

## **Bloom and Connections to the World Beyond the Classroom**

### **January 3, 2005 Sound School Staff Meeting** **Higher Order Thinking Skills and New Assessment Techniques** **Linked to School Reform** **Timothy C. Visel, Coordinator**

Increasingly the term assessment has taken on new meaning - different from "traditional content" to "higher order thinking" as a response to performance standards.

This approach - the new generation of assessment would measure far more than traditional "tests" as proposed by Benjamin Bloom in 1956, "skills at different levels must be taught and tested in different ways."

Bloom's work remained relatively obscure until the Nation at Risk Report 1982 which detailed how the business community embraced "Bloom" for its critical thinking, problem solving, reasoning and team building activities.

More recently the State Dept of Education with its Common Cores of Learning and Teaching continues the "Bloom Philosophy" which now is part of the New Haven teacher evaluation process as indicators of instruction and assessment.

I presented this change in assessment last January, the example was expanded (exaggerated) to include almost every possible response. It had a content focus but the assessment was designed to elicit far more than A, B or C response from students.

I have attached the part of the inservice that had this example. It is only one of many different "types" of example assessments.

One of the ways that critical thinking and other common core skills can be incorporated into instruction is the use of situational, writing prompts. These situational prompts also called open ended prompts.

A method to change instructional practice and incorporate the higher order thinking skills is modifying formal assessments. This can be accomplished by changing formal assessment from answering questions to responding to "situations." The situational response (also called prompt) is a method that asks the students to analyze, critique, compare/contrast problem solve or explain possible solutions or methods rather than recite factual information. It focuses upon the assessment thinking process rather than the assessment product. Research has indicated that factual information without connecting activities or linkages, is only retained short term. This is often acknowledged after students

were retested 48 and 72 hours after an exam. For the same materials retention rates dropped dramatically. Teachers have found this condition to be frustrating at best and often return to recover material presented one or more times. **Creating these new types of assessment instruments takes 4 or 5 times as long to develop and correct and seeks to link or connect several instructional practices.** For the assessment to be fair students need to be exposed to new instructional practices before responding to the new assessment instruments.

Example - A typical multiple choice assessment test question featured in many high school "tests."

Sherman's "March To Sea" during the Civil War was primarily a policy of (A) Scorched Earth B) Pacification or C) Conquest and holding of territory.

The correct answer is "A" he is widely recognized as the first military leader to seek out and destroy the capacity to wage war.

However opportunities exist to connect mathematics and writing to critical thinking analysis, etc. rather than just the recall of events, dates or facts.

### New Assessment Techniques Linking Several Higher Order Skills

Situational Prompt (called writing or assessment prompt)

In 1865 during the closing months of the Civil War general Sherman was convinced that ending the war quickly was the correct thing to do. Until this time Union and Confederate Armies supply trains provided the bulk of food and ammunition required. 50 shot/day, 2 lbs of food and 8 cups of water per soldier required many tankers and barrels. A hogshead barrel contained 325 lbs of food, or 63 gallons of water, ammunition arrived in cartons 10 pound each of 350 shot. Black powder shipped in 50 lbs kegs or one keg for 100 soldiers each day. Soldiers carried about 2 pounds of shot, a daily allotment.

1) How many pounds of food, gallons of water and ammunition shot/power were required each day for Sherman's Army of 98,000 soldiers?

Sherman's proposal to President Lincoln was to "rip the heart of South's Bread Basket," save ammunition by not engaging in conflict and to move like lightning burning Southern capacity to produce war materials and confiscating necessary

supplies to feed and supply his troops. He would need no supply trains. His soldiers would capture necessary food reserves. Once he reached the sea he would need supplies. Anything deemed to be supporting the Southern War effort

would be destroyed. President Lincoln approved this plan. Sherman's Army consisted of 98,000 troops and 254 pieces of artillery organized into three divisions. Items you should know.

a) Much controversy exists about this plan. It was the first time the concept of civilians supporting the war effort was acknowledged as potential military targets or objectives.

b) Sherman's interpretation of Lincoln's approval to burn buildings, farms, homes, stables and small farm buildings was to be termed the scorched earth policy of modern warfare.

\* Sherman had so few supply wagons (mostly used for carrying horse feed) that wounded troops would slow his army to a crawl.

- Georgian farms had been told not to plant cotton but corn instead.
- Sherman's troops were accused of looting homes and then burning them. Although they conquered territory Sherman's Army did not hold it.

\* Sherman believed that maneuverability was key to victory and molded his army into 3 "mobile machines."

- Sherman's troops carried only provisions for 3 days at anyone time and only 3 days of ammunition within one day of travel.

Questions 2-10 refer to the previous statements.

2) What were the major war policy changes attributed to this campaign - please explain.

3) How did Sherman's effort advance the Northern effort to defeat the confederate South, please explain.

4) What would happen if to Sherman's Army if it couldn't move quickly - and stayed in one place for a week and why?

5) If Sherman's troops were confronted with a well equipped opposition force and fighting lasted for more than 3 days would could happen?

6) Do you think Sherman's plan had "risks" please explain.

- 7) If general Sherman had information about a confederate force he would deliberately avoid it why?
- 8) How do you think residents of Georgia felt about this campaign?
- 9) Would you have approved such a plan? Please explain, why or why not.
- 10) It's been over a century since this event took place why do historians continue to discuss it. Why do you think this is so?

It is evident that the ability for connecting problem solving reasoning and creative thinking experience in the situational assessment as compared to a multiple choice or true/false tests. Some school systems have eliminated true/false assessments or minimized their value over time until these assessments became worthless and no longer used.