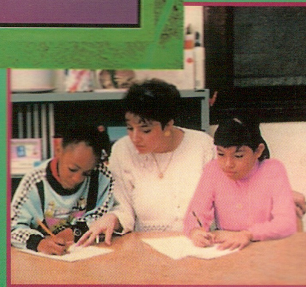
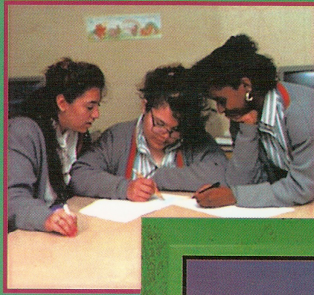


TEACHER'S GUIDE TO

4-12

ANALYTIC PERCEPTION



Reuven Feuerstein

IN COLLABORATION WITH
Mildred B. Hoffman

INSTRUMENTAL ENRICHMENT

Presented By:
Dr Louis Benjamin

Tel: 021 797 9110

Cell: 084 857 87 63

Email: louisben@iafrica.com

Website: www.basicconcepts.co.za

Twitter Handle: @basicconcepts1

WHAT DO YOU SEE?

COLOUR

SHAPE

SIZE

COLOUR

A

*GENERAL
VOCABULARY*

*SPECIFIC
VOCABULARY*

B

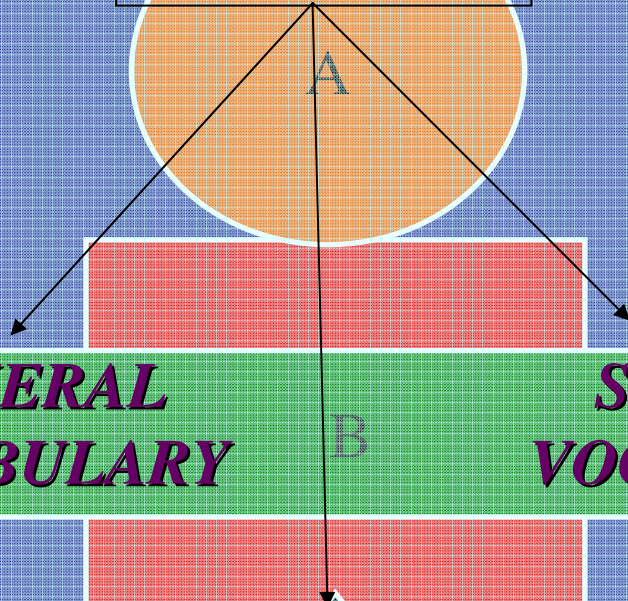
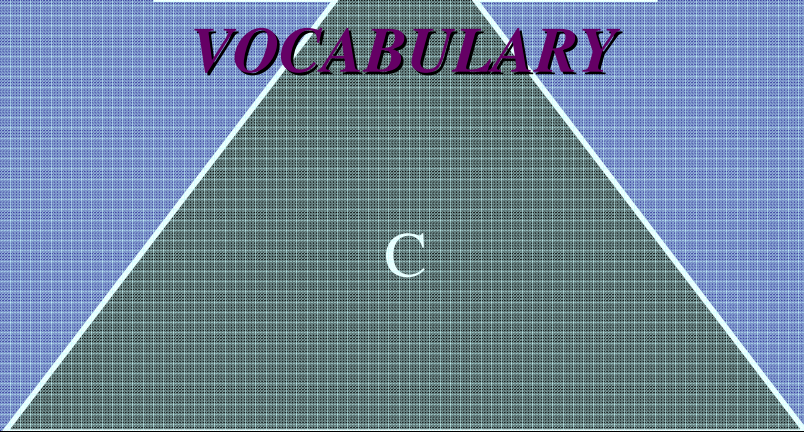
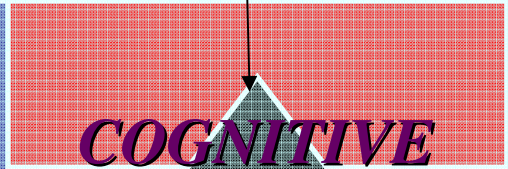
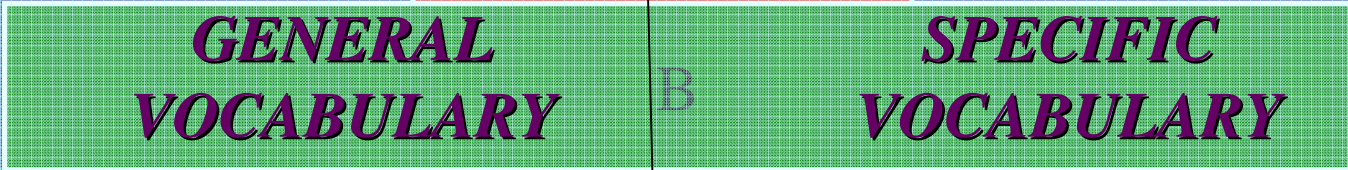
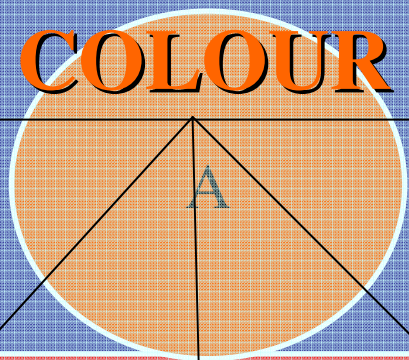
POSITION

NUMBER

LETTER

*COGNITIVE
VOCABULARY*

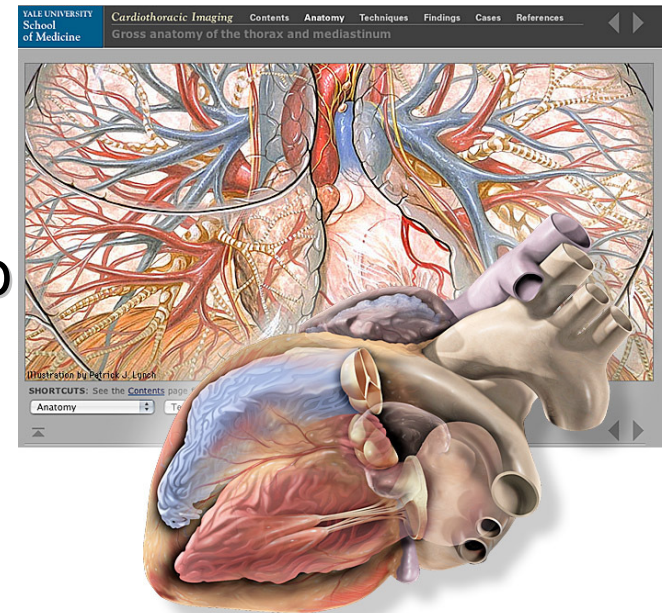
C



Analytic Perception (AP)

Need For The Instrument

Adequate cognitive function requires the ability to both divide the world into its parts (differentiation) and to join parts into a given whole (integration).



Adaptation to the world depends on a balance between the process of differentiation and integration.

Analytic Perception (AP)

Goal Of The Instrument

AP uses perceptual processes to develop a variety of cognitive strategies that lead to attitudinal and motivational changes in a person's approach to reality.

Individuals with an analytic approach set sharp boundaries between themselves and their surroundings.

They are able to form (through structuring and restructuring) and discriminately use internal references for processing information.

Analytic Perception (AP)

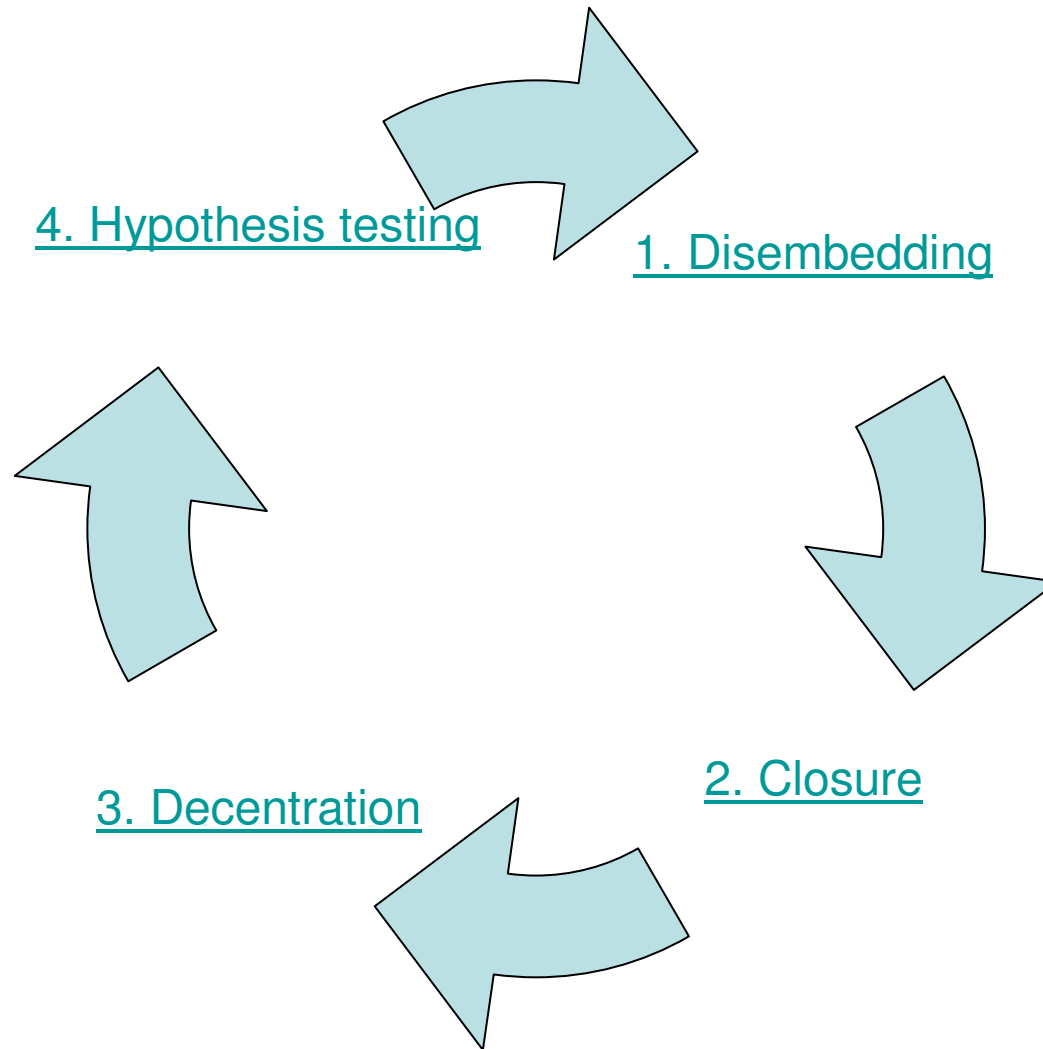
Restructuring The Field

This involves making changes in the perceptual field and going beyond the given information and might involve :-

- 1. Organizing the field in a different way**
- 2. Splitting up an organized field into its component parts**
- 3. Organizing a field that does not have a built-in structure**

Analytic Perception (AP)

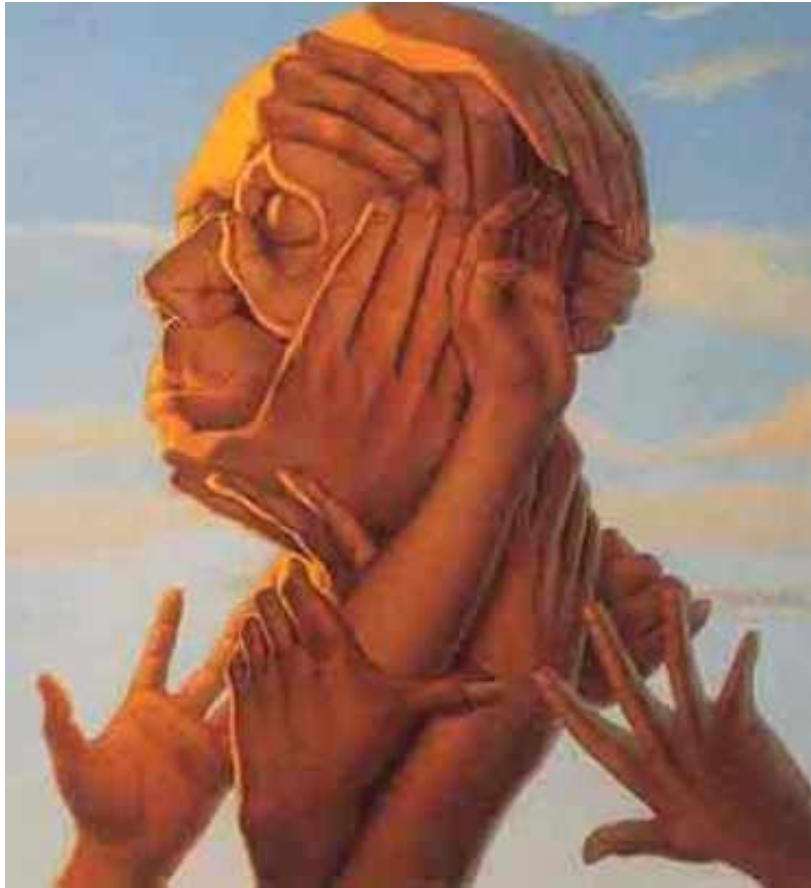
Restructuring The Field



FIND THE:

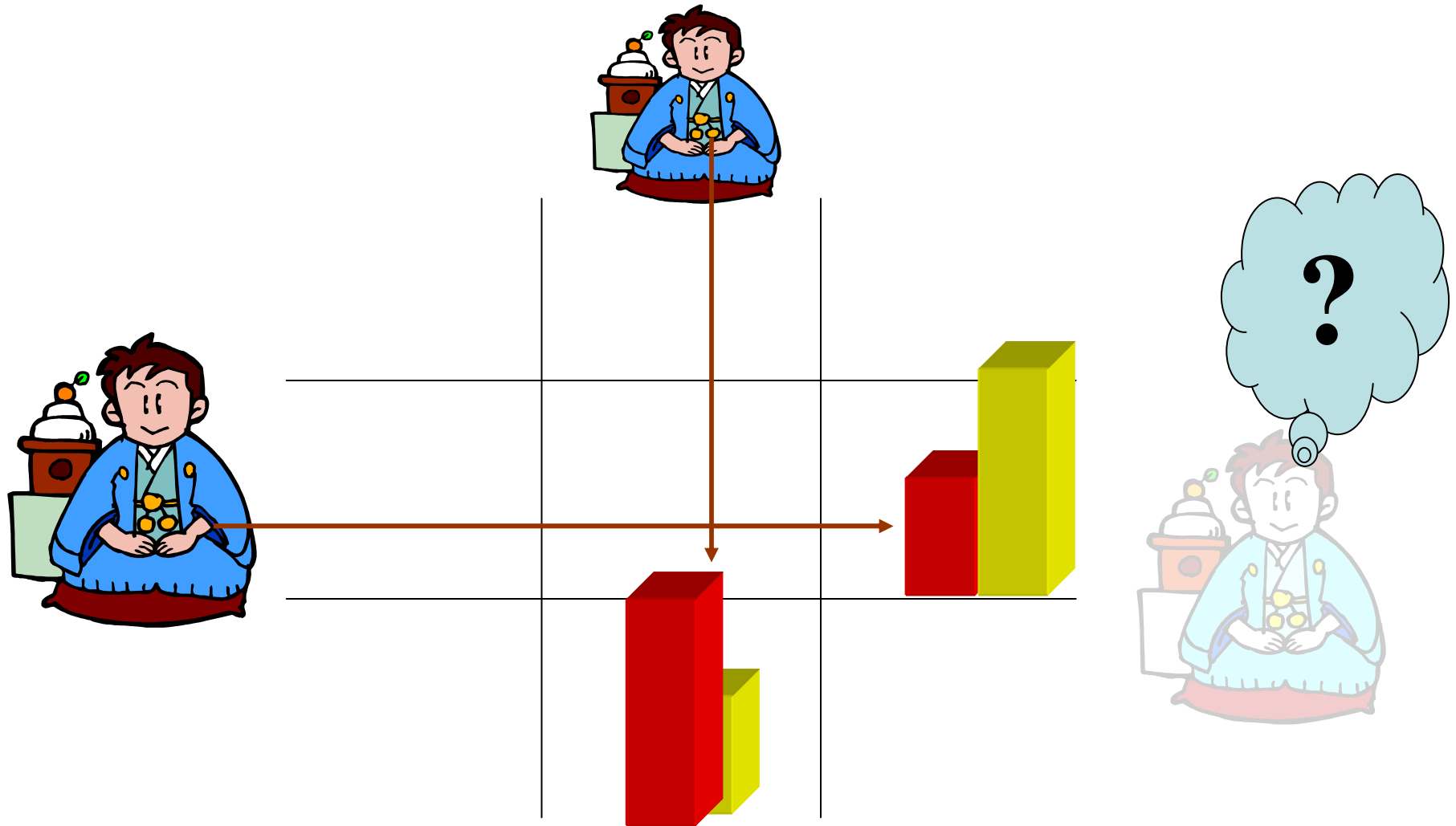
- Girl
- Bottle
- Bucket
- Cup
- Strawberry
- Pickle
- Letter V
- Pencil





BCs AS COGNITIVE TOOLS

PERSPECTIVE TAKING



To experience and describe the presentation of an object or display from different vantage points. This ability involves objectifying one's own view of the object, and anticipating that moving to another point results in specific changes in its presentation. In other words, perspective-taking involves both differentiation and coordination of viewpoints.

Analytic Perception (AP)

Structural Analysis vs. Operational Analysis

Structural Analysis

Used to answer questions such as:-

- ❖ What are the parts of this?
- ❖ What is this a part of?

It involves an inventory of parts which are registered, labeled, summed and related to one another.

Operational Analysis

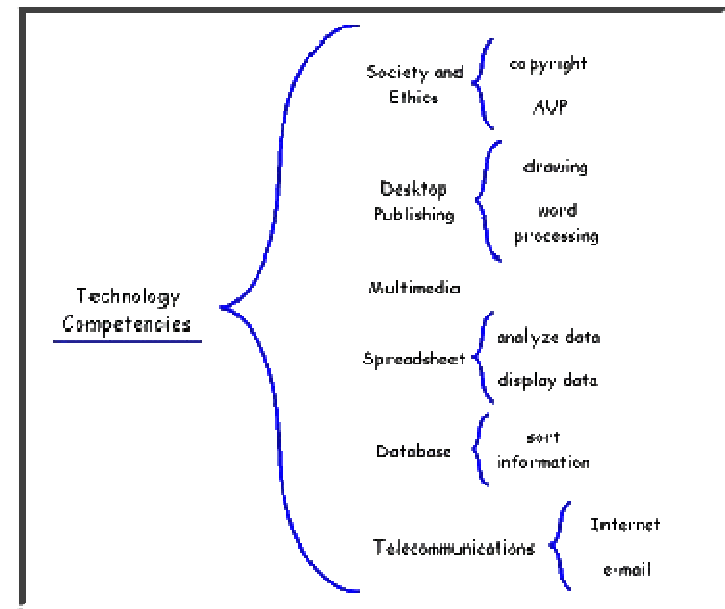
Used to answer questions such as:-

- ❖ What are the stages or the steps of this process?
- ❖ This activity is a stage or step of what process?

It involves registering, labeling, and summing and sequencing the steps.

Analytic Perception (AP)

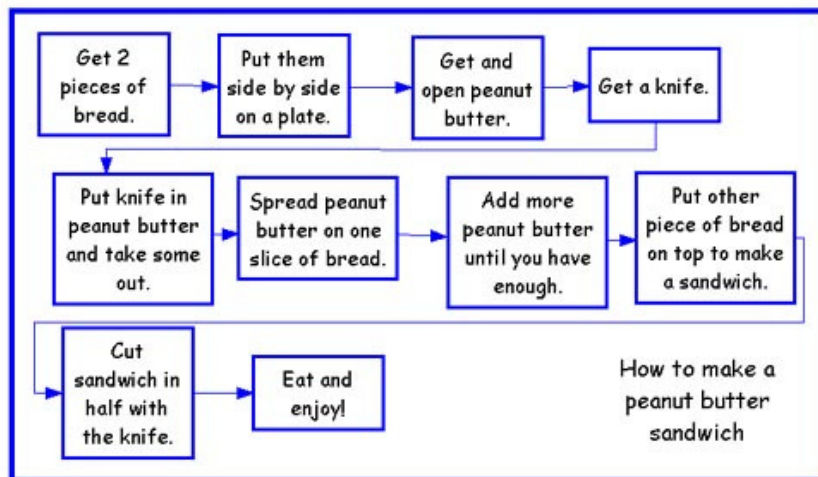
Structural Analysis



Analytic Perception (AP)

Structural Analysis vs. Operational Analysis

Operational Analysis



Name: _____ Teacher: _____ Date: _____ Period: _____

Solving 5-step,
Multi-Step Algebraic Equations

| | | |
|---|--|--|
| <p>Eliminate parentheses.</p> $3(x+1) = 2x + 24 - x$ $3x + 3 = 2x + 24 - x$ | <p>Combine like terms.</p> $3x + 3 = \cancel{2x} + 24 - \cancel{x}$ $3x + 3 = x + 24$ | <p>Isolate the variable.</p> $\frac{3x + 3 = x + 24}{-x \quad -x}{2x + 3 = 24}$ |
| <p>Eliminate the constant.</p> $\frac{2x + 3 = 24}{-3 \quad -3}{2x = 21}$ | <p>Eliminate the coefficient.</p> $\frac{2x = 21}{2 \quad 2}{x = \frac{21}{2} = 10.5}$ | <p>Check the solution!</p> $3(x+1) = 2(x) + 24 - x$ $3(10.5) = 2(10.5) + 24 - 10.5$ $31.5 = 21 + 24 - 10.5$ $31.5 = 34.5 - 10.5$ $31.5 = 24$ |

Correctly completing these steps is order → Correct solutions!
Why is it important to complete the steps in order?

- 
- 1. Where was the photo taken?*
 - 2. What time of the year was the photo taken?*
 - 3. What time of day was the photo taken?*
 - 4. What kind of flowers do you see in the photo?*
 - 5. What do you see in the background of the photo (top left corner)?*
 - 6. Who is not in the picture?*
 - 7. What is happening in this picture?*

Slide 13

LB4

bcs are like an instruction booklet for those who are lost or confused ... by systematically focussing on key concepts (one at a time and one subconcept at a time) we develop a common language for helping learners to understand and for them to express their understanding of their experiences ... even when they have little or no language.

where to start? start by modeling the language: use the higher order word colour and the lower order concepts in your class ... and then gradually build this up to include colour and shape, etc.

Louis Benjamin, 2008/02/20

Analytic Perception (AP)

Overview of the Instrument

- * Nonverbal based on the perceptual analysis of geometric forms
- * 25 pages of tasks ordered in increasing levels of complexity

- ❖ **Pages 1-5:** Simple and complex wholes divided into parts that are summed and parts that are identical to a given standard. *Ideas for Bridging: find a noun in a sentence, identify the circulatory system from other systems, find a paragraph in a story, identify the short leg on a wobbly chair.*

- ❖ **Pages 6-10:** Parts of a whole are identified, categorized and summed. *Ideas for Bridging: adding fractions, checking sentence structure, and reviewing components of a cake recipe.*

- ❖ **Pages 11-17:** Construction of wholes on the basis of identifiable parts and closure of figures by deducing the parts that are missing and identifying them in another setting. *Ideas for Bridging: a motor/book can be viewed as an assemblages of wholes composed of parts*

- ❖ **Pages 18-25:** Certain parts are disembedded from a complex array and joined together to form a new whole. *Ideas for Bridging: in health sciences- heart, arteries, veins and capillaries from the circulatory system and in mechanics the ignition system ...*

Analytic Perception (AP)

Unit I, Page 1

Objectives:

- ❖ To analyze a simple or complex geometric figure
- ❖ To recognize that every part is a whole
- ❖ To foster awareness of the necessity of labeling for identification and communication

Sub- Goals:

- ❖ To teach the importance of systematic work
- ❖ To use summative behavior as a strategy for reintegration

Vocabulary:

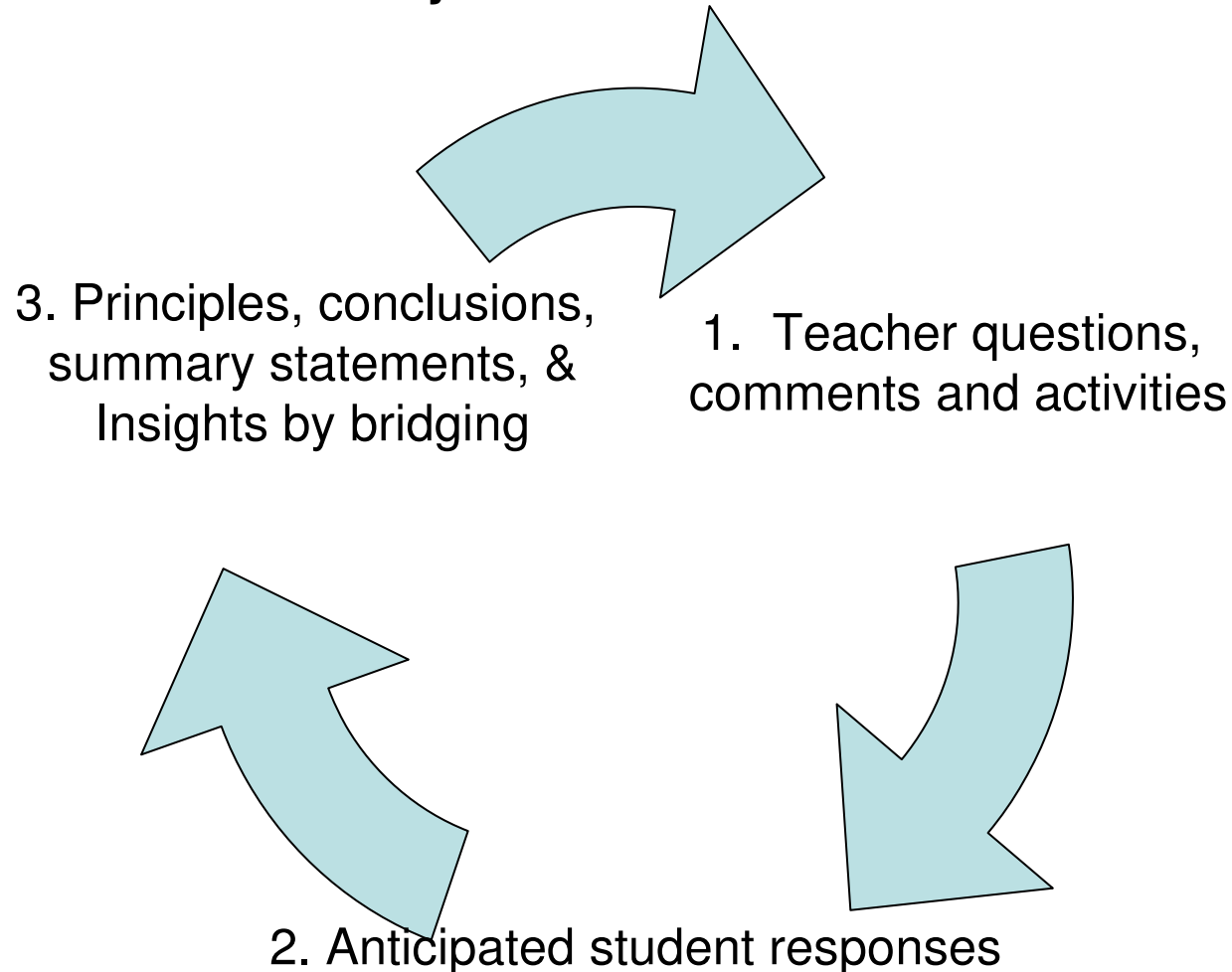
Simple, complex, clockwise, counterclockwise, enumeration, code, opposites, overlap, differentiate, random, constancy, quantitative, sum, rhombus, isolate, pattern

Mediation:

- ❖ Mediation of a feeling competence
- ❖ Mediation of individuation and psychological differentiation
- ❖ Mediation of meaning
- ❖ Mediation of transcendence

Analytic Perception (AP)

Mediation: Rationale and analysis of teacher-student interactions



Analytic Perception (AP)

Group Activity To Prepare A FIE Lesson

1. Solve the problems on your own and then verify your answers in pairs and also discuss the kind of problems presented. **(10min)**
2. Read the mediational strategies in the teacher's guide with your partner and also take note of how the session is structured. **(10min)**
3. Now practise the task with your partner (teacher-student) and take note of the mediational process. **(20min)**
4. Use the template to plan your session. **(20min)**
5. Each group demonstrates their task (5min) and thereafter highlights the salient parts (5min) – the pair might incorporate insights from previous demonstrations and discussions. **(10minutes per pair)**

Analytic Perception (AP)

Principles

1. All phenomena (concrete and abstract) can be divided into their components parts by structural and operational analysis
2. Number can be used to label, quantify or sequence.
3. Systematic work is preferable to working in a random fashion.
4. When critical attributes of an object are conserved, the object remains the same.
5. Elimination will tell you what is not appropriate, but it does not tell what is.
6. The whole depends on the parts and their relationship with each other.
7. In many instances directionality is a critical attribute.

COGNITIVE MAP

1. Content: *history, social studies, economics, etc.*

Is the content familiar or unfamiliar to the subject?

2. Modality: *pictorial, numerical, figural, symbolic, verbal, etc.*

Subjects differ in their use of specific modalities on the basis of ...

3. Phase of the mental act: *input, output, elaboration*

The specific requirements of a given mental act may place greater or lesser emphasis on a particular phase.

4. Cognitive operations required: *analogical reasoning, mental representation, logical multiplication, permutation, seriation*

The mental act can be analyzed according to the rules or operations by which information is transformed, manipulated, understood and acted upon to generate new information

COGNITIVE MAP

5. Level of Complexity: *high-----low*

The level of complexity is related to the quantity and quality of the units of information contained in the test item.

6. Level of Abstraction: *concrete --- abstract*

The level of abstraction defines the distance between the given mental act and the object or event upon which it operates.

7. Level of Efficiency: *rapidity and accuracy*

This parameter is interrelated with one or more of the preceding parameters as well as related to a host of physical, environmental, affective-motivational factors.