Spotlight
on Collaboration

**Collaborating Toward Conservation:
A Recycling and Waste Unit**

By

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At our elementary school, the faculty and administration had just created our first curriculum map. Excited by the possibilities we saw for improving student learning through cross-curricular units, we decided to work together to create a unit on natural resources, waste, and recycling. Although we had cooperated on lessons before, this would be the first time we would plan a unit together and operate as true co-teachers. [P3, P4]

Research shows that when media specialists and teachers work together as teaching partners, children benefit. In their study, Lance, Rodney, and Hamilton-Pennell

(2000, p. 3), demonstrate "the importance of a collaborative approach to information literacy. Test scores rise in both elementary and middle schools as library media specialists and teachers work together." We are lucky to have a principal, Ada Minster, who is supportive of collaboration, appreciates the role of the media specialist as an authority on information literacy, and advocates the use information literacy skills throughout the curriculum. She also facilitates the collaboration process through flexible scheduling, funding a full-time library aide position, and her enthusiasm for innovative teaching practices. [P1]

Our first task in planning this unit was to define our goals. We wanted to cover several state science and language arts standards, and also incorporate American Association of School Librarians information literacy standards. [P2] In addition, we were both convinced that an inquiry approach should be used in developing a research project component. We decided to use the Big6 model of information problem solving. [P8, Eisenberg] One of the many reasons we prefer an inquiry approach to research is because of the motivation factor inherent in having students choose their own research topics. We find that when allowed to choose topics that are personally interesting and meaningful, students are more invested in their research. [K7]

After brainstorming ideas and scanning several databases of standards-based lesson plans, we had a list of activities and lesson components with which to work. As we discussed each activity, we thought about how to incorporate the media center and where the media specialist, could teach mini-lessons on information literacy skills. [P3] We also discussed adapting some of the lesson plans we had found to make them into more project-based activities instead of having the teacher/expert disseminate information to the students. [P8, K2]

We also agreed on the importance of providing for different learning styles. We incorporated different media such as audio and video into our sources. We provided opportunities for tactile learning, such as handling different products when trying to discover what they were made from. We included analytical tasks such as weighing and graphing our lunch waste. In addition, we agreed on the importance of providing choices in how a student expressed what he or she had learned. Many different kinds of presentation formats were suggested for the inquiry research project to give everyone a chance to shine. [K6, P7]

We titled our theme for the first three weeks "Where Does It Come From and Where Does It Go?" This included learning about natural resources, waste, and composting. The second three-week period of the unit focused on recycling and reuse and was called "From Trash to Treasure." We have chosen two of our lessons, the Oral History Interview and the Inquiry Research Project, as examples of how the collaboration process worked and how the students benefited from our co-teaching.

Oral History Interview

(adapted from "Trash Time Travelers" http://www.epa.gov/epaoswer/education/quest/pdfs/unit1/chap3/u1-3_timetravelers.pdf)

Students were asked to interview an older adult in their family or neighborhood about what kinds of things were thrown away in years past, how trash was disposed of then, and how things have changed. They were to use the information gathered in the interview to write an article for a class newsletter called "The Trash Times."

Collaboration

Before the Lesson:

We laid out the plans for the assignment, including responsibilities and expectations for each segment of the project. We also devised the assessment tools, which were three self-assessment checklists for students to use during the process (interview, writing, computer work) and a rubric for assessing the final products. [K1]

The Lesson:

Mrs. Terry had spent several days working with the students on understanding what different products are made from and what happens to these products when we are done with them. Next, she introduced and explained the interview project. Ms. Booker presented a mini-lesson on oral histories and how to conduct a good interview, during which the students brainstormed good interview questions. [K4] Students were given three days to conduct the interview and bring their notes to class.

Students were asked to compare and contrast what they found out about the past with what they saw happening around them today. Another component of the assignment was to imagine how some of the old practices might still be affecting us today. [K4, K5]

Mrs. Terry also included a lesson on how to correctly punctuate the extensive quotations that would be used in this piece. Students wrote, reviewed, and revised their work through proofreading and peer editing.

When students were ready to publish their work, Ms. Booker taught a mini-lesson on the use of a word processing program, specifically the changing of font types, sizes, and colors, and the inclusion of clip art and scanned student artwork. Ms. Booker and a parent

volunteer were available to answer questions and provide individual assistance while students worked with the computer.

After the Lesson:

We assessed each student's performance based on the checklists and the product rubric. [K1] The newsletter was printed and each student was given a copy to take home.

How It Went:

Most students were enthusiastic before the interview, though some seemed nervous about it. Interviews were a method of research most of them had not used before. The checklists seemed to reassure the students by giving them a guide through the necessary steps of interviewing, editing, and word processing. We have found that students respond better to new situations when they know exactly what is expected of them. We did make sure that students understood they were free to add to and go beyond what was stated on the checklists if they desired.

When we asked the students for their reactions to the lesson, the responses were almost all positive. Several students said they preferred this active lesson to simply reading about how trash was handled in the past. [K2, K7] Of course, some students complained that learning punctuation was boring. However, nearly all enjoyed using the word processing software to create their own newsletter, of which they were very proud.

Inquiry Research Project

Collaboration

Before the Project:

As with the Oral History Interview, we discussed which of us would be responsible for each section of the project. Mrs. Terry would teach the first and fourth steps in the Big6 (Task Definition, Use of Information), Ms. Booker would teach the second and fifth steps (Information Seeking Strategies and Synthesis), and we would co-teach the third and sixth steps (Location and Access and Evaluation).

We also devised the assessment techniques we would use for both the process and the end product. We chose a rubric to assess the students' inquiry journals. The students were given a checklist of topics to cover in their journals each day, such as what sources they used, what facts they learned, any questions they had about the information, and reflections on the research process. We also developed a rubric that could be used for assessing final products in various formats. [K2, K1]

The Project:

The second week of our unit began with a field trip to the county landfill and the adjacent recycling center. The students made observations and noted their questions in their writing journals.

Upon return to school, the class discussed their questions and what had interested them. Mrs. Terry modeled how to identify an essential question, or Big Question, as it's called in the Big6. She used the Question Brainstormer for Students (Valenza, 2000) as a scaffold to help students come up with their own Big Questions for research. [K9]

Question Brainstormer for Students

	Topic #1	Topic #2
Which one?		
How?		
What if?		
Should?		
Why?		

From Valenza (2000)

Ms. Booker was an integral part of the inquiry research project. She created both a classroom display of books and an online guide to Internet resources that could be used for research. During the search process, she introduced the basics of how to use an online database, and how to evaluate resources for accuracy, authority, and currency. When it came time for the students to create final products, Ms. Booker demonstrated electronic presentation formats for the students, including a slide show and a web page. She and a parent volunteer assisted students who chose those formats. [P5, P9, K10]

After the Project:

We used the rubrics we had created to assess each student on both the process of inquiry and the end product. We hosted an open house where our students presented their products to the other fourth grade classes and their parents.

How It Went:

Overall, the inquiry project went well. Some students did struggle with using the Big6 model and required extra support. Having two of us available to consult with students on the research process was definitely a positive factor.

The products were not as varied as we had hoped, with many students still opting for a written report or

poster board display. However, after seeing the different products produced by some of their classmates, several of the previously hesitant students voiced an interest in "trying that next time."

While designing this project, we had discussed having the students work in groups to take advantage of cooperative learning, build social skills, and allow for each person to become an "expert" in one area of the research process. We decided against this approach, mainly because this was the first inquiry experience for many of the students. We were afraid that if the research tasks were divided up, each person would become too specialized and would not learn how to do the other tasks.

In retrospect, instead of splitting up the research tasks, a better approach might have been to let each student create his or her own research question from the Big Question for their group. This would have avoided the overspecialization problem, since each person could research a sub-topic and report back to the group. Synthesis and evaluation could then continue on the group level. [K3, Callison]

The View From the Media Center

Ms. Booker Says…

This experience has been a wonderful one for me. I knew from my continuing education and from reading the research that collaboration was important, but I have to admit I was a little intimidated by the prospect of co-teaching such a large portion of the lessons. However, I knew that the skills I had to offer in information literacy were an important part of what Mrs. Terry wanted to

accomplish.

Information literacy is being stressed more all the time in teaching standards such as the National Science Education Standards (Young, 2003). Information literacy skills really are an inseparable part of critical thinking and active learning and, as such, are a necessary part of the curriculum in any content area. [P2]

I really enjoyed working more closely with the students. They now see me as more than just someone who reads them stories or helps them find good fiction books. These students now trust me as a teacher and information guide, as well.

It took a leap of faith for us to plan this unit together. We not only survived, but it was so successful that the other fourth grade teachers approached us about sharing this unit across the whole grade next year. We

Media Specialist Contributions

- Participated in planning, developing, and implementing the curriculum unit at all levels [P3]
- Created classroom displays of both fiction and nonfiction books related to the unit topic [P6]
- Located and presented information on videotape, websites, and other electronic media formats
- Created a pathfinder for students to use at the public library when searching for more information [P10]
- Arranged for guest speakers and a field trip [P10]
- Taught or co-taught lessons on how to conduct an interview, how to locate and use alternative sources (websites, electronic databases, etc.)[K10], how to evaluate sources, how to cite sources appropriately, and how to use electronic presentation tools [K10]
- Participated in creating and employing assessments [K1]

also want to reach out to the art teacher and invite her to join our collaboration. Many of our lessons involved art and even covered some art standards.

The View From the Classroom

Mrs. Terry Says…

I can say with confidence that this unit was a success, and I have Ms. Booker and our collaboration to thank for it.

I was a little worried initially about giving up sole control of my curriculum, but it turned out to be a relief to share the planning with Libby. She contributed a new perspective and a bag of tricks completely different from mine.

When it came to co-teaching, it was so beneficial to the kids! Having two of us around at crucial times, and generally sharing the workload, allowed us to plan a much more complex and interesting unit. I would have been hard-pressed to try some of the technology activities on my own.

I know many teachers feel, as I used to, that they are too busy to plan a collaborative unit. To them I would say, it's definitely worth the effort.

American Association of School Librarians "Learning and Teaching Principles of School Library Media Programs" (AASL, 1998)

[P1] Principle 1: The library media program is essential to learning and teaching and must be fully

integrated into the curriculum to promote students' achievement of learning goals.

[P2] Principle 2: The information literacy standards for student learning are integral to the content and objectives of the school's curriculum

[P3] Principle 3: The library media program models and promotes collaborative planning and curriculum development.

[P4] Principle 4: The library media program models and promotes creative, effective, and collaborative teaching

[P5] Principle 5: Access to the full range of information resources and services through the library media program is fundamental to learning.

[P6] Principle 6: The library media program encourages and engages students in reading, viewing, and listening for understanding and enjoyment

[P7] Principle 7: The library media program supports the learning of all students and other members of the learning community who have diverse learning abilities, styles, and needs.

[P8] Principle 8: The library media program fosters individual and collaborative inquiry

[P9] Principle 9: The library media program integrates the uses of technology for learning and teaching

[P10] Principle 10: The library media program is an essential link to the larger learning community

Key Ideas for Information Age Instruction
(Lamb, online)

[K1] Key Idea 1: Assessment
[K2] Key Idea 2: Constructivism
[K3] Key Idea 3: Cooperative Learning
[K4] Key Idea 4: Creative and Inventive Thinking
[K5] Key Idea 5: Critical Thinking
[K6] Key Idea 6: Individual Differences
[K7] Key Idea 7: Meaningfulness and Motivation
[K8] Key Idea 8: Problem & Project-based Learning
[K9] Key Idea 9: Questioning
[K10] Key Idea 10: Technology

References

American Association of School Librarians. "Information Literacy Standards for Student Learning" in *Information Power: Building Partnerships for Learning.* New York: American Library Association, 1998, p. 8-44.

American Association of School Librarians. "Learning and Teaching" in *Information Power: Building Partnerships for Learning.* New York: American Library Association, 1998, p. 58-82.

Callison, Daniel. "Cooperative Learning" In *Key Words, Concepts and Methods for Information Age Instruction.* Baltimore, MD: LMS Associates, n.d., p. 153-158.

Eisenberg, Mike. "A Big6 Skills Overview." [http://www.big6.com/showarticle.php?id=16] Accessed on October 30, 2005.

Lamb, Annette. "Key Ideas for Information Age Instruction." http://eduscapes.com/info/keys.html. Accessed on October 27, 2005.

Lance, Keith Curry, Marcia J. Rodney and Christine Hamilton-Pennell. *How School Librarians Help Kids Achieve Standards*. Denver: Library Research Service, 2000. www.lrs.org/documents/lmcstudies/CO/execsumm.pdf Accessed on October 27, 2005.

Valenza, Joyce Kasman. "For the Best Answers, Ask Tough Questions." http://www.joycevalenza.com/questions.html. Accessed on October 6, 2005.

Young, Terrence E., Jr. "No Pain, No Gain: The Science Teacher and You Working Together." *Library Media Connection*, January 2003, p. 8-14. http://www.linworth.com/PDF/YoungScience.pdf. Accessed on October 30, 2005.

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