



2010 Annual Report

Pacific Resources for Education and Learning

Building Capacity Through Education

Message from PREL's CEO



PREL's enduring vision is of a world in which all children and communities are literate and healthy global participants, grounded in and enriched by their cultures. As we reflect on the past year, our 20th year as an independent organization, we celebrate the progress we have made on our strategic priorities and new initiatives. We are proud to remain a forward-thinking organization with clear goals and practices that are relevant to our mission and meaningful to our constituencies.

As you read this report, you will find clear evidence of research-proven concepts used to improve schooling and support students in reaching their full potential. Such important work can only be achieved in partnership with educators, administrators, and policy makers of every level with whom we have collaborated for over 20 years of uninterrupted work in Pacific schools. A program that well exemplifies the confluence of research and community is Pacific Communities with High-performance In Literacy Development (Pacific CHILD), a randomized controlled trial of a professional development program developed under the Research Educational Laboratory Pacific (REL Pacific) and delivered in American Samoa, the Commonwealth of the Northern Mariana Islands (CNMI), and Hawai'i.

Essential to PREL's long-standing impact in the Pacific region is our broad network of educators and community-based service centers. Jurisdiction-based PREL staff are crucial to the success of our work, as these educators intentionally bring linguistic, cultural, and contextual expertise to planning and implementation efforts. The Mejrrok Elementary School Academic Literacy Integrating Values Excellence and Economic Empowerment (MES ALIVE) program has yielded meaningful outcomes and is a good example of capitalizing on regional expertise. Delivered in the Republic of the Marshall Islands (RMI), the program follows the rationale that community-based learning involves capacity development for the community as a whole, and not only for the students. As we embark upon the future, we will have more to say about our collective efforts to build capacity across the entities we serve.

In 2010, we continued to strengthen our commitment to the Pacific education community through our marquee programs: the Pacific Educator in Residence (PEIR) program and the Pacific Teacher Scholarship Fund. More than 55 educators have participated in the PEIR program, which supports participants' skill development as they engage in PREL program work. The Pacific Teacher Scholarship Fund has granted tuition assistance to over 40 students pursuing a teaching career in the U.S.-affiliated Pacific. PREL takes pride in the coordinated efforts between our partners, staff, and friends, all of which make these programs possible.

We at PREL are fortunate to have strong leadership supported by a very dedicated staff. Paul Dumas is a seasoned Chief Programs Officer, and Gwen Okamoto, Chief Financial Officer, keeps our finances focused and well-organized. I thank our growing PREL family of professionals, partners, and constituents and look forward to a productive year ahead. For my part, it is a great privilege to serve as the President & CEO of this organization.

—Sharon Nelson-Barber, EdD

S TRENGTHENING FAMILY AND COMMUNITY ENGAGEMENT



The cultivation of strong family-school-community linkages is increasingly and widely viewed as an essential strategy for improving student educational outcomes. During 2010, PREL continued to conduct research and provide technical assistance through the Federated States of Micronesia (FSM) and the Republic of the Marshall Islands (RMI) Parent Information and Resource Centers (PIRCs). The PIRCs use strong social networks at the village level to engage parents and community members in school policy decisions and activities. PREL PIRC staff partnered with state education agencies to help implement successful and effective parental involvement policies, programs, and activities that led to improvements in student academic achievement and strengthened partnerships among parents, teachers, principals, administrators, and other school personnel.

Beyond the work of the PIRCs, PREL partnered with the RMI Ministry of Education (MOE) and UNESCO to implement year 1 of the Mejrrok Elementary School Academic Literacy Integrating Values Excellence and Economic Empowerment (MES ALIVE) project. The project objectives—increasing students’ academic literacy, integrating sustainable skills and knowledge in teaching, and empowering and developing community engagement—are based on the idea that the incorporation of indigenous knowledge and values into formal curricula and learning processes is critical to literacy development and academic achievement.

Our central focus on strengthening family and community engagement continues to guide and inform our technical assistance activities. PREL facilitated workshops and seminars in Hawai’i that focused on equity and access for immigrant students as well as cultural competencies for teachers working with Micronesian student populations. On Maui, PREL staff collaborated with the state Immigrant Services Division to disseminate findings and recommendations from the Micronesian Voices conference and raise awareness about Micronesian cultures and the history of Micronesians in Hawai’i.

PREL’s work in family and community engagement, as well as in mental and physical health, expanded in 2010 when the UNICEF- and RMI-funded Child Protection Baseline Research (CPBR) project appointed PREL as its lead national research agency. CPBR uses the child protection conceptual framework for building a protective environment for children: (1) child protection legislative and regulatory compliance review, (2) institutional stocktaking

of child protection social welfare and protection systems and interagency collaboration, and (3) a societal behavior component. PREL staff analyzed baseline data and presented recommendations to UNICEF and the RMI government. These results will serve as the basis of UNICEF support to the RMI in the area of child protective services for the next 5 years.

We understand that what schools do to foster parent involvement is

critical in determining whether, which, and how parents will participate in their children’s schooling, and ultimately how students will benefit. Over the course of 2010, PREL staff presented at regional and national forums, disseminating research on effective school and teacher practices for influencing the level and quality of parental and community involvement in Pacific schools.

Mejrrok Elementary School Academic Literacy Integrating Values Excellence and Economic Empowerment (MES ALIVE)

The MES ALIVE project was organized around the rationale that community-based learning involves reciprocity among students, teachers, and community members, where not only students, but the entire community, develop new capacities.

PREL and the Republic of the Marshall Islands Ministry of Education provided classroom management and instructional support to help align the project’s activities to curricular standards and benchmark outcomes. Examples of the support provided include the following: using local materials to organize classrooms, establishing a reading center for grades 1–3, training teachers to connect community learning activities to literacy learning, and developing Marshallese language arts vocabulary and the learning of Marshallese culture.

The implementation of the MES ALIVE project has resulted in some notable changes in school management and parent involvement:

- Improved student/teacher attendance and participation
- Higher accuracy in data collection



- Clarification of expectations for students, parents, and teachers, as established through daily school routines
- Promotion of a professional school environment through enforcement of the school uniform for students and professional attire for teachers

The project also displayed the following evidence-based results:

- There was 100% family involvement in the school and community garden plots for social science learning.
- There was 100% participation from 7th and 8th grade boys in making sennit ropes, which are used to make thatch houses.
- There was 100% participation from 7th and 8th grade girls in making thatch for the school house.

IMPROVING STUDENT OUTCOMES

Research continues to demonstrate that the inclusion of students' cultural knowledge enriches the curriculum, expands opportunities for parent and community involvement, and improves student achievement (Demmert & Towner, 2003; Moll, Amanti, Neff, & Gonzalez, 1992; Nelson-Barber & Lipka, 2007; Warikoo & Carter, 2009). Understanding that culturally responsive, standards-based curricula can help schools improve student outcomes—especially schools that are low-performing or have high English language learner (ELL) populations—PREL continues to focus on initiatives that support and engage linguistic and cultural diversity.

Picturing Science

Picturing Science, a course offered through PREL's Hawai'i School Improvement Services program, shows teachers how to integrate students' oral, visual, and written communication skills using an innovative, multidisciplinary model of instruction. In 2010, over 100 public school teachers in Hawai'i earned professional development education credits, added to their toolbox of English as a second language (ESL) strategies, and offered students of all ages opportunities to use words in "painting" what they know.

Building science literacy through *Picturing Science* affords students the opportunity to learn in a real-world context while creatively developing and testing new ideas. Science is, by nature, a multidisciplinary endeavor and a means to apply many of the skills we want students to master. Program Director Lori Phillips stated, "The critical thinking skills developed through scientific inquiry can serve students by providing logic and problem-solving skills used in all aspects of learning. The integration of science with language and visual arts targets the whole brain. Learning in the arts mirrors the goals of scientific literacy by seeking to engage students in both intuitive and analytical thinking."

The 21st-century literacy skills practiced in *Picturing Science* requires students to engage in the synthesis of information, patterns, and concepts; incorporate multiple perspectives; and create meaning from words, symbols, and images. These skills, built through the arts, parallel those sought by scientists.



For the past five years, REL Pacific's Pacific Communities with High-performance In Literacy Development (Pacific CHILD) program has delivered year-round professional development interventions that combined workshops, lesson demonstrations, observations, and peer learning groups for 4th and 5th grade teachers. Program content integrated three reading strategies for improving student reading comprehension (vocabulary; text structure; question generation) with three instructional strategies for improving classroom pedagogy (differentiated instruction; interactive tasks; cognitively rich environment) through the use of expository text. In partnership with Berkeley Policy Associates, REL Pacific, in its final year of 2010, concluded a randomized controlled trial of Pacific CHILD, which will show the level of impact the program has had on teachers' content knowledge and pedagogical practices, as well as student achievement.

One of PREL's newest initiatives to improve student outcomes, the Mathematics and Culture in Micronesia: Integrating Societal Experiences (MACIMISE) project, centers on recovering the mathematical understandings that reside in the everyday heritage practices followed by Pacific

indigenous groups across PREL's service region. MACIMISE staff now work with local practitioners to make use of the mathematical concepts identified in each context—Chamorro, Chuukese, Hawaiian, Kosraean, Marshallese, Palauan, Pohnpeian, Samoan, and Yapese—as they begin to develop curriculum materials for grades 1, 4, 7, and 8. Community engagement and participation are essential to the MACIMISE program, which supports the preservation and advancement of indigenous knowledge systems.

As teachers, administrators, and members of state education agency (SEA) improvement teams increasingly utilize student performance data to inform instructional decision making, PREL's Pacific Assessment Systems and Support (PASS) program continues to provide technical assistance and assessment development and revision services to SEAs across the region. In American Samoa and the Commonwealth of the Northern Mariana Islands, PASS staff are partnering with SEAs to develop and pilot standards-based English language proficiency assessments for both student placement and end-of-year assessment. In Guam, PASS staff are working with teachers and content area specialists to develop Chamorro, mathematics, science, and English language arts assessments that align with the newly implemented content area standards. In the Republic of Palau and the Federated States of Micronesia, PASS is working with teachers to develop standards-based assessments in English language arts and mathematics. A specialized focus of the PASS program is the development of culturally valid



assessments that tap the linguistic and cultural variation of students. PASS staff conduct research and continue to disseminate findings regarding both criteria for culturally valid assessment and recommendations for specific strategies that teachers can use to design and implement effective assessments.

P REPARING GREAT TEACHERS AND LEADERS

In 2010, PREL provided assistance to Pacific state education agencies (SEAs), assisting them in identifying effective teachers and leaders and providing technical assistance for the establishment of mechanisms that measure teacher and leader effectiveness. Through the work of REL Pacific and the Pacific Comprehensive Center (PCC), PREL hosted forums for education stakeholders, connecting national and international experts with local practitioners.



PREL was contracted by the Hawai'i Department of Education (HIDOE) in fall 2010 to provide research and technical support for Race to the Top initiatives that focused on alternative pathways for principal certification and the development of a Turnaround Leadership program. PREL staff worked with HIDOE principals and administrators, as well as union and legislative representatives, to find common ground for a new administrative code that was subsequently enacted in the 2011 state legislative session.

In August 2010, PREL cosponsored the Yap State Leadership Academy in Colonia. All Yap principals and department of education program leaders convened to focus on specific actions designed to develop effective school leaders. The academy covered strategies for increased accountability, data-driven decision making,

and methods for implementing, monitoring, and evaluating curricula. School leaders refined their school improvement plans using recent assessment data. The event was sponsored by the Yap State Department of Education, PREL's PCC, and the University of Guam Center for Excellence in Developmental Disabilities Education, Research, & Service. On the final day of the academy, PREL's REL Pacific supported a Bridge Event on Turnaround Schools by Dr. Sam Redding.

Recognizing the importance of information literacy and the development of 21st-century learning skills, PREL continues to focus on teacher-librarian collaborations. A \$323,792 grant from the Institute of Museum and Library Services (IMLS) established the Strategic Collaborations for Information Literacy (SCIL) project. The mission of the SCIL

initiative is to ensure that all students and staff are given the opportunity to become literate, lifelong learners and effective, responsible users of ideas and information in spite of the *digital divide* and other resource inadequacies they may face. Over the next 3 years, the SCIL project will expand and enhance informal, continuing education opportunities for school library staff and teachers in American Samoa and the Republic of Palau. A major focus of the SCIL project is to create and train teams of school librarians, teachers, and principals who will collaborate to integrate information literacy and content.

As part of PREL's ongoing mission to build the capacity of Pacific region teachers and leaders, the Pacific Educator in Residence (PEIR) program hosted two Palauan educators: Ms. Imengel Mad (Library and Information

Pacific Educator in Residence (PEIR)

Since 1986, the year in which PREL began the Pacific Educator in Residence program, over 59 educators have completed a 1-year residence in PREL's main office in Honolulu or, more recently, in one of PREL's nine service centers around the Pacific region. With almost 24 years in operation, the PEIR program precedes the existence of PREL as an independent agency and has witnessed many of its beneficiaries become teachers and administrators in local schools and education agencies.

Four distinguished PREL staff members have emerged from the program: Ms. Evelyn Joseph, Director of the Parent Information Resource Center in PREL's Republic of the Marshall Islands Service Center; Ms. Juanita Sultan-Rilometo, Program Specialist/Field Coordinator at PREL's Pohnpei Service Center; Ms. Keres Petres, Field-Based Reading Specialist at PREL's Chuuk Service Center; and the late Dr. Rita Inos, who had served as Chair of PREL's Board of Directors.

Some of PREL's PEIRs have moved on to notable positions in education: Mr. Casiano Shoniber became the Secretary of Education for the Federated States of Micronesia, and Mr. Peter James is the Chief of Secondary Schools for the Chuuk State School System. The 2010 Pacific Educators in Residence include Mr. Keizy Shiro and Ms. Imengel Mad, both from Palau.



Literacy Initiatives) and Mr. Keizy Shiro (Research & Evaluation). The program offers a 1-year residency for educators from American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (Chuuk, Kosrae,

Pohnpei, and Yap), Guam, Hawai'i, the Republic of Palau, and the Republic of the Marshall Islands. A collaborative effort of PREL and the departments of education and institutions of higher education in the Pacific region, the PEIR program aims to enhance and

develop the specialized skills of Pacific educators in the context of PREL's ongoing work in the region. PEIRs work side-by-side with senior PREL staff, focusing on research and technical assistance activities that will benefit local schools and communities in the Pacific.

C ONDUCTING RIGOROUS RESEARCH AND EVALUATION

2010 was an exciting year for rigorous research and evaluation at PREL. Our Research Division advanced and disseminated research on effective teaching and leadership, standards-based assessment, second language acquisition, youth resiliency, and culturally responsive pedagogy and assessment, among other critical needs areas. Additionally, our External Evaluations Division successfully completed multiple program evaluations for a range of government and nonprofit education agencies.

In response to requests from our service region, PREL continued to expand its portfolio of research projects designed to advance science, technology, engineering, and mathematics (STEM) education. In 2010, PREL researchers and partnering agencies were awarded National Science Foundation funding to develop and implement a Pacific Island Climate Education Partnership to advance climate literacy in the U.S.-affiliated Pacific Islands (USAPI). Most recently, PREL began work on a National Science Foundation Discovery Research K–12 (DRK–12) award to study math test performance by American Indian and Alaskan Native students.

PREL's research agenda is accentuated by the work of Regional Educational Laboratory Pacific and funded by the Department of Education's Institute of Education Sciences. During the 2010 fiscal year, an independent research team from Berkeley Policy Associates (BPA) conducted a rigorous study of the impacts of our Pacific Communities with High-performance In Literacy Development (Pacific CHILD) program in three entities of the Pacific region: American Samoa, the Commonwealth of the Northern Mariana Islands, and Hawai'i. The study tested the effectiveness of the professional development program



in public elementary schools by assessing whether the program had an impact on teacher outcomes (knowledge and practice) and student achievement in reading. In addition to the Pacific CHILD work, PREL continued to respond to regional needs by connecting practitioners to

research through applied research and development projects, studies, and other technical assistance activities. Such projects included work on nutrition and physical education policy and practice in secondary schools in the Pacific region, a longitudinal study on Native Hawaiian

student achievement, and a case study on the Pacific CHILD professional development program. In addition to its applied research projects, REL Pacific also convened a number of high-profile public forums throughout the Pacific region, bringing together policymakers, parents, community members, and school leaders to expand their knowledge of evidence-based strategies in key areas of interest: turning around chronically low-performing schools, data-driven decision making, effective literacy instruction for English language learners, dropout prevention, and increasing parental involvement.

PREL's External Evaluation Division continued to employ a variety of quantitative and qualitative research methods to provide rigorous formative and summative evaluations to clients throughout the Pacific. Beyond evaluating the effectiveness of programs, we also helped clients better understand the work they do and coherently presented the goals and outcomes of their work to third parties. Our clients use a variety of methods—from video games to sustainable farming—to educate children and adults. In 2010, PREL program staff completed evaluations for schools, organizations, and foundations such as the Hawai'i Department of Education, Kamehameha Schools, and the University of Hawai'i.

As PREL begins the 2011 fiscal year, we are excited to welcome new researchers to our team, engage in new and fulfilling partnerships, and continue to work collaboratively in advancing education research and responding to regional needs.

Pacific Communities with High-Performance In Literacy Development (Pacific CHILD)

Pacific Communities with High-performance In Literacy Development, a randomized controlled trial of a professional development program, may already be improving the skills and techniques of teachers in American Samoa, the Commonwealth of the Northern Mariana Islands, and Hawai'i.



Althea Kalei Arinaga, a teacher participating in the treatment group of the trial, was recently named Teacher of the Year for the island of Kaua'i. Ms. Arinaga is an incredibly amazing 4th grade teacher at Kapa'a Elementary. It was remarkable to see how she gently infused native Hawaiian practices and academic literacy in teaching her 4th grade students. One example that stands out was a unit on invasive plants. She did a compare and contrast lesson on indigenous plants and invasive plants, and

later took her students on an overnight trip to Koke'e State Park to clear invasive plants from the hiking trails. Her class was the group of volunteers who cleared the largest number of invasive plants in one period—over 10,000 stocks!

As a concluding activity, Ms. Arinaga's students wrote letters to Mayor Carvalho. It was astonishing to observe how one teacher embraced and implemented all of the Pacific CHILD components—vocabulary, text structure, question generation, interactive tasks, differentiated instruction, and cognitively rich environments—seamlessly.

Like Ms. Arinaga, many teachers have shared that participating in the Pacific CHILD program has been one of their best professional development experiences. They felt that the ongoing and sustained professional development provided them with much-needed support and helped them learn new strategies, especially localized in their classroom setting with their own students.



FOSTERING INNOVATION AND CREATIVITY



With a philosophy firmly rooted in the belief that innovation and creativity are essential in all disciplines and knowledge-oriented societies, in 2010, PREL continued to explore these concepts in relation to their place in both formal and informal educational contexts.

In 2009, PREL initiated *E Ho'omau!*, a curriculum development project funded under the Native Hawaiian Education Program of the U.S. Department of Education. Through *E Ho'omau!*, PREL is creating three high-quality animated versions of traditional Hawaiian legends designed to be engaging and culturally appropriate. These are complemented by standards-based print materials

and teacher training activities that strengthen language arts and science achievement for Native Hawaiian 4th graders. *E Ho'omau!* addresses the need to improve the literacy skills of students of Hawaiian ancestry. The curriculum aims to do so by integrating evidence-based educational approaches with a visually rich learning system based on Hawaiian legends. The goal is

E Ho'omau!

*E Ho'omau!** has mainly focused on producing curriculum materials: three animated featurettes based on culturally important Hawaiian legends, three accompanying graphic novels, and nine nonfiction booklets.

We have completed the first set in 2010, based on the story *Why Māui Snared the Sun*. In this story, the demigod Māui, as a young man, wants to help his mother, who finds that the sun is hurrying across the sky, making the days too short for her to dry her kapa cloth. Summoning all his courage, Māui confronts and snares the sun, convincing it to slow down and extend the hours of daylight. Production of the animated featurette included script writing, storyboard development, audio casting and recording, character and background art, and final animation.

To accompany the featurette, the following have also been completed: a graphic novel featuring key vocabulary words and three nonfiction booklets containing 4th grade standards-based science content.

Two other stories will be completed in 2011: *The Menehune and the Birds* and *Pele Searches for a Home*. Meanwhile, PREL project evaluators will also begin assessing the quality and utility of the materials and teacher training, as well as student outcomes based on relevant Hawai'i state standards.

**E Ho'omau* is the imperative form of the Hawaiian verb meaning to preserve, to persist. The expression urges us to learn from the past and perpetuate the good.

to elevate student motivation and enhance self-confidence while providing meaningful learning opportunities.

To foster creativity and increase student engagement in both English language arts and the sciences, PREL staff expanded *Picturing Science* instruction into both formal



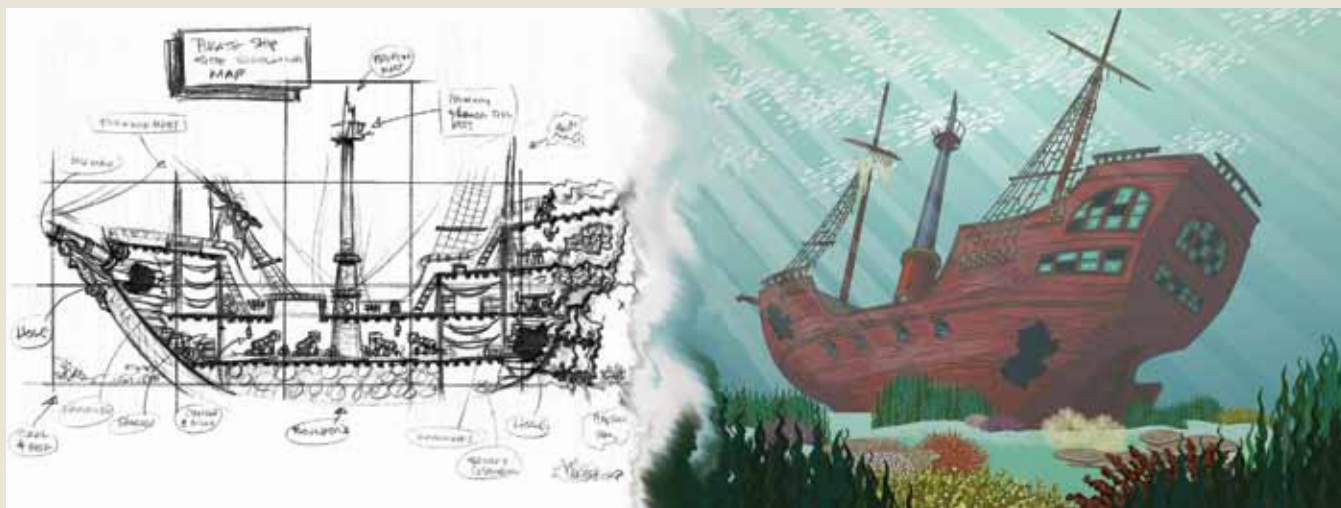
and informal education settings. *Picturing Science* combines scientific inquiry with language and visual literacy strategies to enhance environmental literacy. Integrating science, photography, drawing, painting, and writing, it creates a showcase of student work. The goals are for students to examine their

environment from new perspectives and to engage creatively with scientific process and content. Such use of language and visual literacy strategies has been successful in enhancing instruction in chemistry and physics courses (Schonborn & Anderson, 2006; Bopagedera, 2005; Campbell, 2004) and in connecting with informal audiences about biology (Jacobson et al., 2007).

PREL, in collaboration with Mentor Interactive, recently released *Cosmos Chaos!*[™], an educational game for the Nintendo DS console that targets vocabulary learning in science, social studies, and mathematics. Resulting from a U.S. Department of Education grant focused on the development, delivery, and evaluation of a supplemental vocabulary instructional game for the Nintendo DS, this digital game-based vocabulary enrichment program is designed to improve 4th grade struggling readers' word knowledge and use of word learning strategies for reading comprehension. Instructional content and an engaging virtual experience combine in *Cosmos Chaos!*[™] to create an innovative educational game. *Cosmos Chaos!*[™] strives to move beyond the electronic

version of school; instead, it creates an environment where the player goes on a mission to save a pet dog, Hugo, and stop a takeover of the galaxy. As the player engages in this quest, he or she interacts with words and learning strategies. The role-playing game (RPG), adventure hybrid embeds strong learning principles and educational goals in the areas of fantasy, rules/goals, sensory stimuli, challenge, mystery, and control, and its instructional design not only enhances, but promotes, players' learning processes.

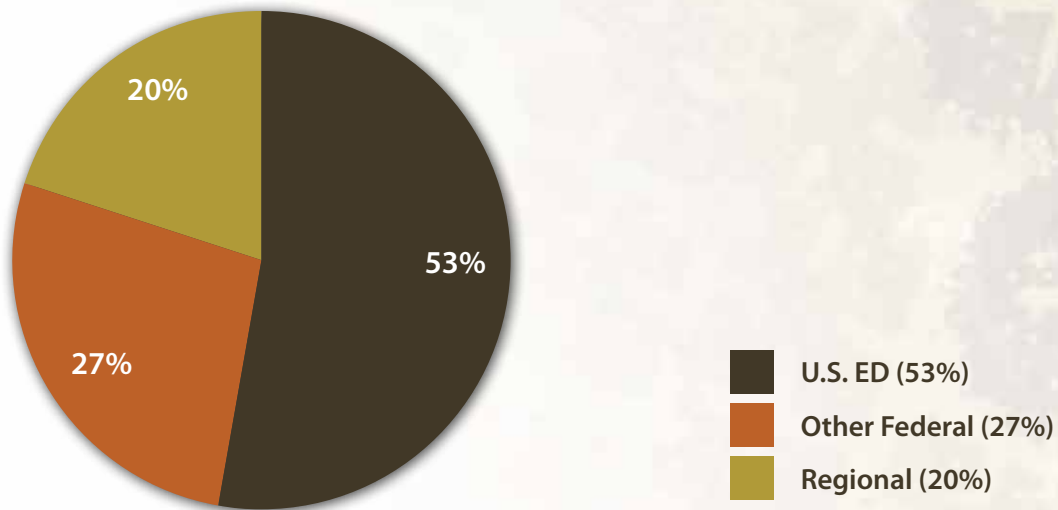
We understand that creativity does not arise from the standardization of education, which seems to perpetuate the status quo, but from gathering together people with a variety of perspectives and understandings. In partnering with education stakeholders, PREL shares the commitment in improving the educational contexts in which we learn and work. By thinking and talking with our partners, friends, and neighbors, we continue to envision and enact new possibilities for fostering innovation and creativity, in both formal and informal settings.



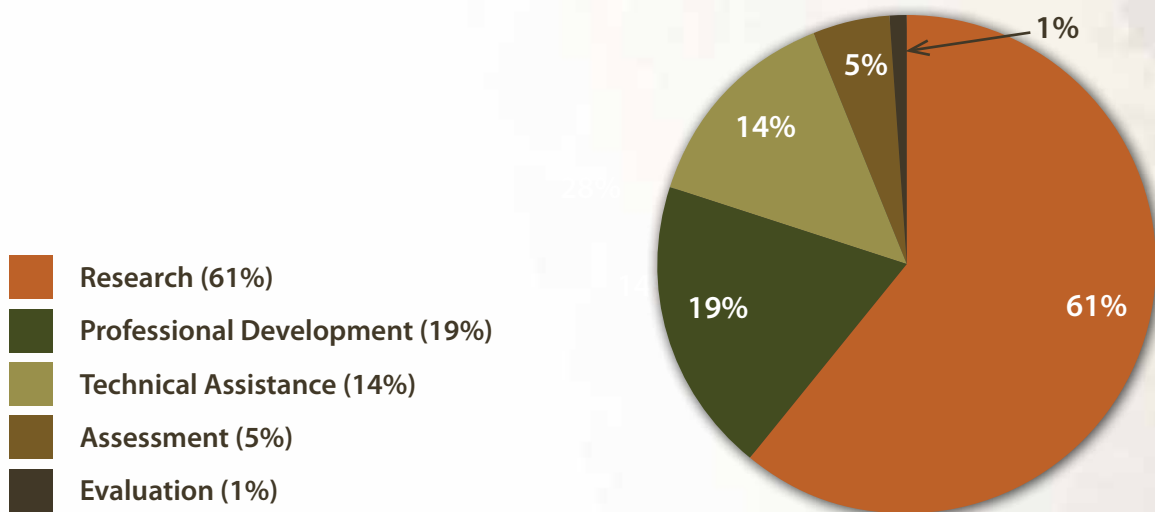
2009–2010

PREL's revenue was \$9.9 million dollars in fiscal year 2010. An operating surplus during this fiscal year (FY) of \$252,000 brings our net assets to \$1.7 million as of September 30, 2010. PREL continually invests its net assets to support our projects, programs, and research. From Accuity LLP, our external auditor, PREL received an unqualified opinion—in the auditor's opinion, PREL has fairly presented its financial position, results of operations, and changes in cash flows. For a copy of our complete financial statements for FY 2010, please contact our Finance Office. PREL operates as a nonprofit 501(c)(3) corporation.

Revenue by Source



PREL Core Work



References

Bopegedera, A. M. R. P. (2005). The art and science of light: an interdisciplinary teaching and learning experience. *Journal of Chemical Education*, 82(1), 55–59.

Campbell, P. (2004). Seeing and seeing: Visual perception in art and science. *Physics Education*, 39(6), 473–479.

Demmert, W., & Towner, J. (2003). *A review of the research literature on the influences of culturally based education on the academic performance of Native American students*. Portland, OR: Northwest Regional Educational Laboratory.

Jacobson, S. K., McDuff, M. D., & Monroe, M. C. (2007). Promoting conservation through the arts: Outreach for hearts and minds. *Conservation Biology*, 21(1), 7–10.

Moll, L., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory Into Practice*, 31(2), 132–141.

Nelson-Barber, S., & Lipka, J. (2007). Rethinking the case for culture-based curriculum: Conditions that support improved mathematics performance in diverse classrooms. In M. Brisk (Ed.), *Language, curriculum & community in teacher preparation* (pp. 99–123). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Schonborn, K. J., & Anderson, T. R. (2006). The importance of visual literacy in the education of biochemists. *Biochemistry and Molecular Biology Education*, 34, 94–102.

Warikoo, N., & Carter, P. (2009). Cultural explanations for racial and ethnic stratification in academic achievement: A call for a new and improved theory. *Review of Educational Research*, 79(1), 366–394.

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