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Participants reported that they were more skilled in all areas at the end of MAESTRO training than they were before.[1]

The same survey also was administered to 328 core content area teachers (e.g., mathematics, science, social studies, language arts) in AISD in September of 2003 and again in the spring of 2004. Once the surveys were received, respondents were divided into two categories, those who indicated on the survey that they had never attended MAESTRO and those who had attended in years prior to 2003.

Table 2. Number of Comparison Teachers Returning Surveys by Campus Level
and MAESTRO Attendance

	Pre-Survey		Post-Survey	
	Previously Attended MAESTRO	Never Attended MAESTRO	Previously Attended MAESTRO	Never Attended MAESTRO
Elementary School	8	9	3	11
Middle School	24	43	31	46
High School	6	40	8	54
Total Teachers*	43	94	47	117

* Source: Teacher Technology Needs Assessment online surveys, September, 2003 and April, 2004
*Note: Some teachers did not indicate a campus level, therefore the total number of teachers listed is not the sum of the elementary and secondary teachers.

To examine whether teachers who attend MAESTRO might be already be different from teachers who do not attend MASETRO, teachers in the MAESTRO 2003 group were compared, pre-training, to the group of comparison teachers who had never attended MAESTRO. Pre-training, MAESTRO 2003 teachers were similar to non-attendees on most skills with the exceptions of Inspiration and iMovie skills. MAESTRO 2003 teachers reported hi

provide teachers with valuable technology skills and that those skills do not deteriorate over the course of several years. They also suggest that teachers who attend MAESTRO are already integrating technology in their classrooms more often than do those who do not attend, and that MAESTRO teachers continue to use their technology skills and to integrate technology into their existing classroom practice.

Teachers who attended MAESTRO trainings did implement the technology they learned, but did not always implement integrated technology units in the form that the staff had envisioned. Teachers tended to integrate a single technology package, such as Inspiration for several days, rather than integrating multiple technologies over longer periods of time. This suggests that the vision for integration may need to be more flexible to meet teachers' needs.

Interviews and survey data from teachers and staff indicate that teachers do not take advantage of the ongoing support provided by the Instructional Technology staff in any systematic way. Staff provide a broad range of services to all teachers on an on-call or schedule basis depending upon the needs of the campus and teacher. Teachers who attend trainings, however, are not required to implement the technology units they have developed nor to attend follow-up training to improve their skills. Research on the effects of training on implementation suggests that only about 15% of participants will be able to implement a new program based on a one-time training session, but that up to 80% will be able to implement with regular ongoing support (Joyce & Showers, 1995). This suggests that to increase both the quality and quantity of technology integration in the classroom, staff must provide ongoing support and follow-up that address challenges to successful implementation, is non-negotiable, and provides clear standards and expectations for quality implementation.

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