



Lesson MS.51

RESOURCES AVAILABLE

Unit. Stage Three of Development—DO

Problem Area. How Do I Make Things Happen?

Precepts. **N2:** Demonstrates Problem-Solving Skills. **A4:** Identify and Use Resources.

National Standards. NL-ENG.K12.3--Evaluation Strategies--Students apply a wide range of strategies to comprehend, interpret, evaluate and appreciate texts.



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

- 1 Define the term "resources."
- 2 Identify three categories of resources and give two examples of each.
- 3 Define the term "relevant resources."
- 4 Assess personal resources.



© 2004 National FFA Organization
It is illegal to reproduce copies of this material
without written permission from the National FFA
Organization.
National FFA Organization



Time. Instruction time for this lesson: 100 minutes.



Resources

Ackermann, Ernest and Karen Hartman, “Searching and Researching on the Internet and the World Wide Web,” Wilsonville, OR, Franklin, Beedle & Associates, 1999.



Tools, Equipment, and Supplies

- ✓ Student Notebooks
- ✓ Dum Dum Suckers—one per student
- ✓ Blank Sheet of Paper—one per student
- ✓ MS.51.TM.C
- ✓ MS.51.TM.D
- ✓ Overhead Projector
- ✓ Magazines to be Cut Up
- ✓ Individual Pairs of Scissors for at Least Half the Class
- ✓ Glue for the Entire Class

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

- ***Resource***
- ***Relevant resource***



Interest Approach



Everyone will need to put on his or her spy cap today and be a curious investigator.

Read the following in a mysterious way to create an atmosphere of interest and intrigue.



Our class has been selected to be part of a top secret think tank for the government on a BIG national problem. A think tank is a group of very smart people who are brought together to study a topic. To solve our top secret question, you will consider all the information you know on the topic and will write this down in your secret agent notebook. Get your writing surface and utensil ready to take notes.



2

Wait until the students are finished getting their materials out.



Without talking, take 30 seconds to write down all you know or all the places you could find information on the top secret question. Are there any questions? Drum roll please!

Have the students make a drum roll noise to increase the intensity of the moment.

Show MS.51.TM.A



The question is: "How many licks does it take to finish a Dum Dum?" Your time begins now.

Time students and answer any questions they may have about the question. Stop after 30 seconds.



Do you think you can solve this top secret question with the information you have written in your notebook? Signal, "yes" by giving a thumbs-up.

Pause, signal "no" by giving a thumbs-down.



Raise your hand if you can tell me some ways we could collect information to solve the top secret question.

Post ideas on a public writing surface. Some examples may include: actually licking a Dum Dum; talking to someone who eats Dum Dums all the time; talking to a Dum Dum production employee.



We are going to investigate some of these sources of information. One group will receive Dum Dums for their own consumption and actually count the licks. A second group will listen to an interview with the president of Dum Dum, Inc., using MS.51.AS.A; about how many licks he thinks it takes. A third group will read a study, using MS.51.AS.B; on how many licks it will take.

Divide the class by assigning them to a group according to Dum Dum flavors: root beer, cherry, or grape. Have the students count off by saying root beer, cherry, or grape.



To break into teams, we will use three flavors of Dum Dums: root beer, cherry, or grape. When pointed at, count off saying root beer, cherry, or grape.

Go around the room, having the students count off using the Dum Dum flavors. Then separate them into groups and explain what will happen.



When I say, "Go," you will break into your three groups, depending on the Dum Dum flavor; then, we will assign the group an information source. Each group will have three minutes to determine what information is important to share with the whole think tank to help solve our top secret question.



Root beer will be given Dum Dums to determine the number of licks that can be accomplished in three minutes. One lick is comparable to pulling the Dum Dum down your tongue once.

Cherry will listen to an interview with the president of Dum Dum, Inc. about how many licks he thinks it takes to get to the center.

And grape will read a study to determine how many licks it takes. Everyone needs to concentrate on what information they hear that can help solves our problem.
Go!

See the attachments for a script for the president of Dum Dum, Inc. and the study. Designate a student to read the script of the Dum Dum president ... if you have a student who could ham it up, that is ideal. Give each student in the grape group a copy of the study.

Wait three minutes for students to complete their task. Give them a one minute warning.



This is a one minute warning!

Wait for the end of three minutes.



Time is up! We will now have 30 seconds to determine who is the reporter. Choose one person now.

Once they have chosen, have each group report on their findings in whatever order you wish.



Each reporter needs to share with the class the findings of the group.

Let each group report on its findings.



We have done a great job as a think tank and have provided plenty of information to submit to the government on our top secret question! As a reward for a job well done, each of you may now have a Dum Dum and return to your seats.

Give all students a Dum Dum and wait for them to return to their seats.



As you eat your Dum Dum, think about the informational sources we used to solve our problem and get ready to learn more about them.



TEACHING STRATEGIES

Objective 1. Define the term “resources.”



What were some of the benefits of using the various resources to help determine our answer? Let's capture some of our responses and develop a concrete definition of resources in our notes.

Wait for students to accomplish task, then have them take notes.

I. Definition of the term "resources."

A. All the information sources we used to solve our top secret problem are resources.

Show MS.51.TM.B. Have the students copy this onto their writing surface.



Let's write the following definition in our notes.

1. A **resource** is a collective wealth of knowledge critical to solving problems.

Ask students the following question.



What were the resources we used when studying Dum Dums?

Some examples would be: the interview with the corporate president; the report; the data we collected from actually licking the Dum Dums.

Using the Choral Response Moment, have the students say “resource” in a monotone, even voice when you point to them. Do it three times.



To help you remember the definition of the term "resources," we are going to recite together in a monotone, even voice the ending to the following definition. I will read a sentence, but when I point to you, I want the whole class to respond with the right answer. Ready?

A collective wealth of knowledge critical to solving problems is referred to as a _____ . *Point to students and expect them to say “resource” as a unit.*

Upon completion, ask the students to answer the following question.



Raise your hand if you can think of some times when you might need resources in your life.

Get several responses and then move on to categories of resources.



Now that we know the definition of resources, let's look at the categories of resources.



Objective 2. Identify three categories of resources and give two examples of each.

Use MS.51.TM.C.



Resources are a very important part in helping solving problems. These resources generally fall into three categories. Each of these categories is used for very specific tasks. Let's capture these resource categories in our notes.

II. Categories of resources

A. Three categories of resources:

1. Individuals: person who shares information with you
2. Information: book, magazine, website, etc.
3. Personal: something you know about or are talented in

Have students think of examples of each category in their notes.



Next to each category, write at least two examples of a resource from that category. You will have one minute. Begin!

Upon completion, ask several students to share their answers.



Raise your hand to share your examples of each category.

After examples have been given for each category, move on to the activity.



We have thought of some fantastic examples! In a moment, you will use the magazines in the

classroom to cut out at least two examples from each category of resources you would use in any situation. Then, paste them onto a blank sheet of paper and label the categories.

Give students ten minutes to cut out pictures and paste them into categories. If there are not enough scissors or glue to go around, advise the students to share

An example for an individual resource would be a news reporter in the magazine; an information resource would be an advertisement for a magazine or a book; and a personal resource example could include something in the magazine the student already knew about.



This is our two minute warning!

At the end of time, stop the students.



Stop, time is up!

Once completed, have the students bring their papers to you and display them on a bulletin board for the next class day.



Bring your "works of art" to me and then be seated. They will be displayed on the bulletin board by tomorrow for you to use as reminders of resources that are available for you to use in any situation.



6

Wait for this to happen.



You have done such a great job of identifying the three categories of resources! Now let's consider what makes those resources relevant.

Objective 3. Define the term "relevant resources."



Using our three categories, it is important to think about what makes a resource the perfect fit for a solution or need. Therefore, we will now define what a relevant resource is.

Ask students to define the word relevant in their notebooks.



Take the next 40 seconds to define the word "relevant" in your notebooks. Hint: think about the other times we have heard the word relevant used in conversation.

After 40 seconds, ask several students to share their answers.



Raise your hand to share your definition of the word "relevant."

After several answers, move on to the definition.



We are on the right track. Let's write down the following definition in our notes.

Use MS.51.TM.D.

III. Relevant resources.

A. **Relevant resources** are those that are logically related to the problem at hand.

1. Relevant individuals

Examples include: teachers, counselors or principals in school; people from a church or place of spiritual growth; boss or co-workers; parents or their friends; your friends.

2. Relevant information

Examples include: library; schoolbooks; magazines at grocery stores; Internet

3. Relevant personal resources

Examples include: talents or capabilities you have, such as singing, showing, creed speaking, sports, and good grades.



Let's look at an example. If we were working on a project about the effects of fertilizer, what would be some relevant resources to consider?

Solicit answers from students. Some potential answers include: a farming magazine; a fertilizer salesman or company; a Website on fertilizer.



Once completed, transition from defining resources to thinking about personal resources the students brings to the class.



You have done an excellent job of thinking about resources and how they apply to a certain issue or problem. Now, let's focus on the personal resources you bring to our class.

Objective 4. Assess personal resources.



During our magazine cutting exercise, what were some of the personal resources we found in the magazines?

These could include: knowing about a book; a new video game; a movie star; a new Internet site.



Each of us brings special personal resources to our class. In order for each of us to respect the special resources our classmates bring, take the next three minutes to complete this personal resource inventory.

Pass out the MS.51.AS.C, and give the students three minutes to complete. Once the students complete the inventory, give them 30 seconds to share three of their personal resources with two neighbors either to their right or left.



When I say, "Go," take 30 seconds to share three personal resources with two neighbors. Go!

Once the time is up, ask the students to hand in their personal resource inventories.



Please hand in your personal resource inventories.



Review/Summary

Have the students pretend to be popcorn and answer the following questions.



Act like you are popcorn. Pop up silently when you know the answer to the following questions:

What is a relevant resource?

What are the three categories of resources?

What is one personal resource?

What resources did we use to solve the Dum Dum problem?

What pictures did you cut out of the magazines?

Conclude the lesson.



We have done an excellent job today of thinking about relevant resources. We have also examined what resources we bring to our class. Let's continue over the next few weeks to identify additional resources.



8



Application

► Extended Classroom Activity:

For homework, ask each student to prepare a list with at least one example of the following resources: individual, information, and personal. Have the students actually collect resources on a topic of choice and write a one-page report on the information found.

► FFA Activity:

Have the students gather resources necessary to plan an FFA activity.

► SAE Activity:

Have the students identify and collect six resources related to their SAE project.



Evaluation

MS.51.Assess

Answers to Assessment:

Individual, information, personal

Magazine: information

Dairy farmer: individual

Documentary movie: information

Your knowledge on sports: personal

Piece of music: information

Judge: individual

True/False

T

F

T

T



MS.51.Assess Name: _____

RESOURCES AVAILABLE

Label each resource shown as either an individual, information, or personal resource. Share one project, task, or problem where you could apply that resource.

Magazine:

Project/task/problem:

Dairy farmer:

Project/task/problem:

Documentary movie:

Project/task/problem:

Your knowledge on sports:

Project/task/problem:

Piece of music:

Project/task/problem:

Judge:

Project/task/problem:

Answer the following True/False questions by circling T or F.

T F A resource is a collective wealth of knowledge critical to solving problems.

T F The three categories of resources are individuals, personal, and index.

T F Relevant resources are those that are logically related to the problem at hand.

T F An example of an information resource is an Internet website.



MS.51.TM.A

HOW MANY LICKS DOES IT TAKE TO FINISH A DUM DUM?



11

MS.51.TM.B

TERM RESOURCES

Define the term “resources.”

◆ **A *resource* is a collective wealth of knowledge critical to solving problems.**



MS.51.TM.C

CATEGORIES OF RESOURCES

Three categories of resources:

- ◆ **Individuals:** person who shares information with you
- ◆ **Information:** book, magazine, website, etc.
- ◆ **Personal:** something you know about or are talented in



MS.51.TM.D

RELEVANT RESOURCES

Define the term “relevant resources.”

◆ ***Relevant resources*** are those resources that are logically related to the problem at hand.



14

MS.51.AS.A

INTERVIEW WITH PRESIDENT OF DUM DUM, INC.

Hello! I would like to thank you for your interest in Dum Dum, Inc., and for eating our candy. It is now seen as a tradition during the Halloween season.

I wanted to clue you in to some exciting research we have been doing. After eating 999 Dum Dums, we have discovered it takes the average person 107 licks to get to the middle of a Dum Dum. This has been a very important discovery for us, and one we hope your findings support.

There is a small difference in the number of licks it takes for red, in contrast to all the other colors.

Don't be dumb; eat Dum Dums.

Thank you,



MS.51.AS.B Name: _____

RESEARCH ON THE DUM DUM

Dum Dum Pops were originated by Akron Candy Co., Bellevue, Ohio, in 1924. I.C. Bahr, the early sales manager of the company, named the ball-shaped candy on a stick and figured dum-dum was a word any child could say.

In March 1953, Spangler purchased the trade name, along with equipment and machinery to make Dum Dums, and moved the operation to Bryan, Ohio. After the wax-wrapped pops had been in production in Bryan for just four weeks, a celebration was held. On June 4, 1953, a special Dum Dum booth set up outside the factory supplied Dum Dums free to all the children—grownups, too—and offered chances to win special gift prizes.

Regular Dum Dums come in more than ten flavors and are enjoyed by kids of all ages! Flavors are cream soda, cherry, butterscotch, root beer, watermelon, grape, blue raspberry, strawberry, sour apple, and the mystery flavor. New flavors are chocolate, cotton candy, and bubble gum! If you counted 13 flavors, you are correct. You get ten in the larger bags—more than you get with other lollipops!

Dum Dums have their own mascot—the Dum Dum Drum Man—who has been with us since 1966!

Dum Dums are made from a mixture of sugar and corn syrup. The liquid sugar and corn syrup are pumped from storage tanks to a pre-cooker, and then the cooking process starts. The mixture is

pumped to the final cooker and cooked under a vacuum. The vacuum removes moisture and heat from the candy.

After the candy is cooked, it is placed in a large mixer, where the color, flavor, and citric or malic acids are mixed into the batch. Citric acid reduces the sweetness and makes the flavor stronger. Malic acid enhances the flavor of non-citrus flavors.

After these ingredients are added, the batch is mixed. It is put into a batch roller, which extrudes the candy into a press. The press forms the Dum Dum head and inserts a stick into it. After the candy is formed, it is cooled so it can harden. Following cooling, the pops are transported to the wrapping machines on conveyer belts. From the wrapping station, the Dum Dums are transferred to either a bagging or boxing operation, and then stored in a climate-controlled warehouse until they are shipped to a distributor or retailer.

We have found it can take an average of 119 licks to get to the center of one Dum Dum, regardless of flavor.



MS.51.AS.C Name: _____

PERSONAL RESOURCE INVENTORY

Using the following list, put a check next to the personal resource items you consider yourself to be good at.

- _____ Singing
- _____ Playing sports
- _____ Playing instrument

- _____ Reading
- _____ Writing
- _____ Theatre
- _____ Animal showing
- _____ Public speaking
- _____ Drawing
- _____ Team competitions
- _____ Memorizing facts
- _____ Mentoring others
- _____ Add at least three other items:
 - 1.
 - 2.
 - 3.

