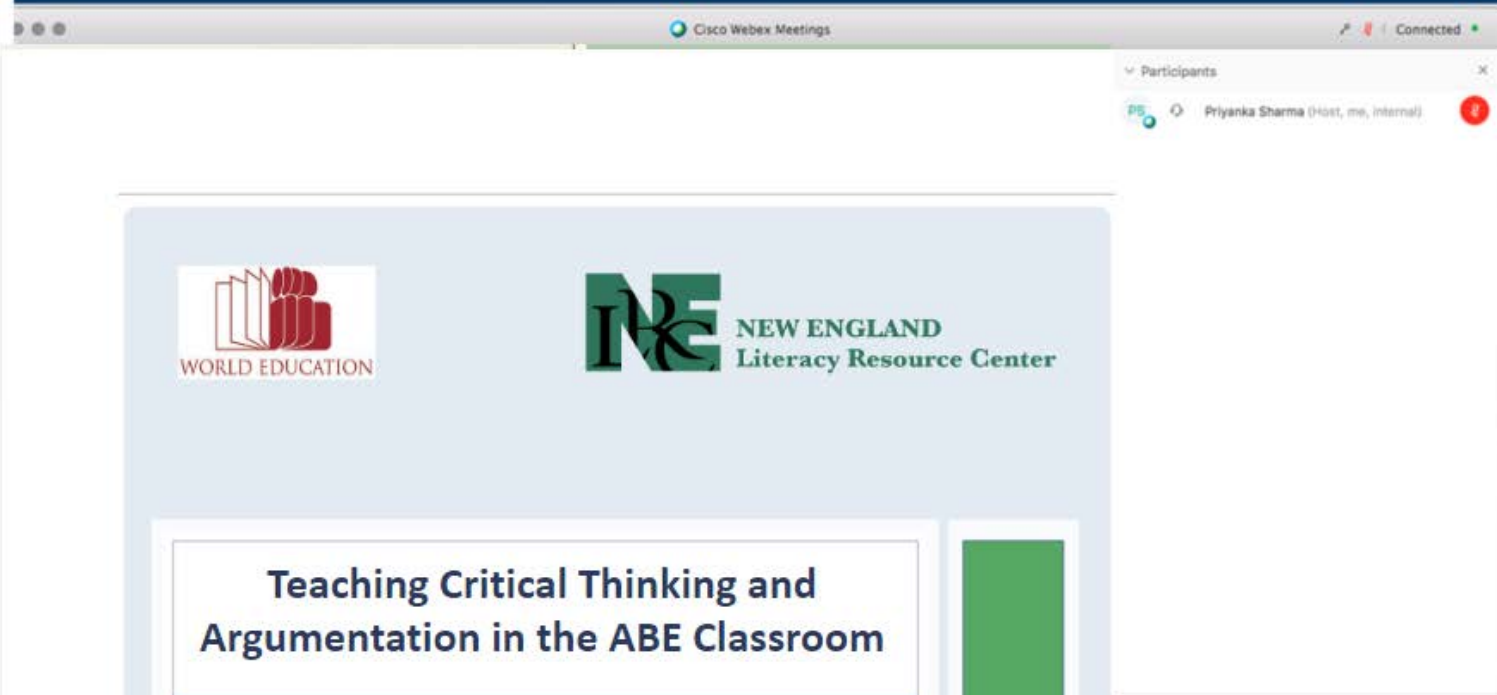


Teaching Critical Thinking and Argumentation in the ABE Classroom

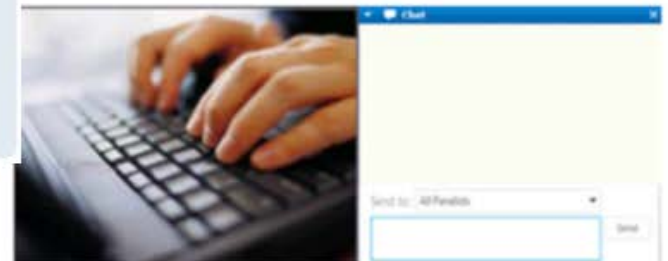
FEBRUARY 21, 2019

Presenter: Amy R. Trawick
atrawick1@gmail.com

Webinar Tools



Use chat box for discussion



GETTING FOCUSED

By the end of the webinar, participants will be able to:

- Define critical thinking and discuss its components
- Define argumentation and distinguish among its key elements
- Try out instructional approaches:
 - Hunting and checking assumptions
 - Elements of argument
 - Taking multiple perspectives
 - Logical fallacies
 - Assessment

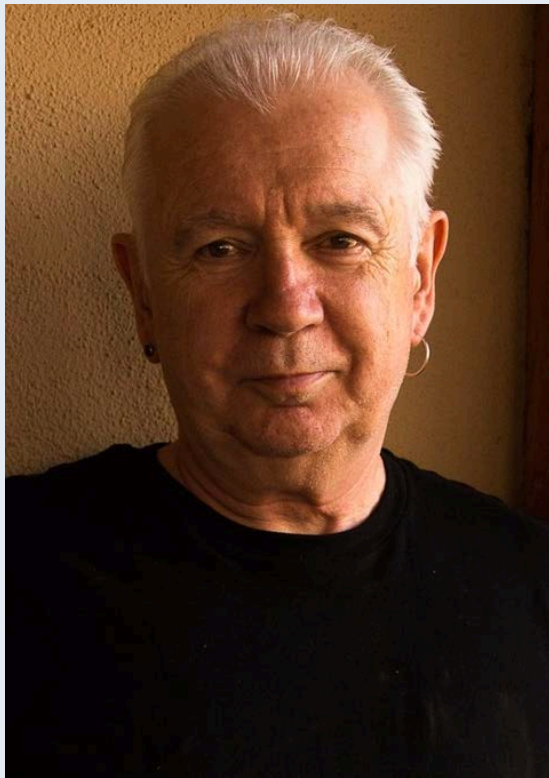


ASSUMPTIONS



- You want to be here.
- You already have some prior knowledge related to critical thinking and argument and how to teach them.
- You can find information and resources re: finding and citing sources rather easily.
- Teaching critical thinking and argument are important beyond HSE credentialing.

WHAT IS CRITICAL THINKING?



Critical thinking occurs when we:

- Identify the assumptions that frame our thinking and the thinking of others
- Check out the degree to which these assumptions are accurate and valid
- Look at ideas and decisions from several different perspectives
- (on the basis of all this) take informed action

(Brookfield, 2012, p. 1 and p. 157)

TRADITIONS OF CRITICAL THINKING

- **Hypothetico-Deductive Method** (scientific method)
- **American Pragmatism** (continuous experimentation)
- **Psychoanalysis** (living an integrated, authentic life)
- **Critical Theory** (speaking truth to power)
- **Analytic Philosophy and Logic** (detecting language tricks)



(Brookfield, 2012)



WHAT IS AN ARGUMENT?



a reasoned, logical way of demonstrating that a position, belief, or conclusion is valid

(Appendix A, CCSS)



emotional appeal



disagreement between two people



one person's chain of logic to support a position, belief, of conclusion



Argument

- Logic
- Cold
- Overarching goal: to build a case that can be useful in making decisions or informing action



Persuasion

- Logic + emotion
- Hot
- Overarching goal: to win, to convince people to believe something or do something

Let's Create a Word Cloud!

What are words you associate with *argumentation*? Think of features or elements, words used to discuss *argument* or *argumentation*. Type as many as you can in the time allowed.



1. Text to: **37607**

1. Type in **amytrawick871** in the message bar. Send. [You have now joined the poll.]

1. Type one word/phrase at a time. Send.



COLLEGE AND CAREER READINESS STANDARDS FOR AE

- **READING Anchor 8:** Delineate and evaluate the **argument** and specific **claims** in a text, including the validity of the **reasoning** as well as the relevance and sufficiency of the **evidence**.
- **WRITING Anchor 1:** Write **arguments** to support **claims** in an analysis of substantive topics or texts, using valid **reasoning** and relevant and sufficient **evidence**.
- **SPEAKING AND LISTENING Anchor 3:** Evaluate a speaker's point of view, **reasoning**, and use of **evidence** and **rhetoric**.
- **SPEAKING AND LISTENING Anchor 4:** Present information, findings, and supporting **evidence** such that listeners can follow the **line of reasoning** and the organization, development, and style are appropriate to task, purpose, and audience.



CCRS AE (CONT'D)

- **MATHEMATICS: Construct viable arguments and critique the reasoning of others. (MP.3)**

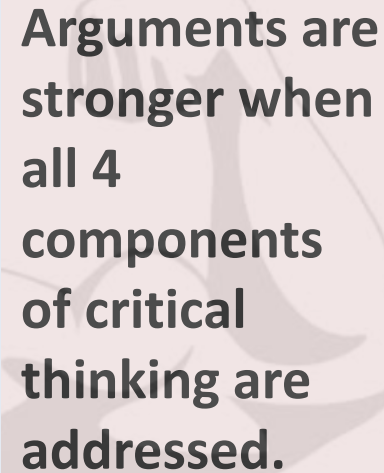
Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in **constructing arguments**. They make conjectures and build a **logical progression of statements** to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use **counterexamples**. They **justify** their **conclusions**, communicate them to others, and **respond to the arguments of others**. They reason inductively about **data**, making plausible **arguments** that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct **logic or reasoning** from that which is flawed, and—if there is a flaw in an argument—explain what it is...



REMEMBER...

Critical thinking occurs when we:

- Hunt for **assumptions**
- Apply **evidence** to test assumptions and support claims
- View topics/ideas from **multiple perspectives**
- Take **informed action**



Arguments are stronger when all 4 components of critical thinking are addressed.



“World View” – the structuring assumptions we use to organize the world into fundamental categories; what “is”; hardest to uncover



“Shoulds” – assumptions about what we think should be happening in a particular situation

Causation – assumptions about how different parts of the world work and about the conditions under which these can be changed; easiest to uncover

What are some assumptions the author seems to have?



Posted by u/hjjslu 5 years ago

13



I think voting is a waste of time. CMV

Even if there was an election where one candidate was clearly good and agreed with me about everything, and the other candidate was clearly bad and disagreed with me about everything, I'd still think it's a waste of time.

Basically I just believe that my vote doesn't count. I mean, it is technically counted by someone in my state, and when I'm watching the election returns and they show that 65,370,985 people voted for candidate X, I'm technically be one of those people but my vote will not effect the outcome of the election.

Let's say I preferred Obama in the 2008 election and I lived in the contested state of Virginia (both of which are true), if I had voted Obama would have won Virginia by a margin of 149,299 votes, but instead I stayed home and Obama still won by a margin of 149,298 votes. Even if Obama lost Virginia by one vote and my vote that I never cast could have tied it (not sure what would happen in that case), then it still wouldn't matter because Obama would still win the election 319 to 219 instead of 332 to 206. Even if I lived in Florida in 2000 where the race was decided by "only" 537 votes; me voting would only change the margin to 536 votes, which would still mean Bush would win the state and the presidency.

By voting, I'm basically betting an hour of my time that my state was perfectly divided among the two candidates and my single vote will push one candidate over the edge; and that the other candidates will win if and only if they win my particular state. That's the only possible way my vote could change the outcome of the election. In the history of the U.S. the "closest" this has ever come to happening was still 537 votes off, and as the population increases, this scenario only becomes less and less probable. So what's the point?



42 Comments




Share



Save

80% Upvoted

https://www.reddit.com/r/changemyview/comments/1epznq/i_think_voting_is_a_waste_of_time_cmv/

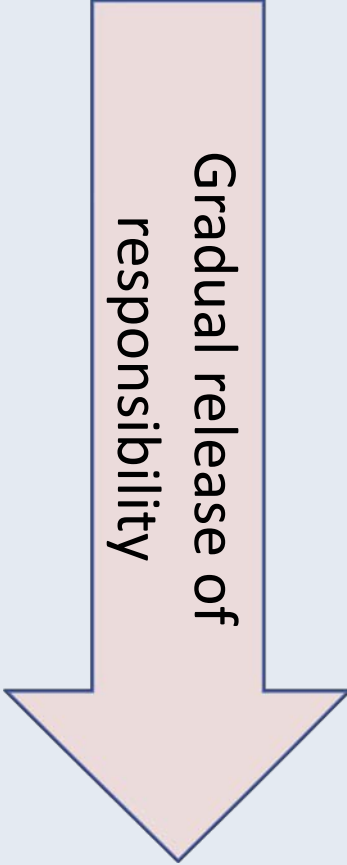


Sample Assumptions	Alternatives
Even if I don't vote, other people will.	Democracy depends on large numbers of people voting.
Voting only matters if it helps win a close election.	My vote helps show support for certain ideas, which may shape legislation or empower the next candidate. Voting helps me stay tuned in to what's going on.
My time is very valuable.	Maintaining a democracy is time-consuming but important.

TEACHING ABOUT ASSUMPTIONS

- Share own assumptions regularly

-
1. **Model** how to identify assumptions, derive alternative explanations, and consider evidence, using a short text (or video).
 2. Lead students in **guided practice** with the same process, using a new text/video.
 3. Have students work in **groups or pairs** to apply the same process, using a new text/video.
 4. Have students work **individually** to apply the same process, using a new text/video.



Gradual release of
responsibility



Hunting and Checking Assumptions



Assumption	Alternative Assumption	Evidence to Seek





Let's Get Real!

Mark: That was the worst Super Bowl ever! **Claim**

Juanita: Huh? Why do you think so?

Mark: The score was so low. 10-3. Nothing ever happened. **Evidence**

Juanita: So what? Why does that make it so bad?

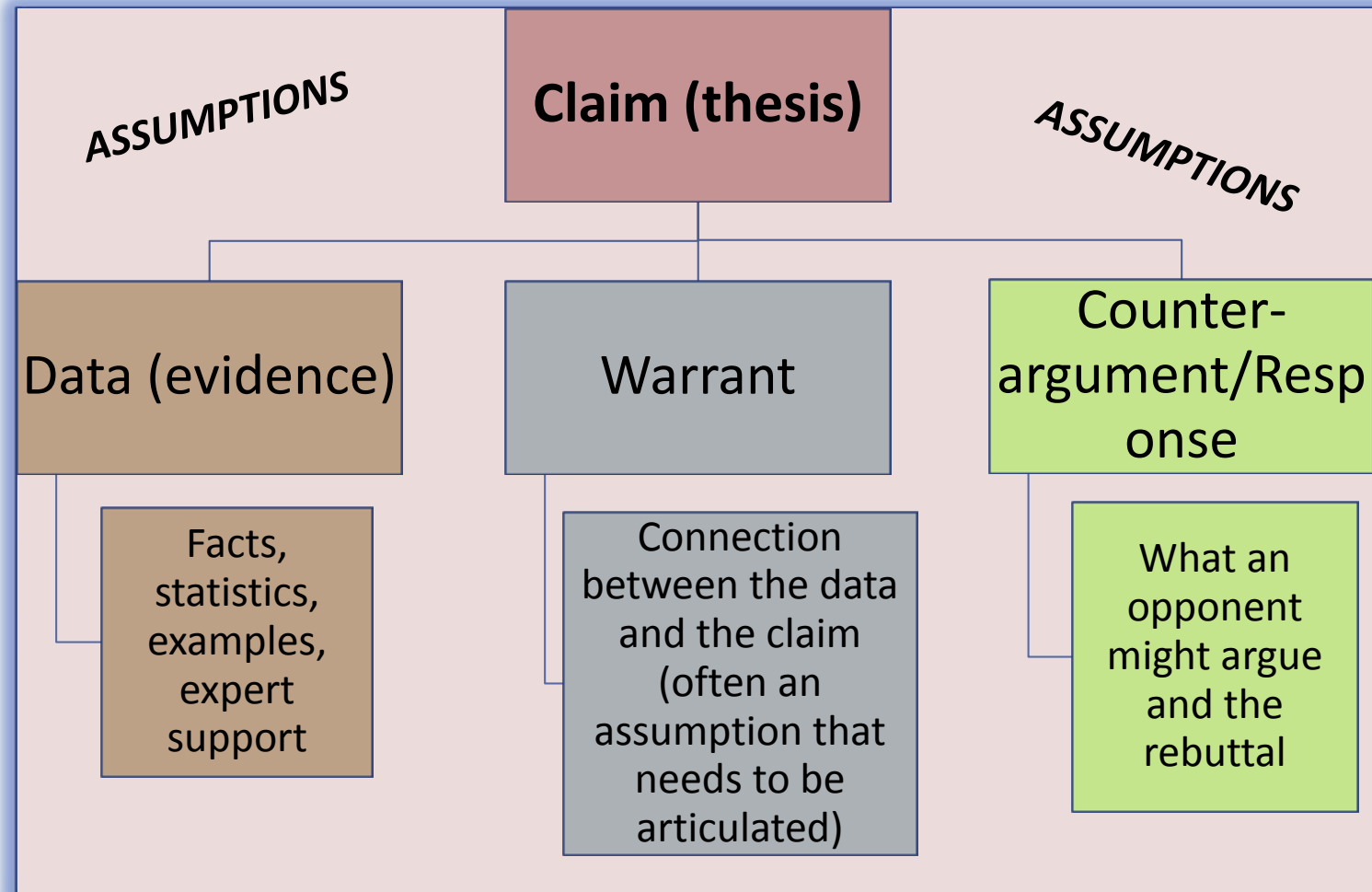
Mark: Super Bowls should be exciting, and scoring is what makes it exciting. **Warrant**

Juanita: But what about the great defense on both sides. That was some excellent playing right there. **Counter-argument**

Mark: But it was bo-o-ring. The good defense kept anything exciting from happening until the end. What a waste of time. **Rebuttal**

ELEMENTS OF ARGUMENT

(adapted from Toulmin)





MORE ABOUT “WARRANTS”

- Warrants connect data to the claim
 - Often unspoken/unwritten
 - Get at assumptions being made
- Instructional strategies
 - Ask “So What?” when students offer evidence without explanation
 - Analyze ads for warrants.



TEACHING THE ELEMENTS OF ARGUMENT

- Evoke the elements through oral language/dialogue first.
- Provide explicit instruction--explain, model, guided practice, independent practice--with a few elements at a time.
- Evaluate texts for the elements (apply to reading/listening).
 - Use guiding questions, graphic organizers
- Incorporate elements into writing/speaking assignments.
 - Use guiding questions, graphic organizers



Claim/Argument Graphic Organizer
Directions: Use the graphic organizer to evaluate a text/video for the presence/absence of claims and arguments and the strength and validity of those claims/arguments.
What is the claim? What evidence does the author/writer use to argue his/her claim? Do you feel the author/writer substantiates his/her claim? Why or why not?
What is the claim? What evidence does the author/writer use to argue his/her claim? Do you feel the author/writer substantiates his/her claim? Why or why not?
What is the claim? What evidence does the author/writer use to argue his/her claim? Do you feel the author/writer substantiates his/her claim? Why or why not?
What is the claim? What evidence does the author/writer use to argue his/her claim? Do you feel the author/writer substantiates his/her claim? Why or why not?

BUILDING AN ARGUMENT

MAIN IDEA

Here's what I think...

Evidence to back up my reasons

Here are my REASONS!

1.

2.

3.

COUNTER ARGUMENTS

You COULD argue that...

...but here's the WEAKNESS...

Strong Finish!

PRO

When you

weigh all the evidence, you conclude that...

CON

Argumentative Writing: Graphic Organizer

1. As in any essay, the first paragraph of your argumentative essay should contain a brief explanation of your topic, some background information, and a thesis statement. In this case, your thesis will be a statement of your position on a particular controversial topic. You are making a claim!

2. Support your claim with more than one supporting reason - in logical order. Next, give evidence to support your reasons.

Reasons/Supporting details

Evidence

3. Make at least one (1) counter-claim (the other side of the argument).
4. Next, provide facts or examples to refute it (make a rebuttal).

Counter-claims

Rebuttal

a concluding statement that calls the audience to take action.



LOGICAL FALLACIES

➤ common errors in reasoning

- Ad Hominem
- Straw Man
- False Dilemma
- Slippery Slope
- Appeal to Pity
- Bandwagon
- Circular Argument
- Hasty Generalization
- Red Herring
- Appeal to Hypocrisy
- Appeal to Ignorance
- Misuse of Authority

Decent descriptions of logical fallacies can be found at:

- <https://thebestschools.org/magazine/15-logical-fallacies-know/>
- <https://informationisbeautiful.net/visualizations/rhetological-fallacies/>

Teacher Example

Logical Fallacies: Guided Notetaking

Logical fallacies are errors in reasoning, false or illogical reasoning, and/or irrational or manipulative emotional appeal (pathos) resulting in the loss of credibility and weakening of the overall argument.



Caution: Humans use logical fallacies because they can work! However, critical thinkers won't be duped. Use your critical thinking skills to look for and call out these common types of manipulation and weaknesses in argument. When you debate, rely on sound reasoning and avoid fallacies in your own argument.

• Jumping on the Bandwagon

- arguing that everybody believes or does something.
- arguing that everybody should have the same reaction.



Ask Yourself: Do all people *really* have the same idea or reaction?

• Ad Hominem • Personal Attack • Name calling • Poisoning the Well

- Making personal and negative statements about someone
- focusing on a person's looks rather than the argument or issue



Ask yourself:

• Either/Or Thinking • Black and White Thinking

- Insisting that there are only two, typically opposing or extreme, courses of action.
- In reality, there are usually more than two possibilities. When you see an either/or statement, test it.




Ask Yourself:

• Slippery Slope

- A statement claiming that one action will lead to a whole series of undesirable events--without offering any proof.



Ask yourself: "Will this first action *really* lead to the next?"







Logical Fallacy	Definition	Example from the News
Straw Man	Misrepresenting the opposing view and then attack that new view.	Person 1: We don't need a wall to make our southern border safe. Person 2: Well, open borders will destroy this country, so we have to have a wall.
Ad Hominem	Attacking the person's character or looks instead of their ideas	"Orange Orangutan" <u>"Killary"</u>
False Dichotomy	Limiting the options to two when there is actually a range of options	"Either you're with us, or you're with the terrorists." "This is a vote for the future of democracy—or for its demise."

Logical Fallacies: Guided Notetaking

Logical fallacies are errors in reasoning, false or illogical reasoning, and/or irrational or manipulative emotional appeal (pathos) resulting in the loss of credibility and weakening of the overall argument.



Caution: Humans use logical fallacies because they can work! However, critical thinkers won't be duped. Use your critical thinking skills to look for and call out these common types of manipulation and weaknesses in argument. When you debate, rely on sound reasoning and avoid fallacies in your arguments!

<ul style="list-style-type: none"> <u>Jumping on the Bandwagon</u> 	<ul style="list-style-type: none"> arguing that everyone or everybody believes or does something. arguing that all people have the same reaction.  <p>Ask Yourself: Do all people <i>really</i> have the same idea or reaction?</p>
<ul style="list-style-type: none"> <u>Ad Hominem</u> <u>Personal Attack</u> <u>Name calling</u> <u>Poisoning the Well</u> 	<ul style="list-style-type: none"> Making personal and negative statements about someone focusing on a person's looks rather than the argument or issue  <p>Ask yourself:</p>
<ul style="list-style-type: none"> <u>Either/Or Thinking</u> <u>Black and White Thinking</u> 	<ul style="list-style-type: none"> Insisting that there are only two, typically opposing or extreme, courses of action. In reality, there are usually more than two possibilities. When you hear an either/or statement, test it.  <p>Ask Yourself:</p>
<ul style="list-style-type: none"> <u>Slippery Slope</u> 	<ul style="list-style-type: none"> A statement claiming that one action will lead to a whole series of undesirable events--without offering any proof.  <p>Ask yourself: "Will this first action <i>really</i> lead to the next?"</p>

Argument Fallacies: Group Activity

The Issue: Should the United States legalize marijuana at the federal level?

Directions: Discuss each piece of evidence with your group. Make a decision about which type of fallacy best describes the evidence. Debating is good! Remember, this is an art, so there might be more than one possibility. The goal is to think critically about arguments and evidence and to consider why and how fallacies can weaken an argument. Identifying fallacies is another strategy that you can use to analyze and evaluate arguments.

Possible Evidence	Type of Fallacy	Group Explanation: Why and how is this an argument fallacy?
Marijuana is a Class 1 Controlled substance for a reason. Either you support illicit drug use or you don't. It's that simple.		
Societal ideas about marijuana have evolved over time, especially in the past 10 years. Many states have legalized marijuana use to some degree. Everyone knows that marijuana is less harmful than alcohol, and alcohol has been legal since the 21st amendment in 1919.		
No matter how much pot advocates try to deny it, marijuana has been proven to be a gateway drug. If legalized at the federal level, all drug use will go up, and society will pay a heavy price as a result.		
It's simple-- it's time to let go of outdated ideas about the dangers of this natural substance. Society has changes and our laws should reflect those changes. Get with the times.		
No good people smoke marijuana.		
There is nothing to debate. The other side cannot argue against the facts.		

CONVERSATION CAFE



- Based on World Café process (<http://www.theworldcafe.com>)
- Can use as precursor to debate (primes the pump)

TEACHING LOGICAL FALLACIES

- Provide definitions and examples
- Have students find examples in editorials, letters to the editor, ads, and online comment threads
- Invite students to bring in examples that they see/hear outside of class
- Have students look for at least one logical fallacy when they review their own or a peer's paper
- Comment on logical fallacies you find in students' oral or written arguments



ASSESSING WRITTEN/SPOKEN PRODUCTS

word generation

ARGUMENTATIVE WRITING RUBRIC

CCSS Writing Standard grades 4-5: Write opinion pieces on topics or text, supporting a point of view with reasons and information.
CCSS Writing Standard grades 6-8: Write arguments to support claims with clear reasons and relevant evidence.

	Emerging (1)	Developing (2)	Proficient (3)	Exemplary (4)
Argumentation	The writing presents only a vague or confusing claim.	The writing presents a clear and relatively precise claim but provides little or no evidence or reasoning to support it.	The writing presents a clear claim and provides evidence to support it, but perhaps no clear articulation of the reasoning relating the evidence to the claim.	The writing presents a clear claim, provides evidence to support it, and makes clear the reasoning relating the evidence to the claim.
Evidence	No evidence is presented.	Some appropriate evidence is presented.	Sufficient and compelling evidence is presented.	Sufficient and compelling evidence is presented, and evidence that counters alternative claims is included.
Organization	Claim, support, conclusion, and structure are absent.	The evidence presented is not linked to the claim; the conclusion simply restates the claim.	The claim, evidence, and reasoning linking them are presented in a logical order, with a conclusion restating the reasoning.	The claim, evidence, and reasoning linking them are presented in logical order, and the conclusion effectively strengthens the claim by displaying the relationship.
Language	Academic language forms (including focus words) are used incorrectly, or not at all.	Academic language forms (including focus words) are attempted, but they are sporadic and mostly not correct.	Academic language forms (including focus words) are used frequently and mostly correctly, but not consistently.	Academic language forms (including focus words) are used correctly and consistently, except for cases where conversational language is used for specific effects.

© 2015 SERP wordgen.serpmedia.org

Available at

https://wordgen.serpmedia.org/assets/wordgen_argumentative_writing_rubric-copy.pdf

- Use rubrics to be transparent
 - Develop rubrics with students [or share a teacher-developed one] when the product is assigned
 - Review content standards for guidance
 - Be sure the criteria used are level-appropriate
- Encourage self-assessment and peer-assessment

FINAL THOUGHTS

- ✓ Make critical thinking/argument part of the class culture; avoid one-and-done lessons/units
- ✓ Focus on small chunks at a time (e.g., supporting claims with evidence, making warrants clear, including a counter-argument)
- ✓ Incorporate collaboration and oral language (dialogue)
- ✓ Include a mix of:
 - Explicit instruction and implicit learning
 - Learners' evaluating the arguments of others and building their own arguments



KEY RESOURCES

- Brookfield, S.D. (2012). *Teaching for critical thinking: Tools and techniques to help students question their assumptions*. San Francisco, CA: Jossey-Bass.
- Palmer, E. (2016). *Good thinking: Teaching argument, persuasion, and reasoning*. Portland, ME: Stenhouse Publishers.
- Smith, M. W., Wilhelm, J. D., & Fredricksen, J. E. (2012). *Oh, yeah?!: Putting argument to work both in school and out*. Portsmouth, NH: Heinemann.



IMAGES USED

- <http://www.stephenbrookfield.com/>
- <https://www.bbc.com/news/entertainment-arts-31662024>
- https://en.wikipedia.org/wiki/Ronald_Reagan
- http://worldartsme.com/strong-arm-clipart.html#gal_post_28621_strong-arm-clipart-1.jpg
- <http://www.minico.com/blog/4-critical-disaster-preparedness-considerations-agency/>
- <https://www.gettyimages.com/photos/yellow-dog-productions?sort=mostpopular&mediatype=photography&phrase=yellow%20dog%20productions>
- <https://cheezburger.com/683525/meme-of-the-day-logical-fallacy-ref-will-help-you-keep-internet-arguments-fair>
- <https://depositphotos.com/57870359/stock-illustration-team-work-people-group-of.html>

THANK YOU!

Presenter: Amy Trawick, atrawick1@gmail.com

A link to a recording and slides of this webinar will be sent to you and will be archived at nelrc.org/resources.

Please complete the very short webinar evaluation that pops up at the end.

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nelrc.org