



High School

National FFA Organization

Lesson HS.24

CRITICAL THINKING SKILLS

Unit. Stage One of Development—ME

Problem Area. How Do I Begin to Grow?

Precepts. J1: Think critically.

National Standards. NS.9-12.1 — Science as Inquiry — Develop abilities to do scientific inquiry.

Student Learning Objectives. As a result of this lesson, the student will ...

- 1 Define critical thinking skills.
- 2 Examine methods of critical thinking.
- 3 Classify evidence, argument, and persuasion.



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Time. Instruction time for this lesson: 50 minutes.



Resources

Forte, Imogene, et al. 180 Icebreakers to Strengthen Critical Thinking and Problem-Solving Skills. Nashville, Tennessee. Incentive Publications, 1999.

National FFA Organization's Essential Learnings materials, 2003.

Ruggiero, Vincent Ryan. Becoming a Critical Thinker. Boston, Massachusetts. Houghton Mifflin Company, 2002.

Webster's Universal College Dictionary. New York, New York. Random House Inc., 1997.

Weise, Elizabeth. PETA: 'Happy cows' ad is a lie. USA Today. December 11, 2002. p. 8D.

✓ Tools, Equipment, and Supplies

- ✓ Writing Surface
- ✓ Transparencies
- ✓ Overhead projector
- ✓ Assortment of markers
- ✓ Copies HS.24.Assess—one per student
- ✓ Copy of a full-page magazine advertisement
- ✓ Copies of HS.24.AS.A—one per student
- ✓ Red, blue, and yellow markers—one each per student
- ✓ Index cards

🔑 Key Terms. The following terms are presented in this lesson and appear in bold italics:

- ▶ Argument
- ▶ Critical thinking
- ▶ Evidence
- ▶ Opinion
- ▶ Persuasion
- ▶ Propaganda
- ▶ Skills



Interest Approach

Before class, bring a copy of a full-page advertisement from a magazine. Choose an advertisement with abstract pictures or ideas that have nothing to do with the product sold, or an article with a misleading claim. Examples may include advertisements for a car, truck, cologne, makeup, shoes, new technology, etc.



 Today we need to be in advanced thinking mode as we look into one of the most important skills in life. The skill we are talking about today is critical thinking skills.

Show the advertisement to class. Capture the students' answers to the following questions on the writing surface.

 If you were a person seeing this advertisement for the first time, with no previous knowledge of the company or the product, what would be your first thoughts? *Possible answers may include a bogus claim, sex appeal, admiration and money.*

 Who is the advertisement trying to target?

Possible answers may include young, old, women, men, rich and poor.

 How is the advertisement biased?

Possible answers may include only one opinion is stated and they are trying to sell a product.

 Why is the company's claim really not that great?

Possible answers may include the claim has nothing to do with the product, there is no guarantee, and there are certain conditions and exceptions.

SUMMARY OF CONTENT AND TEACHING STRATEGIES

Objective 1. Define critical thinking skills.

 We have just experienced a. Congratulations! Now let's be analytical students as we work together to discover the meaning of critical thinking. Are critical thinking skills important for everyday life? Let's learn more about what it is and see.

Provide the following on a writing surface or use HS.24.TM.A and have students capture in their notes. Use a Descartes Moment to initiate the concept of critical thinking.

I. Define critical thinking skills.

- A. **Critical thinking** is personal purposive and reflective thinking used to solve problems, make decisions and clarify concepts.
- B. **Skills** - the ability to do something well arising from talent or training.

Use a Chorale Response Moment to review the terms critical thinking and skills. Recite the definition of each in alternating order at least a couple of times. After you recite the definition of critical thinking or skills ask students to say critical thinking or skills when you point to them.

Objective 2. Identify methods of critical thinking.

 Now that we know the definition of critical thinking, let's observe behaviors needed to think critically. Understanding the behavior of a critical thinker will help us develop our skills as impressive critical thinkers. For this next activity, we will take turns listening, being attentive and sharing as we discover what it takes to be a critical thinker. Capture these behaviors in your notebook.



Use a Little Professor Moment to engage student learning. Show HS.24.TM.B and HS.24.TM.C, or capture on a writing surface. After you teach each method of critical thinking, stop and let Little Professor I or II teach.

II. Methods of critical thinking.

A. Accept new evidence.

1. Uncritical thinkers hold on to their own cherished ideas and beliefs.
2. Critical thinkers accept valid evidence even if it is against their previous belief.
3. Example: A new report is released stating that genetically modified fruit are more nutritious than traditionally grown fruit.
 - a. An uncritical thinker will continue to buy tradition ally grown fruit, not willing to accept the new evidence.
 - b. A critical thinker will consider if the new evidence is valid. If so, he may buy genetically modified grown fruit even though he previously believed tradition- ally grown fruit is more nutritious.

Little Professor Moment

B. Resist abuse of propaganda.

1. Uncritical thinkers are easily swayed to believe propaganda.
2. **Propaganda**—information or ideas spread to promote or injure a cause, move-ment, or nation.
3. Critical thinkers see through propaganda.
4. Example: You pick up a flyer that dis plays a picture of a hunter in a jail cell for shoot- ing a deer. The statement on the bottom reads, “Stop the killing of innocent animals.”
 - a. An uncritical thinker will believe the propaganda thinking that all hunters kill innocent animals.
 - b. A critical thinker will realize that the flyer is propaganda and will research the issue to discover facts concerning hunters, hunting seasons, and wildlife popu lations.

Little Professor Moment

C. Simplify confusion.

1. Uncritical thinkers avoid complex situations.
2. Critical thinkers take time to find an answer to complex problems.
3. Example: FFA members are no longer coming to the monthly meetings.
 - a. An uncritical thinker will avoid trying to determine why FFA members are no longer coming to meetings.
 - b. A critical thinker will take time to resolve why FFA members are not coming to meetings. They may look at the time of the meetings, length of the meetings, activities during the meetings, or location of the meeting place.

Little Professor Moment

D. Ask questions.

1. Uncritical thinkers accept statements as they are given.
2. Critical thinkers ask questions to test inaccurate statements.
3. Example: Consider the statement, “Trucks are safer to drive than cars.”
 - a. An uncritical thinker will believe that trucks are safer to drive than cars and decide to buy a truck.



b. A critical thinker will ask questions about the statement. Which trucks and cars were evaluated? Who did the evaluation? What kinds of tests were done on the trucks and cars? What safety features were tested? What speeds were used in the tests? How many tests were completed?

Little Professor Moment

E. Base judgments on evidence.

1. Uncritical thinkers find opinions that match their own belief.
2. **Opinion**—a belief or judgment based on grounds insufficient to produce complete certainty.
3. Critical thinkers find evidence to support valid claims.
4. **Evidence**—data that tends to prove or disprove something.
5. Example: You are reading a newspaper and find an article claiming that cookies are healthier to eat than brownies. You prefer eating brownies.
 - a. An uncritical thinker that prefers brownies to cookies will not read the article for fear of being proved wrong. You may begin trying to find an article stating brownies are a healthy food.
 - b. A critical thinker will read the article to consider the evidence and then do more research to find out if cookies really are healthier to eat than brownies.

Little Professor Moment

F. Look for connections.

1. Uncritical thinkers are narrow-minded.
 2. Critical thinkers realize knowledge in one subject applies to other subjects.
 3. Example: You watch a video demonstrating a technique used to train a pet dog.
 - a. An uncritical thinker will believe that the technique can only be used on dogs, and that the person in the video is the only one able to perform that technique.
 - b. A critical thinker will see the technique and realize that the same training will work on your pet pig.
- Use an Encyclopedia Moment and ask students to identify events in the Encyclopedia that would have required a great amount of thinking. Give students two minutes to complete this task. Then have students share with class when completed. At the end of each student's presentation ask questions pertaining to their event, being sure to highlight each of the needed behaviors for critical thinking.

 Wow! We are really getting the hang of this critical thinking stuff. I hope we are beginning to recognize how important this skill can be.

Objective 3. Classify evidence, argument, and persuasion.

 Now that we have learned behaviors of critical thinking, we need to learn three terms. These terms will allow us to take our new knowledge and apply our critical thinking skills. I need for you to be amazing writers as we determine the meaning of these three words. Write your definition of the terms and then compare your answers with a friend. Be ready to share your answers with the class in two minutes.

Show HS.24.TM.D or capture on a writing surface. Use a Me-you-us Moment to engage student learning.

III. Classify evidence, argument, and persuasion.

- A. Evidence—data that tends to prove or disprove something.
- B. **Argument**—a statement or reason offered as proof of evidence.
- C. **Persuasion**—to cause a person to do some thing by advising or urging.



Use a Crayon Moment to engage student learning and hand out HS.24.AS.A. Give students ten minutes to complete.



It is now time to apply our critical thinking skills to a news article [article is cited HS.24.AS.A, but not present. Does this article have a website or can we get permission to print it in the appendix?]. Let's critically think about the issue of animal rights. Listen closely and capture the following directions in your notebook. Use a red marker to highlight all statements of persuasion in the article. Use a blue marker to highlight all statements of argument in the article. Use a yellow marker to highlight all statements of evidence in the article.

We now know how to define critical thinking skills and know methods of critical thinking. We can also classify persuasion, argument, and evidence to help us in our critical thinking. Now, think critically about today's lesson. Think to yourself about possible test questions that may come from what we discussed today.



Review/Summary

Hand each student an index card. Write two questions on the note card that may possibly be a test question concerning critical thinking. Give the students one minute. Have students share questions and answers with a friend. Collect the cards and use as the interest approach for the next day.



Application

►Extended Classroom Activity:

Have students watch commercials for evidence, argument, and persuasion.

►FFA Activity:

Have students prepare a persuasion speech for a public speaking Career Development Event or analyze another student's speech.

►SAE Activity:

Have students develop an advertisement for their own SAE project. Present and share advertisements while students find the persuasion, argument, and evidence.



Evaluation

A written test, HS.24.Assess, is provided to measure Objectives 1, 2 and 3. For problem number eleven of the test. Please find a copy of an opinionated article from the newspaper or magazine. You may also use the following article:

Weise, Elizabeth. Texas groups want to keep horse meat off dinner tables. USA Today. January 28, 2003. p. 10D.



Answers to Assessment:

1. Personal, purposive and reflective thinking used to solve problems, make decisions and clarify concepts.
2. The act of convincing
3. Statements offered as proof of evidence
4. Data offered to prove or disprove a statement
5. True
6. True
7. False
8. False
9. True
10. True
11. Claims will vary with article.



CRITICAL THINKING SKILLS

Define the following terms:

1. Critical thinking skills
2. Persuasion
3. Argument
4. Evidence

► **True or False.**

Write "true" in the blank if the statement is true. Write "false" in the blank if the statement is false.

- _____ 5. Evidence is used to support an argument.
- _____ 6. Critical thinkers ask questions to clear confusion.
- _____ 7. Uncritical thinkers look for relationships between subjects.
- _____ 8. Critical thinkers hang on to beliefs despite new information.
- _____ 9. Critical thinkers simplify complex situations.
- _____ 10. Both critical thinkers and uncritical thinkers have opinions.

For the next problem, read the article and circle the evidence.

11. What claims can also be made with this same evidence.



CRITICAL THINKING SKILLS

Critical thinking is personal purposive and reflective thinking used to solve problems, make decisions and clarify concepts.



Skills—the ability to do something well arising from talent or training.



METHODS OF CRITICAL THINKING

◆ **Accept new evidence.**

→ **Uncritical thinkers hold on to their own cherished ideas and beliefs.**

→ **Critical thinkers accept valid evidence even if it is against their previous belief.**

◆ **Resist abuse of propaganda.**

→ **Uncritical thinkers are easily swayed to believe propaganda.**

→ **Propaganda—information or ideas spread to promote or injure a cause, movement, or nation.**

→ **Critical thinkers see through propaganda.**

◆ **Simplify confusion.**

→ **Uncritical thinkers avoid complex situations.**

→ **Critical thinkers take time to find an answer to complex problems.**



METHODS OF CRITICAL THINKING (CONTINUED)

◆ Ask questions.

→ Uncritical thinkers accept statements as they are given.

→ Critical thinkers ask questions to test inaccurate statements.

◆ Base judgments on evidence.

→ Uncritical thinkers find opinions that match their own belief.

→ Opinion—a belief or judgment based on grounds insufficient to produce complete certainty.

→ Critical thinkers find evidence to support valid claims.

→ Evidence—data that tends to prove or disprove something.

◆ Look for connections.

→ Uncritical thinkers are narrow-minded.

→ Critical thinkers realize knowledge in one subject applies to other subjects.



CLASSIFY ARGUMENT, EVIDENCE, AND PERSUASION

◆ **Evidence**—data that tends to prove or disprove something.

◆ **Argument**—a statement or reason offered as proof of evidence.

◆ **Persuasion**—to cause a person to do something by advising or urging



► **Directions:**

Use a red marker to highlight all statements of persuasion in the article. Use a blue marker to highlight all statements of argument in the article. Use a yellow marker to highlight all statements of evidence in the article.

► **Copy of article:**

- Weise, Elizabeth. PETA: 'Happy cows' ad is a lie. USA Today. December 11, 2002. p. 8D.

