

# Thinking Skills

**Overview:** This lesson provides basic foundational information about two types of thinking skills: critical and creative. Students have used critical and creative skills each day with the “Thought for the Day.”

**Educational Goal:** The goal of this lesson is for each student to (1) comprehend critical and creative thinking skills, and (2) appreciate the importance of thinking skills to his or her life.

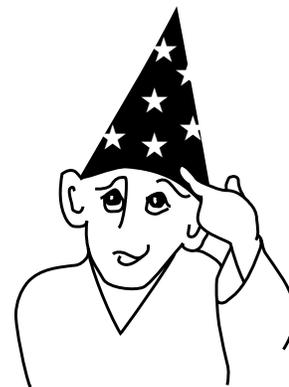
**Objective:** The objective of this lesson is for each student to (1) comprehend critical and creative thinking skills, and (2) respond to the value of critical and creative thinking skills. The student will:

*Cognitive:* — Explain the elements of critical and creative thinking

*Affective:* — Appreciate the value of critical and creative skills

**Skill/Standard Connections:** This lesson has connections to the Tennessee KSAs – *Think Creatively* and *Think Critically* and the EFF Standard – *Solve Problems and Make Decisions*. (Appendix II)

**Teaching Strategy:** This lesson briefly introduces the students to thinking skills. It covers critical and creative thinking skills specifically. The students have been using both of these skills since they entered the *Learning Skills* classroom. The main points for critical and creative thinking begins with a working definition and several key characteristics of those types of thinkers. The lesson approach is to discuss each element, allowing the students to discover their own meaning and examples. The final main point provides a creative exercise for the students to understand how the creative process works in a team setting. The students should be encouraged to pass on their learning to their families and others.



**Time:** 1-1/2 hour

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**Reference:**

Vincent Ryan Ruggiero,  
*Critical Thinking: Supplement  
to Becoming a Master Student*,  
Houghton Mifflin Company,  
Rapid City, Michigan, 1993.

## Lesson Plan

### Introduction

**Attention:** From the first day of class we have been about and working to develop our thinking skills.

**Question:** 1. What have you learned in this class that has helped your thinking skills?

**Anticipated Responses:** — *Thoughts for the Day*  
 — *STAR & PDSA*  
 — *Test Taking*  
 — *Homework*  
 — *Learning Styles*

**Question:** 2. Why would it be important to develop your thinking skills?

**Question:** 3. How can you use it at home with your family, in your community, and at work?

**Motivation:** Though we have been talking about and working with thinking skills over the past weeks, this lesson will help you to understand more about the specifics of critical and creative thinking skills.

**Overview:** During this lesson we will take a look at and discuss thinking skills. We will look at two specific categories of thinking: critical and creative. We will look at a working definition of each of the types of thinking and the characteristics of each type of thinker. We use critical and creative thinking each time we do a “Thought for the Day,” but we will talk about that later. We will end up the lesson by practicing a creative-thinking exercise.

## Body of Lesson

### Main Point 1: What Are Thinking Skills?

The mind we have is a wonderful thing. You may have heard it is like a computer. You may have also heard that we use only a portion of its capability. We can improve our thinking skills by understanding specific types of thinking, how they work, and practicing to improve our thinking abilities. If we become more conscious about those skills, we become better as a person, family member, and worker.

We will look at two types of thinking skills in this class: critical thinking and creative thinking.

**Question:** What do you believe critical thinking means?

**Anticipated Responses:** — *It is where we take a hard look at things to see what they really mean.*  
 — *When I analyze something.*  
 — *Breaking a subject down to its various parts to understand them.*

**Question:** What do you believe creative thinking means?

**Anticipated Responses:** — *Inventing something new.*  
 — *Thinking up something from scratch.*  
 — *Putting things together in a new way.*

Good answers. We will take a look at both of those skills; let's start with critical thinking.

There are two categories of thinking that we are going to focus on: critical and creative. Critical and creative thinking help you to solve problem and make decisions. The more flexible and efficient your thinking, the more effective you will be in your life.

## Main Point 2: Critical Thinking

A working definition of critical thinking is exercising or involving careful judgment or evaluation, e.g., judging the feasibility of an idea or product.

Critical thinking is a very important skill to develop. We are asked to analyze and understand so many things in this very fast-pace world. If you are going to be able to compete, keep up with, and actually move ahead, your ability to think critically will be a valuable tool. Once you learn and perfect this skill—pass it on and teach others.

The following are several statements about critical thinkers. Let's read through each statement, the descriptions, discuss what they mean, and how you can use the information.

### Critical thinkers are able to do the following things:

- Be open minded about new ideas.
- Are intellectually independent.
- Know when there is a need for more information about something.
- Ask questions.
- Base their judgments on evidence.
- Look for connections between subjects.
- Know the difference between a conclusion that might be true and one that must be true.
- Analyze and understand concepts, information, and behavior.
- Break things down and separate fact from opinion.
- Question everything that doesn't make sense.
- Try to avoid common mistakes in reasoning.

### Teaching Tip



Talk the students through each statement. Help them to develop their own understanding and appropriate examples. Link these statements to in-class and out-of-class previous work and experiences.

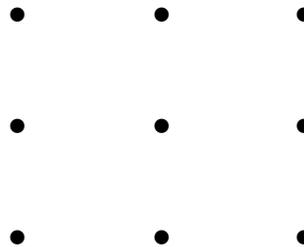
- Be Honest with themselves.
- Overcome confusion.
- Try to separate emotional thinking from logical thinking.
- Do not argue about something that they know nothing about.
- Try to build a vocabulary so that they can understand what others are saying and make their ideas clear to others.

### Main Point 3: Creative Thinking

A working definition of creative thinking is having unusual ideas and innovative thoughts, able to put things together in new and imaginative ways. We have often said throughout this course that it is like thinking outside of the box. The following exercise will help you to understand our usual pattern of thinking and begin to see things in a different way “outside of the box.”

Try this exercise. Turn in your student Note taker to the nine-dot exercise. I want you to connect all nine dots by drawing only four straight lines with your pen or pencil never leaving the paper.

#### Nine Dot Exercise



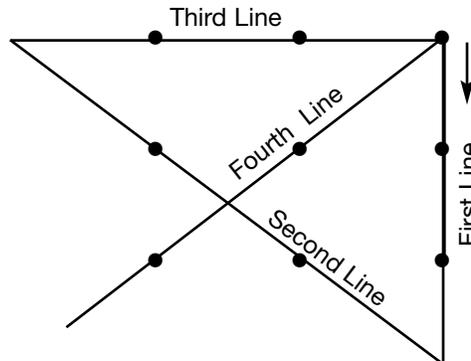
#### Teaching Tip



Provide the students with the instructions for the Nine Dot exercise in their student guide.

How did you do? When you looked at this exercise did you first see and try to solve the problem using a box-type pattern? Did you see the box? Remember I said it is about seeing something in a new way and thinking outside of the box. What did you do first?

Here is the solution.



What this exercise shows is we often see things using our old patterns or old thinking. When it comes to creative problem solving you need to think “outside the box” to solve the problem.

Creative thinking is a great skill to develop. Your ability to develop new and imaginative ideas, concepts, plans, and other things will make you a valued person and team member. Developing this skill helps you to solve problems better by using creativity. The value of creative thinking is all around us. Just turn on the television or pick up a magazine to see new or evolving innovation.

Creative thinking calls for taking risks and stepping past what we know. The more you practice this skill, the better you get at it. Creative thinking is a tool that can help you and your family. Once you learn and perfect this skill—pass it on and teach others.

We have used brainstorming in this class, which is using the creative-thinking process. **Here are some other creativity tips to help you to develop your creative-thinking skills:**

- Don't get hooked on finding the right answer. There can be many right answers in a creative process; it depends on your point of view.
- Don't always be logical. Sometimes we need to look at something in a very different or not so logical way to create a better way.
- Break the rules (of thinking) sometimes. New breakthroughs have happened because of someone not always following the rules.
- Be impractical. If we are always practical, we will always see things the same way. Sometime we have to step out of what is usual or safe.
- Let yourself be playful. Creativity is a fun process; so let go and step outside of the box.
- Be a little foolish. It's okay, that is part of freeing your mind to think new thoughts.
- Let yourself fail. You get better with practice.
- Always consider yourself to be creative. This goes to our never saying we cannot do something; we need to always try.

**Question:** Each day you have used both critical- and creative-thinking skills during the “Thought for the Day.” How?

**Teaching Tips**

The size of the groups depend on how many learners there are.

Asking learners to present their inventions to the class will help them to feel more comfortable when speaking in front of others. It will also help them to feel more at ease about their presentation that they have to give on the last day of *Learning Skills*.

**Main Point 4. Creative Thinking Exercise**

The following exercise will help to show you not only how creative thinking works, but also for you to see you can do it.

**Creating an Invention**

Now that we have discussed critical and creative-thinking skills, let's try out a fun activity that will help you to apply your creative-thinking skills.

**Question:** Have you ever invented something?

**Question:** What is an invention?

The definition of *invention* in *Merriam Webster's Collegiate Dictionary*, 10th edition, says that an invention "is a discovery or finding or a product of the imagination." The second definition of the word *invention* is "creative."

We want you to create an invention as a team. We will break into groups. As a team you will need to brainstorm what you want to invent. Draw your invention on chart paper or poster board and present it to the class.

You will have 15-20 minutes to break into your groups, brainstorm what you will invent, draw it out, and prepare to share it with the class. I also would like you to be prepared to answer a few questions about your creation. Write these questions down so that you will remember to answer them during your presentation.

1. What is the name of your invention?
2. How did you come up with the invention?
3. Who would want or need the invention?
4. What was it like to use your creative skills as a group?

The answers to these questions will vary. Learners' inventions are always unique and very creative. Some groups may come up with an invention that is out of this world and different, while other groups may focus on a specific need or product and how to improve it. There are no wrong answers. Questions 1-3 are for learners to analytically think about their invention. Question number 4 leads to the objective and overall understanding of creative thinking skills.

(After the groups have spent 15-20 minutes on the project, ask them to wrap up their group discussion. Make sure that they have answered the questions. Let them know that they may not have completed the activity to their satisfaction but they had only 15-20 minutes and have done a great job with that time. If some groups are really struggling with this

activity, let them know that wherever they're at is okay. This is not an easy activity. If they did have difficulty, try to connect their thoughts about the activity to creative thinking. Use the question: Is creative thinking fun and easy? Allow each group time to share their discoveries and to answer the question.)

**Question:** Now that we have completed the activity, let's reflect back on creative thinking skills. Is creative thinking fun and easy?

Creative thinking takes time, just as critical thinking takes time. When you answered the questions about the activity you were critically thinking about the process you went through. So really we used both creative and critical thinking skills. Creative thinking comes from being imaginative. Imagination is a wonderful thing, but the process of thinking imaginatively sometimes takes a lot of planning.

This exercise shows you that you can be creative and have fun doing it. You can also see that working with a team really helps the creative process, like our Synergy exercise.

## Conclusion

**Summary:** We have looked at thinking skills that can help all of us with our education and other aspects of life. We can never spend too much time building these skills, because they are important to our growth.

I want you to summarize what you have learned about thinking skills.

**Re-Motivation:** Thinking skills are extremely important for all of us. We need to push ourselves in this area to be all we can. Remember that we are only using a portion of this wonderful computer called our mind. So begin to lean forward and stretch your efforts. It is like the picture of the brain with the light switch—it's time to turn on our minds to reach our full potential.

**Close:** I know you've heard this final phrase on the television from the advertisements for the Negro College Fund, but it is such a wonderful and true phrase. "The mind is a terrible thing to waste." Therefore, let's push and break through to new heights.

### Teaching Tip



Allow students time to respond, and add any information they may miss.