



Advanced High School

National FFA Organization

## Lesson AHS.12

### CONCEPTUALIZING IDEAS

**Unit.** Stage One of Development—ME

**Problem Area.** Who Am I in Light of Serving Others.

**Precepts.** C2: Conceptualize ideas.

**National Standards.** NL-ENG.K-12.7 — Evaluating Data — Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources to communicate their discoveries in ways that suit their purpose and audience.



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

- 1 Illustrate different methods of problem solving by conceptualizing ideas.
- 2 Increase his or her understanding of how to brainstorm to conceptualize ideas.



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**Time.** Instruction time for this lesson: 50 minutes.



## Tools, Equipment, and Supplies

- ✓ Writing surface
- ✓ Overhead projector
- ✓ AHS.12.TM.A
- ✓ AHS.12.TM.B
- ✓ AHS.12.TM.C
- ✓ AHS.12.TM.D
- ✓ AHS.12.AS.A
- ✓ AHS.12.AS.B
- ✓ AHS.12.AS.C—one per student
- ✓ AHS.12.Assess—one per student



**Key Terms.** The following term is presented in this lesson and appears in bold italics:

- ▶ Brainstorming



## Interest Approach

*Say to students:*



In this exercise you will examine first the individual and then the group problem-solving process as you brainstorm solutions to a given problem. Brainstorming is a technique to aid creativity in which people are instructed not to critique any ideas flowing from the exercise until later, in a way to suspend disbelief as one does when watching the movies. In brainstorming, a person or a group of people writes down every possible idea, solution, approach, etc., without regard to feasibility and practicality.

*Give everyone copies of AHS.12.AS.A and say:*



Working individually, brainstorm as many possible solutions as you can and then record these solutions on your sheet of paper.

*After two minutes say to the students:*



Form work groups of four persons each and spend three minutes brainstorming additional solutions to the same problem.

*After three minutes reassemble the group and tell the students:*



Compare the number of solutions arrived at in the individual and in the group problem-solving efforts.



*Conclude the exercise with a discussion in which the group members share their feelings about individual and group problem-solving efforts.*

*Summarize the material as follows:*



As we have just experienced, to brainstorm is to spark ideas off of your own imagination or the imagination of someone else. It results in: 1) totally bright ideas and 2) really dull ideas. Today, we will look at the role that brainstorming can play in conceptualizing ideas.

### ►Variations

*You may present two different problems, one for the individual process and one for the group problem-solving process.*

*You may begin the exercise with group problem-solving and then have the students brainstorm individually.*

**Objective 1.** Illustrate different methods of problem solving by conceptualizing ideas.

I. Different methods of problem solving by conceptualizing ideas

*Introduce the steps to conceptualizing ideas by saying to the class:*



The use of logical steps in conceptualizing ideas quickly improves the quality and efficiency of any group discussion.

*Display AHS.12.TM.A and say to the students:*



Although the actual steps can be described in various ways, most formulas are founded on a traditional, scientific method that includes the following stages:

1. Defining the problem
2. Checking involvement
3. Collecting information and diagnosis
4. Suggesting solutions
5. Evaluating alternatives
6. Decision making and gaining commitment
7. Planning implementation
8. Evaluating or re-planning



Develop a flexible plan that utilizes logical steps in problem solving as part of the preparation.



The greatest advantage of using these suggested logical steps to conceptualizing ideas is that they require groups to separate the suggestion of solutions from the discussion of them, thus eliminating a step during which many groups get stuck. It is only natural that when one member suggests a solution, other members will reply with an opinion about the suggestion. This stop-



ping and starting slows down the meeting, makes it difficult for all possible solutions to be stated, and tends to put the person who suggested the solution on the defensive. It does not allow for the various solutions to be compared with one another and to rise or fall on their own merits.



By arguing over suggestions, groups may rob themselves of the opportunity to hear additional suggestions. Furthermore, people who are shy or people who think that they must be on the defensive against nay-sayers may be reluctant to make suggestions at all. Focused conceptualization of ideas and using methods such as brainstorming help to eliminate unwanted group discussion.



The technique of brainstorming utilizes the logical steps in the conceptualization of ideas by clearly separating the suggestion of solutions from the discussion of their value. The basic rule for brainstorming is that no one can comment on, or in any way belittle, the suggestion of another member. The only response to another's suggestion that is allowed is building on it with another idea. This tends to increase the number and variety of suggested solutions, as the threat of having an idea "shot down" by the group is reduced. Much of the value of brainstorming can be achieved by separating step four—the suggesting of solutions—from step five—the discussion and testing of solutions—in the regular use of logical steps in problem solving.

*Review this information using a Choral Response Moment.*

**Objective 2.** Increase his or her understanding of how to brainstorm to conceptualize ideas.

## II. How to brainstorm to conceptualize ideas

*Display AHS.12.TM.B and say to the students:*



As we just outlined, brainstorming is an essential part of conceptualizing ideas, and it is also an essential part of coming to good decisions. How does brainstorming help you think better and make better decisions.



First, it helps you to conceptualize good ideas.



Second, it fosters creativity; it encourages people to see possibilities. Brainstorming causes you to stretch, to not stop at the first thing that comes to your mind but to keep thinking.



Third, it encourages everyone in a group to participate.



Fourth, brainstorming is fun, and because it's fun, it causes you to get caught up with thinking in a way that makes you want to think some more.

*Review this information using a Choral Response Moment.*



Say to the students:



Brainstorming is part of many FFA activities, like developing the chapter's year-long program of activities. Display AHS.12.TM.C and hand out AHS.12.AS.B and say:



This how-to handout offers some suggestions to help make brainstorming happen when conceptualizing ideas. We'll look at some suggestions for individuals, and then we'll look at some guidelines to apply to a group who is brainstorming together.



Let's look at the suggestions for individuals for brainstorming and conceptualizing ideas. When you're in a brainstorming situation, it's important to first get yourself free to brainstorm. The following are some suggestions to help you do that:



First, try to visualize things with your mind's eye. Let pictures freely come to your mind.



Second, concentrate on what you're brainstorming about. Try to get everything else off your mind and focus on the subject at hand.



Third, don't criticize or judge your own ideas internally. If you do, you'll start hesitating and being too careful.



Fourth, take creative risks; think in terms of no limits.



Fifth, believe in and use your own experiences as a springboard for ideas. Each person has all the experiences he or she needs for brainstorming and conceptualizing ideas.

Review this information using a Choral Response Moment.

Display AHS.12.TM.D and hand out AHS.12.AS.C and say:



Now we're ready to move onto group guidelines for brainstorming and conceptualizing ideas. The first step is to help create the right kind of environment for the group to brainstorm together. You contribute to this kind of environment when you:

1. Encourage as many ideas as possible
2. Don't judge ideas—as good or bad—during brainstorming
3. Don't look ahead to making decisions; stay totally in the brainstorming mode
4. Build on one another's ideas
5. Encourage participation from everyone in the group
6. Don't worry about the words you're using to express an idea; simply try to describe the picture you're seeing with your mind's eye
7. List the ideas that your group comes up with so that you don't lose them

Review this information using a Choral Response Moment.





## Review/Summary

*Review the unit by using a Little Professor Moment.*

*Point out that:*



Think about the two words that make up this word—brain and storming. Once you experience brainstorming, you'll realize that it is like a storm in the brain. Ideas begin to flow that we never knew we had, and one idea breeds another idea, and that idea breeds yet another. Brainstorming often surprises people. It blows off the thoughts that lie on top and exposes ideas we're often unaware are inside us. We begin to appreciate more fully what we are capable of and how creative we are. By causing us to stretch beyond our usual way of thinking; brainstorming makes it hard for us to snap back to where we were before, because we've grown a conceptualized new idea.

*At this time pass out AHS.12.Assess.*



## Application

### ►Extended Classroom Activity:

*Have students use the group brainstorming techniques to establish a list of ideas to advance the image of agriculture in society.*

*Have students use the group brainstorming techniques to establish a list of ideas to advance their community.*

### ►FFA Activity:

*Have students use the group brainstorming techniques to establish a list of ideas for advancing the FFA chapter.*

### ►SAE Activity:

*Have students use the individual brainstorming techniques to establish a list of ideas to advance their SAE project.*



## Evaluation

*AHS.12.Assess*

## Answers to Assessment:

f.

c.



b.  
e.  
g.  
a.

h.  
d.



## CONCEPTUALIZING IDEAS

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**Put the scientific method of conceptualizing ideas in order.**

- \_\_\_\_\_ a. Decision making and gaining commitment
- \_\_\_\_\_ b. Collecting information and diagnosis
- \_\_\_\_\_ c. Checking involvement
- \_\_\_\_\_ d. Evaluating/Re-planning
- \_\_\_\_\_ e. Suggesting solutions
- \_\_\_\_\_ f. Defining the problem
- \_\_\_\_\_ g. Evaluating alternatives
- \_\_\_\_\_ h. Planning implementation



# LOGICAL STEPS IN CONCEPTUALIZING IDEAS

| Problem-Solving Steps                     | Useful Member Roles                                                                                                                                           | Blocks                                                                                                                                                                      | Possible Methods                                                                                                                                                                |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Defining the problem                   | <ul style="list-style-type: none"> <li>• Orienting</li> <li>• Clarifying</li> <li>• Defining problem</li> </ul>                                               | <ul style="list-style-type: none"> <li>• Ambiguity</li> <li>• Different perceptions</li> <li>• Generalizations</li> </ul>                                                   | <ul style="list-style-type: none"> <li>• Problem census</li> <li>• Small groups</li> <li>• Needs analysis</li> </ul>                                                            |
| 2. Checking involvement                   | <ul style="list-style-type: none"> <li>• Testing</li> <li>• Supporting</li> <li>• Revealing interest</li> </ul>                                               | <ul style="list-style-type: none"> <li>• Silence</li> <li>• "Yessing"</li> </ul>                                                                                            | <ul style="list-style-type: none"> <li>• Going around the group</li> <li>• Ranking priorities</li> </ul>                                                                        |
| 3. Collecting information and diagnosis   | <ul style="list-style-type: none"> <li>• Giving information</li> <li>• Orienting</li> <li>• Summarizing</li> </ul>                                            | <ul style="list-style-type: none"> <li>• Moving to next step</li> <li>• Stepping too quickly</li> <li>• Lack of focus</li> </ul>                                            | <ul style="list-style-type: none"> <li>• Force-field analysis</li> <li>• Advance preparation</li> <li>• Data collection</li> </ul>                                              |
| 4. Suggesting solutions                   | <ul style="list-style-type: none"> <li>• Seeking opinions</li> <li>• Giving opinions</li> <li>• Coordinating</li> </ul>                                       | <ul style="list-style-type: none"> <li>• Starting to evaluate ideas</li> <li>• Limited participation</li> <li>• Minority not heard</li> </ul>                               | <ul style="list-style-type: none"> <li>• Brainstorming</li> <li>• Small groups</li> </ul>                                                                                       |
| 5. Evaluating alternatives                | <ul style="list-style-type: none"> <li>• Giving opinions</li> <li>• Testing feasibility</li> <li>• Mediating-harmonizing</li> <li>• Coordinating</li> </ul>   | <ul style="list-style-type: none"> <li>• Emotional distortions</li> <li>• Conflicts</li> <li>• Steam rolling</li> <li>• Majority voting</li> <li>• Loss of focus</li> </ul> | <ul style="list-style-type: none"> <li>• Guided discussion</li> <li>• Going around</li> <li>• Force-field analysis</li> <li>• Role playing</li> <li>• Risk technique</li> </ul> |
| 6. Decision making and gaining commitment | <ul style="list-style-type: none"> <li>• Giving opinions</li> <li>• Coordinating</li> <li>• Mediating-harmonizing</li> <li>• Testing for consensus</li> </ul> | <ul style="list-style-type: none"> <li>• Majority voting</li> <li>• Polarizing</li> <li>• Going along with group</li> <li>• (no commitment)</li> </ul>                      | <ul style="list-style-type: none"> <li>• Risk technique</li> <li>• Provisional try</li> <li>• Total-group discussion</li> <li>• Protecting minority opinions</li> </ul>         |
| 7. Planning implementation                | <ul style="list-style-type: none"> <li>• Giving information</li> <li>• Testing feasibility</li> <li>• Initiating</li> </ul>                                   | <ul style="list-style-type: none"> <li>• Lack of involvement</li> <li>• Generalizations</li> <li>• Vague responsibility</li> </ul>                                          | <ul style="list-style-type: none"> <li>• Implementation teams</li> <li>• Small groups</li> <li>• Committees</li> </ul>                                                          |
| 8. Evaluating/ Re-planning                | <ul style="list-style-type: none"> <li>• Coordinating</li> <li>• Giving opinions</li> <li>• Giving information</li> </ul>                                     | <ul style="list-style-type: none"> <li>• Expectations not clear</li> <li>• Implementation</li> <li>• Mechanics not clear</li> </ul>                                         | <ul style="list-style-type: none"> <li>• Work groups</li> <li>• Committee reports</li> <li>• Data Collection</li> </ul>                                                         |



- 1 it helps you to conceptualize good ideas**
- 2 it fosters creativity; it encourages people to see possibilities**
- 3 it encourages everyone in a group to participate.**
- 4 brainstorming is fun, and because it's fun, it causes you to get caught up with thinking in a way that makes you want to think some more.**



## SUGGESTIONS FOR INDIVIDUALS FOR BRAINSTORMING AND CONCEPTUALIZING IDEAS

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**When you're in a brainstorming situation, it's important to first get yourself free to brainstorm. The following are some suggestions to help you do that:**

- ◆ **First, try to visualize things with your mind's eye. Let pictures freely come to your mind.**
- ◆ **Second, concentrate on what you're brainstorming about. Try to get everything else off your mind and focus on the subject at hand.**
- ◆ **Third, don't criticize or judge your own ideas internally. If you do, you'll start hesitating and being too careful.**
- ◆ **Fourth, take creative risks; think in terms of no limits.**
- ◆ **Fifth, believe in and use your own experiences as a springboard for ideas. Each person has all the experiences he or she needs for brainstorming and conceptualizing ideas.**



## GROUP GUIDELINES FOR BRAINSTORMING AND CONCEPTUALIZING IDEAS

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**The first step is to help create the right kind of environment for the group to brainstorm together.**

**You contribute to this kind of environment when you:**

- ◆ Encourage as many ideas as possible
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- ◆ Build on one another's ideas
- ◆ Encourage participation from everyone in the group
- ◆ Don't worry about the words you're using to express an idea; simply try to describe the picture you're seeing with your mind's eye
- ◆ List the ideas that your group comes up with so that you don't lose them



Our local grocery store has been suffering a significant decline in sales during the past year. Management is unsure about the cause(s) of this loss except that it may be due to more aggressive marketing by its competitors—large numbers of television advertisements, more ad space in the local newspaper, more costly displays, etc. Since the store is unable to secure additional funds for marketing, its management has decided to find new ways to increase the store's marketing efforts without spending more money.

You have been brought in as a consultant to assist in the expansion of the store's viability and hence, increase its sales. How is this to be done.



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