In this article we discuss our collaboration to develop and implement two projects that integrated technology into the elementary and secondary curriculum. Our goal in undertaking the projects was to enhance the learning process and to increase the independence of students with visual impairments. Twenty-four students from the elementary and secondary levels participated in the projects. Some students were on grade level in all subjects, but others performed significantly below their same-aged peers. Visual acuity ranged from 20/100 to functionally blind.

Our school provides a Windows NT network with Windows 95 and 98 workstations. The school's standard technology includes commercial hardware components (PC and peripherals) and commercial software (Microsoft Office 2000 and the Encarta Encyclopedia). The students discussed in this article access the Windows environment by using JAWS for Windows or ZoomText; they translate electronic material into Braille through Duxbury and use Openbook Ruby Edition to convert print material to an electronic format. These students also use portable notetakers produced by Freedom Scientific to organize their materials, complete class assignments, and produce Braille or print copies of their work.

Members of the school's technology team and teachers from the elementary and secondary levels collaborated on the projects. The elementary-level children studied a unit on desert animals; the secondary-level students researched the origins and effects of earthquakes. Uniting the use of technology with academic content enhances the overall learning process. We expected the students to learn and to present new material and to acquire new technology skills that they could use in a setting that would make learning the skills a purposeful activity. The students were engaged in "in-depth learning by completing holistic tasks that were relevant or real world" (Tinzman, Jones, Fennimore, Bakker, Fine, & Pierce, 1990).

The Primary-Level Project

Working with the computer teacher, the third-and-fourth-grade teacher chose to have her science class study desert life. The class consisted of 3 students who read Braille and were proficient users of the Braille 'n Speak and one student who used large print. The students came to the computer lab 2 days a week for adaptive technology instruction. The technology skills they learned there were reinforced daily as they worked in class on their desert animal projects.

The two instructors investigated team teaching and combining interdisciplinary activities and talked with others who had undertaken similar projects. The instructors met during their planning periods and after school once a week to discuss the project's development. They decided that each student would choose a desert animal to research and that the Internet would be the primary resource for gathering information. The teachers realized that for the students to achieve the anticipated outcomes from the project, they needed to acquire certain prerequisite technology skills. (See Table 1.)

Table 1. Prerequisite Technology Skills Elementary Students Needed for the Project Needed Skill Outcome Keyboarding To type all letters and numbers, use the...

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cross-subject curriculum meeting to ensure continuity and coherence of the whole curriculum. The actual curriculum tailoring should then be systematically conducted as designed by the well-experienced personnel. 3.1.4 Incorporation of Communication and Interpersonal Skills Training. Maladjusted children can establish effective relationship with their immediate environment be it their families, schools or communities only if their communication and interpersonal skills improve significantly. Therefore these skills should be included in the curriculum as a subject, and widely incorporated into As classroom access to the Internet continues to increase, teachers’ use of the Internet to communicate with other educators and to post material to school and teacher websites will also increase. A) decrease; increase B) increase; decrease C) increase; increase D) decrease; decrease. The US Department of Education survey of 2000 teachers revealed that 36% felt that they were insufficiently trained to integrate technology into the classroom. A) 12% B) 20% C) 28% D) 36%.  Is technology integrated into the teaching/learning environment? Are technology proficiencies and measures incorporated into teaching and learning standards? Technology integration is the incorporation of technology resources and technology-based practices into the daily routines, work, and management of schools. Technology resources are computers and specialized software, network-based communication systems, and other equipment and infrastructure. The construction skills students should have by completion of elementary school are presented in the list that follows. They build upon the basic and critical skills found in the Nonprint Media and Technology Literacy Standards.