ABSTRACT
        The development of a scoring tool to be used with
alternative and authentic assessment strategies is discussed,
describing the parts of such a tool and the development process. The
design is based on the Innovation Configuration (IC) process of the
Concerns-Based Adoption Model. To begin, components of the test task
are identified. Variations that accomplish the various components are
then determined. A quality line is established that sets least
desirable variations on the left side of the tool and most desirable
variations on the right side. The quality line may be percentages of
student accomplishment, or it may be developed from judgment of
student work or grade level performance. An IC-rubric (IC-R) is
developed from combinations of components and variations for any
performance task. Components are listed on the y-axis and variations
from least to most desirable (quality line) on the x-axis. An
activity for developing and applying an IC-R is included. (Contains
six inserts and four references.) (SLD)

DESIGNING SCORING TOOLS FOR AUTHENTIC & ALTERNATIVE ASSESSMENTS: A COMMON SENSE METHOD

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Assessment! Let's face it, the term assessment is loaded. It is loaded with the power to determine students' level of progress, the degree of student proficiency, and the state of competency reached as a result of participation in classroom instruction. In our schools today, the application of the term assessment still most commonly refers to tests, homework, and that most infamous of assignments, the vocabulary quiz. It is time for a change!

Now is the time for educators to address student assessment and make it meaningful to the student and the curriculum, make it reflective of high expectations, and make it related to real world experiences relevant to students' lives (Pandey, 1990). As what has been called the "driving force promoting change in schools" (Field, 1991), classroom teachers must make the conscious choice to develop student assessment in conjunction with changes in curriculum and instructional strategies. To that end, our approach is simple in both design and application.

Designing Scoring Tools

The design is based on the Innovation Configuration (IC) process created as a part of the Concerns-Based Adoption Model (CBAM) (Hall & Hord, 1987). The concept of Innovation Configuration in the model provides the theory and foundation for creating assessment plans based on teacher decisions about what is important in their individual classroom. The application is based on a common sense approach determined by the primary force in the classroom: the teacher.

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There are a variety of approaches to designing assessment. They include portfolios, tasks, problem design and a variety of others. To be effective, each form, or strategy, of assessment must be driven by a plan and involves several parts. Those parts include: setting a goal or objective for student performance, development of a task prompt, assignment of a student task, development of an assessment tool, and scoring of student performance on the task. This paper deals wholly with the latter part, the development of a scoring tool to be used with alternative and authentic assessment strategies. The parts of such a scoring tool are described, and the process for developing the tool is outlined in the sections that follow.

Defining the Parts of the Scoring Tool

Scoring tools appear to function on many levels with several common parts (Bracey, G. & Pool, C., 1992). The first of three components is the "what." That is, "what" are we looking for students to be able to do. This might take the form of the student sorting a series of objects by a named attribute, designing a map of the neighborhood or playground, solving a problem, or creating an alternative to an existing answer. The second and third components are the "how" and the "quality line."

Components of the Task

The "whats" that are referred to in this context are specifically named the "COMPONENT" for the working purposes of this paper. The term "component" is borrowed from Taking Charge of Change (Hord, Hall, Rutherford, and Huling-Austin, 1987). The authors' long term work with the use of the IC, with practitioners, lends practical theory to the development of a process, a strategy to develop meaningful student assessments. To use a common example for demonstrating the term component, a sample task might be to create a scale

model of the solar system which includes all planets, the sun, and at least two unique identifying

features for each planet. Components of this task include, but are not limited to:

- Creation of the model with the sun and all planets represented

- The model is represented at scale

- The model has at least two identifying features for each planet

INSERT 1

Variations of a Component

The second part of the scoring tool is the "how." How is the component accomplished? How do versions of accomplishment of the component compare? How do the versions compare to accepted standards or benchmarks? The how versions, or "VARIATIONS" as they are referred to, are intended to be objective and observable on a continuum of possibilities. Each component may be demonstrated by students in the classroom with different variations that have very different degrees of proficiency or performance. In the above example, Component #1 may have several variations which include:

INSERT 2

Component #2 may have the following variations:

INSERT 3

Component #3 may have the following variations:

INSERT 4

It is important to note at this point that you, the reader, may consider other variations and

components as being essential for the assessment of this task. That is fine. As educators, we all bring unique perspectives to the development of assessment tools for the classroom. There is no one right number of components or variations for a task. The component variations should represent the criteria for the task's appropriate accomplishment.

The Quality Line

The third component of the scoring tool is the "QUALITY LINE." A constant pattern is set on the matric placing least desirable variations on the left side of the tool and ranging to the most desirable, or highest quality, variations on the right side of the tool.

The quality line may be developed for a number of reasons and for a variety of purposes. The quality line may represent percentages of student accomplishment. For example:

60%   70%   80%   90%   100%

Or, the quality line may be developed from judgment of student work. For example:

poor   average   above average

Or, the quality line may indicate grade level performance. For example:

below grade level   at grade level   above grade level

Regardless of how the quality line is constructed, it should relate to the components and variations developed for the performance task and help the teacher assess the student.

We have created an Innovation Configuration-Rubric (IC-R) that was constructed from the combinations of components and variations developed for any given performance task. The Innovation Configuration-Rubric (IC-R) takes the form of a standard matrix or rubric with the

components listed along the y-axis and the variations from least to most desirable listed on the x-axis.

The IC-R for our example about the model of the solar system might look in its entirety like the following:

INSERT 5

Developing Your Own IC-R

As you have seen, the development of an IC-R is relatively easy but requires thoughtfulness and careful consideration. To create an IC-R for yourself, try the following activity.

1. First, look at your curriculum. What is something you expect your students to be able to do? Write it here: _____
    _____

2. Identify a task that is a part of your answer in #1.

3. Use the box below and list three components of the task from #2. We are using three components for the purpose of this paper; there could, of course, be more than three.

4. For each component identify three possible variations of ways in which the component may be performed.

5. Next, fill in the quality line to help you judge the quality of the variations and better assess performance on the task. You should use a scale or indicator you are comfortable with, such as unsatisfactory/satisfactory/outstanding or poor/ average/ above average.

INSERT 6

6. After completing the IC-R you should check your IC-R by asking yourself some simple questions.

   a. Is this component something I want to assess about my students' performance?

   b. Are the variations likely to be in my classroom and does one variation represent highest quality?

   c. Are the components/variations observable?

After asking yourself these questions eliminate any components or variations to which you have answered "no" as a response.

Application of the IC-R

One big question educators have about the IC-R is "How do I use the IC-R to assess student's learning?" The answer we give is "through a holistic process." The use of a holistic process provides the most accurate strategy while maintaining a view of the entire task.

Let's go back to the example about the model of the solar system. Think about the IC-R assessment tool and this example of a student's performance on the task: created a model without a sun, was lacking the planets of Venus and Pluto, only three of the planets had two identifiable

features, and Earth and Mars were larger than Saturn and Neptune. Go to the sample IC-R and shade in the variations listed. What is the students' performance? If you compare the shaded-in variations to the quality line, it becomes easy to see that the students' performance on the task was below the satisfactory level, or at the unsatisfactory level.

However, if the student were to have included the sun and all of the planets, made the representation of each planet relative to the others, and included two or more identifying features on each planet, the student would be in the high end or outstanding portion of the quality line.

As we move into the performance task and portfolio assessment era in education, we must keep in mind that the purpose of assessment is to help improve student performance inform and improve teachers' practice. It is up to the individual teacher to create and use the IC-R in a manner which is meaningful to the student and functional in the classroom.

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INSERT 1

COMPONENTS	
1. Create a model of the solar system containing the sun and all the planets.	
2. Make all parts of the model at a relative scale.	
3. Include at least two identifying features for each planet.	

COMPONENT #1	Variation A	Variation B	Variation C	Variation D
Create a model with the sun and all planets represented.	The model has not been created.	The model lacks the sun.	The model lacks one or more of the planets.	The sun and all planets are repre-sented.

INSERT 3

COMPONENT #2	Variation A	Variation B	Variation C
The model is represented at scale.	The model is not represented at scale.	The model is represented at scale in terms of either planet size or distance between them.	The model is represented at scale in terms of the size of the planets and the distance between them.

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INSERT 4

COMPONENT #3	Variation A	Variation B	Variation C	Variation D
The model has at least two identifying features for each planet.	No planets have identifying features.	Some planets have two identifying features.	All planets have one identifying feature.	All planets have at least two identifying features.

INSERT 5

| Unsatisfactory | Satisfactory | Outstanding |

Assessment Line

COMPONENTS	*VARIATIONS*			
1. Create a model of the solar system containing the sun and all the planets.	a. No model was created.	b. The model does not include the sun.	c. The model lacks one or more of the planets.	d. The sun and all the planets are represented.
2. Make all parts of the model at a relative scale.	a. The model is not represented in a relative scale.		b. The model is represented in a relative scale.	
3. Include at least two identifying features for each planet.	a. None of the planets have two identifying features.	b. Some of the planets have two identifying features.	c. Most of the planets have two identifying features.	d. All of the planets have two identifying features.

INSERT 6

_____

(Quality Line)

COMPONENTS	VARIATIONS		
Component 1:	a.	b.	c.
Component 2:	a.	b.	c.
Component 3 :	a.	b.	c.