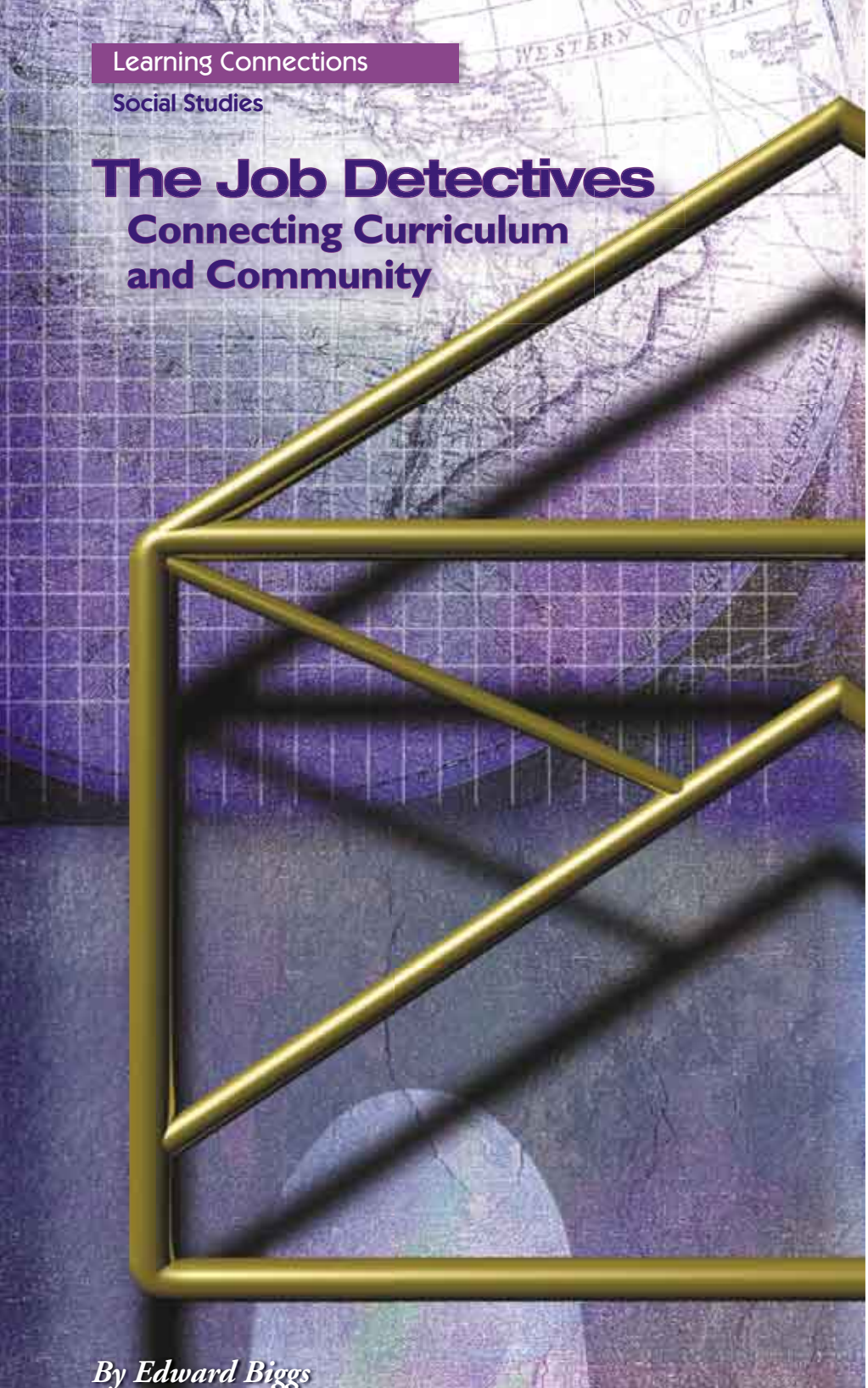
The Job Detectives
Connecting Curriculum and Community



By Edward Biggs

Subject: Early literacy

Grades: 1–3 (Ages 6–9)

Technology: E-mail

Standards: *NETS•S* 3 (http://www.iste.org/standards/)

Eighteen first-grade students gather on their meeting rug, looking at the screen where an e-mail message has been projected. Their teacher reads the message:

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Good morning, Room 22,
Well, I start my day at 7:00 when
I awake and put on my uniform. I
have to be at work by 8:00 a.m.
Can you guess my job?
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The teacher asks, "Who's our mystery worker? Any guesses?" Hands raise; voices shout out ... policeman, policewoman, mailman, nurse, fireman. The list grows. Guesses are recorded for future reference. "How do you know?" the teacher asks. "What else do we need to know?" The Mystery Worker project has begun.

Of course, like most curriculum units, we began the project long before this first e-mail message. Rebekah Van De Mark and I, the technology professional development specialist, worked to create a project that integrated technology into a classroom unit as part of a project (Project MEET) sponsored by the Massachusetts Department of Education. (***Editor's Note:*** For more on Project MEET, visit http://www.doe.mass.edu/edtech/teacher/projectmeet/.)

Planning and Goal Setting

Planning backwards, we considered what we wanted students to accomplish and understand. Our goals were linked to the Massachusetts History and Social Science Framework (economics strand) and included standards of fundamental economic concepts, which state that students should understand the differences between work and play, how natural limits favor people working together, that some tasks are best accomplished by individuals, and that some work is accomplished only when an individual takes initiative.

The Grade 1 curriculum also focused attention on families and community, and comparing family roles with community roles. Was there a way to get community workers involved with the classroom to engage the students as emerging readers, writers, thinkers, and presenters? Rebekah had used guest visitors in the past. Such visits were chancy because they are subject to the convenience of workers who must arrange time away from their jobs.

We decided that e-mail might be the answer to involving our busy community workers. E-mail would provide a link to several community workers before they came to class—perhaps even replace a classroom visit. E-mail documents would be the catalyst for early literacy efforts in reading about, listening to, and discussing ideas about the world of work.

We focused on two goals from the English language arts framework (language and composition strand). Students use agreed upon rules for formal and informal discussion in both small and large groups. Students develop and use criteria for assessing final versions of their compositions and research projects before presenting them to varied audiences.

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Good Morning, Students of
Room 22!
I had an early start this morning
to get to my workplace before
any other workers or visitors.
I often come in early to make
sure all my instruments are ready
and necessary papers complete. I
also have to make sure my jacket
is clean and ironed. I will wear
this jacket all day to protect
my suit and tie. I am looking
forward to another full day of
work and hearing from you. Can
you guess who I am and what I do?
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We decided to use one classroom e-mail account, controlled by the classroom teacher, for all messaging. This would satisfy our own queasiness about young students using e-mail and satisfy our district's acceptable use policy as well.

Students would make guesses about the mystery worker as subsequent clues came to the class. Clues would be received from each worker over the course of a week. Students would give reasons why they thought a person had a certain job and refine their guesses based on the information from successive e-mails. As messages arrived, Rebekah prepared them for sharing with the class. The messages were projected for the whole class, printed out for individual reading, and posted on a classroom "worker wall" along with group guesses and comments.

A participant guide that modeled the series of e-mail clues was distributed to the volunteers, who included a school secretary, town librarian, police officer, dentist, postal worker, and veterinarian, so messages would be similar in content as each worker communicated with the class. The messages would touch on the general topics of:

- the work environment
- special activities related to work
- workers' feelings about their work

Students, as a class, in smaller groups, and individually, made guesses about the workers' occupations. Questions and modeling by the teacher directed student guesses, supported by information from the e-mail, prior knowledge about this topic, as well as readings and presentations during the unit, using trade books about workers as a classroom/library resource. Recording these guesses and reasons took several forms, including individual logs and group lists, with students taking turns as recorders during small group work.

Responses to e-mail messages were group efforts. The class discussed topics for response and questions to ask, modeling the thoughtfulness that was a goal of the project. They also brainstormed the differences and similarities between e-mail and letter writing. Later, students wrote letters of appreciation to the worker volunteers using a simple checklist rubric.

After all the identities were revealed, each student was asked to determine which job in the community was most important and create a "most valuable worker award" and citation based on their investigations which included information from books, interviewing friends and family, as well as the e-mail messages themselves. This was presented to the class with a structured rationale.

The worker wall holds e-mail and student guesses through the duration of the project.

A sample of a student award presentation.

Rebekah scaffolded the activity by providing students with a list of questions to answer when deciding to present their award.

- What job deserves your award?
- What do people with this job do?
- How do you think this job helps the community?
- Does this job provide goods or services?
- What would happen to the community of this job did not exist?

Students then presented the award to classmates, answering questions about their choice. Awards were then displayed on the worker wall. Several workers eventually visited the school. Student research was the basis for the questions students asked during these visits to further investigate specific jobs.

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Good morning, class.
Even though I work in a truck,
sometimes I use a bag. I make a
real lot of stops everyday and
might even come to your school.
At the end of the day I park
my truck and make sure I take
everything out. My job lets me
see lots of people during the
day and bring good things at this
time of year.
Can you guess my job?
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Student Outcomes

Students learned about workers and their jobs. They learned that workers often work alone but are part of a larger group. They learned that some workers provide a service instead of making a product. Students interacted with the community and saw how the town relies on all of its workers.

Students had a chance to really think. They had to make guesses and revise them. They learned to find clues in messages and use these clues to support their own thinking. They had to determine if something made sense or not, and they had to think why. There was the chance for them to reflect on information and provide reasons for their own ideas. Young students felt good about themselves and what they could do—think, discuss, and work in a group.

Students also became familiar with a computer as a tool of communication and as an information resource that could support their learning. This is not insignificant in a culture

that often relegates the computer to recreational status.

Educator Outcomes

We learned that the co-planning process is a supportive process and necessary for making such a project possible. Juggling curricular demands as well as technology demands, and refining a classroom activity in process all benefit from multiple viewpoints. We saw paths that might have been ignored if only one of us were involved.

In year two of the project, we invited the rest of the school's grade one team to join a study group. The e-mail project was the catalyst for professional development for these three teachers as well. With year three (2002–03) the project moved into these classrooms, along with other integration activities.

Rebekah and I also presented a districtwide professional development course, "Integrating Technology with Primary Age Students," and the e-mail project has been disseminated to teachers of older students. The use of e-mail has created a host of new options for linking classrooms to a wider community.

For others thinking of trying such a project, the following points are worth distilling from our experience:

- A one-computer classroom permits class e-mail access for young students with appropriate teacher monitoring.
- Classroom group processes are nurtured through group reading of e-mail and teacher-guided discussion.
- The gateways for student involvement are already in place through curricula that seek to expand student horizons, from the classroom to the wider community.
- Literacy issues can be addressed with authentic communication, including reading, responding, and communicating in multiple forms.

With reflection and further co-planning, we made changes for the second year of the project. We noticed that students were confused with so many clues arriving from all the worker volunteers at once. The time frame for the project also expanded several weeks longer than planned when some messages arrived later than arranged. We decided to limit e-mail messages to three instead of five. E-mail messages would be fewer from each worker but would provide more information. Students would focus on one mystery worker at a time, respond to and discuss what they found, and move from Monday to Friday in a progression of gradual enlightenment. The new structure was successful, both in helping students work through the clues and the process of discovery and thinking, and in helping the teacher manage the project more smoothly.

In talking to other teachers about this project, informally and in the several workshops we directed in the past two years, we were encouraged by their interest and the motivating effects of this project. It's an idea that seems so simple. But the use of e-mail as a classroom tool seems to be underused. In this project, the actual time dealing with technology is very little compared to the total time spent on the learning activities, including student discussion, planning, writing, and sharing. The technology is a catalyst for much of what happens in the classroom.

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Hello, Room 22.
How is everyone in the Detectives
Division today?
While I am at work it can be
quite noisy. I often hear the fire
engine/ ambulance sirens sounding
off. I also hear house alarms
buzzing loudly. Since I deal
with citizens on a daily basis,
conversations either on the phone
or in person are always going on.
The phone systems in the building
I work in are constantly ringing
off the hook with people who
need directions or who just need
help... I work in and outside,
and both places seem to be busy
and loud, sometimes hectic.
Can you guess my job?
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Overall, the use of e-mail was a small but significant use of technology that encouraged communication between the worker and the students. Everything else in the activity was possible without the technology, but was enriched with that technology. Working together, Rebekah and I were able to keep our focus on the classroom and student needs, the demands of the state frameworks, and the desire to use only that technology that would bring value to our ideas of good teaching and learning.

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