

Module 2

Developing Thinking Skills in English Language Teaching for Upper Secondary Education Level



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Objectives

By the end of this module, participants will be able to:

- demonstrate understanding toward thinking skills in different levels, and
- organize English language teaching activities which enhance thinking skills.

Have you ever told yourselves to 'stop thinking'?

Right now you are told to 'stop thinking'? Let's stop thinking and report to us whether or not you can stop thinking.

What are thinking skills?

Thinking skills can be defined as the ability gained through experience or training to use the brain to achieve tasks of mind.

Tasks of Mind:



Acknowledge

Recognize

Understand

Analyze

Plan

Evaluate

Inquire

Solve problems

Make decision

Imagine

Create

Bloom's Taxonomy

Benjamin Bloom (Bloom & Krathwohl, 1956), an American psychologist, proposed six levels of thinking skills:

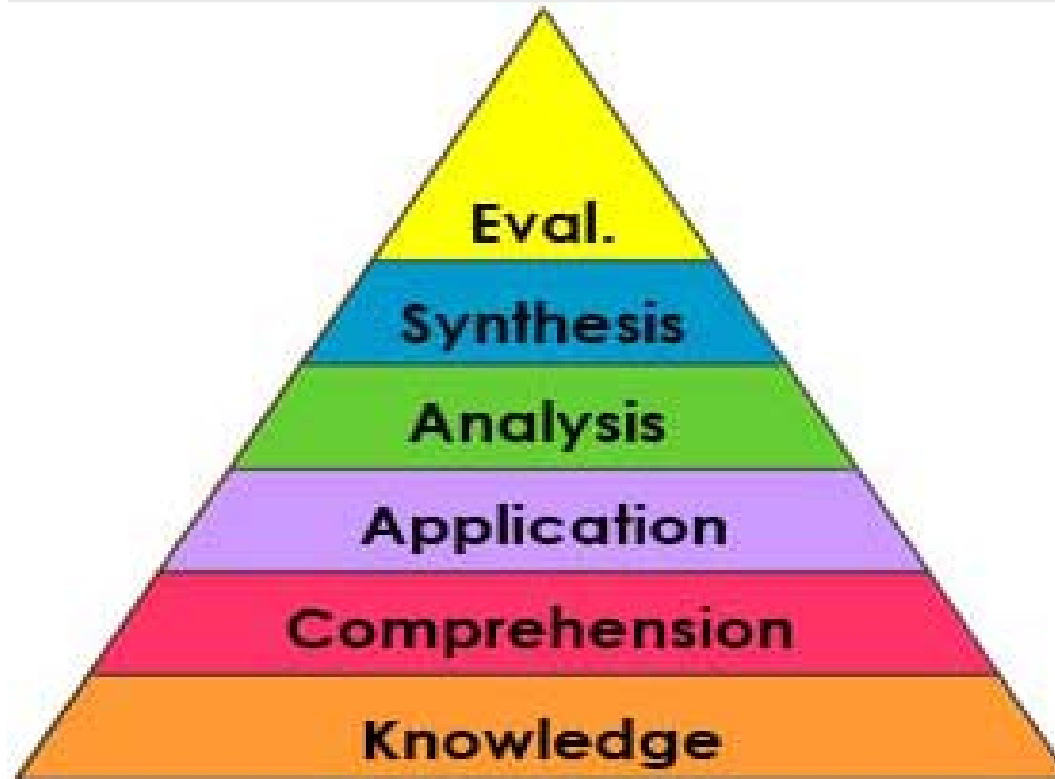
- Knowledge
- Comprehension
- Application
- Analysis
- Synthesis
- Evaluation.



Benjamin Bloom

Source: <http://redie.uabc.mx/contenido/vol6no2/art-104->

Bloom's Taxonomy

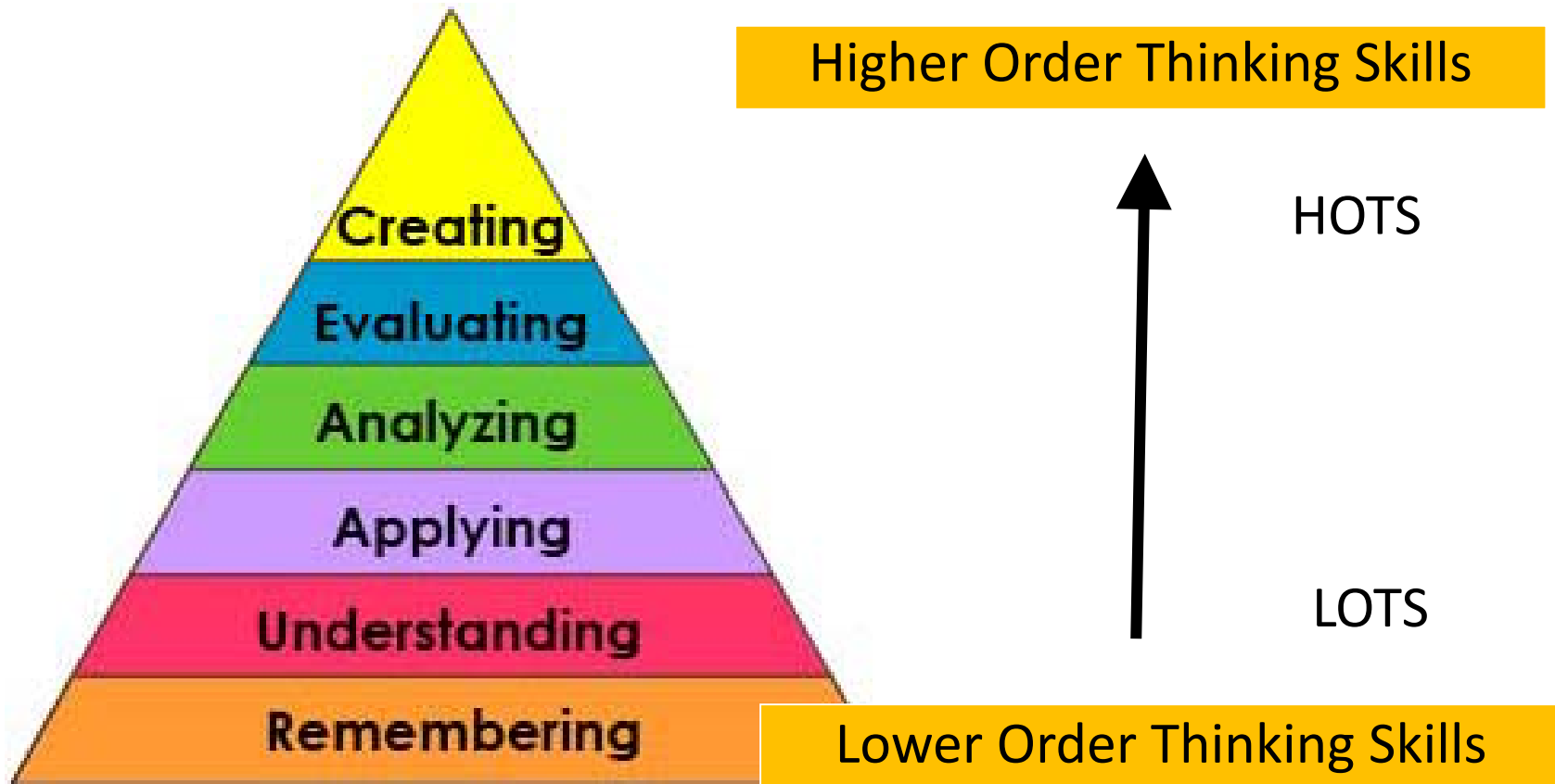


(Bloom & Krathwohl, 1956)

Anderson & Krathwohl (2001) proposed a revised version of Bloom's thinking skills taxonomy which are:

- Remembering,
- Understanding,
- Applying,
- Analyzing,
- Evaluating, and
- Creating.

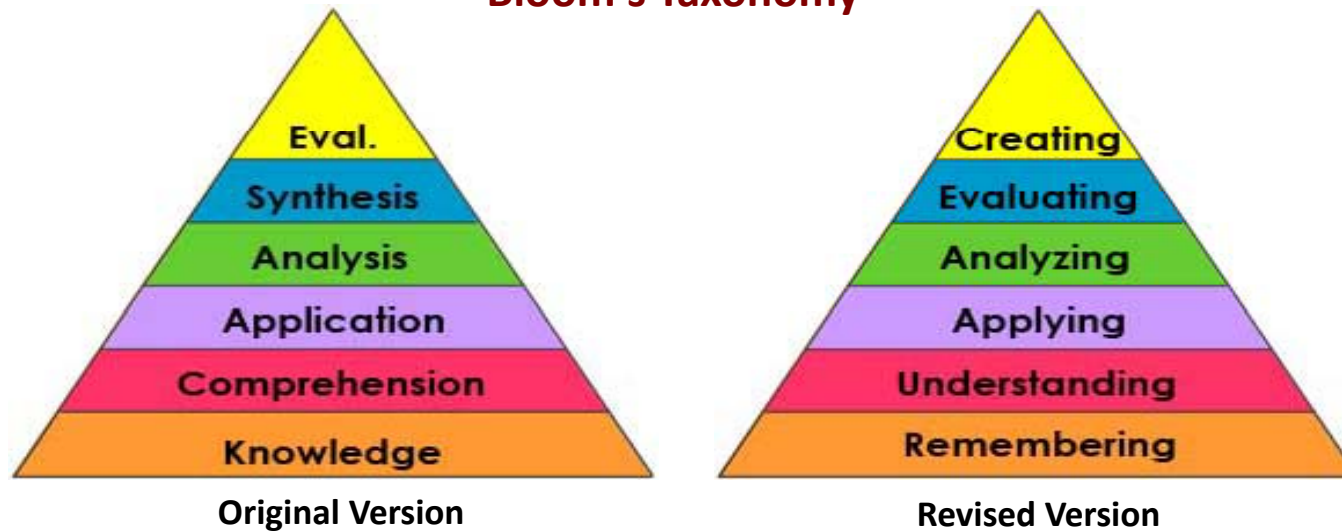
Revised Bloom's Taxonomy



(Anderson & Krathwohl, 2001)

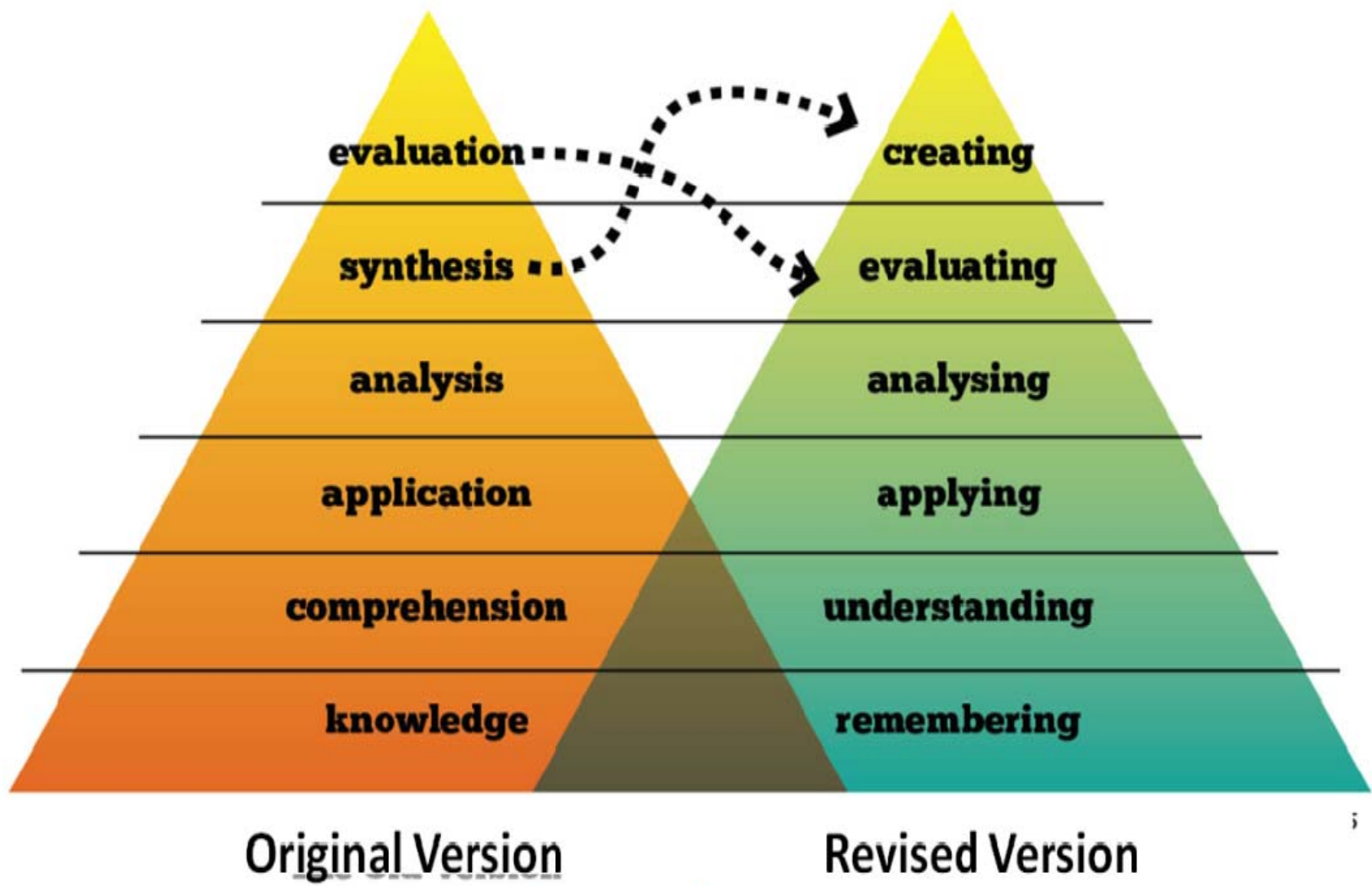
Original vs. Revised

Bloom's Taxonomy

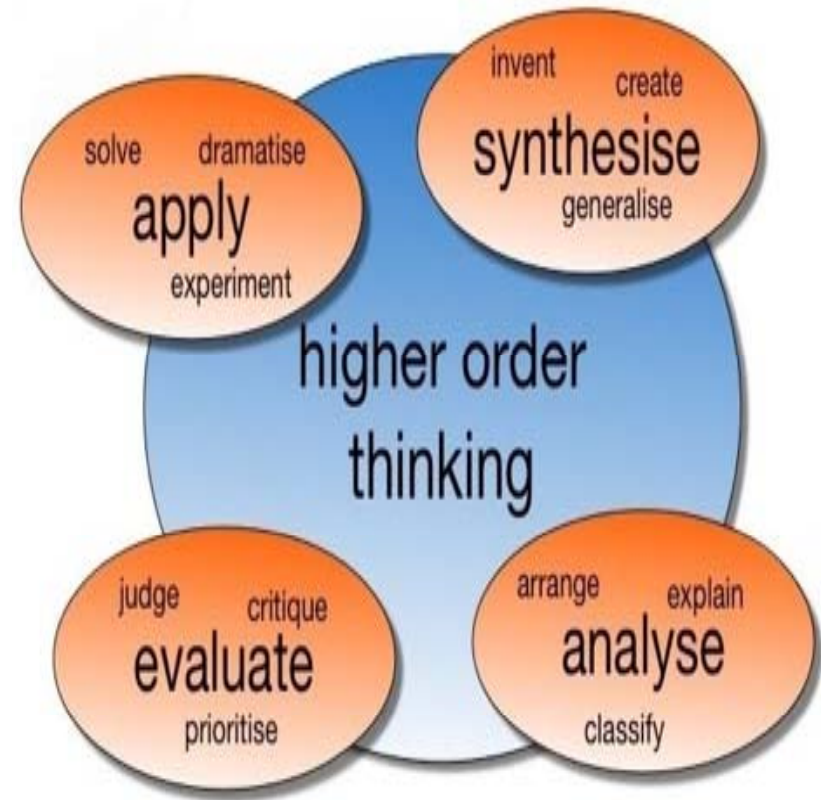
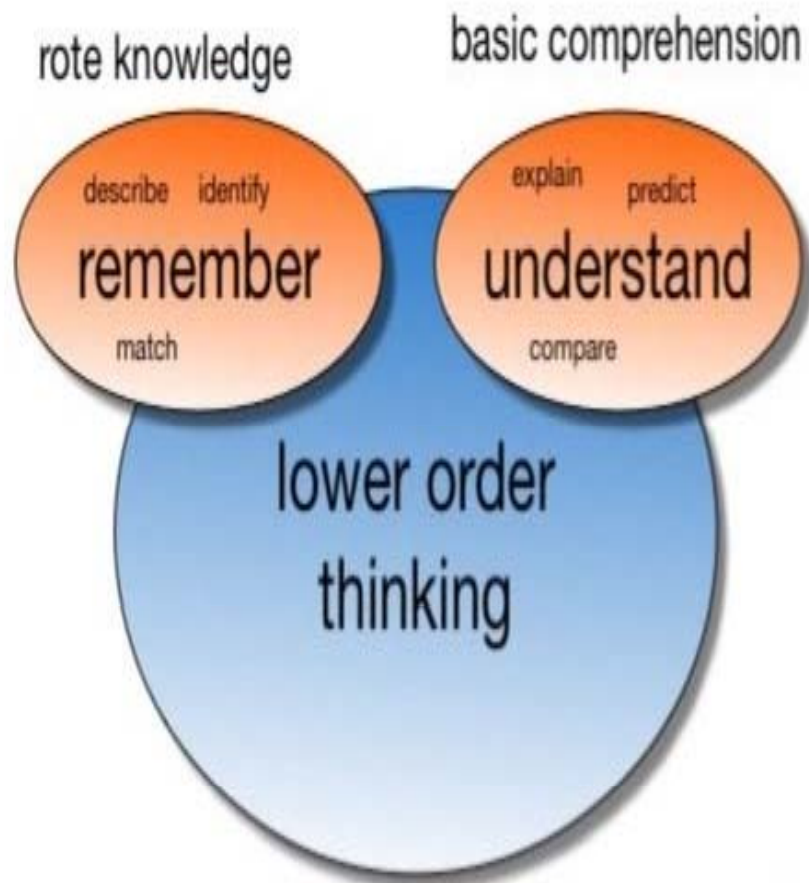


Source: http://www.odu.edu/educ/roverbau/Bloom/blooms_taxonomy.htm

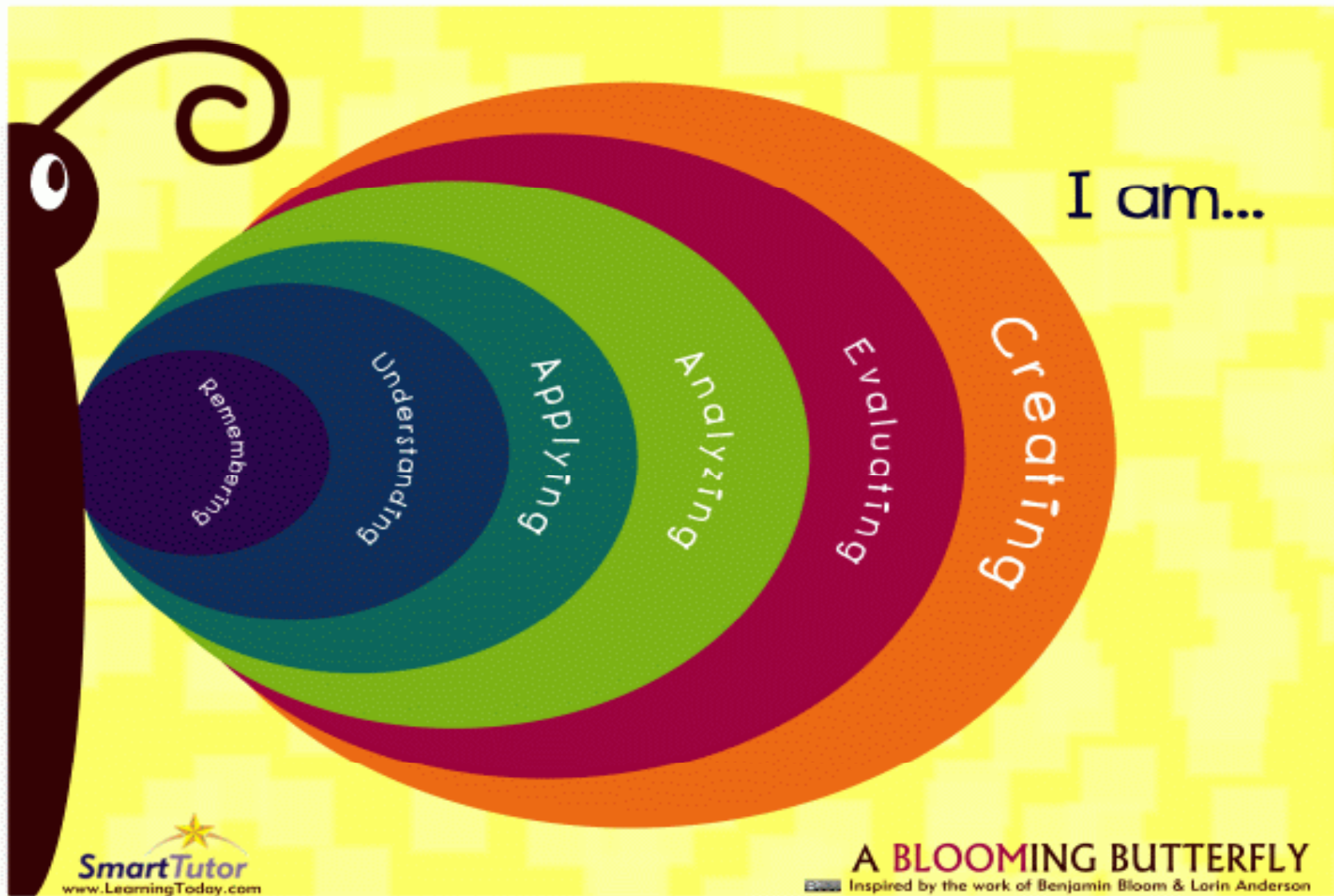
Nouns	→	Verbs + ing
Evaluation	→	Evaluating
Synthesis	→	Creating



Source: psia-nw.org



Source: http://www.projectict.com/Healthy_Me/Blooms_Taxonomy.html

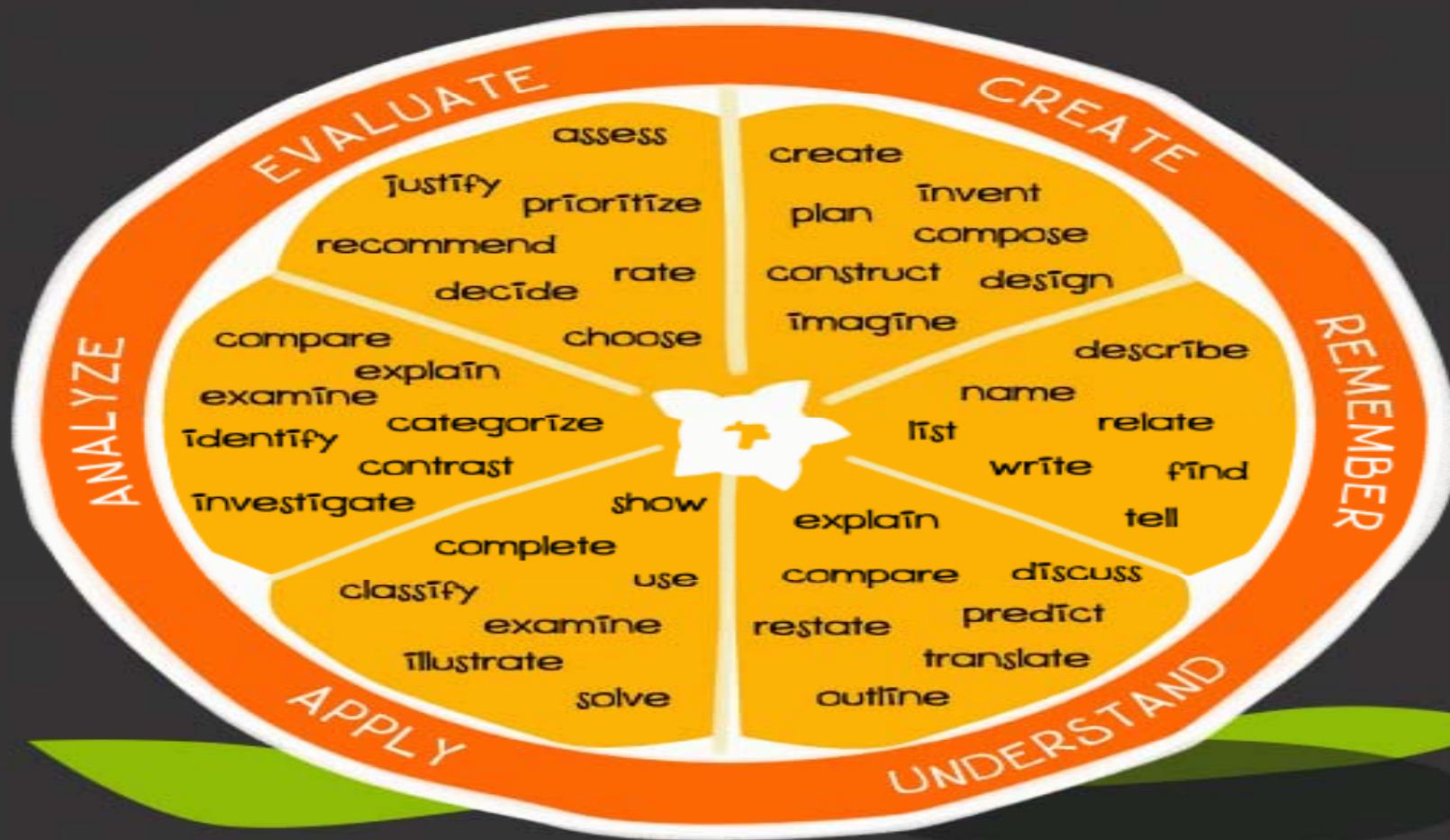


☀ Blooming Verbs List ☀

Remember	Understand	Apply	Analyze	Evaluate	Create
name	predict	solve	examine	choose	create
tell	explain	show	compare	decide	invent
list	outline	illustrate	contrast	recommend	compose
describe	discuss	complete	investigate	assess	plan
relate	restate	examine	categorize	justify	construct
write	translate	use	identify	rate	design
find	compare	classify	explain	prioritize	imagine



Can you...



North Carolina, U.S.A

In North Carolina, U.S.A (North Carolina Public School, 2010) the school determined for learners the following thinking skills:

1. Knowing
2. Organizing
3. Applying
4. Analyzing
5. Generating
6. Integrating
7. Evaluating

California's Thinking Skills

In California (Facione, 1998), the thinking skills learners should develop include:

1. Interpretation
2. Analysis
3. Evaluation
4. Inference
5. Explanation
6. Self-Regulation

United Kingdom's Thinking Skills

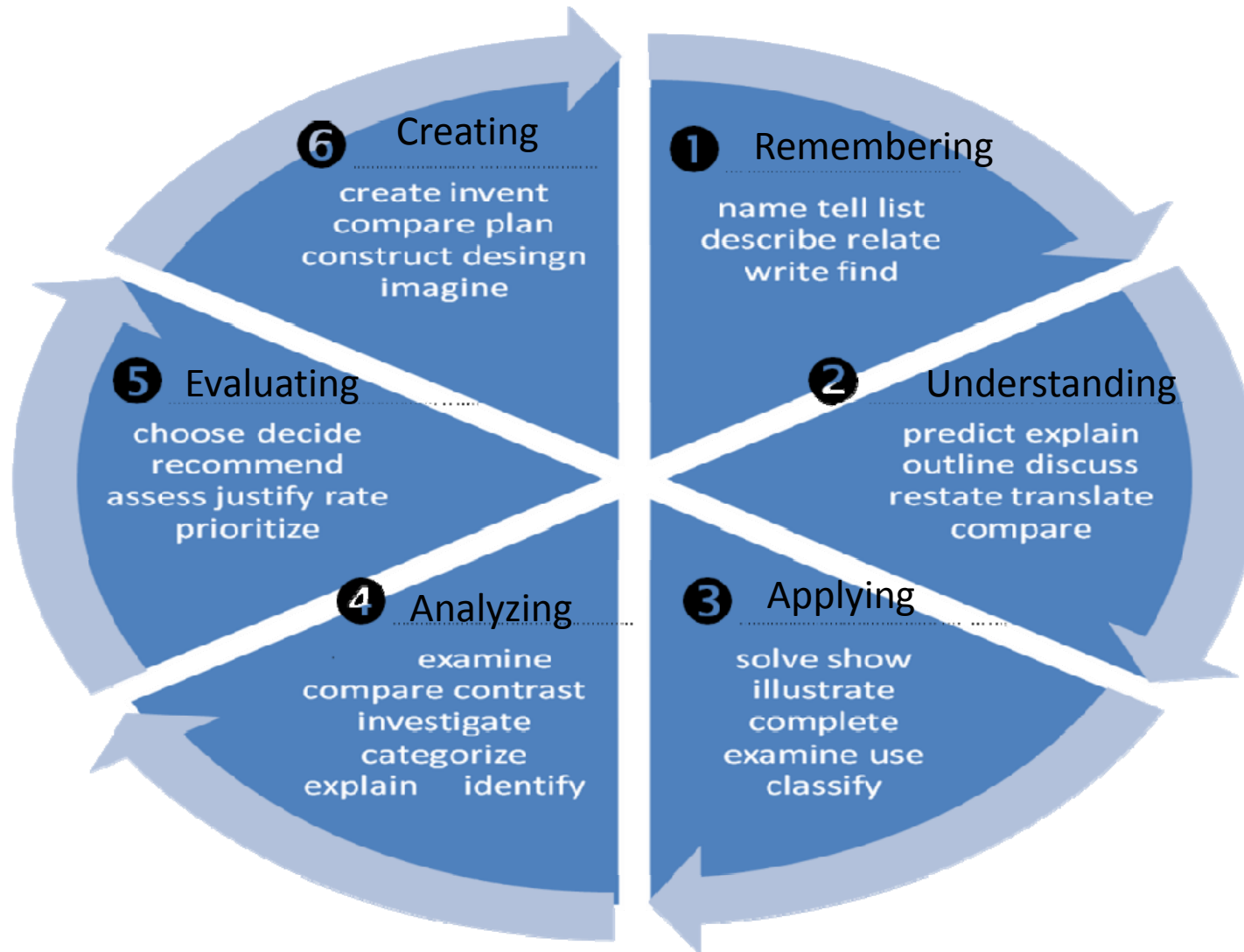
In the U.K., The Department for Education (Department for Education: Secondary, 2010) has determined the five thinking skills as follows:

1. Information Processing
2. Reasoning
3. Inquiry
4. Evaluation
5. Creative Thinking

Worksheet 2.1.1

Classroom Action Verbs to Create Thinking Skills

Study the lists of classroom action verbs below and tell which set can create what type of thinking skills.



Worksheet 2.1.2

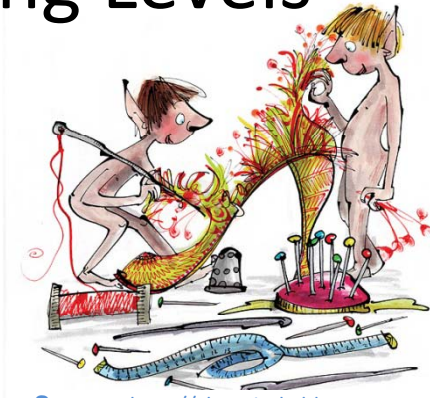
Classroom Questions and Thinking Levels

Questions in reading comprehension: “**The Elves and the Shoemaker**”

(Source: www.bbc.co.uk/cbeebies/misc/stories).

Form a group of four and determine which category of thinking each question below should belong to in the Revised Bloom’s Taxonomy:

Remember, Understand, Apply, Analyze, Evaluate, and Create.



Source: <http://chencindy.blogspot.com>

	Questions	Which category of thinking should each question belong to?
1.	<i>What happened in the story?</i>	Remembering
2.	<i>Why did it happen that way?</i>	Understanding
3.	<i>Which part did you like best?</i>	Analyzing
4.	<i>Can you think of a different ending?</i>	Creating
5.	<i>What did you think of the story? Why?</i>	Evaluating
6.	<i>What would you have done with the thing you learned?</i>	Applying

Why are thinking skills important?

Thinking skills are required for every individual, since they can lead to:

1. critical perception of information
2. good learning
3. good communication
4. good problem solving
5. being creative
6. acknowledgement of one's potentials



Students can be trained for thinking skills.

Students who are trained for thinking skills should be able to:

1. Give clear and systematic opinions
2. Take part in learning process and /or other activities with enthusiasm and liveliness
3. Give appropriate reasons
4. Solve new problems efficiently
5. Be more creative
6. Gain more self confidence.

Worksheet 2.2

GAT - Tests of Thinking Skills for Upper Secondary School Students



Source: studychannels.com

Most of the upper secondary school English teachers have additional duties to prepare their students for taking a GAT test. GAT or General Aptitude Test is a test to be used to examine students' potentials to pursue the study in the university levels.

Instructions: Form a group of four to help find the correct answer for each test item. Try to figure out what thinking skills needed for being able to answer it.

(Source: GAT Test, March 2011, Retrieved from <http://www.niets.or.th/>)

Speaking (Items 2, 11, 12)

Choose the best answer.

2. A: _____?

B: She's lovely. I really like her.

1. How do you see Jane
2. How do you meet Jane
3. How do you go with Jane
4. How do you find Jane

Alec: Have you made a decision about the accommodations yet?

Liz: Yes, I've chosen the cottage, not a hotel this time.

Alec: _____11_____ Why?

Liz: I want to make our trip a romantic one.

Alec: So, we have to buy things and cook ourselves?

Liz: Certainly. There're a few places where we can do the shopping

_____12_____. It'll be fine.

11. 1. Oh, I like it.
 2. It's superb.
 3. The cottage?
 4. What is it?
12. 1. Don't worry.
 2. Take your time.
 3. No kidding
 4. Have fun

Odd One Out (Items 16-19)

Three of the words in each group relate to one another to their meaning.

Choose the word that does NOT belong.

16. 1. grab 2. seize
 3. snatch ④. rise
17. ①. perceive 2. achieve
 3. attain 4. acquire
18. 1. chubby ②. overload
 3. overweight 4. plump
19. 1. violent 2. forceful
 3. aggressive ④. exciting

Meaning Recognition (Items 20, 22)

Choose the alternative which has the same meaning as the underlined word in the given sentence.

20. Apply some moisturizer on your skin when it gets dry.
1. Students should apply what they have learned in their real life.
 2. I had to apply the brake very quickly.
 3. I will apply a plaster on the cut to your finger.
 4. My sister wants to apply for a new job.
22. The SWAT team is forcing the criminal to release the little girl.
1. I can't wait for Jessica to release her new album.
 2. Please join hands to ask China to release fewer greenhouse gases.
 3. The public want the governor to release updates on the accident.
 4. The aim of the project is to release elephants back in to the forest.

Reading (Items 29, 30)
Choose the best answer.

Systems Engineer
<p>Position: Systems Engineer</p> <p>IT Department</p> <p>Job Responsibilities:</p> <ul style="list-style-type: none">• Prepare detailed flow charts and diagrams outlining systems capabilities and processes.• Research, plan, install, configure, troubleshoot, maintain and upgrade hardware and software interfaces with the operating system.• Good English written and verbal communication skills, hardworking, service-minded and able to work outside office hours and on holidays.• Good team play with initiative and a willingness to learn. <p>Qualifications:</p> <ul style="list-style-type: none">• Bachelor's degree in Computer Engineering, Science or related field• 3-5 years experience in systems administration and Network LAN/WAN• Experience evaluating systems performance and trouble-shooting problems involving business applications, OS software and server hardware• Good knowledge of Internet architecture (firewall, DMZ, proxy)

29. Which of the following candidates is NOT suitable for this job?

1. A person who likes to work alone.
2. A person who has a degree in Computer Science.
3. A person who can speak both Thai and English fluently.
4. A person who has worked in systems administration since 2005.



30. What can be inferred from the comic strip?

1. The girl doesn't say no.
2. The boy doesn't say no.
3. The boy doesn't like the girl.
4. The girl doesn't like the boy.

Developing Thinking Skills in ELT: Brain-based Approaches

- Mind Mapping (Tony Buzan, 1993)
- Multiple Intelligences (Gardner, 1993)
- Thinking Hats (De Bono, 1976)

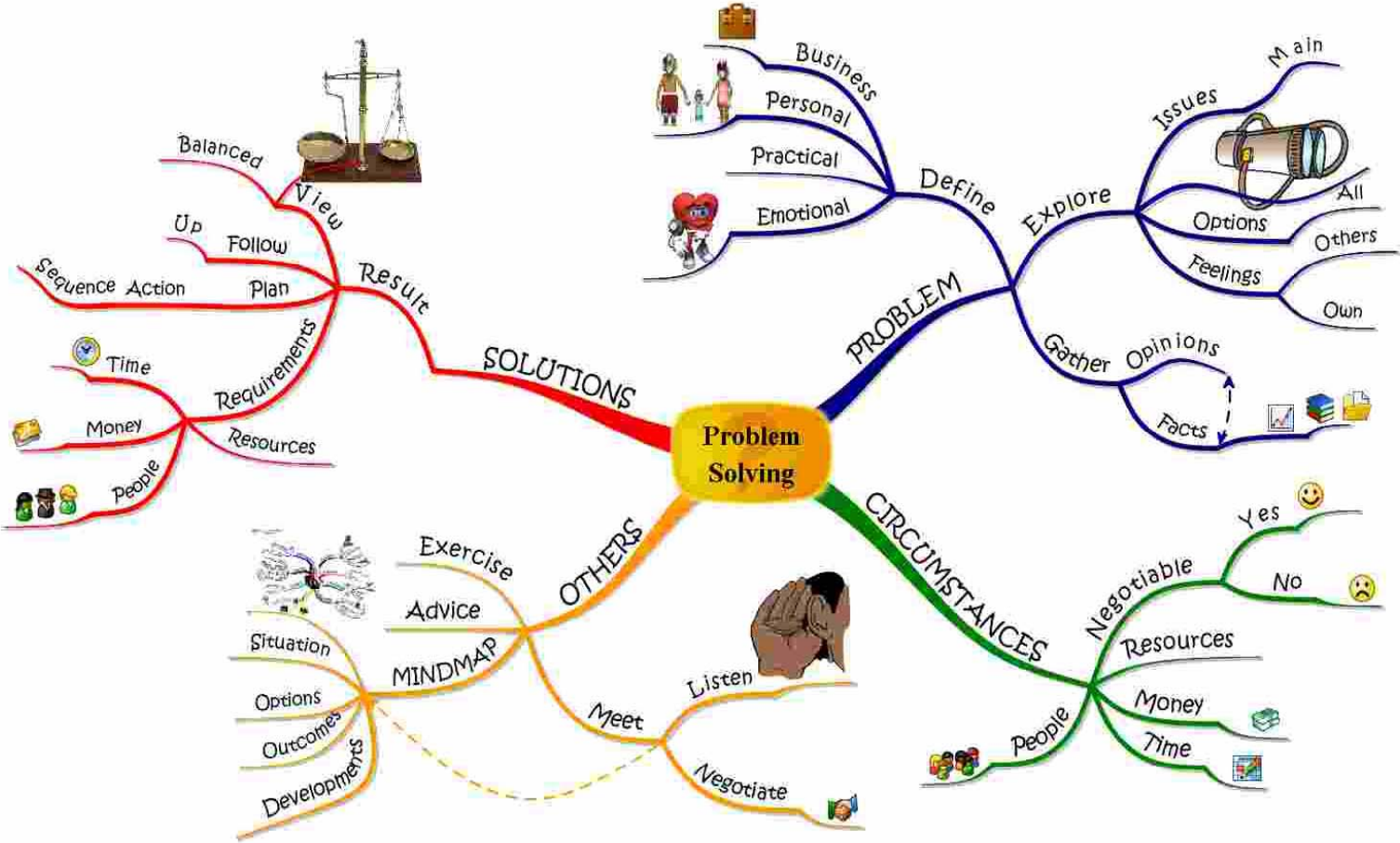
Mind Mapping

Mind maps, concept maps, or graphic organizers are representations of ways to process abstract ideas into concrete ones.

Mind mapping is a popular technique teachers can use to practice students' thinking skills.

A clip showing how to draw a mind map can be observed by visiting the website:
http://www.mindtools.com/pages/article/newISS_01.htm

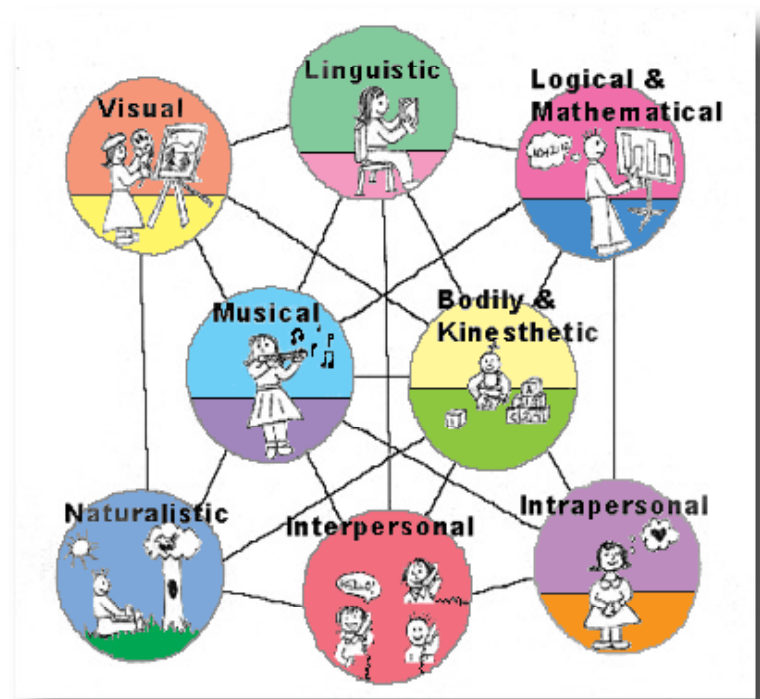
An Example of Mind Mapping



Multiple Intelligences

Multiple Intelligence theory suggests that a human can possess different types of intelligence including:

- Spatial-Visual
- Linguistic-Verbal-Audio
- Logical-mathematical
- Kinesthetic-Bodily
- Musical-rhythmic
- Interpersonal
- Intrapersonal
- Naturalistic



Students may best learn the given material through a different approach.

VAK (Visual-Audio-Kinesthetic) is an approach concerning the way students perceive new things.

Six Thinking Hats



White Hat – Information Seeking



Red Hat – Emotional Response



Yellow Hat – Positive Response



Black Hat – Negative Response



Green Hat – Creative Response



Blue Hat – Metacognition

Worksheet 2.3.1

Role Play for Thinking Activities – ‘Six Thinking Hats’

Instructions: Form group of four. Imagine a dialogue using a statement in the conversation cards below. The statement provided in each card represents its specific color: White – Information Seeking, Red – Emotional, Black – Negative, Yellow – Positive, Green – Creative, and Blue – Metacognition. Role play the conversation you make, while putting an imaginary hat in such color.

White hat says I can't decide yet, I need to find out more. Any ideas?

WHITE HAT



Feeling a bit Red here: I'm getting twitchy about doing this now.

RED HAT



'With a Black hat, I'd say that we could not afford to do that.'

BLACK HAT



Paying more on employees' overtime can speed up the process of our project.

YELLOW HAT



'Blue calling: The whole contraption is too heavy. It will sink without trace.'

BLUE HAT



Try it another way. Let's mix the more active participants with the less active ones to make the training more colorful.

GREEN HAT



Example 1:

Situation – At an import-export company.

John: Paying more on employee's overtime can speed up the process of our project
(Yellow Hat)

Mary: I'm afraid we could not afford to do that. (Black Hat)

Developing Thinking Skills in ELT: Philosophical Approaches

Stories for Thinking

Stories for Thinking

“Stories for Thinking” developed from the belief believe that every child is a philosopher by nature. Children see the world ambitiously, and begin to question and discuss about the possibilities of the world around, which is the same way as people do in philosophy (Matthew Lipman, 2003).

“Story for thinking” has been brought to use as classroom activities to practice thinking skills since then.

Steps in 'Stories for Thinking'

Steps used in 'Stories for Thinking' to develop thinking skills in an English language teaching:

- Present an arousing issue
- Give students "time for thinking"
- Have students post any comments or questions to be discussed
- Have the whole class select interesting questions to be discussed
- Have students give reasons to accompany their ideas/opinions
- Ask students who do not give reasons, "Why do you think so?" / "Any rationale thought?"

Harry Potter: A story for thinking

Witschonke (2006) has proposed skills, ideas and concepts of philosophy gained from the famous novel *Harry Potter*.

Harry Potter and the Philosopher's Stone (1997): greed, sacrifice, and fear of the unknowns;

Harry Potter and the Chamber of Secrets (1999): pride and self-esteem;

Harry Potter and the Goblet of Fire (2000): presumption and influence of media; and

Harry Potter and the Order of the Phoenix (2003): discrimination, racism and media influences.



Worksheet 2.3.2

Thinking Activities ‘Stories for Thinking’

Instructions: Below are several arousing issues from Thai folklore, Thai soap opera, and two American films. Form a group of five. Imagine all the group members to be students in an English classroom. Vote for one arousing issue to be discussed in your group. Write down your comments or questions you want to discuss about the selected issue. Vote again for a comment/question the group majority want to discuss.

A Thai folklore “UTHAI THEVEE”

- Why did Nang Uthai have to hide herself in a toad body?
- Why did Nang Uthai’s grannies tell the King to build silver and golden bridge?



An American film “AVATAR”

- Why was Jake able to walk and run even being paraplegic?
- Why was the native humanoid "Na'vi" attacked by a troop of the soldier?



Worksheet 2.3.2 (cont.)

Thinking Activities ‘Stories for Thinking’

A Thai folklore “KAEW NA MA”

- Why did Kaew have to hide her beauty in a hoarse face?
- Do you think a smart and good-hearted woman but with an ugly face can have any chance to win a man’s heart? Why or why not?



An American film “INCEPTION”

- Do you believe there is somewhere in which technology exists to enter the human mind through dream invasion? Why or why not?
- Why was the movie entitled ‘INCEPTION’?



Teaching Thinking Skills in English Language Classroom

Core practices in teaching thinking skills.

1. Cognitive challenge
2. Cooperative learning
3. Metacognition discussion

Steps in teaching thinking skills in classroom.

1. Class introduction
2. Class activities
3. Metacognition practice
4. Knowledge transfer

Classroom Environment to Encourage Thinking Skills

1. Increase of teachers-students and students-students interaction.
2. Appropriate assigning of individual, pair, and group work.
3. Regular use of thinking processes vocabulary.
4. Fun and enjoyable learning activities.



Odd One Out

“Odd one out” is a classroom activity to promote thinking skills in English classrooms. Students are told to find one irrelevant in meaning to the other words in the set. Each set comprises 4 to 6 words and the words in each set can vary along levels of difficulty. An example is as follows.



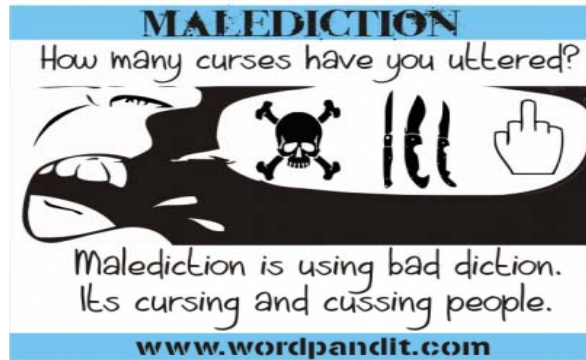
Can you spot the odd one out?

Malediction

Curse

Benison

Invective



Can you spot the odd one(s) out?

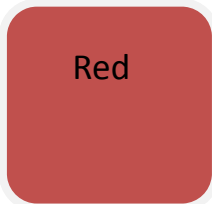
Yellow

Red

Green

Dead

Black



Worksheet 2.4

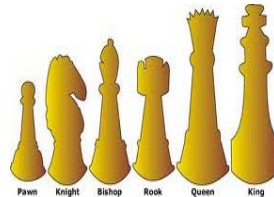
Spot the Odd One(s) Out.

Find the odd one(s) out in the following sets of words. Then discuss the process of thinking for the selected answers.

What can be the odd one(s) out of each word set?

(Source: <http://www.englishclub.com/esl-lesson-plans/activity1-oddoneout.htm>)

1. Lily, Jane, Tulip, Rose
2. Brunei, Singapore, Seoul, China, Malaysia
3. Dodge, Ford, Lincoln, Hoover
4. King, Earl, Knight, Bishop
5. Vampire, Mummy, Wear-wolf, Frankenstein



Can you spot the odd one(s) out?



Thank you
for your attention !