

Bridging the Standards Across the Curriculum with Portfolios
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Those of us who are involved in education, in whatever capacity, can sense the stirrings. Parents are voicing concerns about the adequacy of their children's education. The business community and American industries question whether the quality of education will prepare youngsters for the realities of the workplace. Corporations question whether schools are preparing America's youth to cope with the demands of an increasingly technological environment. It is now imperative that the next several generations of students entering the expanding workforce are trained to make sound decisions. A quality education must prepare young adults for responsible positions in the business world, where problems must be confronted and solved on a daily basis. As one of the world's greatest industrial powers, workers are evaluated on the basis of their intellectual capability, creativity, and inventiveness, as well as their ability to formulate practical responses to problems and difficulties as they arise.

Within the precincts of the private sector, the business community and the corporate world, individuals today gather data, compile statistics, conduct surveys and access all types of information. Companies and corporations of all nations use this information to make a good product, work efficiently, and show annual profits. To attain these simple but all-important goals an intelligent workforce is not only desirable but necessary. Today's workers are a far cry from the laborers that manned the industries following the Second World War. While that was a time when muscle and brawn were in demand, such qualities take a back seat to today's qualifications of intelligence, literacy, knowledge, shrewdness, sensibility, and perception. The new millenium will demand young men and women who can channel the data, statistics, surveys, and all those massive amounts of information into material that is comprehensive and useful to the business world. Computer skills will be necessary. And even as technology generates new innovations, reading and writing skills will be as important as they are today.

Today's generation of school children is going to enter a workplace that demands that they possess a fundamental conception and understanding of the basics within their area of specialization. A study by Canteen and Campos (1990) pointed out that it took over one hundred and fifty years, from 1750 to 1900, for all information in the world to double. They further reported in their *History of Knowledge* that all information that existed in 1983 doubled by 1985. Yes, our world has markedly changed due to modern technological advances. It is now predicted that informational data banks will be doubling every year. An avalanche of facts, figures, and rapidly accelerating intelligence is inundating the world, and there is no end in sight. Today's students, who will be tomorrow's labor force, must have the skills to find and sort materials that will be pertinent to their needs. They will be required to write and give reports on their accumulated data, which will be used in problem solving and decision-making. With this insight, our committee realized that good writing of all sorts could no longer be confined within the walls of the Language Arts classroom; instead, it must be implemented and utilized across the disciplines. We wanted the students to extend skills obtained in the Language Arts classroom to their other subject areas.

Corporations and other outside agencies continue to critically examine school systems. It is evident that traditional tests are being criticized for not assessing student aptitude (Herman and Winters, 1994). Interviewees are often being asked to bring portfolios when they seek a position. The portfolio speaks volumes and can demonstrate an applicant's potential success or failure in a particular position. Portfolios provide more equitable and sensitive indicators of what students can

accomplish. For this reason, we knew that the portfolio, as well as the writing, needed to be implemented across the disciplines.

What follows is not a panacea for the problems besetting the educational community in the United States. Instead, it is an overview of how one school implemented portfolios to improve the quality of education for its students. **The formula that made our implementation a success was the breaking away from the antiquated view that most writing occurs in the Language Arts classroom.** If portfolios worked at Wagner Middle School in New York City, they just might help other schools better the education they give their youngsters.

Background:

In 1997, Robert Wagner Middle School was the recipient of the Magnet School of the Year Award. To elevate Wagner to the status of becoming one of the finest schools in Manhattan took a great deal of hard work. Tremendous changes had to be implemented, but the faculty was willing. The administration led the way with support and leadership, school spirit, and high morale, which fostered the will to make it all succeed. The easiest part was initiating changes in furniture placement, so that every classroom today has students clustered in groups of four and ready for student-centered, hands-on activities. The grades were divided into "Houses," with four classes in each House. The homeroom teachers each taught their major subject area, namely Social Studies, Language Arts, Mathematics and Science. They worked together to plan curricula during two CPT periods (Common Planning Time) and counseled two Advisory sessions during the week. As the educational consultant coordinating this project, I participated with teachers, administrators, and members of the community to plan and implement the changes. But one final step remained.

Wagner was ready to implement the standards and the portfolio process. In order to assess youngsters authentically, it was time to look beyond scores on a test, a quiz, or working multiple choice questions to attain a grade that was suppose to indicate the full measure of their talents and abilities. Teachers were now ready to assess projects, long-term assignments, reports, speeches, and essays in a different manner. Many school districts throughout the nation have begun to use standards and portfolios; District Two and Wagner would not be the first. But at Wagner, we wanted to go beyond simply initiating portfolios to be filled with a student's work. We wanted to take it one step further. Within every subject area, the teachers rewrote standards in their own words that conformed to those imposed by New York City's Board of Education. Once the standards were clearly delineated, and it was clarified what the youngsters would be mandated to learn, the teachers created rubrics that would determine the quality of work to be placed in the portfolio. Once this occurred, the work placed in our portfolios could be defended against any challenge to its authenticity.

The procedures we followed to institute the standards process at Wagner were not complex. We began by forming a small group assigned to examine how to proceed and what our goals should be. The first step was to brainstorm a list of questions that would define our expectations and serve as our guide. The second step was to answer those questions clearly and carefully so that the standards and the portfolios could be successfully implemented. Once we listed our questions, we sorted them in different categories. Below are the answers to the questions:

How We Addressed the Questions:

1. How could we get teachers to have ownership of the standards?

Much of this was accomplished on days when the school was scheduled for a half-day, with classes for the students in the morning, and the afternoons set aside for staff development. From the first meeting on, the teachers congregated in small groupings according to their discipline and subject area. The administrative staff distributed the New York City Board of Education's Framework Standards, the New York State Board of Education's standards, and the New Standards from the Learning, Research, and Development Center to all the teachers. Time was set aside for a review of the standards as mandated by the board, and a general discussion and forum followed. Afterwards, the teachers were called upon to write the standards in their own words, and they were permitted to edit and revise as they saw fit. If they chose to strengthen the wording of the standard, all well and good, but to weaken or water down any item was strictly forbidden.

By allowing teachers to place the standards within familiar parameters, teachers were able to discuss and debate all aspects of each standard. As the various teacher forums discussed the standards for their subject area, everyone made certain that they addressed the needs and specific abilities of Wagner's student body. The debate and discussion alone allowed them to take ownership of a document that may otherwise collect dust on a shelf.

We used the following system for writing our standards book: Mission Statements, Content Standards, Curriculum Standards, and Curriculum Objectives. Here is a sample taken from the Social Studies Department:

A. Mission Statement: (Graduating or exit goals)

“Students will develop critical thinking skills through decision making about issues confronting themselves, society, and the world, as well as through the investigation and questioning of chronology of events and causal relationships. A multicultural and multi-perspective approach to curriculum standards will be employed to provide students with the appropriate tools to investigate global events and issues such as conflict, dissent, racism, and gender bias. These issues will be studied in relation to the values inherent in American society including justice, equality, rule by law, and civil responsibility...”

B. Content Standards: (Descriptions of the behaviors found in the mission statement)

Students will be able to:

1.0 Demonstrate an awareness of social, economic, and political changes

C. Curriculum Standards: (General activity statements of student performance)

Students will be able to:

1.1 Examine the relationship between technological developments and changes in society, politics, and economics

1.2 Identify how war and conflict influenced social, economic, and political changes

D. Curriculum Objectives: (Specific student tasks to be assessed)

Seventh Grade:

1. The North and South break apart

- A. Analyze the efforts to compromise between the North and South to settle their differences
- B. Compare and contrast the conflicts and tensions, which mount between the North and South
- C. Critique the events that led to war

2. The North and the South fight a war

- A. Compare and contrast the strengths and weaknesses of each side
- B. Analyze how leadership, or lack thereof, brought victory to the North
- C. Investigate how the war affected the lives of people in the North and the South
- D. Examine the complexities of reuniting the nation
- E. Analyze Lincoln's plan to unite the divided nation
- F. Compare and contrast the South before and after the war

2. How could teachers use rubrics to improve the quality of their assessment and the work of the students?

The philosophy of the shared ownership did not stop at the teacher level. Instead of imposing pre-established criteria of standards, teachers engaged in meaningful dialogue with their students, who were given the opportunity to negotiate the criteria for assessment of each of their assignments and projects, giving them a sense of ownership as well (Stix, 1997). So that teachers at Wagner felt competent and confident in their own assessment procedures, they were encouraged to use rubrics as a means of measuring their students' work. To better understand the implementation of this procedure, all teachers were trained in writing and designing rubrics. Breaking up into teams and working on a specified task that their students had to complete during the school year, the teachers designed a 4 or 6-stage rubric so that work produced by the students could be judged and graded according to specific criteria. The rubrics would also be an immense help to classroom teachers and would serve as an aid in preparing and planning their lessons.

We wanted the teachers to complete this exercise so they would know how to create rubrics during the school year with their students. This way, they would be able to create and negotiate the criteria with their students when the task is initially assigned, and students would know exactly what work was expected of them and how it would be graded. We hoped that students would try to meet each criterion, increasing the quality of work being submitted (Wiggins, 1993). Teachers were then required to complete a cover sheet explaining how the task met the standards. The completed form would include the content standard, the curriculum standards, and the curriculum objectives of this task as designated in the school's standards book.

This form (Figure 1), issued to all subject teachers in all curriculum, helped to outline and delineate the standards that would be implemented for a particular task.

Figure 1: Bridging the Standards to the Classroom

Figure 2: This rubric was designed after the Bridging the Standards to the Classroom form was completed.

The students' involvement in creating criteria did not end with the rubric. Peer review allowed students to pass judgment on each other's work. By using the criteria the students themselves have engendered, the students could critique and judge what their peers and they, themselves, have produced for a particular project or assignment (Collins and Dana, 1993). Therefore, we taught teachers how to create an assessment chart with the students. By writing the criteria along the heading, students filled in the quadrants and offered a judicious critique using expressive language, as indicated in the samples (Figures 3 and 4). A group of students used the same assessment form below for a particular presentation. Two students saw the same site plan presentation, but from totally different perspectives, showing that the charting helped them become good viewers and listeners, and that different conclusions could be drawn.

Charting of Student Work by Other Students

Figure 3: Theodore Lee's charting of his peer's presentation on a site plan during colonial times.

Figure 4: Luciana Gravotta's charting of her peer's presentation on a site plan during colonial times.

3. In what ways could the portfolio demonstrate our commitment to writing across the curriculum?

Many times it is assumed that a portfolio is only for a specified task. This is a natural inclination, since we daily confront terms such as “retirement portfolios,” “stock portfolios,” an “artist’s” or “designer’s” or “model’s portfolio,” and on and on. In the school environment, it is usually an “art portfolio” that some talented and gifted youngster is encouraged to compile for presentation to an admissions board of a specialized high school or academy. Under other circumstances, people assume the portfolio is used only in the Language Arts Department. Since Wagner was transformed into a true middle school, we were committed to having subject areas that were all individually strong. We also fostered a school policy of interdisciplinary connections through the use of “houses” or “academies,” with individual portfolios that would exhibit the full gamut of a child’s schooling experience.

Before we began, we decided to use the Literacy Portfolio Guide from the *New Standards* (1997), a document from the Learning, Research, and Development Center, a division of the University of Pittsburgh. After studying the guide, we chose to use the Middle School Portfolio (Grades 6-8) as a basis of what writing should be included. The structure included the following:

Reading Exhibits: Reading challenging literature, reading for information (informational material, public documents), reading 25 books, of which 4-5 have to be a genre study and at least 4-5 books for an author study.

Writing Exhibits: Respond to literature, write a literary genre or a narrative account, write a report, a narrative procedure or a persuasive essay, one free choice piece, and one piece showing the writing process where multiple drafts are included.

Speaking, Listening, and Viewing Exhibits: Oral presentation to share information, oral presentation to influence others’ opinions, evidence that you viewed something and could make a judgement about what you viewed.

Reflective Essay: An end-of-the-year reflection piece that explains how the portfolio represents you, the student, as a reader, writer, speaker, listener, and viewer.

Through a great deal of discussion, we tried to determine what occurred naturally within each discipline. It is at this precise point that Wagner's efforts impacted on what would be the major accomplishment of the school's portfolio initiative. In 1992, when Bill Clinton made his first bid for the presidency, he caught the imagination of the American people with, "It's the economy!" Our slogan became, "It's the writing." And the writing would be across the disciplines, emphasized in every classroom, and pushed in all subject areas, major and minor. The students would write. And when they were finished they would write some more. We wanted everyone to know that at Wagner it would be the writing that would herald success for our portfolios.

Though the workplace may emphasize data, surveys, statistics, and information, the human element cannot be totally discounted. Wagner's program for emphasizing writing skills at all levels and in all disciplines was a touch of reality. The kids were being braced and told, "this is what will

be expected of you in the real world." The mandated standards were creating a new environment in many of the classrooms.

As an example, the science class was evolving beyond simply performing experiments and taking class notes. In many classrooms, teachers assigned the Tuesday edition of the *New York Times* as reading material, with an emphasis on the special science section. Certain topics and subjects lent themselves easily to narrative reports, some timely and controversial such as the cloning issue. The science teacher, perhaps detailing the daily experiments and work of a Louis Pasteur or Madame Curie, could assign journals and diaries. The writing would be science-informative, but the format could vary depending on the particular topic. How much do the students have to know about rocket science and space research? Let them write a play and script on the achievements of Werner von Braun or Robert H. Goddard. Learning the periodic table of elements could be reinforced through writing a persuasive speech that could also be delivered as an oral presentation. Through innovation and imagination, an endless supply of challenging assignments could be developed and implemented.

Our group then made the decision to select in each subject area the type of writing that would be considered **natural** to that discipline. We did not want to overwhelm the students, and we sought to avoid an overload of what the teacher would have to assess and improve upon for inclusion in the portfolio. We decided that the science teacher would assign a narrative on a scientific topic, since that type of writing is both natural to the subject and is frequently used. It could be a write-up of an experiment, a written discourse on some new discovery or cure, or an informative biography of a famous scientist and his work. In Social Studies, students would be required to respond to a public document. They would write a persuasive position statement and it would be delivered as an oral presentation. The classroom teacher would select the public document from a long list of appropriate choices; for example, the list would include Magna Carta, Washington's Farewell Address, the Bill of Rights, Lincoln's Second Inaugural, or Martin Luther King's "I Have a Dream." In math class, the students would be called upon to write the solution to an open-ended problem. What appears at first glance so simple becomes teasingly difficult, for the students are called upon to go beyond only solving that problem. They must write and detail the steps that helped them arrive at the particular solution they've indicated. Language Arts poses a unique challenge, for it is mandated that the students read 25 books over the course of the school year. Through discussion, we decided the writing should be a response to one item in their literature assignment. The other required piece was the writing of a narrative account, or a creative piece in some other literary genre, such as a play or a poem. We continued this discussion with all subject areas.

We prepared a set of sheets (Figures 5 and 6), which described each subject area in detail and what was required:

Figures 5 and 6: Portfolio Requirements by Subject Area

All subject areas were covered, and all disciplines would require writing from the students. Even the Health class set a standard that called for a written response to informational material. The students could be confronted with the reality of responding to a clinic's notification of a recent outbreak of hepatitis in the school. They would be asked to respond in writing as to how they would cope with this infection, what steps the school should take, and what they could do individually.

Were we trying to transform the students into scribes? Most definitely not. Within each subject area the material would be challenging and an education in itself. Students would learn to work with others cooperatively. Certain skills would be mastered, such as the ability to confront a problem and work out a successful solution. Students would learn to handle data and information in a manner similar to that of the business community. Wagner's approach attempts to reduce the difficulties and pitfalls the students are eventually bound to encounter and prepare them adequately for writing in the real world.

4. How could we design a list of expectations without being prescriptive?

When the portfolio requirements called for a persuasive speech, this did not mean that a teacher had to give one assignment “to cover it.” We assumed that there would be many times when students would be asked to write and deliver a persuasive speech or take part in a debate. The student could “house” many of these samples. By year’s end, they could choose their best piece for their portfolios (Goerss, 1993).

It was important that the portfolio did not become prescriptive. Over the period of the whole school year, there would be numerous opportunities for debates, speeches, writing exercises and essays. Together teachers and students could collect as many samples as they wanted. At the end of the year they could collectively decide what should be included in their portfolios and what particular items could be excised and eliminated. Students had to fulfill the minimal requirements of the check-off sheet (Figure 7). However, they would always be encouraged to go far beyond the minimal requirements.

Figure 7: Check List of Portfolio Submissions

5. In what ways could we better link and integrate the disciplines through this process?

To encourage core and encore teachers to be actively involved, to fashion links between the disciplines that would be natural, we again looked to the New Standard's Literacy Portfolio Guides. Language Arts, Social Studies, and Drama can be easily integrated, especially where subject matter could bridge the disciplines. A natural connection could be made between writing a skit reflecting a moment in history in Language Arts, using Drama techniques to enhance the presentation, and performing the skit in Social Studies. An indication that the rest of the class is using active listening would be evidenced by their own critiques and peer assessment forms. This makes the presenting students accountable for what is often referred to as "accountable talk," from the Principles of Learning (Resnick, 1995).

If at Wagner we focused on integrating the standards across the disciplines, we were also interested in giving the students the opportunity to express themselves multi-modally. Essentially, if a student is assigned a monologue, the writing requirement part is not enough. The writing is but a preliminary, for now the written work must be expressed dramatically in whatever genre the teacher and/or student should happen to suggest as the mode of expression. The written form now manifests itself at another level, with the voice and speech giving emotion to the words, arousing in the audience feelings of sadness, pity, tenderness, sorrow, or laughter and amusement and that which is comical and funny. In drama, the students may wish to make a video that can be included in their portfolios, showing how they created a play, worked in the scenery, and acted out the dialogue. In a similar manner, the art teacher can submit an actual piece the student created for inclusion in the portfolio. If the artwork is such that the size or material precludes being placed in a portfolio, a photograph will suit the purpose admirably, and the work itself can be a painting, sculpture, woodcut, a work of animation, or a ceramic. There are no limits to what the portfolio can contain to help the teacher (or parent) fully understand the talent and intelligence of the student.

Figure 8: Standard Assessment Sheet

Figure 9: Peer Assessment Sheet

6. In what ways could we get teachers to feel the portfolio was a natural extension of what they are already doing?

We allowed the New Standard's Literacy Portfolio Guides to steer us ahead. Much of the work that would be assigned for portfolio fulfillment was already mandated in many of the subject areas. By examining the criteria, we found certain procedures and formalities would naturally fall into those disciplines where such work was already being done. A "persuasive speech" would most naturally fall into the Social Studies curriculum. A piece of "informational matter" would easily be found in a health class. A "narrative procedure" would be natural to Science classes. What was already being done at Wagner was now simply extended to creating work for the portfolios. There was no added burden assigned to the teachers. We designed a step-by-step approach for teachers, but we indicated they could create and design their own method of implementation. However, we determined that it was better to have a form available (Figure 10) to alleviate any anxieties about approaches and procedures.

Figure 10: From Standards to Portfolios

7. In what ways could the standards movement reflect our commitment to the inquiry approach to instruction?

Imagine our delight in finding the New Standard's Literacy Portfolio Guide requirements completely open-ended. This meant we could encourage teachers to give open-ended problems and tasks, where students would be compelled to use their inquiry skills, a sound foundation for formulating their answers and solutions. This would certainly be the type of work that a teacher would want included in a student's portfolio. It became very important to understand that the portfolio represents not only the best work that a student produces, but also material that challenges the mind and requires the full application of scholarly skills in combination with the intellectual prowess of the youngster. This is the type of work that begins to deliver results. The portfolio is not supposed to be an easy alternative to honest assessment or a gimmick used to substitute for testing. If the portfolio is taken seriously, applied with skill and intelligence, it can become a teacher's valuable tool. It may solve the riddle of what students investigated on their own. It authentically reflects what they really produced, what they really learned, and what the work was really worth, instead of relying on the simple expedient of choosing letters on a multiple choice test for those answers.

8. For what reasons should the portfolios be mandatory for just the graduating class? Or, should we encourage all grade levels to engage in the process?

Through discussions with teachers, we decided that if the portfolios were to have relevance by the time students were leaving Wagner for high school, then it should be a full documentation of each youngster's middle-school career. We wanted the portfolio experience to begin with the 6th grade. This would give students an allowance for trial and error. By the time the third year (8th grade) rolled around, the portfolio would assume validity. It would possess a personality and character all its own, of standards fulfilled, assignments critiqued, and work and projects honestly evaluated and accurately assessed. By maintaining the portfolio through all three middle school years, a student's academic growth and development can be easily charted.

There are two ways that the portfolio could be utilized. A cumulative portfolio would represent a three-year period of growth, and could provide information necessary to charting and measuring a student's growth, maturity, and scholastic improvement. Alternatively, a separate portfolio could be used for each year and can be given to the student to bring home to their parents at the conclusion of each school year. This second option can give parents a feeling of participation in the continuing academic development of their child, having an actual hands-on opportunity to evaluate and appreciate what was learned during the school year. In the student's hands, it is an effective tool for charting one's own maturity and reflecting upon one's own growth and accomplishments. If handled correctly, the portfolio becomes a reflective tool that marks time and achievement (Dietz, 1995).

The portfolio is visible proof that the school system is working for our youngsters. It ensures the development of a "portfolio culture" that will lead to more standards-driven instruction, more challenging performance tasks, and more authentic assessment. In this way, their education will prepare them for their future in the real world.

9. In what ways could we make the portfolio as equitable as possible for all teachers?

At Wagner, to make it more equitable, we decided to involve all our teachers across all subject areas in the standards movement. Since Wagner was transformed into a true middle school, we were committed to having subject areas that were all individually strong. We also fostered a school policy of interdisciplinary connections through the use of “houses” or “academies,” with individual portfolios that would exhibit the full gamut of a child’s schooling experience. We were careful not to give the specialty teachers, who often see over 400 students per week, more than one task per child. We gave the common core department teachers two tasks. Only the Language Arts teachers were given the added chore of having their students earn a reading certificate at the end of the school year, and write a reflective essay. However, these two items were already part of our Language Arts teachers’ curricula.

10. How would the portfolios be organized and housed?

Each teacher would receive two cardboard boxes to hold the class portfolios and manila file folders for each student. Each teacher would be responsible for one class. Ideally, the advisory periods are the perfect time to sit with each student and assess his/her portfolio in an on-going manner. They also give students the time to work on their portfolio independently of the instructor, as they use a check-off sheet to determine what they have accomplished and what work is still required (See Figure 7). If we advise students in these small group sessions as to how they are adjusting and progressing, the portfolio can be an excellent indicator of their continuing development.

11. In what ways will the portfolio help or aid the teachers become life-long learners?

By looking at the work of the students, seeing their failures as well as their many successes, teachers can modify their strategies and approaches to their material. They will not only assess students’ work, but their own teaching as well. This will cause a shift in the philosophy of teaching. In the past, teachers introduced a topic, assigned a reading or a project, and graded the students’ work. Those students who did well received a good grade. Those who did not, received a poor grade. Once a topic was completed, the teacher would begin a fresh topic and start the cycle over again. Now, teachers are being asked to constantly redefine their lessons according to performance and authentic assessments of their students. A teacher will assign a task, and students will use their problem-solving skills to complete it. Both the teacher and the other students can look on and apply performance assessment, lending authenticity to their critiques. Instead of closing the door on that topic, the teacher will now look at the on-going assessment to determine how it will change the introduction of the new topic. Therefore, assessment becomes an integral part of teaching; lessons are no longer a series of cycles and topics, but rather a continuous educational process that extends over the whole school year.

Support from the administrators can come in different ways. Furnishing in-classroom staff development, encouraging the staff to help and aid each other in their teaching by scheduling common planning time, and giving teachers the time to visit one another’s classrooms will support the on-going learning teachers may experience. Providing half or full professional development

days where workshops are held and establishing a place in the teacher's lounge that stocks professional journals and books will also go a long way to promote teacher development. The administration can also order necessary materials, give the staff full support in word and deed, accommodate the faculty with appropriate scheduling, and do everything possible to maintain school spirit, morale, and pride.

Conclusion:

I like what is happening at Wagner. I celebrate the dynamics that created a school that students want to come to every day, a school that parents want to send their children to every day, a school that educates and is a challenge and a joy. Wagner is what it is today because everything came together at the right time in the right place. None of this could have been accomplished without the guidance and the total support of the superintendent's office. The work and effort of the teachers and administration, the parents and the community, and the consultants and staff developers, coalesced into the school we knew Wagner could be if we all tried hard enough. Wagner works, and it works for the students, educating them across the board. The school hums with activity every single day, and teachers are learning to shift their practices to make the students the centerpiece of their classroom. Wagner's teachers know the direction this is all taking: they are learning to work with the standards, with the hope that their students will meet these expectations. Some staff are more proficient at this stage than others, but we are all learners. What is being put into place is an equitable and just measure of assessment and grading. The standards movement and portfolios represent not only the best and finest work a child creates, but the academic growth of a young boy or girl --something simple numbers, digits, and markings in a roll book cannot do. We like what is happening at Wagner because it didn't come easy and is under continual refinement. What we have at Wagner today is what we all worked hard to achieve.

References:

- Burke, Kay. (1993). *The Mindful School: How to Assess Thoughtful Outcomes*. Palantine, IL: IRI Skylight Publishing.
- Canteen, Nancy and Campos, Lori. (1990). "*History of Knowledge*." Phi Delta Kappan, Spring.
- Collins, Angelo and Dana, Thomas M. (1993). "*Using Portfolios with Middle Grades Students*." Middle School Journal, November.
- Dietz, Mary E. (1995). "*Using Portfolios as a Framework for Professional Development*." Journal of Staff Development, 16: 2.
- Goerss, Katherine V. (1993). "*Portfolio Assessment: A Work in Process*." Middle School Journal, November.
- Herman, Joan L. and Winters, Lynn. (1994). "*Portfolio Research: A Slim Collection*." Educational Leadership, 52: 2.
- Learning, Research, and Development Center (1997). *The New Standards*. National Center on Education and the Economy. Pittsburgh: University of Pittsburgh/ Harcourt Brace Publishers.
- Resnick, Lauren, (1995). "*Principles of Learning*." Adapted from: *From the Bell Curve to All Children Can Learn*, video-based lecture. Pittsburgh: University of Pittsburgh, Institute for Learning.
- Siegel, Janna and Shaughnessy, Michael. (1994). "*An Interview with Howard Gardner: Educating for Understanding*." Phi Delta Kappan, 75: 7.
- Stix, Andi (1997). "*Creating Rubrics through Negotiable Contracting and Assessment*" US Department of Education: ERIC #TM027246.
- Wiggins, Grant. (1993). "*Assessment: Authenticity, Context, and Validity*." Phi Delta Kappan, November.