

LESSON 4:

Making a Strong Justification

INTRODUCTION

In this lesson, students learn the characteristics of a strong justification and apply them to a decision about an ethical question. Students brainstorm the characteristics of a **weak** justification, and are then primed to identify what makes a **strong** justification through their participation in a silent debate. Students refer to the case study from *Lesson Three, Dennis's Decision*, and evaluate a number of pre-written justifications for that case. For each justification, students consider whether: a decision has been made, scientific facts have been included, stakeholder views are represented, there is reference to bioethical principles, and alternative options are considered. Once students understand the elements of a well-crafted justification, they come to their own decision about Dennis and write their own justification.

KEY CONCEPTS

- Students need to consider a wide range of viewpoints when generating options for resolving an ethical dilemma.
- An excellent justification has the following components:
 - Clearly-stated position (claim) that relates directly to the ethical question.
 - Reference to important facts and science content of the case.
 - Consideration of how stakeholders will be impacted by the decision.
 - Reference to one or more Bioethical Principles.
 - Consideration of the strengths and weaknesses of alternative options.
- “Pro” and “con” positions can often be equally well defended by a reasoned, thoughtful answer rooted in critical thinking.
- For the purpose of evaluation, the student’s ability to put forth a reasoned, thoughtful answer is more important than the student’s position on the issue.

LEARNING OBJECTIVES

Students will be able to:

- Understand the elements of a strong justification.
- Distinguish between a strong justification and a weak justification.
- Provide a strong justification for a position, one that shows a connection between the claim and evidence.

CLASS TIME

2 class periods of 55 minutes each. This time could be reduced by assigning Student Handout 4.3—*Your Decision and Justification* as homework.

MATERIALS

Materials	Quantity
Student Handout 2.1— <i>The Principles of Bioethics</i> (handed out in <i>Lesson Two</i>)	1 per student
Student Handout 3.3— <i>Facts, Values, and Stakeholders</i> (from <i>Lesson Three</i>)	1 per student
Teacher Resource 4.1— <i>Take This! Take That! Silent Debate</i>	1
Blank paper for Silent Debate	2–3 per pair of students
Student Handout 4.1— <i>A Decision for Dennis</i>	1 per student
Student Handout 4.2— <i>Elements of a Strong Justification</i>	1 per student
Possible Answers for Student Handout 4.2— <i>Elements of a Strong Justification</i>	1
Student Handout 4.3— <i>Your Decision and Justification</i>	1 per student
<i>Optional:</i> Projector or document camera	1

TEACHER PREPARATION

Make copies of the *Student Handouts*, one per student.

NOTE TO THE TEACHER ABOUT ARGUMENTATION

As students write their own well-reasoned justifications in the next two lessons, they are honing their argumentation skills by using evidence to support their claim to a position relating to a bioethical case study. This is an important practice in science, and students are often encouraged to show how data support the claim. The types of data used to support one's claim when analyzing a case study may be different from the types of data collected through conventional scientific inquiry, however. When using a socio-scientific case study, **data** may refer to the scientific facts of the case, the bioethical principles that apply to the case, or even the social context of the case. Student argumentation skills will also be supported when considering the perspectives, views, and interests of various stakeholder groups to help identify possible weaknesses in their own (or others') arguments.

FRAMING THE LESSON

The previous days' lessons have led students to this point: A decision must be made for Dennis, and strong reasoning must be provided for that decision. Because writing a thorough justification for an ethical decision can be difficult, students are **introduced** to the concept by reading six pre-written justifications and using a decision chart to judge the relative strengths and weaknesses of each justification. **By the end of this lesson, students should be able to build on the justifications provided and write their own, well-reasoned justification.**

PROCEDURE

Part I: More About Dennis...

Activity Time: 10 minutes

1. Re-engage students with the case study *Dennis's Decision* by reminding them of the different stakeholder views presented in *Lesson Three*.
2. Introduce additional information about the case:
 - Doctors diagnosed Dennis's leukemia a month before he needed his blood transfusion. He agreed to and started chemotherapy but immediately refused the blood transfusions. The hospital's experience in similar situations was that patients who initially refused blood transfusions would eventually agree to them after becoming very ill.
 - Dennis's hospital room became a place for members of his religion to congregate, with up to 20 friends and family members staying with him around the clock.
 - The hospital policy is to inform parents/guardians that while the hospital will do everything it can to avoid transfusions, it will not let a child die because he or she needs blood. This policy is most often used for one-time transfusions in emergency surgical cases, such as after a car accident.
 - The hospital policy would be difficult to enact in Dennis's case. The treatment would require his full and on-going cooperation; in addition to complying with the repeated blood transfusions, he would need to take medications at home, come to follow-up visits, and undergo frequent blood counts.

Part II: What Makes a Strong Justification?—Introduction

Activity Time: 20 minutes

3. Ask students, "By a show of hands, how many of you think you already have an answer to the ethical question, 'Should Dennis be allowed to reject medical treatments that would save his life?'" Do not ask students what their individual answers would be.
4. Tell students to put their answers "on hold" for the rest of the class. The decision they come to is only as strong as the reasons they give for supporting their decision. Assure students who do not have an answer that they will get practice working this out today.

5. The reasons given to support a position, or claim, are called the **justification**. Students may have experience with writing thesis statements in Social Studies or English papers; a justification is similar to a thesis, where evidence is marshaled to support a position or claim.
6. Tell students that when presented with an ethical dilemma, many people quickly jump to their decision/position, without a sense of their justification, or they may say that their position is “simply what I believe” or what intuitively “feels right.”
7. Tell students that they will look at what makes a good justification soon, but sometimes it is easier to recognize a **weak** justification.
8. Ask students whether “I don’t like it,” “That’s not the way it should be done,” or “I just don’t think it is right” are good justifications, and prompt them to explain why or why not.
9. List the characteristics of weak justifications for all students to see.

Weak justifications:

- Are based purely on subjective opinion.
 - Rely on an undefined “feeling.”
 - Can’t be substantiated with facts or science.
 - Are based on a cultural bias that is not universal.
 - Are not relevant or logically linked to the facts of the case.
10. Ask students to offer other examples of weak justifications.
 11. Tell students that they will be debating what should be done in the case of *Dennis’s Decision* with a partner, and that they should keep in mind the characteristics of weak justifications so that they can avoid them in their own arguments.

Part III: Take This! Take That! Silent Debate

Activity Time: 15 minutes

In this portion of the lesson, students take sides on *Dennis’s Decision* and participate in a silent debate to practice their use of reasoning. Because the debate is in written (silent) form, conversation cannot deteriorate into a shouting match. At the end of the debate, students identify the strongest arguments and justifications made, and analyze what makes them so.

12. Project a copy of Teacher Resource 4.1—*Take This! Take That! Silent Debate* for all students to view.

13. Ask students to form pairs and decide who will represent the “For” and “Against” positions. The positions can be assigned to students if needed.
14. Use Teacher Resource 4.1—*Take This! Take That! Silent Debate* to describe the debate format to students. A pair of students can read the school uniform example aloud for the class, or students (or the teacher) can model the practice debate using a PowerPoint presentation found at: <http://www.nwabr.org>. Clarify any questions about the debate.
15. Begin the debate. During the exercise, students pass a blank piece of paper back and forth. One student makes one argument, and the other person can rebut it. Students take turns presenting new arguments.
16. Allow this silent exchange to occur for a few minutes. Have more paper available, as the debate may go on for several pages.
17. After 5 or 6 minutes, stop the debate.
18. Have students look over the written debate and find the strongest arguments the **other** person made.
19. Have students discuss with their partner what, specifically, made the argument strong. Did it rely on facts from the case? Take the concerns of the stakeholders into consideration?
20. Elicit some responses from the whole class.
21. Have students refer to the *Principles Poster* created in *Lesson Two*. Was their partner’s argument strengthened by giving voice to an ethical principle?
22. Ask, “What makes a strong justification?” As a class, develop the criteria for a strong justification.
23. List the characteristics of strong justifications for all students to see.

Strong justifications may include:

- A clearly-stated position (claim) that relates directly to the ethical question.
- Reference to important facts and science content of the case.
- Reference to one or more Principles of Bioethics or other ethical considerations.
- Consideration of how other people will be impacted by the decision.
- Consideration of the strengths and weaknesses of alternative options.

Part IV: What are the Options?

Activity Time: 15 minutes

24. Tell students that, before coming to a decision about a case, an important step is to generate all the options for possible solutions to that case.
25. As a class (or individually first, if time permits) have the students generate a list of alternative options for possible solutions. This is a brainstorming step, to generate a wide range of ideas.
26. If options are scarce, two strategies to help with this step are:
 - Think about the solutions different stakeholders would propose.
 - Consider extreme positions from both ends of the spectrum, and work to find middle options.
27. As a class, write on the board some key words distilled from the different options provided below. Some options for possible solutions include:
 - Dennis's wishes could be honored and he receives no blood transfusions. He is allowed to die.
 - The doctors are allowed to treat their patient as they see fit, in his best interests. Dennis receives blood transfusions against his wishes, even if that means the medical staff must restrain him during transfusions.
 - Dennis is given sedatives to incapacitate him during blood transfusions. This allows him to **not** give his consent to receive transfusions (thereby honoring his beliefs), yet allows the doctors to "do good" and treat their patient.
 - The parental rights of the biological parents are legally reinstated, thereby giving them the authority to override the wishes of Dennis and his aunt and receive blood transfusions.
 - Dennis is not given chemotherapy in the first place, allowing his disease to take its natural course without the need for blood transfusions.
 - Dennis is encouraged to spend time with his biological parents to build that relationship; they convince him to receive the transfusion.

Part V: What Makes a Strong Justification? – Justify the Answer

Activity Time: 20 minutes

28. Remind students that an ethical question is a type of **reasoned judgment** question that relies on evidence, critical reasoning, and thoughtful balancing of opposing values and viewpoints.
29. Distribute copies of Student Handout 4.1—*A Decision for Dennis* and Student Handout 4.2—*Elements of a Strong Justification*, one per student.
30. As a class, read through the pre-written justifications (A-E) from Student Handout 4.1—*A Decision for Dennis*. Tell students that they will be evaluating each justification using the decision chart found on Student Handout 4.2—*Elements of a Strong Justification*.
31. As a class, fill out the decision chart together for justification "A." Ask students, "Has a decision been made?" Since a decision is clearly stated, put a "Y" in the first box of column A. Ask students, "Are facts from the case included in the justification?" Since scientific facts concerning chemotherapy, blood cells, and transfusions are addressed, put a "Y" in the second box of column A. Continue asking questions about stakeholder views, ethical considerations (students can refer to Student Handout 2.1—*The Principles of Bioethics*) and alternative options. Students fill out the decision chart for justification "A" as a class.
32. Teachers can refer to Possible Answers for Student Handout 4.2—*Elements of a Strong Justification*, if needed.
33. Instruct students to evaluate justifications B – E (and fill out columns B – E) on their own or in pairs. Teachers could also assign a different justification to small groups of students.
34. When the students are finished, go over Student Handout 4.2—*Elements of a Strong Justification* as a class. Because there may be some variation in the Y/N answers due to student interpretation, **pose higher-level questions** such as, "Is one justification particularly strong? Why?" or "Is one justification particularly weak? Why?" Ask students what they would add to make a strong justification even stronger.
35. Point out to students that a well-reasoned justification can be made to support either side of the argument; there are strong justifications for both treating and not treating Dennis. For the purposes of this class, the **justification** for the decision is more important than the decision itself.

Part VI: Student-Written Justification

Activity Time: 20 minutes in class, or given as homework

36. Pass out Student Handout 4.3—*Your Decision and Justification*. Have students begin writing their own decision and justification for *Dennis's Decision* following the prompts on the Student Handout.

37. The decision and justification should be completed as homework.

Part VII: Variations on the Story (Optional)

38. Once students have come to a decision about the case and have justified their decision, have them consider the following variations to the story. Would any of these change their decision? Why or why not? Have students discuss the following variations in pairs or small groups.

What if...

- Dennis were younger than he is in this case? What if he were 12? 10? 8 years old?
- Dennis were older than he is in the case? What if he were almost 18, but not yet legally an adult?
- Dennis was not religious at all, but simply wanted his illness to "run its natural course" because that is how life, in its most organic and raw form, works?
- Dennis were still under the legal care of his biological parents?

The Rest of the Story

[**Note:** Share "The rest of the story" **only if** the students have finished writing their own decision and justification.]

After spending time with this case, students will understandably be curious about what happened to Dennis. After students write their own decision and justification, share with them the rest of the story:

Through the court system, the state and Dennis Lindberg's biological parents attempted to force Dennis to receive blood transfusions. After hearing from Dennis's parents, aunt, doctors, and social workers, the judge ruled that Dennis was a "mature minor" saying, "I don't believe that Dennis's decision is the result of any coercion. He is mature and understands the consequences of his decision."

The judge called the decision the most difficult of his career. Before the court decision was made, Dennis fell into a coma. He died soon after. This took place at Children's Hospital & Regional Medical Center in Seattle, Washington in November, 2007.

CLOSURE

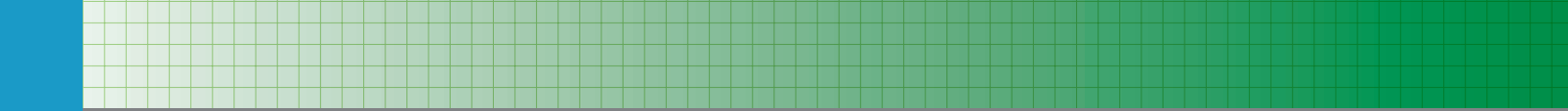
39. Emphasize the importance of providing reasons for taking a certain position, as well as making sure those reasons are strong.
40. Review the elements of a strong justification and stress the need for students to consider those elements when they defend a position.
41. Tell students that Student Handout 4.2—*Elements of a Strong Justification* is a conceptual model that can be applied to other sorts of difficult or ethical decisions, not just *Dennis's Decision*.

HOMEWORK

Ask students to finish writing their own justification using Student Handout 4.3—*Your Decision and Justification*.

SOURCES

Take This! Take That! Silent Debate contributed by Rosetta Eun Ryong Lee, Seattle Girls' School. Original idea shared by teacher Aimee Trapp.



TEACHER RESOURCE 4.1

Take This! Take That! Silent Debate

The Issue: *Should Dennis be allowed to reject life-saving medical treatments?*

Students should form pairs and decide who will represent the FOR (YES) position and who will represent the AGAINST (NO) position.

Silent Debate Instructions:

1. There is no talking once the silent debate starts.
2. Note whether you are making an argument FOR or AGAINST the issue.
3. If you change the type of argument you are making, you may draw a line to separate your ideas. For example, the first argument about school uniforms (below) is about individuality, and the second argument is about money.
4. Add additional sheets of paper as necessary.

Silent Debate Example on School Uniforms

- **Student 1:** There should not be a school uniform because it does not allow students to express their individual personality.
 - **Student 2:** Students are in school to learn, not to express their personality.
 - **S1:** Part of school is to figure out who you are, and lack of ability to express personality does not help that process.
 - **S2:** Students learn to be like everyone else when it comes to fashion. There should be lessons that help students figure that stuff out, not clothing choices.
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- **S2:** There should be a school uniform because it makes less obvious the differences in how much money students have.
 - **S1:** Students know those differences anyway – they compare shoes, accessories, cars, homes, electronics, etc. Uniforms just become an additional expense for families that are already struggling.
 - **S2:** It still decreases the biggest comparison factor – name brands and variety of clothing. Uniforms could be provided free to families that cannot afford them.
 - **S1:** Avoiding the problem won't help students learn how to deal with real-life problems like how to deal with people of different economic

STUDENT HANDOUT 4.1

A Decision for Dennis

Name _____ Date _____ Period _____

Read justifications A – E, which address the following ethical question:

“Should Dennis be allowed to reject life-saving medical treatments?”

Evaluate each justification using the decision chart found on Student Handout 4.2—*Elements of a Strong Justification*. If the necessary part of the justification is present (A DECISION, FACTS or STAKEHOLDER VIEWS, for example) put a “Y” for yes in the box. If not, put an “N” for no in the box. You will go through example “A” as a class, then complete B – E individually.

A. “No. The blood products he needs are medically necessary. Since his leukemia was treated with chemotherapy, most of his blood cells have been destroyed. He needs blood transfusions to survive. In following the principle ‘Maximize Benefits’ for Dennis (to ‘do no harm’) the doctors are required to save his life.”

B. “Yes. The doctors probably don’t know what they’re doing, and he’ll probably die anyway. People get sick in hospitals all the time from diseases they didn’t come in with. In his weakened state, he could easily get sick from something else and die.”

C. “Yes. The principle ‘Respect for Persons’ includes the idea of autonomy which allows a person to make decisions about his or her own fate. Dennis is 14 years old, old enough to fully understand what it means to refuse blood transfusions. He should make this decision and his wishes should be respected.”

D. “The doctors should ‘Maximize Benefits’ and ‘do good’ by not allowing him to die. On the other hand, they should respect his autonomy and his wishes. His parents gave guardianship over to the aunt, so their opinion shouldn’t matter. The aunt and the doctors should make the decision together.”

E. “No. It will be too emotionally difficult on his biological parents. They are now sober and just because they made mistakes in the past, that doesn’t mean that they should have to watch their son die. They probably thought that giving custody to the aunt was temporary, and that they would get him back.”

STUDENT HANDOUT 4.2

Elements of a Strong Justification

Name _____ Date _____ Period _____

What Makes a Strong Justification for a Decision on an Ethical Question?

Read through possible justifications for *Dennis's Decision* found on Student Handout 4.1. Evaluate each justification (A – E) using the following decision chart. If a justification contains the needed element, write "Y" for Yes in the box. If not, write "N" for No.

A good justification includes:	Which means...	A Decision for Dennis Justifications				
		A	B	C	D	E
A DECISION	A position (claim) has been clearly stated. The decision relates directly to the ethical question.					
FACTS	The facts and science content can be confirmed or refuted regardless of personal or cultural views. This can be used as evidence to support the claim.					
ETHICAL CONSIDERATIONS	Ethical considerations may include Respect for Persons, Maximize Benefits/Minimize Harm, and Justice, in addition to others. This can be used as evidence to support the claim.					
STAKEHOLDER VIEWS	There are a variety of views and interests in the decision and more than one individual or group will be affected by the outcome.					
ALTERNATIVE OPTIONS and REBUTTALS	No one decision will satisfy all parties. A thorough justification considers strengths and weaknesses of various options.					
REASONING and LOGIC	A logical explanation that connects the evidence to the claim is provided.					

For our purposes, the justification for the decision is more important than the position on the decision.

Possible Answers for STUDENT HANDOUT 4.2

Elements of a Strong Justification

What Makes a Strong Justification for a Decision on an Ethical Question?

Read through possible justifications for *Dennis's Decision* found on Student Handout 4.1. Evaluate each justification (A – E) using the following decision chart. If a justification contains the needed element, write "Y" for Yes in the box. If not, write "N" for No.

A good justification includes:	Which means...	A Decision for Dennis Justifications				
		A	B	C	D	E
A DECISION	A position (claim) has been clearly stated. The decision relates directly to the ethical question.	Y	Y	Y	N	Y
FACTS	The facts and science content can be confirmed or refuted regardless of personal or cultural views. This can be used as evidence to support the claim.	Y	N	Y	SOME	SOME
ETHICAL CONSIDERATIONS	Ethical considerations may include Respect for Persons, Maximize Benefits/Minimize Harm, and Justice, in addition to others. This can be used as evidence to support the claim.	Y	N	Y	Y	N
STAKEHOLDER VIEWS	There are a variety of views and interests in the decision and more than one individual or group will be affected by the outcome.	N	N	N	Y	N
ALTERNATIVE OPTIONS and REBUTTALS	No one decision will satisfy all parties. A thorough justification considers strengths and weaknesses of various options.	N	N	N	Y	N
REASONING and LOGIC	A logical explanation that connects the evidence to the claim is provided.	Y	N	Y	N	N

For our purposes, the justification for the decision is more important than the position on the decision.

STUDENT HANDOUT 4.3

Your Decision and Justification

Name _____ Date _____ Period _____

You may refer to Student Handout 3.3—*Facts, Values, and Stakeholders* if needed.

1. What is your position on this issue? Write out your claim in a complete sentence.
2. What is the factual content that can be used as evidence to support your position? This factual content should be able to be confirmed or refuted regardless of cultural or personal views.
3. What are the views and interests of the individuals or groups affected by the decision that you think are most relevant to your position?
4. What ethical considerations can be included as evidence to support your position? (Respect for Persons, Maximize Benefits/Minimize Harms, Justice)

5. What are the alternative options and why are they not as strong as your position? (Some of these options may be proposed by different stakeholder groups.)

6. Take the answers to *Questions #1-5* and write a strong justification paragraph for your decision on the topic. Make sure to use the evidence (such as the scientific facts and ethical considerations) in support of your claim in a way that shows your reasoning