

# THINKING AT ITS BEST

A quick synopsis of terrible technical Taxonomy terms that terrify teachers to tears (a'la Bloom).

**KNOWLEDGE** – Recalling basic facts. The simplest level of thinking.

**Verbs to use at this level:**

explain	label	locate	identify
list	say	choose	read
show	recite	select	write
find	check	name	match

**COMPREHENSION** – Understanding the idea is the key.

translate	outline	alter
retell	expand	change
interpret	qualify	account for
define	reward	spell-out

**APPLICATION** – Using facts to find solutions to problems.

solve	relate	employ
adopt	illustrate	report
use	diagram	interview
try	construct	record

**ANALYSIS** – Examining parts in relationship to the whole.

breakdown	examine	inspect
uncover	take apart	categorize
look into	classify	compare
dissect	simplify	contrast

**SYNTHESIS** – Creating new or original ideas or products.

invent	develop	reorder
compose	blend	produce
combine	form	design
reorganize	originate	predict

**EVALUATION** – Judging the value of ideas or products.

translate	select	criticize
debate	reject	recommend
evaluate	determine	rank
mark	judge	editorialize

# QUESTIONING CUES

## TEACHER TIPS

### CREATIVE THINKING SKILLS

The purpose of this page is to acquaint the teacher with specific types of questioning techniques that should be used to encourage Fluent, Flexible, Original and Elaborative responses from your students. These techniques should be used to enhance step 3 of your creative thinking plan.

### THINKING PROCESSES

**FLUENCY** – the ability to produce a large number of ideas in a short period of time.

Question Cues – Who can think of the most... ?

Think of all the... ?

How many ways... ?

**FLEXIBILITY** – The ability to adapt quickly to changes.

Question Cues – In what other ways... ?

What different kinds... ?

What else... ?

**ORIGINALITY** – The ability to think of new, novel or unusual ideas.

Question Cues – Design or invent a unique... ?

Think of something new... ?

Think of some unusual ways to describe... ?

**ELABORATION** – The ability to add onto an idea.

Question Cues – Can you expand... ?

Can you do something to make it more interesting... ?

How could you change... ?

# USING THIS BOOK

This book will help students develop creative and critical thinking skills enabling them to achieve independence in organizing and elaborating on their ideas. In planning for these experiences a suggested time-line would be:

- 1st day - Activity 1 and 2
- 2nd day - Activity 3
- 3rd day - Activity 4

The activities in this book will expose your students to situations that stimulate creativity and guide them through critical skills. Each nursery rhyme or poem is followed by two corresponding activity pages. To be most effective each mini-unit should be done in the following order:

1. The teacher should read the nursery rhyme or poem to the children. Recite it together; listen to the rhyme patterns; enjoy the visual imagery; but don't discuss it yet!
2. Read the "What if..." statement to the students. "What if..." pages are geared for the students to use for expressing ideas. Using one's imagination is the key. The pages are designed in a format which allow students to express their ideas in a drawing. If students have acquired the necessary writing skills, invite them to also add sentences to express the ideas.
3. When finished, encourage students to share and enjoy each other's ideas. As they do so, challenge them to become Fluent, Flexible, Original, and Elaborative thinkers by using the **Questioning Cues** found on page 5. By using these cues with your students, you will be helping to develop specific creative thinking skills. The atmosphere should be accepting, open, student centred and positive as there are no right or wrong answers to these questions. By using these questioning techniques in a warm, nonjudgmental climate, the students will be more apt to be successful with the next activity sheet that focuses on critical thinking skills.
4. Following each "What if..." page is a critical thinking page based on Bloom's Taxonomy of Higher Level Thinking Skills. The questions on these pages are written to challenge the students to apply a multi-level thinking process. Discuss these questions with your students either in large or small groups and enjoy the satisfaction of knowing that you are stretching their minds by challenging them to reason at the higher levels of thinking.

The questioning techniques suggested in this book are open ended. They encourage responses involving problem solving, creative ideas, discussion and the application of knowledge. Usually most questioning in the classroom relates mainly to the lower levels of thinking (knowledge and comprehension) and are closed – requiring a single answer. It is hoped that through activities such as "What if..." children are challenged to expand their thinking, become more creative thinkers and to be more productive problem-solvers.

# CONTENTS

Using This Book .....	4
Questioning Cues .....	5
Thinking at its Best .....	6
Brainstorming .....	7
Humpty Dumpty .....	8
Little Miss Muffet .....	11
Twinkle Twinkle Little Star .....	14
Fog .....	17
Rain .....	20
The Cricket .....	23
Balloon Man .....	26
Jack be Nimble Jack be Quick .....	29
The Turtle .....	32
Brainstorming record sheet .....	35
WHAT IF you could train worms? .....	36
WHAT IF you were contacted by aliens? .....	38
WHAT IF humans became extinct? .....	40
WHAT IF you were a broken heart? .....	42