

There are one-story intellects,  
two-story intellects,  
and three-story intellects  
with skylights.

All fact collectors who have  
no aim beyond their facts  
are one-story *people*.

Two-story *people* compare, reason,  
generalize, using the labor of  
fact collectors as their own.

Three-story *people* idealize,  
imagine, predict—  
their best illumination comes  
from above the skylight.

*Oliver Wendell Holmes*

*The word "people" has been substituted for the word men, with no  
apologies to Holmes.*

**The six levels of Bloom's taxonomy provide focus points teachers and students can incorporate into lesson designs.**

## **BLOOM'S TAXONOMY**

- 1. Knowledge — remembering information**
- 2. Comprehension — understanding information**
- 3. Application — using, in a new situation, information that is already known**
- 4. Analysis — taking apart information**
- 5. Synthesis — putting information together in a new way**
- 6. Evaluation — judging the value of information**

## Terms to Use in Determining Components in the Cognitive and Affective Domains

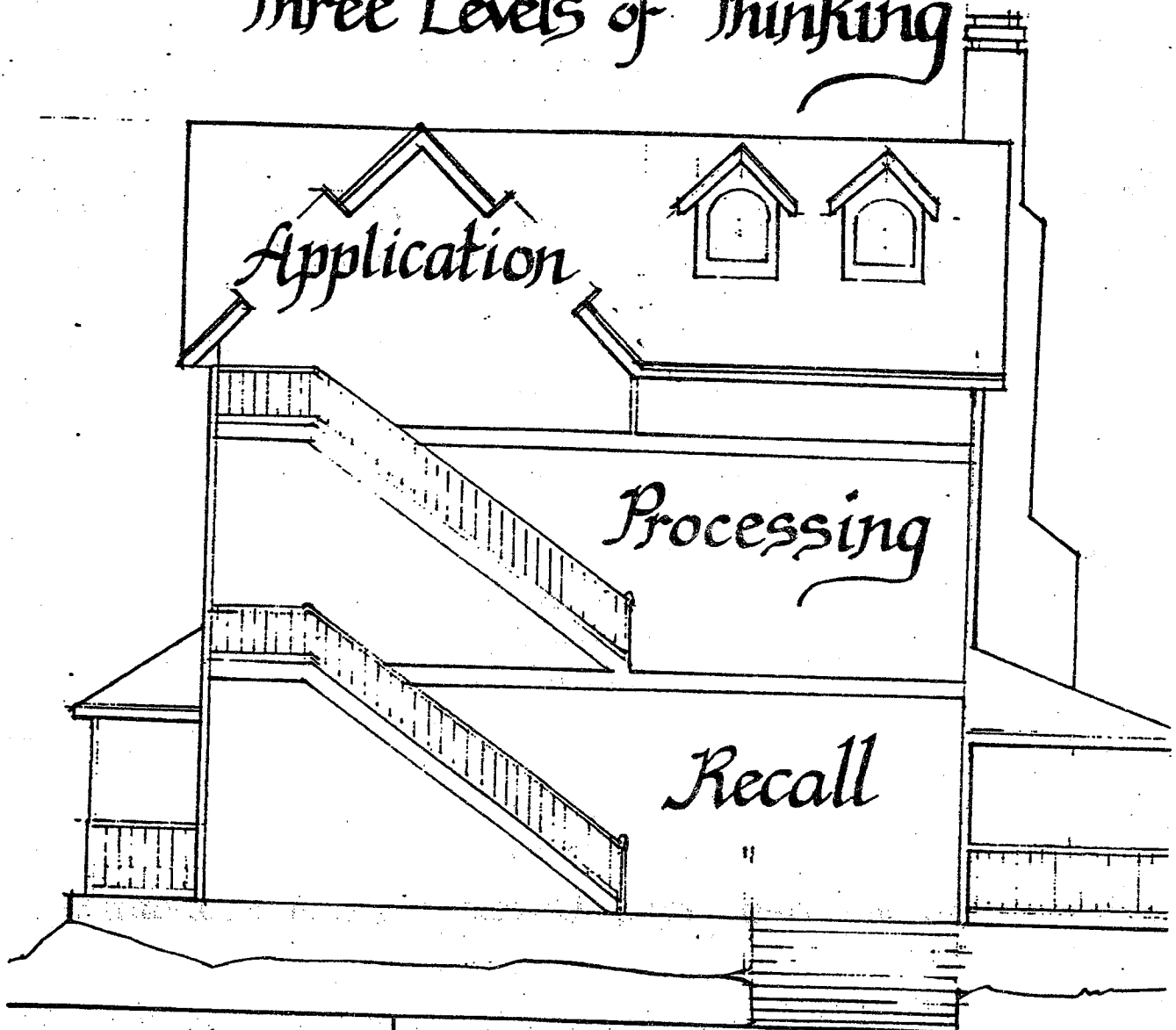
### COGNITIVE PROCESSES

1.0 Knowledge	2.0 Comprehension	3.0 Application	4.0 Analysis	5.0 Synthesis	6.0 Evaluation
Count Define Draw Identify Indicate List Name Point Quote Read Recite Recall Recognize Record Repeat State Tabulate Trace Write	Associate Classify Compare Compute Contrast Describe Differentiate Discuss Distinguish Estimate Extrapolate Interpret Interpolate Predict Translate	Apply Calculate Classify Complete Construct Demonstrate Employ Examine Illustrate Practice Relate Solve Use Utilize	Analyze Detect Explain Group Infer Order Relate Separate Summarize Transform	Arrange Combine Construct Create Design Develop Formulate Generalize Integrate Organize Plan Prepare Prescribe Produce Propose Specify	Appraise Assess Critique Determine Evaluate Grade Judge Measure Rank Recommend Select Test

### AFFECTIVE PROCESSES

1.0 Receiving	2.0 Responding	3.0 Valuing	4.0 Organizing	5.0 Characterizing by Value System
Appreciate Be alert to Be conscious of Be sensitive to Perceive Show awareness of Tolerate	Accept responsibility for Acquaint self with Be willing to comply with Enjoy Find pleasure in Obey	Actively participate Assume responsibility for Be committed to Be convinced of Believe in the importance of Desire to develop Be devoted to idea, ideals Have faith in Rely upon Subscribe to	Classify Develop a plan for Form judgments as to responsibility Systematize Weigh alternatives	Change behavior Develop code of behavior or philosophy of life Judge problems or issues Revise judgments Show mature attitude

# Three Levels of Thinking



<i>Recall</i>	<i>Processing</i>	<i>Application</i>
<ul style="list-style-type: none"> <li>Complete</li> <li>Count</li> <li>Define</li> <li>Describe</li> <li>Identify</li> <li>List</li> <li>Match</li> <li>Name</li> <li>Observe</li> <li>Recite</li> <li>Select</li> <li>Scan</li> </ul>	<ul style="list-style-type: none"> <li>Compare</li> <li>Contrast</li> <li>Classify</li> <li>Sort</li> <li>Distinguish</li> <li>Explain (why)</li> <li>Infer</li> <li>Sequence</li> <li>Analyze</li> <li>Synthesize</li> <li>Make Analogies</li> <li>Reason</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate</li> <li>Generalize</li> <li>Imagine</li> <li>Predict</li> <li>Speculate</li> <li>If/Then</li> <li>Apply a Principle</li> <li>Hypothesize</li> <li>Forecast</li> <li>Idealize</li> </ul>

# THE PLEDGE OF ALLEGIANCE

## **KNOWLEDGE**

1. Say the Pledge.

## **COMPREHENSION**

1. Say in your own words what these words mean:  
Pledge  
Allegiance  
Indivisible  
Liberty and Justice for all, etc.

2. Write your own definitions of those words.
3. Paraphrase the Pledge

## **APPLICATION**

1. What does Liberty and Justice on the playground mean?
2. To what other organizations and people do you owe Allegiance?
3. What else is Indivisible in the same sense as our nation?

## **ANALYSIS**

1. Compare the Pledge to another pledge (Scouts, etc.). How are they the same and how different?
2. What elements do all pledges have?

## **SYNTHESIS**

1. Write a class pledge.
2. Write a pledge for your family that all members would be willing to sign.

## **EVALUATION**

1. Should every nation have a pledge? Support your position.
2. Should the Pledge be said every day? Support your position.
3. What would improve the Pledge? Why?

# STRATEGIES TO EXTEND STUDENT THINKING

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- \*\*CALL ON STUDENTS RANDOMLY  
NOT JUST THOSE WITH RAISED HANDS
  
- \*\*UTILIZE "THINK-PAIR-SHARE"  
TWO MINUTES OF INDIVIDUAL THINK TIME, TWO MINUTES DISCUSSION  
WITH A PARTNER, THEN OPEN UP THE CLASS DISCUSSION
  
- \*\*REMEMBER "WAIT TIME"  
TEN TO TWENTY SECONDS FOLLOWING A "HIGHER LEVEL" QUESTION
  
- \*\*ASK "FOLLOW-UPS"  
WHY? DO YOU AGREE? CAN YOU ELABORATE?  
TELL ME MORE, CAN YOU GIVE AN EXAMPLE?
  
- \*\*WITHHOLD JUDGMENT  
RESPOND TO STUDENT ANSWERS IN A NON-EVALUATIVE FASHION
  
- \*\*ASK FOR SUMMARY (TO PROMOTE ACTIVE LISTENING)  
"COULD YOU PLEASE SUMMARIZE JANE'S POINT?"
  
- \*\*SURVEY THE CLASS  
"HOW MANY PEOPLE AGREE WITH THE AUTHOR'S POINT OF VIEW?"
  
- \*\*ALLOW FOR STUDENT CALLING  
"RICHARD, WILL YOU PLEASE CALL ON SOMEONE ELSE TO RESPOND?"
  
- \*\*PLAY DEVIL'S ADVOCATE  
REQUIRE STUDENTS TO DEFEND THEIR REASONING AGAINST  
DIFFERENT POINTS OF VIEW
  
- \*\*ASK STUDENTS TO "UNPACK THEIR THINKING"  
DESCRIBE HOW YOU ARRIVED AT YOUR ANSWER." (THINK ALOUD)
  
- \*\*STUDENT QUESTIONING  
LET STUDENTS DEVELOP THEIR OWN QUESTIONS
  
- \*\*CUE STUDENT RESPONSES  
"THERE IS NOT A SINGLE CORRECT ANSWER FOR THIS QUESTION.  
I WANT YOU TO CONSIDER ALTERNATIVES."