Writing Objectives for Stuff Bill Packets.

Written in a format intended to aid educators in writing behavioral objectives, this guide first identifies four variables an acceptable objective must have--institutional, behavioral, instructional and evaluative. After defining the variables, the reader is asked to identify them in a selection of objectives and/or to identify the elements that are left out of another set of objectives. It suggests that "evaluation" is extremely important and, when used, must be accompanied by criteria or a criterion reference. Three areas are used in the EPIC-style objectives: (1) cognitive behavior relating to knowledge, comprehension, application, analysis, synthesis, and evaluation; (2) affective behavior relating to feeling, emotion, response, value, organization, and characterization of behaviors; and (3) psychomotor behavior relating to imitation, manipulation, precision, articulation, and naturalization of behaviors. Behaviors should be written using "action" verbs so one can more clearly describe what behavior is being considered. Creativity is also suggested as an area in which "indicator" behaviors can be observed and can help the reader develop criteria for what is actual creativity. (HS)
WRITING OBJECTIVES FOR STULL BILL PACKETS
Santa Clara Unified School District Format

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WRITING OBJECTIVES FOR STULL BILL PACKETS
THE SANTA CLARA FORMAT

Goals are timeless statements of what is to be accomplished, and objectives are the "what you do" to achieve those goals. One of the biggest problems in writing objectives is to tell your intent to the reader. Objectives should be statements which set forth clearly, what is desired or what is to be done.

An acceptable objective must have four elements in it, and these are:
1. The institutional variable.
2. The behavioral variable.
3. The instructional variable.
4. The evaluative variable.

Examples:
1. The **institutional variable** refers to: (the person)
   - the child
   - the student
   - the teacher
   - the principal

2. The **behavioral variable** refers to: (something you can see happen)
   - will show knowledge by selecting
   - will show comprehension by telling
   - will read aloud
   - will demonstrate his ability by reciting
   - will evaluate by comparing
   - will show application by listing
   - will match

3. The **instructional variable** refers to: (the subject, reading, science)
   - a circle, triangle or square,
   - the parts of the water cycle,
   - the main points of the story,
   - the meaning and spelling of a word,
   - pictures of family groups with pictures of environments.
4. The **evaluative variable** refers to:

- on a teacher-prepared test
- to be measured by teacher observation
- as observed by the teacher from previously determined criteria
- from a standardized test
- on a teacher-prepared instrument
- using a criteria established in the Inventory of Developmental Tasks

Identify the four elements in the following objectives:

1. Institutional
2. Behavioral
3. Instructional
4. Evaluative

The child will list numbers from 1 to 10 in numerical order as measured on a teacher-prepared test.

The student will show comprehension by selecting the proper tools for constructing a funnel, to be measured by teacher observation.

The student will show knowledge of the worldwide spatial distribution of major features of man's physical and cultural environment by writing a comparative essay on the subject, as measured by teacher judgment.

The student will show comprehension of American history by writing a paragraph on some of the major events that are represented by holidays, to be measured by a teacher-prepared instrument.

The child will respond positively by showing approach behavior when given mathematics homework, to be measured by teacher observation, using pre-selected criteria.

The student will analyze some of the rights of American citizens and the extent to which other countries grant the same rights, and construct a graph comparing these countries, to be measured by teacher-prepared criteria.
The child will walk the balance beams forward and backward, using the criteria of the Inventory of Developmental Tasks.

What element(s) is/are left out of the following objectives?
The student will be able to perform an experiment that will show heat to be a form of energy.

Show knowledge of negative numbers on a teacher-prepared test.

The child will list the simple machines in a more complex machine.

Using a criteria test established by the teacher, the student will show knowledge by matching.

On a teacher-prepared test the student will show application by selecting items of his choice.

Fractions $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{10}$ will be tested on a teacher-prepared instrument.
Write an objective using the four criteria of an acceptable objective toward the following areas:

**READING COMPREHENSION:**

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- 
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**SPELLING:**

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- 
- 

**GEOGRAPHIC FEATURES:**

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**LISTENING:**

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- 
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**PHYSICAL DEVELOPMENT:**

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- 

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Some considerations to be aware of in writing objectives for the Stull Bill Packet are:

The evaluation component is extremely important and cannot be left out or neglected.

In evaluation, do not use "to be measured by teacher observation" too many times. It is great when appropriate, but can be overdone. When used, it must be accompanied by criteria or a criterion reference.

Acceptable:

The student will show knowledge of triangles, circles and squares by naming common objects in the classroom, as measured by teacher observation.

Criteria: Object named must have an indication of shape named.
Child must be able to name object and shape represented.

Inappropriate:

The student will show knowledge of addition of single digit numbers, as measured by teacher observation.

The EPIC format calls for the use of a set of behavioral terms of a common language, and using this set of words adds greatly to the clarity of the cognitive, affective or psychomotor behavior you are trying to describe in an objective.

The three sets of words which are used in EPIC style objectives are:

Cognitive Behavior: (thinking)
Knowledge (recall, recognition, dates, time)
Comprehension (interprets, translates, summarizes, puts in own words)
Application (different from situation originally learned)
Analysis (cause and effect, separating complex parts)
Synthesis (designs product, arranges structure in an original way)
Evaluation (decision-making, comparison, determines if something really works)
Affective Behavior:  
Receive  
Respond  
Value  
Organization  
Characterization  

(fueling, emotion)  
(aware of, listening)  
(attending to, reaction to, obeying)  
.believes, shows attitude, commitment, high certainty)  
(displays commitment by action to a set of values)  
(total behavior over extended period of time)  

Psychomotor Behavior:  
Imitation  
Manipulation  
Precision  
Articulation  
Naturalization  
(coordinator, neuro-muscular)  
(crude, imperfect form)  
(capable of performing an act according to instruction)  
(higher degree of accuracy)  
(accuracy and control plus speed and time)  
(a habit, performance natural and smooth)  

An example of a cognitive objective:  
The student will demonstrate a comprehension of consonants, vowels, and blends, on a teacher-developed instrument.

An example of an affective objective:  
The student will respond positively toward mathematics materials as measured by teacher observation.

An example of a psychomotor objective:  
The child will imitate the action of a push-up as described in the Physical Performance Test for California, as measured by the teacher.

Again, a cognitive objective:  (more clearly stated)  
The student will demonstrate comprehension of consonants by marking consonants, vowels, and blends, on a teacher-developed instrument.

An affective objective:  
The student will show a positive response toward mathematics by using freely, mathematics materials in independent study time as measured by teacher observation.  
Criteria:
A psychomotor objective:

The child will imitate by doing or performing the action of a push-up as described in the Physical Performance Test of California, as observed by the teacher.

Criteria:

The point is to tie into your objective, words that you can see happen, observable performance.

Use words like: count, find, measure, mark, compare, paraphrase, fold, dot, make, perform, change, skip, hop, jump, select, write.

Avoid "fuzzy" words such as: learn, feel, know, believe, conceptualize, perceive, see, think, understand.

If you are having trouble describing a behavior, ask yourself this question: "How would I recognize one like that if I saw it?"
We can write an objective covering just about anything. The cognitive and psychomotor areas are easiest to handle because they are actually observable. You can see the product of a cognitive area (the answers to a math problem, the paragraph, the results of an experiment, the matched pictures).

The performance of a psychomotor objective is observable too -- (the back flip, push-ups, striking the "e" on a typewriter, walking the balance beam backwards).

The affective area is more difficult. With affective behavior (feeling), you may ask yourself the same question, "How would I recognize one like that if I saw it?" Only this time you look for the indicators of that performance.

Let's take a tough one first: Creativity. How do you see creativity in a child? You don't see it, you see indications of it. You can develop criteria for what is actual creativity. If you put all the children in your class into two piles, the ones that show creativity in one pile and the ones who don't show creativity into another pile, what would you look for as indicators that a child was creative?

<table>
<thead>
<tr>
<th>Not Creative</th>
<th>Creative</th>
</tr>
</thead>
<tbody>
<tr>
<td>follows</td>
<td>humorous</td>
</tr>
<tr>
<td>never suggests change</td>
<td>never bored</td>
</tr>
<tr>
<td>only takes directions</td>
<td>is innovative</td>
</tr>
<tr>
<td>lacks individual ideas</td>
<td>draws unusual pictures</td>
</tr>
<tr>
<td>learns by being shown only</td>
<td>uses words he makes up</td>
</tr>
<tr>
<td>cannot improvise</td>
<td>is able to suggest</td>
</tr>
<tr>
<td>shows little imagination</td>
<td>alternatives</td>
</tr>
<tr>
<td>not willing to take risks</td>
<td>doesn't always go along</td>
</tr>
<tr>
<td></td>
<td>with your reason</td>
</tr>
<tr>
<td></td>
<td>approaches problems in</td>
</tr>
<tr>
<td></td>
<td>a unique way</td>
</tr>
</tbody>
</table>

Any single indicator does not prove a child to be creative or non-creative, but an accumulation of indicator behaviors can give you a pretty good idea that a child is creative.

So, if you are writing an objective about a difficult affective area like creativeness, appreciation of music, appreciation of art, loyalty, citizenship, you must describe the indicator behaviors for which you are looking. You must establish criteria that say what you are looking for in a child.
An Objective Measuring Creativity:

The student will show creative talent by exhibiting responding behavior as observed by the teacher and compared to established criteria.

Criteria:
1. is humorous
2. never bored
3. is innovative
4. draws unusual pictures
5. uses words he makes up
6. is able to suggest alternatives
7. does not always go along with your reason
8. approaches problems in a unique way

or better yet:

The student will develop creative talent by showing valuing behavior on being confronted with alternatives, problems, and situations, as observed by a teacher, and compared with established criteria.

Criteria:
1. is humorous
2. never bored
3. is innovative
4. draws unusual pictures
5. uses words he makes up
6. is able to suggest alternatives
7. does not always go along with your reason
8. approaches problems in a unique way
Write your objective in terms of the individual child.

Rather than saying:

70% of the students will show knowledge of multiplication of all single digit numbers, to be measured by a teacher-prepared test;

say:

The student will show knowledge of multiplication of all single digit numbers, to be measured by a teacher-prepared test.

If we are to move forward in working toward continuous progress of students, our objectives should be child-oriented. We should work at measuring progress of students as individuals rather than as groups. If you are writing your first set of objectives, write them with your aim on an individual in the middle of the class you teach. This set of objectives will be a sample of your total program and will represent achievements you need to measure to show individual student progress.

OK? TIME TO GO TO WORK!