Summer of 2005 may serve as a pregnant pause for those inventors of thinking classrooms who hear the sands of the hour glass sliding down to the final moment. The last school bell rings soon. The pause brings them a time to look back and a time to look ahead.

Several Woodson Warriors experienced a lunch time study group that took on tough problems such as these:

- What are the defining characteristics of thinking classrooms?
- How might the average class become a thinking classroom?

This group of educators kept pace with Superintendent Janey’s Strategic Plan as well. Dr. Janey’s single goal of student achievement and the plan provided a context for thinking classrooms. Its vision was to have 100% of the students rating proficient or advanced on the state assessment with similar achievement benchmarks on measures such as advanced placement tests and the National Assessment of Educational Progress administrations over the next nine years.

By 2014, DCPS will be a district of high achieving students across zip code addresses. East of the River students will compare nicely with students West of the Park. Also, study group members experienced a powerful, yet simple, teaching method because Howard Gardner’s MI approach was the framework for each of the ten study group sessions.

Based on multiple intelligences theory, the MI approach organized each study group session into just three parts.

That meant each session opened with a point of entry activity related to the concept of the session. Then, members engaged a powerful metaphor to wrestle with an image related to the concept. Finally, members engaged multiple representations to go deeper.

The lesson plan (story board) for any one of the ten sessions illustrated how the MI approach worked. But session ten seemed particularly instructive.

Study group session ten opened with members responding to a writing prompt. **How might we create a culture of thinking at Woodson High School?**

They wrote on post-its for five minutes, and then participated in the co-generative dialogue strategy to exchange ideas with one another.

Gardner’s MI approach gave the facilitator the range to use any one or a few of the nine intelligences in his theory to open with an activity that motivated as well as informed, often tapping both prior knowledge and inquiry.

In the case of session ten, the writing prompt drew on verbal linguistic intelligence. The structured talk or (“co-generative dialogue” in the world of ethnographic research) extended this word smart task with interpersonal intelligence because members comprehended and challenged one another’s thinking. Following the group norms for the structured talk, they agreed to disagree and still remain colleagues.

Most of the ten sessions used a painting, clip art, or poem for the powerful metaphor. When a painting or clip served as an image-maker, the intelligence was visual spatial. When poems such as Richard Wilber’s “Mind” were used, the powerful metaphor drew from verbal linguistic intelligence.

But the powerful metaphor in session ten was neither. It was this prayer:

> Dear heavenly Father, make me an instrument of inspiration and blessing to others. As I empower others to fulfill their purposes, empower me to walk in the fullness of what You have created for me to do and be. Amen.

At first glance this appears to be a word smart activity. Yet it does not suggest an image. It has neither metaphor nor analogy in its literal content. But it is a use of the ninth intelligence in Gardner’s theory. A seldom used, but potentially awesome, activity to create an image from scratch, existential intelligence means the capacity to ponder or pose questions about ultimate realities such as life, death, God, purpose for living, Dharma, war, love etc. A person who is wonder smart has a proclivity to search for the deeper meanings life offers.

Many of the members of this study group showed that proclivity as evidenced in the puzzle wall strategy (chart paper capturing questions that came up for members throughout the ten weeks).

Their existential questions forced fellow members to go deeper and included the following:

- How do we get students to buy into the “new standards” that will get them to “think” continuously about integrating technology with texts and original written responses?
- How does the strategic plan support thinking classrooms?
- Does the DCPS strategic plan provide a system that will support a culture of thinking?
- Where is the fort? Are people working at night to build the fort for educational excellence?
- How do we get students to be original thinkers?
How do we overcome the attitudes and dispositions for non academic achievement?

How is a science fair like a thinking classroom?

What methodology can be implemented for students who are “50 years” behind in basic skills—reading, writing, and arithmetic?

Why don’t we go “back to basics”?

In an Information Society, have the basics changed?

What implications do MI theory and the MI approach have for thinking classrooms?

What can we do as educators to help students to think at the higher order level?

For these study group members, such a final powerful metaphor steeped in existential intelligence felt right.

In this prayer, members got to see themselves as the metaphor of power. And that is not power in the more conventional sense of power-over. It is in the sense of power-with. Power-with God and power-with other people creates deep change in systems.

Dr. Wilma Bonner recently employed this power-with concept in the professional development on standards for DCPS leaders over the last two weeks.

She hired a consultant, David Nagel, to train 75 core leaders in a scientifically based standards program. They, in turn, one week later, trained another 200 or so anchor leaders. Those anchor leaders will train X number of teachers this summer beginning with the 2005 June 23rd and 24th dates.

After the three anchor team leadership sessions during the second week at the Logan Professional Development Center, Dr. Bonner met with the core leaders and explained that the district plans to build capacity of K12 teachers and principals. Every teacher will have the chance to learn a scientifically based program for improving teacher quality and student achievement. Many teachers will be trained to teach teachers.

That, in a nutshell, is power-with.

Thus, a novel use of the prayer for empowerment, as a powerful metaphor in Gardner’s method, drew on higher ground and educational context.

Power-with means God empowers us to empower others.

Finally, participants played Harvard University’s Reflection Cube Game for the multiple representations phase of their final study group session.

A mostly, intrapersonal, interpersonal, and verbal linguistic intelligences game requiring thinking about thinking, interaction with others, and a command of language, written and spoken, this critical thinking game gave members a chance to reflect on the year of inventing thinking classrooms. Also, it encouraged members to anticipate the new school year, particularly the district attention to standards.

Not only will the study group start off in September by examining a landmark book (Tishman, S., Perkins, D. and Jay, E. 1995. The Thinking Classroom: Learning and Teaching in a Culture of Thinking. Boston: Allyn & Bacon.) the scientifically based standards movement will come to DCPS.

District-wide, teachers will teach teachers to identify power standards, unwrap the power standard for concepts and skills, create big ideas from the concepts and skills, and invent corresponding essential questions that foster deeper understanding of the given power standard. And that is just the knowing phase of a three-phase approach to make the average teacher in DCPS proficient.

And there is so much research to say that teacher quality relates to student achievement. Dr. Bonner’s expectation that a district of proficient teachers will foster high achieving students on state assessments, National Assessments, and Advanced Placement examinations feels reasonable.

Beyond knowing the standards, she said the next two phases will be the teaching and assessing phases. Professional Development will make it so.

Locally, some of Woodson High School’s brightest teachers will be both applying the scientific standards methods and reflecting on those standards with the Harvard Model for creating a culture of thinking.

For instance, once a thinker identifies a power standard (one that endures, connects with other standards, and appears on high stakes assessments), he or she unwraps that power standard by circling the verbs and underlining the nouns. These become the skills (verbs) and concepts (nouns) that stand out. The skills and concepts, in turn, become a set of big ideas the students will learn. The big ideas are, finally, made operational for classroom thinking and learning by becoming essential questions. These questions (worded in plain English, capturing essential content in the standard, setting up inquiry) are posted in the classroom to guide both instruction and assessment of student thinking and understanding.

The four forces of enculturation in the Harvard Model support this scientific method for creating standards of power.

In the Harvard Model (Tishman, Perkins, and Jay), teachers would use four forces of enculturation to create cultures of thinking:

1. modeling
2. explaining
3. interaction
4. feedback

These forces seem to be what an essential question demands in the heat of real instruction.

Teachers model good thinking, explain a tough concept, provide interaction for learners to wrestle with the concept, and give them useful feedback about their thinking and understanding of the concept.

In the Harvard Model, language, thinking dispositions, mental management, strategic spirit, higher order knowledge, and thinking transfer are six dimensions of a culture of thinking classrooms.

In the entire scientific approach for knowing standards, teacher understanding a language for thinking adds value.

Take just the unwrapping of a power standard for instance. The verbs indicating skills are either lower order thinking or higher order thinking when viewed from the perspective of Bloom’s taxonomy. In his taxonomy words such as evaluate, synthesize, and analyze are obvious words of higher order thinking. They are the top three of the six words in Bloom’s cognitive model. Thus, they are in the language of thinking according to the Harvard Model.
Such a word appears in a 12th grade power standard like “evaluate the range of literary devices and techniques (author’s craft) present in classical essays and historical speeches.” (Strand 4, 12.LT.8 p37 of 65)

But for educators able to go deeper, the language of thinking helps to discern other power standards with less obvious words, though the words are in the language of thinking that extends Bloom’s taxonomy. (That should be no surprise. As valuable as Bloom’s taxonomy is to educators who want to think about thinking, he created the model in 1956. A lot has changed in the cognitive community of researchers and practitioners in the 50 year swing since.)

Those educators who know the language of thinking can recognize the value of verbs not found in Bloom’s taxonomy.

Look at power standard 12. LT. 1

“Relate literary works to the social and cultural traditions and seminal ideas of their eras.”

That standard identifies learning that would endure well beyond 12th grade. It spans life long learning. It endures.

That standard connects with over a dozen other standards in the other strands of the DCPS version of the Massachusetts standards for ELA. It builds on less complex standards from grades K to 11.

That standard coheres with high stakes testing (state assessment, national assessment of educational progress, advanced placement, College Board writing, and even the GRE writing examinations).

That standard, then, endures, connects, and coheres. It is a power standard.

Yet, an educator unaware of the language of thinking will recognize that “relate” means to see the pattern that connects. The word relate even encourages thinkers to see what does not relate. Add to that the noun/noun phrases such as literary works, cultural traditions, seminal ideas, era (or seminal ideas of their era) and it becomes clear that this standard must be taught. These concepts yield big ideas and essential questions for a lifetime.

Similarly, educators who know how to teach specific thinking dispositions that favor good thinking, metacognitive strategies for mental management, the strategic spirit to be a questioner, higher order knowledge worth remembering, and transfer of thinking to other content areas and life situations will use the scientific method for standards even more effectively.

Reframed as inquiry, this position becomes the following: Do educators who examine both the theoretical implications and practical classroom applications of the Harvard Model for creating a culture of thinking, use the DCPS scientific model for knowing, teaching, and assessing standards more effectively than educators who use only the scientific model for standards?

In any case, the Woodson Warriors who have just completed the inventing or reinventing thinking classrooms study group stand ready to be torch bearers in the fall.

These Prometheans will engage the double description of learning the Harvard Model and the scientific method of knowing, teaching, and assessing standards. They get to go deeper into the question how does the average class become a thinking classroom?

They get to create new puzzles.

A Literacy Coach for DCPS and educational psychologist at large, Jerry Fluellen has been writing a series of monthly articles to foster thinking. “Double Description” is the tenth and final article in the series for the academic year 2004-2005. Also, he publishes DrumTalk, a quarterly newsletter for the thinking classroom.

Jerry joined the Woodson family last September and co-created the “Inventing or Reinventing Thinking Classrooms” project with 22 fellow teachers.

As a final thought, he ends this year with a quotation from Frank Herbert’s Dune Saga.

“Education is no substitute for intelligence. That elusive quality is defined only in part by puzzle solving ability. It is in the creation of new puzzles reflecting what your senses report that you round out the definition.”

Frank Herbert
Chapterhouse Dune