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Rafael Hernandez School (Principal: Margarita Muñiz)

**Denver**  
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**Dubuque**  
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Central Alternative High School (Principal: David Olson)

**New York City**  
School for the Physical City An Expeditionary Learning Center (Principal: Mark Weiss)

**Portland**  
Jack Elementary School (Principal: Myrt Collins)  
King Middle School (Principal: Michael McCarthy)  
Portland Regional Vocational Technical Center (Principal: Cal Chaplin)

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INTRODUCTION

This report describes the Expeditionary Learning Outward Bound Project (ELOB), a three-year project launched by Outward Bound (OB) USA in 1992 with a grant from the New American Schools Development Corporation as part of its mission to transform American schooling. ELOB’s major goal was to develop new schools or transform existing ones into centers of "expeditionary learning," where learning would take place through participation in expeditions. Expeditions are "journeys into the unknown," in which teachers act as expedition guides and students explore questions of importance and meaning, while developing their "curiosity, skills, knowledge, and courage."¹

By transforming schools into centers of expeditionary learning, the project proposed to change existing schools and schooling in three ways:

- By putting students learning and character development together at the pinnacle of schools' hierarchy of values
- By requiring the complete reorganization of time, space, and relationships among persons, across disciplines, between persons and learning technology, and between the school and community to maximize opportunities for learning
- By holding high expectations for all students' character development and academic achievement, as manifested in student demonstrations at critical transition points in their schooling²

During the initial year of the project, a design team developed 10 design principles and five program components that would characterize ELOB schools. The design principles included an emphasis on both character and academic development; social commitment, vision, and service; cooperation rather than competition; the importance of caring and intimacy, solitude and reflection, and success and failure as means to and conditions for learning; respect for nature and the environment; diversity and inclusivity in the classroom; and creating conditions in schools for all students to discover and construct meaning.³

In addition to the 10 design principles, ELOB required that schools restructure in order to support a community of learners engaged in expeditions. They proposed transformations in scheduling and school organization, teacher-student relationships, curriculum, professional development, and assessment. ELOB schools were also required to eliminate student tracking, establish multi-year teaching, and create linkages with community organizations to support children and their families. In terms of budget, after a transition period of three to five years, ELOB schools were not to exceed significantly the amounts already allocated to other schools in their districts.

A total of 10 schools participated in the ELOB initiative for two years: four elementary; one middle; one K-8; one 6-12; one K-12; one regional vocational center; and one alternative high school. These schools were located in Boston, Denver, Dubuque, New York City, and Portland, Maine. Among these were inner-city schools with predominantly poor populations, as well as schools with more diverse racial/ethnic and socioeconomic mixes. In 1993-94, approximately 5,400 students enrolled in ELOB classrooms, of whom 39 percent were students of color, and 52 percent were eligible for free or reduced-price lunch (see Tables 1, 2, 3 and 4 at the back of this report). In 1994-95, approximately 3,800 students enrolled in ELOB classrooms, of whom 19 percent were students of color, and 47 percent were eligible for free or reduced-price lunch. Four schools served entirely English-speaking students, and six served some students who primarily spoke a language other than English. The appendix contains brief descriptions of ELOB schools.
Participating schools implemented ELOB principles and components in different ways. Some "transformed" and became ELOB schools totally during the first year of the project; others "phased in" ELOB approaches and principles in selected classes or houses over two years. The four participating schools in Dubuque chose to implement ELOB in all classes; the four schools in Boston and Portland phased in ELOB in selected grades. In addition, in New York City and Denver, two new schools were specifically created as part of the ELOB project.

**ELOB Evaluation**

In September 1993, the Academy for Educational Development (AED), a nonprofit educational evaluation and technical assistance organization, with offices in Washington, D. C. and New York City, began an evaluation of the ELOB project. Our evaluation was to examine how ELOB was implemented at participating schools, how schools changed as a result of ELOB, and how students fared in these schools. Evaluation strategies included surveys of teachers and students, interviews of school and district staff, student focus groups, site visits, and case studies of participating students. In addition local ethnographers conducted research in five participating schools (one in each city), including the student case studies. The evaluation findings are discussed in detail later in this report and are summarized in the box below.
SUMMARY OF EVALUATION FINDINGS

The evaluation concluded that:

- All participating schools made significant changes in the following: their curriculum and teaching through the design and implementation of interdisciplinary learning expeditions; in the relationships among students and teachers, among teachers, between parents and school staff, and between school leaders and teachers; and in their school organization.

- There were positive student outcomes in all schools as evidenced by surveys of sixth and ninth graders over two years that measured student engagement in learning, bonding to the school, and student perceptions of the implementation of expeditionary learning approaches in their schools.

- Cohorts of students who were tracked over three years in several grade levels at each school demonstrated significant increases in standardized test scores in reading and math.

- The majority of case-study students demonstrated social and academic growth over the two years during which they were interviewed and observed; parents of these students and the students themselves identified specific aspects of their schools and expeditionary learning approaches that helped them do well in and like school.

- Teachers experienced an enhancement of their professional standing, partially as a result of their central role in the initiative.

Organization of This Report

The rest of this report is divided into two parts. The first describes the ELOB project in particular the central role of teachers in the initiative and the nature of learning expeditions. The second describes the three-year evaluation process and findings about the implementation of ELOB in participating schools; the major changes in teaching, relationships, and organization in ELOB schools; and students outcomes (changes in student engagement in learning and school membership; how case-study students fared in ELOB schools; and student status and achievement data). Quotes illustrating the responses of teachers, students, and parents participating in ELOB are contained in the text and in boxes throughout the report.

THE EXPEDITIONARY LEARNING OUTWARD BOUND PROJECT

The Centrality of Teachers

As a first-year teacher, this is an exciting program to begin my career with. It allows for creativity, real-life experiences and emotion! [ELOB teacher]

Teachers are the driving force in the ELOB initiative, and, in this respect, the project differed from many school reform efforts. Initially it was planned that curriculum writers would create expeditions for teachers in participating schools. However, during the design year, ELOB planners decided to have
EXPEDITIONARY LEARNING OUTWARD BOUND

A Summary Report

teachers, rather than curriculum experts, develop the curriculum, thus making them responsible for creating an "expeditionary" culture in their schools or classes. Placing teachers at the center of the ELOB initiative focused professional development on supporting teachers as learners. ELOB professional development opportunities aimed to "transform" teachers' experience of learning and foster their ability to translate these new approaches to learning into the Carburetorof New Echota" Summit). ELOB professional development was highly experiential. It sought to change teachers' views of teaching and of their role in the classroom, helping them become facilitators of learning rather than dispensers of knowledge. The box below contains a list of the various ELOB professional development activities.

### ELOB Professional Development Activities

- Summer planning institutes of 5 to 10 days
- Afterschool planning sessions
- Planning days conducted outside the school
- Mini-sabbaticals (teachers from the same grade level worked with teachers from other schools for several days)
- Week-long summits providing immersion in a discipline or topic
- "Sharing days" (representatives from ELOB schools networked with colleagues and visited schools)
- Workshops on special topics, such as authentic assessment
- Visits to cities/schools within the ELOB network
- Visits by master teachers
- Leadership development forums for principals and other school leaders
- OB expeditions specifically designed for educators

Most teachers participated in ELOB professional development activities from 10-20 days a year. The appendix contains a table showing the number of teachers who participated in ELOB professional development activities during the 1994-95 school year.) As can be seen from the box, the highest percentage of teachers participated in the summer planning institutes (80%), followed by the "sharing days" (74%) and the mini-sabbaticals and other planning days (71%). Teachers valued the ELOB professional development activities highly. Three teachers said:

- The summit (Rocks, Rivers and Caves) was one of the most profound development experiences I have ever had. It afforded me a wealth of knowledge in the subject area, invaluable ideas for activities with students, and personal challenges encouraging personal growth and modeling of a "holistic" approach to education. Most significant was the level of confidence and excitement I felt when I translated it to my own expeditions. It was truly a joy to teach and consequently enormously successful. [Middle-grades teacher]

- The mini-sabbaticals and the summer institutes where regular education and special education teachers collaborate together have been the most valuable staff development activities. These have helped me stay current on what expeditions are being taught, which ones are being developed, and what content I can reinforce in special education. [Special education, elementary teacher]

- Intense involvement in subject matter I was later going to teach helped me the most. It helped me reflect on issues relevant to teaching about Native Americans. The methodology of the summit also
Learning Expeditions

As for my expedition on dinosaurs, my students absolutely "ran with it!" They will be crushed when it is over. Their knowledge of this era could easily rival any adult's!

[Elementary teacher]

There was so much overlap between the disciplines that students were asking, "Is this science, math, or reading?" [elementary teacher]

Learning expeditions are the major vehicle for teaching and learning in ELOB schools. Expeditions entail experiential interdisciplinary approaches to teaching and learning that are based on a set of guiding questions. They include one or more major projects and are characterized by active learning; demonstrations of learning in a variety of formats; extensive use of community resources (libraries, museums, experts) to enhance and support the learning experience; and an emphasis on character development, through a focus on how students work with one another and through community service. This community service can sometimes be the major outcome/product of the expedition, for example, in one school students created two-dimensional and three-dimensional models for the use of vacant land in a community.

Besides helping students develop academic skills, expeditions help them develop social and life skills, as well as explore contemporary social issues or community needs and the connections between family and school. Expeditions vary greatly in their time-span, with some lasting a whole year or semester, and the majority lasting at least three months. They also vary widely in the amount of time devoted to them during the school day. Typically, students spend a portion of each day, with more time devoted to the expedition as it progresses and as projects are being completed. They result in a wide variety of products and provide students with multiple avenues for exhibiting learning.

Most expeditions are interdisciplinary and foster a variety of student academic and nonacademic skills. Teachers develop them with an eye to meeting city or state requirements and engaging students in topics and issues that are relevant and important to them. The most common areas into which over half of the expeditions designed under the ELOB project fall are science and social studies, followed by expeditions focusing on community/family issues, and life and social skills. However, in each expedition a variety of disciplines are used in addressing the guiding questions.

In science the range of topics covered by expeditions was great: insects, the oceans, rivers, the rain forest, pond and plant life, dinosaurs, the human body, electricity, the stars, mountains, reptiles, weather, mammals, and rockets. In social studies, expeditions focused on Native Americans; local and state history; journeys (the journey westward, and pilgrims); the Civil War; and twentieth century issues (civil rights, anti-Semitism, urban renewal, and the environment).

Some expeditions addressed pressing social issues. In one middle school, the expedition, Change: Inside and Out, explored social change movements and personal change. It explored the Reconstruction era, the civil rights movement, social activism today, and students' personal approach to change. Students chose social issues and activists that they wanted to learn more about. One group selected the issue of homelessness and visited an organization that advocated for the homeless. These visits were tied to service
to the community; among other things, students silk-screened blankets and distributed them to homeless people. The culminating activity of this expedition was an awards evening in which students selected a social activist to receive an award, interviewed that person, and presented him or her with an award.

Several expeditions focused on practical or social issues confronting communities or schools. For example, in one school, the upcoming move to a facility prompted a focus on designing the space for the school. Students in a middle school developed designs and architectural plans for a new aquarium for their community in the expedition *Dream On*. In another grade in the same middle school, students developed a guide to their local community through mapping and investigating it in the expedition *Urban Orienteering: The Asphalt Jungle*. The high point of the expedition was a scavenger hunt in which small groups of students went in search of historic sites and businesses. In a fifth-grade expedition, *Have You Heard the News?*, students investigated the proposed budget cuts for education in their city. The superintendent and chair of the school committee came to the school to answer students' questions. After researching the issues, students wrote letters to city council members and staged a mock hearing on the budget, taking the positions of various stakeholders.

Some expeditions focused on family life and cultural heritage. In one school, in an expedition entitled *Packed with Memories*, primary students researched grandparents or other older adults, conducted interviews and developed books on their family traditions. Some expeditions were designed to help students gain life and social skills. Such expeditions helped students in kindergarten adjust to school (*Getting Together*) and older students adjust to a new middle or high school (*Launch Your Dream*); they also helped students make healthy choices (*Healthy Choices*); develop study skills; think about future goals (*Looking to the Future*); understand physical and mental fitness (*You At Your Best*); develop powers of persuasion; and understand the community and the individual's role in it (*Better Together*). Some expeditions involved students in community service in their schools or in their local communities: for example, fifth graders teaching younger students about magnets or high schoolers designing a plan for a park on school property.

Two expeditions were designed specifically to address the needs of special groups of students. In one special-needs students wrote letters to parents or other significant adults discussing their strengths, needs, and goals. Students then shared these letters in the classroom with their adults, who offered support to students in framing goals and carrying out other projects related to the expedition. Vocational teachers also designed expeditions to address the curriculum in their particular areas, for example, hospitality and food service and fashion merchandising. These expeditions included projects that involved students in reading, writing, researching, and demonstrating knowledge in ways closely related to future work: for example, preparing a Thanksgiving meal for the school, opening a restaurant, writing a manual on baking a pie, and producing a fashion show (including researching the history of fashion). In one vocational expedition, students researched land use in their community and, through consultation with experts and community members, developed a design and model for a local park.

**Guiding Questions**

Most expeditions are designed around guiding questions, which shape the content of the expedition. Some questions are conceived during the design of the expedition, and some evolve as it progresses. Guiding questions are geared specifically to the age/grade level of students involved. For example, a second-grade expedition, *A Walk Through Our Neighborhood*, had as its major guiding questions, What is a neighborhood? What businesses and services are important? What are the
responsibilities of citizens to make a neighborhood prosper? An expedition designed for grades 3-6, *Journeys (Pilgrims: Past, Present and Future)*, focused on the journey from England to North America and asked the guiding questions Why do people journey? Are the reasons the same historically? What tools and technologies influence journeys?

One expedition for grades 1-2, *Moments in Time*, focused on the importance of memories and addressed such questions as Why is it important that people share memories? How do people record memories? What does one remember most? Similar goals were also attempted in a third-grade expedition, *Kaleidoscope of Family and Community Ties*, which asked such questions as How are we alike and different? How can our classroom function like a family? How is our school like a family? A high school expedition, *All the World's a Stage*, focused on a study of theater and drama and asked the guiding questions, What are the elements of drama? How can a drama be shared? What role does the audience play in the growth of a writer? A sixth-grade expedition on ancient history, *Blast to the Past*, posed the questions, How does the past relate to the present? How has the past influenced our lives today? The expedition, *Pioneers*, was developed for ninth and tenth graders who were preparing to move to a new school building; it focused on the questions: What is a pioneer? What are the qualities of pioneers? What does it feel like to be the "first" to do something? In one high school, the expedition *Shapes* focused on mathematical concepts. One of the goals of the expedition was to develop students’ capacity to explain mathematical concepts to younger children. The guiding questions were What do volume, area, surface area, and measurement mean? How do you teach this to first graders? How will you assess what they understand? Students visited a first-grade class each week, and the final product was the development of books appropriate for first graders.

In an ESOL classroom of multilingual students, an expedition for grades 6-8, *The Refugee Experience*, focused on the history and culture of Africa. It was designed to address the experiences of many students in the class who were refugees. Questions included What is a meaningful way for our students to learn about and reflect upon their experiences of change within the refugee context? What is common among all refugees? What is a meaningful way for our students to share their stories with mainstream students and the community?

In 1994-95, teachers carried out 170 learning expeditions, most of them entailing an interdisciplinary focus, guiding questions, student projects, multiple opportunities to demonstrate learning, and public exhibitions of student work. The appendix of this report contains a list of expeditions, the grades in which they were used, the time-span involved, the leading questions that guided them, and the products created.

Expeditions lead to a great variety of final products through which students displayed their learning; all participating schools encouraged public exhibitions of students' work. These products (some of which are listed in the box at the end of this section) foster tremendous pride on the part of students, parents, and teachers. One teacher said:

*The generation books will be something the parents will save forever! The children continued their excitement about their work and learning for two and a half months!* [Elementary teacher]

**Planning Expeditions**

School-based planning is a vital part of expeditions, and teachers overwhelmingly emphasized the necessity of such planning time and collaborating with colleagues as being essential to their effectiveness in developing expeditions. The planning took different forms in participating schools. For example, in
one there were daily planning times for teachers and a committee, which included the principal and other staff, to assist with planning. In some schools, regular time was set aside for grade-level planning, as well as three days set aside for planning new expeditions or revising and improving already developed expeditions. In one school, teachers were freed one afternoon a week through a change in the school schedule, resulting in an early dismissal for students to participate in after-school activities coordinated by the Department of Parks and Recreation. These grade-level and schoolwide planning meetings were often facilitated by ELOB consultants.

Box: The Importance of Planning
Many teachers emphasized the importance of planning in helping them develop effective learning expeditions.

*If we did not have our planning-sessions, some great ideas and projects would never happen. When a group of educators get together to work on an expedition, anything is possible.* [Middle-grades teacher]

*We spend a lot more time talking to one another when we undertake an expedition. We share ideas, materials and resources. We reflect together and refine our teaching. Often children in different classrooms end up working together as a result of expeditions.* [Elementary teacher]

*First and foremost, the ELOB planning days this school year have benefitted my teaching greatly. Time to collaborate, plan and prepare enhances what goes on in the classroom.* [High school teacher]

*If we did not have these planning sessions we could not carry out this approach. These planning sessions are CRITICAL!* [Elementary teacher]

*While participation in such development activities as the Treaty of New Echota Summit certainly had a profound impact on our Native American expedition, I would have to say that the planning days spent with the other fifth-grade teachers had perhaps the most significant impact on my teaching overall. These days spent away from the classroom and school discussing our teaching methodology, reflecting on recent classroom events, sharing successes and failures and planning for future expeditions were invaluable in terms of alleviating the isolation of the classroom and actually improving my teaching.* [Elementary teacher]

A Portfolio Culture

ELOB fostered a focus on assessment in all participating schools. In particular, it helped teachers use portfolios of student work as a way to assess what they had learned. The use of portfolios encouraged students to revise their work as a regular feature of their learning; it also fostered an ongoing dialogue and reflection on the part of students and teachers about what students were learning as well as about the qualities of their work. Many teachers involved parents and members of the community in the review of portfolios, often at parent-teacher conferences. One school developed standards for K-12 learning in the core academic areas and rubrics to assess student work in writing and mathematics. In 1995, all students in this school submitted final math and writing portfolios, which were assessed by a committee that included an outside reviewer.
Expedition Products

Journals, reports, models, essays, stories, seminars, children's books, maps, field guides to pond and marine life, plays, "big books, autobiographies, dramatic skits, science fair projects, reports, charts of life cycles, tree journals, story boards, study guides, magazines, rock and mineral collections, projects on violence prevention, construction of the Mayflower, formal proposals, "memories" luncheon, class quilt, time-lines of ancestors, weaving, oral reports, day trip with Conestoga wagons, display at Wellness fair, letters, weather books, legends and myths, masks, metric stick, picnic tables, diorama, talent show, T-shirts, bread and butter, self-portraits, posters, rocket launch, archeological dig, scrapbook, drawings, rocket models, Indian artifacts, persuasive letters, patchwork pillows, travel brochure, newspapers of the past, architectural drawings, kites, reading logs, debates, woodworking projects, murals, mobiles, lobster bean bags, fundraising activities, blueprints, photographs, video, silk screen, horticultural display, fashion show, plan for park, surveys of school staff, Thanksgiving dinner, family trees
THE ELOB EVALUATION

The evaluation was conducted by the School and Community Services department of the Academy for Educational Development (AED), a nonprofit educational evaluation and technical assistance organization. Our evaluation sought to determine how ELOB was implemented at participating schools, how schools changed as a result of ELOB, and how students fared in these schools. The issues addressed in our evaluation are contained in the box below. To address these issues, we used a combination of quantitative and qualitative methods, including surveys of teachers and students, interviews of school and district staff, student focus groups, site visits, review of school documents, ethnographic research in five schools, and case studies of 29 participating students.

- **Student achievement in ELOB schools between 1993 and 1995**: Using baseline data for individual students from 1992-93, AED used a cohort analysis to determine students' achievement in ELOB schools, as measured by traditional indicators and, when possible, by new forms of authentic assessment developed in this project.

- **Impact on teachers**: What was the impact of ELOB professional development on teachers in terms of curriculum, methods of instruction, and assessment? What were the challenges teachers perceived in implementing ELOB and the types of assistance they needed and received?

- **Impact on administrators**: How did administrators in ELOB schools perceive the benefits of ELOB for students, professional development for themselves and teachers, the challenges of implementing ELOB in their schools, and the type of assistance they received in addressing these challenges?

- **Intensity and nature of implementation of ELOB design principles and components in different schools**: How were ELOB design principles and components implemented in different schools? What were the differences among new, transformed, and phased-in schools in implementing ELOB principles and components?

- **Parent Involvement**: What was the nature and extent of parent involvement in ELOB schools? Which groups of parents were involved and in what types of activities? How did parents perceive the effects of ELOB education on their children?

- **Impact on School Climate**: What was the impact of the implementation of ELOB principles and components on school climate in transformed and phased-in schools? How did students, teachers, and parents perceive school climate in all ELOB schools?

Our evaluation drew on certain theoretical perspectives and research findings on school change, professional development, leadership, and engagement of students in learning. The changes proposed by ELOB involve what Larry Cuban calls second-order changes, those which "seek to alter the fundamental ways in which organizations are put together, including goals, structures, and roles." This is in contrast to changes that may improve efficiency or effectiveness of what is currently being done but which do not disturb the "basic organization features," and do not "substantially alter the way that children and adults perform their roles." To be institutionalized, second-order changes depend on the support and...
involvement of all constituencies, no single constituency can affect the change alone. These constituencies include district staff and school administrators, teachers, students, parents, community members and organizations, and, when relevant, government agencies. Although all these constituencies must be involved to produce fundamental school change, it is ultimately teachers' subjective realities which must change, beliefs, attitudes, and finally behaviors: "Educational change depends on what teachers do and think, it's as simple and as complex as that. It would be so easy if we could legislate changes in thinking." The AED evaluation considered all these aspects of change and the perspectives of the various ELOB constituencies on the nature and extent of change.

Evaluation Findings

The following section of this report presents a summary of our findings about the implementation of ELOB in participating schools (specifically how ELOB was implemented differently in participating schools); the major changes in teaching, relationships, and organization in ELOB schools; and student outcomes (changes in student engagement in learning and school membership; how case-study students fared in ELOB schools; and student status and achievement data).

How ELOB Was Implemented in Different Schools

As stated in the introduction to this report, participating schools implemented ELOB principles and components in different ways. Some "transformed" and became ELOB schools totally; others "phased in" ELOB designs and principles in selected classes or houses over two years; and two new schools were specifically created as part of the ELOB project.

Findings from the three years of the evaluation indicated that those schools that transformed into centers of expeditionary learning rather than phasing in the approaches in selected grades made the greatest schoolwide changes; this was supported by districtwide support for teacher development; pervasive teacher collaboration in developing new approaches to curriculum and teaching; and sustained leadership for change on the school and district levels.

- **Transformed schools were able to implement the most pervasive changes in the schools.** All teachers participated in initial professional development experiences; these opportunities continued over the two-year implementation period and included districtwide and schoolwide planning periods for teachers. These schools did experience some obstacles to maintaining implementation momentum in the second year among some teachers who felt that it was more important to consolidate and refine what was developed in the first year, rather than continue to introduce changes such as multi-year teaching.

- **New schools faced the greatest challenges in implementing ELOB principles and components** because of the competing demands made on them in creating every aspect of their schools, finding adequate space, and meeting the demands of parents, school partners, and sending districts. Nevertheless, both schools hired a very committed staff who demonstrated creativity and flexibility in developing expeditions and incorporating ELOB principles into their school mission and teaching practice.
• **Phased-in schools had the most uneven implementation.** In two schools, all teachers participated in the second year, and there was schoolwide support for ELOB and collaboration of teachers across grades and within grades. In two schools, there were pockets of resistance to introducing ELOB and less widespread implementation of ELOB. In one school, the teachers were not required, although they were encouraged, to organize curriculum around expeditions and collaborate with other teachers in designing them.

**Changes in Teaching, Relationships and Organization in ELOB schools**

Teachers spoke positively of the changes in their teaching as a result of ELOB. The major changes in these areas are summarized below.

• **Surveyed teachers cited the following areas as ones in which they changed the most as a result of being part of the ELOB initiative.** Seventy-five percent or more of teachers felt that they changed a great deal in these areas: collaborating with other teachers; thinking up front about content and skills outcomes in designing expeditions; developing clear criteria for assessing student work; having students redo work in multiple drafts; and using resources outside the classroom in developing and implementing expeditions.

• **The use of portfolios was extensive in most schools.** Most teachers (81 percent) surveyed in 1994-95 used portfolio assessment in their classes. Forty-eight percent believed that portfolio assessment helped them to assess student progress and evaluate students holistically; 31 percent cited changes in teaching, such as being more responsive to student learning needs, becoming a better facilitator of students' learning, and organizing teaching around outcomes.

• **Collaboration was enhanced in all schools.** Among the changes in this area cited most frequently by teachers was collaboration among teachers in designing expeditions, which in turn fostered discussions of every aspect of teaching and learning.

• **Principals also participated in professional development activities that helped them reconfigure their own roles as leaders,** especially their role in supporting teachers as curriculum designers. Principals helped teachers obtain resources for expeditions and supported flexible schedules and time for planning during the day, a critical aspect of support for teachers who were constantly involved in planning expeditions. Several principals also played a critical role in developing new approaches to teaching and assessment; one developed methods for assessing the effectiveness of expeditions through a peer-review process.

• **Various organizational changes supported the implementation of ELOB in participating schools.** These included flexibility in scheduling to accommodate expeditions; planning time for teachers during the day; and the introduction of multi-year teaching in two elementary schools and one middle school with teachers willing to participate. One elementary school had already implemented multi-year teaching before the introduction of ELOB and strengthened this practice through the project.
• **There was increased parental involvement in ELOB schools.** Parents participated in schools in greater numbers than they had before the introduction of ELOB, particularly in classroom activities related to expeditions and student exhibitions and performances. In some schools, parent conferences were structured around a review of student portfolios, a process viewed positively by parents. In one new school, parents were a part of the school=s governance structure. Schools also improved their communication with parents about curricular goals and content.

• **There was considerable outreach to the community in ELOB schools.** This occurred primarily because of the positive relationship to the community established through expeditions, which included a study of the community, service projects in communities, and the use of community experts and resources in expeditions. In addition, the new schools were linked from their inception with community partners who were advisory to the school and also contributed to one of the new school=s curriculum and resources.

The box on the next page summarizes the major aspects of change that ELOB schools implemented during the second year of the project (1994-95). Changes were influenced by a school's professional development experiences and its prior philosophy and reform agenda, as well as by the nature and level of district, parent and community support. Not all changes were made to the same extent in all schools.

The appendix contains three diagrams that illustrate the challenges to and opportunities for change in new, transformed, and phased-in schools. The highlighted areas are those in which schools made the greatest changes; non-highlighted areas indicate either that these conditions prevailed prior to the ELOB initiative or that little change occurred between the first and second year of implementing the design in this respect.
## Major Aspects of Change in the Second Year of ELOB

### Teaching

1. Confidence and comfort on the part of teachers in designing and implementing expeditions that incorporate design principles, are interdisciplinary in nature, and integrate field experiences, outside resources, and community service into the fabric of the expedition.

2. Increased focus on creating authentic forms of assessment to assess student learning and related discussions of standards and what constitutes quality work at various grade levels.

3. Increased focus on developing students' capacity to ask questions and to be led by curiosity and systematic inquiry into constructing knowledge, thereby becoming more responsible for their own learning.

4. Increased focus on addressing the learning needs of all students in heterogeneously grouped classrooms.

### Organization

1. Scheduling that allowed substantial blocks of time for expeditions and teacher planning, and improved use of planning time by teachers.

2. Administrative follow-through so that teachers felt supported in the design and implementation of expeditions.

3. The implementation of multi-year teaching to promote continuity in teaching and relationships among teachers, students, and parents.

### Relationships

1. Increased collaboration among teachers, especially within a grade level, in designing or refining expeditions and discussing teaching and learning, and increased communication among teachers across grade levels regarding teaching and learning.

2. School leadership that provided teachers with time for planning, assisted with obtaining resources for implementing expeditions, and focused on critical issues in teaching and assessment that were central for improving teaching in the school.
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<td>3.</td>
<td>Increased bonding between students and staff and an emphasis on helping all students feel part of a diverse, humane, and caring community</td>
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<td>4.</td>
<td>Increased communication with parents regarding their children’s education and development; increased involvement of parents in their children's education through volunteering in classrooms as assistants, resources, and experts, as well as participation in teacher-parent conferences and special events; and increased parent input into substantial school issues</td>
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Student Outcomes

Evaluation findings suggest that ELOB had a positive impact on students. A survey of sixth graders and high school students in all schools with these grades in 1994 and 1995 indicated increased student engagement in learning, bonding with teachers and a pervasive sense of school membership. Students described the personal and social relevance of the curriculum and reported frequent and positive experiences working in groups with their peers, acceptance of diverse points of view in the classroom, learning to work with different types of people, interest in their school work, respect from teachers, respect for diversity among teachers and students in their school, all factors associated with engagement in learning and student perception of membership in their schools. Specifically:

- **Two-thirds of sixth graders and high school students claimed that expeditions helped them learn.** Students said that expeditions helped them learn to solve problems, work with different people, find out ways of getting information that they needed, organize time, make plans, and understand how school work relates to the real world.

- **Three-fifths of sixth graders and two-thirds of high school students reported that they worked in groups always or most of the time and cited the benefits of this:** learning from other students, feeling that they had something to contribute, and feeling comfortable participating in a group.

- **Over half of sixth graders and high school students reported that discovering things on their own was a big part of the way they learned.** Two fifths to 70 percent of sixth and ninth graders reported finding school work interesting and that they had opportunities to pursue their own ideas and interests, all factors associated with student engagement in learning.

- **The majority of students understood the importance of effort in learning.** Four-fifths of sixth graders and 85 percent of high school students felt that how much they learned in the school depended on their own efforts.

- **Feelings of school membership were high among students.** Over half of sixth graders and high school students said that teachers listened to what they had to say always or most of the time. A high proportion of students described themselves as fitting in well in an ELOB school, both factors associated with feelings of membership in the school.

The following summaries of data collected from each school included demographic, attendance, mobility, retention, and standardized test score data for two cohorts of students (1992-95, cohort A and 1994-95, cohort B, as described below).
Student Status and Achievement Data

Student demographics and historical and current-year status and outcome information were collected to describe the ELOB target population and track its progress over time. Demographic information included in these analyses were enrollment statistics for the 1993-94 and 1994-95 school years disaggregated by race/ethnicity, gender, grade, and primary language. Student status information included in these analyses were mobility and year-end status, school program participation (i.e., programs for the bilingual or the gifted), and receipt of services (e.g., Chapter I, special education, free or reduced-price lunch). Student performance measures collected included reading and math standardized achievement results and portfolio assessments, where applicable. Longitudinal analyses of these results have been included in this section where results from several test administrations were available.

AED collected data from two cohorts of students in ELOB classrooms from 1993-95. Data from these two groups were also entered into cohort files and analyzed with this distinction. The first group, cohort A, is comprised of all students enrolled in ELOB schools during the 1993-94 school year and identified by the schools as having received ELOB instruction during that year. Those students who completed the full 1994-95 school year at the same school, that is, received two years of ELOB instruction, have been included in cohort A analyses. Cohort B is comprised of students who were enrolled in ELOB classrooms for the first time in school year 1994-95. Students in this group are either students who newly entered an ELOB school or who were continuing at the same school in school year 1994-95 but not previously receiving ELOB instruction.

Description of Student Population

There is tremendous variation among student populations in the 10 schools (the following data are based on enrollments in 10 schools in 1994-95):

- Overall, almost one-fifth (19 percent) of the total student population were students of color, the highest proportion was 86 percent and the lowest 4 percent.

- Almost half (47 percent) of the student population were eligible for reduced-price or free lunch, three schools had a majority of eligible students (from 68 to 87 percent); three schools had a third of students eligible, and the others had lower percentages of eligible students.

- Special education populations ranged from one in five in three schools, one in six in two schools, and one in ten in two schools, and lower percentages in other schools. The two new schools did not have special education programs (although one had special education students), and one school had a full inclusion program at all grade levels.

- Chapter One services ranged from two-thirds of students to 7 percent of students.

- Four schools enrolled students who spoke a language other than English as their primary language.
• **Attendance** was high in all schools throughout the two years of the initiative: in all elementary and middle schools above 90 percent of all possible days; high school attendance was above 90 percent for students in two schools in 1993-94; it declined in two schools in 1994-95 to 81 percent and 87 percent.

• **Mobility**: With the exception of the alternative school which provided transition services for students who were not succeeding in regular high schools, two-thirds of the students in schools in the five cities were continuously enrolled in ELOB classes from 1993 to 1995.

• **Retention** of students (holding them back) was extremely low in all the schools. All students in seven schools made normal grade progress into the 1994-5 school year.

**Student Achievement Test Results in Reading and Mathematics**

Standardized test scores varied widely among schools, within schools between grade levels and, in two schools, within grade levels between Cohort A and Cohort B. Nevertheless, a three-year longitudinal analysis of scores from Cohort A students (students continuously enrolled in the schools from 1992-93 and in ELOB classrooms from 1993-94) showed some significant increases in selected schools and grades. Most positive were the increases in scores in three elementary schools among Cohort A students whose scores were documented from fourth through sixth grades: scores increased in reading in two schools and in mathematics in two schools. In these schools, notable increases occurred in the percentage of students scoring in the top two quartiles and decreases occurred in percentages of students scoring in the bottom quartile. Three other schools also had significant improvements in reading or math scores with decreases of students scoring in the lowest quartile in reading or math.

• From 1993-1995, the following grades in selected schools showed significant increases in reading: Grades 5 and 6 (K-8 school); grade 6 (two elementary schools) grade 7 (two middle schools) and grade 8 (one middle school).

• From 1993-1995, the following grades in selected schools showed significant increases in mathematics scores: grades 5 and 6 (K-8 school), grade 8 (middle school), grade 6 (two elementary schools). From 1993-1995 a decrease in mathematics scores occurred in grade 7 in two middle schools.

**The Case-Study Students**

Twenty-nine students from five schools were selected by teachers and principals as case-study students. These students were representative of the ethnic/racial distribution in their school, and half were female. Students also represented a range of levels of engagement in academic work. The evaluation found that these students fared extremely well in ELOB schools. Outcomes for case-study students are summarized below.
• Of the 29 students, the majority could be said to have fared well over the two years that they were interviewed and observed, that is, they progressed in several areas of their school work and felt positively about school, and their parents and teachers felt they were making progress.

• Students from poor, immigrant, and minority backgrounds fared well in all the schools. Middle school students were especially well served by the emphasis on group work and cooperation emphasized in ELOB classrooms and by the attention to social and identity issues that are of great importance to students at this age.

• The majority of parents were very positive about their children's progress in school, and in particular about some aspects of the ELOB approach, its emphasis on cooperation and its hands-on approach to learning. Parents were also positive about the school's emphasis on respecting diversity.

• Parents and students agreed that the following elements of an ELOB school or classroom were especially valuable to students: high levels of engagement in learning that resulted from the hands-on, experiential nature of learning; multiple venues for learning and demonstrating learning; an emphasis on team work and cooperation; and an emphasis on diversity in the classroom and a respect for diverse backgrounds and points of view.

Conclusion

In brief, the evaluation found that ELOB is an effective school reform initiative with a positive impact on student outcomes, the quality of teaching, and school climate and relationships. Crucial to its success is the central role that teachers play in designing and implementing expeditions and ongoing high-quality professional development.
What Students Said about ELOB Schools

I like going to an EL school. It's fun and I think it helps me with reading and writing. You wake up and think, "I can't wait to work on our biographies today." [Third-grade student]

You don't just read things in books like female guppies are green; you go look at guppies or you raise some yourself. [Third-grade student]

"Before I came to school I could not get along with people very well, especially a certain kind of people. . . . At this school, you learn to work with that person and around that person." [Ninth-grade case-study student]

At other schools they teach you more, and that's all you need. Here you figure it out yourself. Teachers help but you do it yourself. [Seventh-grade case-study student]

A school where you try to find things out for yourself. The teacher doesn't just tell you. [Second-grade student]

We just get to do more. I used to go to Nativity and we all worked on the same thing at the same time. Here they let the kids that know stuff go to another group instead of getting stuck doing it over and over. [Fourth-grade student]

Instead of having students stay in the classroom and teachers telling you what to do, you have choices in how you want to learn. [Sixth-grade student]

You don't just have 45 minutes to learn about something. You have a longer time to think and work on what you are going to do. [Seventh-grade student]

A student from this school knows more about their city because they have been out in the community mixing with the people. It's not just learning about buildings. It's about where you live. [Ninth-grade student]

You own companies or architectural firms and write proposals on building renovations. [Sixth-grade student]
Endnotes

1. ELOB proposal to NASDC, 1992.

2. Ibid.

3. ELOB draws especially on the pedagogical principles developed by Kurt Hahn, OB founder, and the adaptation and practice of these principles in OB Schools and centers in the United States, and on the ideas of Harvard educators Paul Ylvisaker and Eleanor Duckworth.


6. Ibid.

7. In 1994-95, 136 out of 221 full-time teachers responded to the surveys twice in each academic year (136 in fall 1994 and 124 in spring 1995). Non-respondents included teachers in phasing-in school who were not consistently implementing expeditions and recently hired teachers in new schools.