

How about a little less testing; and, a lot more problem-solving & decision-making?

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Problem = the difference between what is expected and what is desired

Problem-solving

To avoid making things worse and to increase the probability of helping
Effective Problem-solving decreases these risks:

- **Of spending too much time assessing**
- **Of selecting the wrong instructional objectives**
- **Of selecting the wrong (i.e., mis-aligned) instruction**
- **Of missing problems**
- **Of waiting too long to start work**

To reduce the overall mismatch between expected and actual performance --- here are our choices: Change of ---

- 1. Instruction**
- 2. Curriculum**
- 3. Environment**
- 4. Change the student's knowledge and skills**
- 5. All four**

Step One: Behavioral Definition

Objective — the definition refers only to observable and measurable characteristics of the behavior.

Clear — the definition is so unambiguous that it could be read, repeated and paraphrased by a stranger.

Complete — the definition delineates both examples and non-examples of the behavior so that differences between occurrences and non-occurrences of the behavior can be discerned.

Step Two: Developing Assumed Causes –Hypothesis (es)

Definition: A hypothesis is a succinct and specific statement that describes the relationship between an observed reality and possible causes.

The hypothesis is:

- Specific and observable
- Testable
- Focused on alterable variables

The hypothesis is not:

- Global or unobservable
- Un measurable
- Focused on unalterable variables

Thinking Differently

- Student problems can be defined and changed
- **Questions will drive assessments**
- Assessments will lead to instructional decisions and be low in inference
- Assessments will serve multiple purposes
- Enabled learning is the goal; rather than discrepancy or diagnosis

RIOT = Convergent Data Convergent Data from Multiple Sources

What you think is what you get:

Hypothesis Format

Hypothesis Examples

1. Dirk hits Lisa **because** Dirk's friends pay attention to him for doing so.
2. Dirk hits Lisa **in order to** get removed from instructional demanding situations.
3. Dirk hits Lisa **because** she reacts so strongly when he does so.

Hypothesis Non-example

1. Dirk hits Lisa because he has ADHD.
2. Dirk hits Lisa because he has an angry temperament.
3. Dirk hits Lisa because he has a conduct disorder.
4. Dirk hits Lisa because he likes power.

Unacceptable Practices

1. Focus on the unimportant **"So What?"**
2. Measurement not clear **"Stranger"**
3. Observers don't agree on behavior
4. Baseline data not gathered before intervention
5. No standard of comparison
6. Baseline is not a number
7. Standard of comparison is not related to behavior
8. Discrepancy is minimal..team goes forth anyway

Thinking about problem-solving: Paradigm Shifts

To Evaluation; not testing/assessment

To Focused, functional, and formative

Thinking about Decisions

1. what are the needs= what and how to teach
2. Based on data not opinion
3. focused on problems not general concerns
4. to provision of resources needed

Steps in Problem Analysis

Step One - Gather known and unknown information using RIOT procedures in the areas of environment, curriculum, instruction, and learner (Fact Finding)

Step Two - Develop assumed causes

Step Three - Validate Hypotheses (Record results of data collection)

Step Four - Link assessment to intervention (Indicate and write the intervention to be implemented).

Paradigm Shifts

What is the Problem ? Not child focused but breakdowns in teaching and learning
Could occur in many/could be a system problem

- Role of General, Remedial, and Special Education
- About *Every Ed*
- Non-categorical
- *No wait to fail*
- Instructional orientation not placement orientation

“The greatest impediment to problem solving is prior knowledge.”

The so-what test: the skill/content is important if

- it is a *knowledge* problem not a *display* problem
- it is an *education* concern not a control *concern*
- the skill/content is hazardous
- it is pivotal to the learning of many other tasks (low in skill sequence or *tool skill*)
- the skill/content complex
- the skill/content requires the use of a task-specific strategy
- it must be used with a high level of proficiency
- it is ill-defined
- the skill/content adds to or facilitates meaning
- the students has expresses a preference to learn it
- Also:
 1. size of the performance discrepancy
 2. size of the progress discrepancy
 3. existence of dual discrepancy
 4. number of situations/contexts in which the problem occurs
 5. number of the skills/areas involved
 6. the problem was *early in onset*
 7. **Resistance To Intervention** (i.e., previous attempts at correction have failed)
 8. the problem has continued for some time (i.e., duration)
 9. priority for:
 - Student
 - Parents
 - Staff

Common Errors in Problem-solving:

1. **Unalterable variables** Spending time thinking, attending to and talking about things you can't do anything about.
2. **Blame the victim** Viewing the problem as student-centered.
3. **Diagnostic/prescriptive gone feral !**
4. **Preoccupation with cause**
5. **Paradigm fixation** (Reluctance to think differently about problem-solving & decision-making)
6. **Oz error** Basing inferences about intervention on systematic categories and their labels. These include taxonomic-based disability types, administrative/funding categories and/or demographic characteristics (e.g, Low SES, minority status, single parent family, ELL, LD ---)
7. **Resistance is futile** Stop focusing on sources of the resistance. Consider strengths in all ICEL areas.
8. **Mind reading** Attempting to measure the student's cognitive or perceptual processing; then use the results to guide instructional decision making.

CBE Process of Inquiry				
Fact	Assumed Cause	Evaluation Question	Assessment Procedure	Conclusions
CAP = 140 wpm	He's disabled	What is wrong with the student?	Measures of cognitive & perceptual processing	Outside of curriculum
<u>Student reads 100 wpm</u>	→	→	→	
	Never taught to read quickly	Has fluency instruction been provided?	Review curriculum & Interview teacher	What and how to teach

CBE Problem-solving Self-monitoring

