use of principles to support that position.

CLASS TIME

One class period of 55 minutes.

MATERIALS

<table>
<thead>
<tr>
<th>Materials</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Resource 2.1—Skit Improvisation List (cut into strips)</td>
<td>1</td>
</tr>
<tr>
<td>Student Handout 2.1—Principles of Bioethics—Background</td>
<td>1 per student</td>
</tr>
<tr>
<td>Student Handout 2.2—Focus on the Principles</td>
<td>1 per student</td>
</tr>
<tr>
<td>Student Handout 3.1—Dennis’s Decision, as homework (found in Lesson Three)</td>
<td>1 per student</td>
</tr>
<tr>
<td>Sticky notes in two different colors</td>
<td>2 sticky notes per student</td>
</tr>
<tr>
<td>Poster paper for Principles Poster</td>
<td>1</td>
</tr>
<tr>
<td>Colored markers</td>
<td>Assorted</td>
</tr>
</tbody>
</table>

TEACHER PREPARATION

• Make copies of Student Handout 2.1, 2.2, and 2.3, one per student.
• Make one copy of Teacher Resource 2.1—Skit Improvisation List. Cut into strips. You will need one strip for each small group.

FRAMING THE LESSON

In Lesson One, students discussed a difficult ethical question and explored the reasoning behind making a difficult decision. Briefly elicit some ethical questions that students wrote down for homework. Today, they will build on this by looking at questions that draw on objectivity, subjectivity or reasoned judgment. Students are introduced to the Principles of Bioethics by considering how they are rooted in common, respected values. By the end of the lesson, students should be able to name and describe the three Principles of Bioethics.
PROCEDURE

Part I: Subjective and Objective Questions
Activity Time: 20 minutes

1. Tell students that they will be considering subjective and objective questions. On the board or on a banner stretched across the room (the bigger the better) make a continuum like the one below. Mark the line at intervals and label them 1–10. Have students draw the continuum in their notes.

Subjective Questions:
2. As a class discussion, ask students for examples of questions that would be purely subjective, such as, “What is your favorite ice cream flavor?” or, “Do you like to wear sneakers?”
3. Write these at the “Purely Subjective” end of the continuum.
4. Have students choose one representative subjective question from the class discussion to record in their notes.
5. Tell students that subjective questions usually relate directly to the speaker, often have an emotional component, and are modified by cultural bias.

Objective Questions:
6. As a class discussion, ask students to give examples of questions that are purely objective, such as, “What is the capitol of California?” or, “How many legs does an arachnid have?”
7. Write these at the “Purely Objective” end of the continuum.
8. Have students choose one representative objective question from the class discussion to record in their notes.
9. Tell students that objective questions require facts and evidence to answer and are often yes/no or right/wrong answers.

Science:
10. Ask students to work individually to locate the point on the continuum where they think Science falls and draw it in their notebook.

Ethics:
11. Working individually, ask students to locate the point where they think Ethics falls on the line in their notebook and draw it in.
12. Give each student two sticky notes of different colors. Assign one color for Science and the other for Ethics.
13. Have students approach the class continuum and attach their sticky notes at the point they think is most accurate.
14. Ask students why Science is not purely “objective.” It may be helpful to ask a student who has put his or her sticky note furthest away from the “Purely Objective” end of the continuum. Guide the discussion toward the following ideas:
   o While the “facts” of science tend to be objective, the “process of science” is done by humans, and happens in a social context.
   o For example, values enter into questions about what science to fund, how to conduct science responsibly, and how to apply new scientific discoveries and technologies and use them appropriately.
15. Ask students why Ethics is not purely “subjective.” It may be helpful to ask a student who has put his or her sticky note furthest from the “Purely Subjective” end of the continuum. Guide the discussion toward the following ideas:
   o Ethical questions require critical thinking and tools of reasoned judgment. This type of question requires a thoughtful balance on the subjective-objective scale.
   o Emphasize that, contrary to what many people think, ethics is not purely subjective (“my opinion vs. your opinion”) but has many elements from the objective end of the spectrum. Answering questions involving reasoned judgment requires evidence and logic as well as bioethical analysis.
16. Tell students that in answering questions of reasoned judgment, bioethicists rely on a number of ethical perspectives and theories to structure their thinking. These bioethical principles are introduced to students in the next part of the activity.
17. Give students a chance to revisit the continuum in their notebooks and reflect on their original choices.
Part II: Introduction to the Principles of Bioethics through Skits
Activity Time: 20 minutes

In this activity, students first perform skits, and then derive the ideas underlying the Principles of Bioethics taught in this unit during a teacher-led discussion. The skits provide a way for students to show their awareness of concepts supporting the Principles of Bioethics though they may not have the precise vocabulary to explain them as such. The teacher will know which bioethical principle is being introduced (in parentheses after a – f, below) but the students will not. After each set of skits and class discussion, the teacher should name the principle and write it down for the class to see. Do not say the principle by name before the students create their skits.

18. Divide the class into six groups.

19. Give each group of students one of the scenarios a – f, found below in Step #20, and in Teacher Resource 2.1—Skit Improvisation List. Two to three students from each group will come to the front of the class to improvise 30-second role-plays of interactions between a parent and child.

20. Give the students about 2 minutes to prepare to simulate the following interactions between a parent and child. Tell students that it is helpful for them to “give voice” to the ideas inside a person’s head by saying them out loud. The skits (also found in Teacher Resource 2.1—Skit Improvisation List) are:

   a) Parent respecting the child’s career choice.
      (Respect for Persons and their autonomy)
   b) Parent not respecting the child’s career choice.
      (Respect for Persons and their autonomy)
   c) Parent helping child with her homework.
      (Maximizing Benefits/Minimizing Harms)
   d) Parent not helping child with her homework.
      (Maximizing Benefits/Minimizing Harms)
   e) Parent being fair between siblings.
      (Justice)
   f) Parent not being fair between siblings.
      (Justice)

21. Have students from groups ‘a’ and ‘b’ present their skits.

22. Ask students, “What code or standard is being honored (or not)?” Students may say “respect” or “right to choose for him/herself.”

23. Tell students that one of the bioethical principles is called Respect for Persons.

24. Write the principle on poster paper for all to see using information from the box below or Student Handout 2.1—Principles of Bioethics—Background. This is your class Principles Poster.

   Respect for Persons emphasizes the inherent worth and dignity of each individual, and acknowledges a person’s right to make his or her own choices. It means not treating people as a means to an end.

25. Have students from groups ‘c’ and ‘d’ present their skits.

26. Ask students, “What code or standard is being honored (or not)?” Students responses may include “helping” or “being good.”

27. Tell students that another of the bioethical principles relates to Maximizing Benefits and Minimizing Harms.

28. Add this principle to the poster:

   Maximizing Benefits and Minimizing Harms asks how we can do the most good and the least amount of harm. It considers how one would directly help others and act in their best interests, while “doing no harm.”

29. Have students from groups ‘e’ and ‘f’ present their skits.

30. Ask students, “What code or standard is being honored (or not)?” Students responses may include “fairness” or “equality.”

31. Tell students that the third bioethical principle is called Justice.

32. Add this principle to the poster:

   Justice considers how we can treat people fairly and equitably. It involves the sharing of resources, risks, and costs according to what is “due” to each person.

33. Leave the Principles Poster with the three bioethical principles posted in the classroom for the remainder of the unit.

34. Distribute Student Handout 2.1 – The Principles of Bioethics—Background. Give students 3-5 minutes to read through the principles individually.

In addition to the Principles of Bioethics introduced here, ethicists use a number of different ethical perspectives and theories to defend their positions, including:

- Moral Rules and Duties
- Virtues
- Outcomes
- Care
Part III: Application of the Principles of Bioethics

Activity Time: 10 minutes

35. Have students think about how they made their decisions about whom to give the vaccine during pandemic flu scenario in Lesson One.

36. Tell students that these principles are built upon familiar values respected by many different cultures. They are the result of a long history of humans grappling with how to treat each other in a humane and ethical manner. They provide support for reasoned judgments and help the field of bioethics incorporate more objectivity and rely less on subjectivity.

37. Divide the class into three groups, and assign each group a principle: Respect for Persons, Maximize Benefits/Minimize Harms, and Justice. Larger classes can be divided into six groups, with more than one group being assigned the same principle.

38. Revisit the pandemic flu scenario from Lesson One. Based on the bioethical principle the group has just been assigned, ask students which one or two people they would save. Provide them 3-5 minutes to discuss their ideas.

39. Debrief by asking one person from each group to share how their principle can be used to make decisions about who should receive the medication. For example:

- **Respect for Persons**: By respecting the mother’s choice to forgo medication, we are respecting her autonomy and right to self-determination.
- **Maximizing Benefits/Minimizing Harms**: If we want the highest number of people to benefit, we might choose to save the doctor in hopes that she could, in turn, help to save more lives.
- **Justice**: Drawing straws (distributing the medicine without regard to social status, age, or profession) would be a “fair” way to make the decision.

40. Revisit the approaches that arose from the discussion of the flu scenario:

- **Approach 1: Save the Youngest**. In choosing this, students are maximizing the life span for the most number of people. This relates to the principle Maximize Benefits and Minimize Harms.

- **Approach 2: Draw Straws** (or any randomization technique). This option values fairness. It relates to the principle Justice.

- **Approach 3: Save the Weakest**. This option considers the special needs of vulnerable populations. It relates to the principle Respect for Persons.

- **Approach 4: Save the Most Useful**. Saving someone who may be able to save others benefits a larger number of people. This relates to the principle Maximizing Benefits and Minimizing Harms.

- **Approach 5: Respect Relationships**. Honoring the dignity of human beings includes acknowledging their relationships. This relates the principle Respect for Persons. This approach also relates to Care, an additional principle which can be used alongside the other principles mentioned.

CLOSURE

41. Wrap up the lesson by reviewing the Principles Poster and Student Handout 2.1 – The Principles of Bioethics—Background.

42. Tell students that the Principles of Bioethics are used to add structure when reasoning through an ethical question. Used as an analytical tool, the Principles of Bioethics help to move Ethics toward the “objective” end of the subjective-objective continuum.

43. Distribute copies of Student Handout 2.2—Focus on the Principles, one per student. Assign students to use the handout as an organizer for that night’s homework, as well as future ethical analysis.

HOMEWORK

- Distribute copies of the case study for Lesson Three (Student Handout 3.1—Dennis’s Decision), one per student. Assign the reading as homework. In addition, students should fill out Student Handout 2.2—Focus on the Principles as they read the case study.
EXTENSION

- Ask students to read the article “In Pandemic, Should Shots Go to the Old or the Young?” and fill out Student Handout 2.2—Focus on the Principles.


- Expand the discussion about “Subjective and Objective Questions” in Part I of the lesson by asking students to assess where different components of science would fall on the continuum from “Purely Subjective” to “Purely Objective.”

Where would each of these fall?

  o Physics
  o Chemistry
  o Psychology
  o Math
  o Biology
  o Deciding which research grants get funded
  o Using human subjects to test a medicine for effectiveness and safety

Emphasize that different disciplines are open to different degrees of interpretation. For example, in a math problem there is more of a sense of a “correct” answer than in the interpretation of social phenomena.

- Revisit students’ homework from Lesson One, in which students found a news article highlighting the larger societal and ethical implications of science. Have students identify how the bioethical principles might apply to their stories.

ADDITIONAL RESOURCES FROM AN ETHICS PRIMER

The Ethics Background section has additional background information on principle-based ethics, as well as information on different ethical perspectives such as Moral Rules and Duties Ethics, Virtues Ethics, Outcome-based Ethics, as well as the process of ethical inquiry.

CREDIT

The “Along the Line” activity is modified from an activity developed by Bruce Fuchs, PhD, and is used with permission.
Cut out the following phrases indicating interactions between a parent and child. Student groups (a – f) will create and improvise 30-second role-plays. Give the students about 2 minutes to prepare their scenes. Do not tell the students the name of the principle they will be illustrating.

- Skits ‘a’ and ‘b’ relate to *Respect for Persons* (autonomy).
- Skits ‘c’ and ‘d’ relate to *Maximizing Benefits/Minimizing Harms*.
- Skits ‘e’ and ‘f’ relate to *Justice*.

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a. Parent respecting a child’s career choice.

b. Parent not respecting the child’s career choice.

c. Parent helping child with her homework.

d. Parent not helping child with her homework.

e. Parent being fair between siblings.

f. Parent not being fair between siblings.
## The Principles of Bioethics—Background

<table>
<thead>
<tr>
<th>Principle</th>
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<tbody>
<tr>
<td><strong>Respect for Persons</strong></td>
<td>This principle values the inherent dignity and worth of each person, as well as respecting individuals and their <em>autonomy</em>. It means not treating people as a means to an end. Autonomy emphasizes the right to self-determination and acknowledges a person’s right to make choices, to hold views, and to take actions based on personal values and beliefs. It emphasizes the responsibility individuals have for their own lives. The rules for informed consent in medicine are derived from the principle of respect for individuals and their autonomy. In medicine, there is also a special emphasis on privacy, confidentiality, truthfulness, and protecting individuals from vulnerable populations.</td>
</tr>
<tr>
<td><strong>Maximizing Benefits/Minimizing Harms</strong></td>
<td>This principle stresses “doing good” and “doing no harm.” To <em>Maximize Benefits</em> one would directly help others and act in their best interests. It requires positive action. <em>Minimizing Harms</em> obligates others to avoid inflicting harm intentionally. It relates to one of the most traditional medical guidelines, the Hippocratic Oath, which requires that physicians “do no harm”—even if they cannot help their patients. “Doing good” is also referred to as <em>Beneficence</em>, and “do no harm” is also referred to as <em>Nonmaleficence</em>.</td>
</tr>
<tr>
<td><strong>Justice</strong></td>
<td>This principle relates to “Giving to each that which is his due” (Aristotle) or <em>Fairness</em>. It dictates that persons who are equals should qualify for equal treatment, and that resources, risks, and costs should be distributed equitably.</td>
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### Other Considerations

Some ethicists also add *Care*, which focuses on the maintenance of healthy, caring relationships between individuals and within a community. The principle of care adds context to the traditional principles and can be used alongside them.

Additional considerations include *Duties & Responsibilities* or taking actions that reflect personal *Virtues*.

### Historical Context

The historical basis for these principles goes back thousands of years. We find references to fairness and justice in Aristotle’s writings. The Hippocratic Oath entreats physicians to “First, do no harm.” The Nuremberg Code was created in response to World War II atrocities in which prisoners were used for experimentation without their consent. The Code helped to define “Respect for Persons” and created guidelines for conducting ethical human clinical trials. The principles were further refined in the 1970s in a document outlining guidelines for research called the *Belmont Report*. The advent of new life-saving technologies such as the first dialysis machines and organ transplants created a need to establish policy regarding the fair distribution of scarce resources, and to understand how to balance the benefits and burdens of this new research.
Consider how the principles apply to the ethical question. Some principles may apply more than others to a particular situation.

**RESPECT for PERSONS**
- What would be respectful to the people (or other stakeholders) involved?
- How can we respect people and their right to make their own choices (autonomy)?

**MAXIMIZE BENEFITS/ MINIMIZE HARMS**
- How can we do the most good (beneficence) and the least harm (nonmaleficence)?
- What kinds of harms and benefits might arise from different solutions?

**JUSTICE**
- What would be fair?
- How can we treat others equitably?
- How can we distribute resources so that each person gets what is due him or her?

**OTHER**
- Are there any other ethical considerations?