

## Chapter VI

# Finger Painting to Digital Painting: First Grade

*An early fear was that computers would replace other early childhood activities. Research shows that computer activities yield the best results when coupled with suitable off-computer activities (Clements, 1998, p. 6).*

Like Kindergarten, the first grade classroom is a welcoming site with small tables and chairs for the equally small children who are typical first graders. For children who did not attend Kindergarten, for whatever reason<sup>1</sup>, first grade is when they learn about schooling and the rules that go along with being in school. It is a time to explore ideas, be creative, make friends, learn to be collaborative with others, learn to read better, and much more. While the curriculum is similar to Kindergarten, the level of instruction and expectations for student engagement is slowly becoming higher, but only slightly at this point. Also like Kindergarten, computers tend to be used often for students to express their understanding of a story or concept through creative software. The concept of multiple intelligences (Gardner, 1999), active learning (Dewey, 1938), and applying learning to related knowledge (Vygotsky, 1978) are exemplified in all primary grades, and especially in first grade.

As with Kindergarten classrooms, there has been controversy in the literature about whether computers have a place in first grade classrooms. Barnes and Hill (1983) suggested that computers might interfere with children's needed experiences with real events and objects, limiting engagement and physical activity. In the same year, Karoff noted that computers might help children's memory patterns and sequencing as a tool for thinking and problem solving. Over the years, the fears have been proven wrong for children in early grades, but there are still people who strongly believe that children should be experiencing "real" activities rather than digital ones (Healy, 1998). Whether these concerns are valid or not has not been proven one way or the other, and may take a few decades of students using computers in truly meaningful ways, not just as a reward for good behavior, to know if inclusion of computers in early grade classroom lessons and activities actually makes a difference in student learning and long term outcomes.

This chapter presents six first grade teachers who were not unlike the Kindergarten teachers as far as their previous use of technology. Most of the teachers who came into the CPI program classified themselves as novice to non-users of computers, but were keenly aware that computers were considered by many in the education world (and perhaps even more so in the non-education and political world) as very important to the future of today's students. Students who were not techno-savvy were to be disadvantaged when they moved into the work world, one of the concerns in the discussions of the "digital divide." Students from the "have" schools would be privileged, and teachers by nature want to make sure their students are not disadvantaged when they move on in life. These teachers wanted their students to have access to tools that might provide an advantage.

Table 2 gives the reader an overview of the teachers presented in this chapter. The information provided includes how many years of teaching experience they had prior to participating in the CPI program, what grades were included in their school, how they characterized their prior use of computers/technology prior to the CPI program, and whether they were a Visiting Teacher or also asked to be a Resident Teacher. This information may help the reader in deciding which teacher story is close to theirs.

*Table 2. First grade teacher summary*

| Name    | Years teaching | Grades in school | Prior computer usage | CPI teacher |
|---------|----------------|------------------|----------------------|-------------|
| Mary Jo | 20+ years      | K – 4            | Novice user          | VT only     |
| Rhoda   | 20+ years      | K – 8            | Novice user          | VT only     |
| Joan    | 15+ years      | K – 8            | Novice user          | VT only     |
| Parker  | 9 years        | K – 6            | Very comfortable     | VT only     |
| Alta    | 20 years       | K – 6            | Novice user          | VT only     |
| Melanie | 30+ years      | K – 5            | Novice user          | VT only     |

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