East Baton Rouge Parish MSP

5TH GRADE SCIENCE STARS - ELEMENTARY PROJECT | 2011 - 2012

Project Details

Lead District: East Baton Rouge Parish School System
Partner School: Bethany World Prayer Center
Higher Education Partner: Louisiana State University (LSU)

Federal Funds Received: $185,000 (one year)

Participating schools:
Bethany World Prayer Center: Bethany Christian School

Leveraging Louisiana’s Resources: Fossil Expedition to the Copenhagen Hills Preserve

“Look what I found!” exclaimed a Science STARS teacher upon finding a fossil buried in the silt of a creek bed. Dr. Gary Stringer’s reply was equally enthusiastic as he hurried over to check out the object. “You’ve found coral!” As she continued on her quest to find the next fossil, a chorus of other Science STARS teachers clamored for more information, asking. “What is this? Is this a fossil? Should I keep it?” The teachers were part of a marine fossil hunting expedition led by Dr. Stringer, noted paleontologist from the University of Louisiana at Monroe and winner of numerous awards, including the Louisiana Science Teachers Association’s Claudia Fowler Distinguished Educator Award and the William Craig University Educator Award. The expedition took place in the Copenhagen Hills Preserve in North Louisiana, home to some of the most diverse flora in the state. The area is also known as the best site for marine fossils in Louisiana, and one of the best in the United States. This marine fossil site, far north of I-10, reflects the fact that this area was under an ocean at one time. Discovered in the 1900’s, the site now beckons fossil hunters from across the globe. Even after many visitors, marine fossil specimens are abundant at the preserve as each heavy rain uncovers yet another layer.

Through the MSP program, this expedition expanded the borders of the classroom, bringing real life experiences to the Science STARS teachers and introducing them to the incredible resources indigenous to our state. Connecting science content that teachers of 5th graders should know to real life experiences provides opportunities for learning that cannot be read about or duplicated through simulations. There is nothing quite like finding the bone of a whale or a shark’s tooth in North Louisiana, and the experience uniquely illustrates the dynamic nature of science in our world!
Science as inquiry, a pathway to deep conceptual learning, is a primary focal point of Science STARS. Rather than explaining a concept to teachers, Science STARS instructors engage teachers in learning by conducting investigations, recording observations in journals, answering probing questions, asking their own probing questions, conferring with their peers to develop an understanding of scientific phenomena, and learning of common misconceptions held by students about various concepts. This process embeds the content within a context that enhances cross connections from what has been learned to new learnings. It also models the processes shown by research as best practices that enhance student understandings. Far from the traditional classroom in which the teacher is the information giver, the MSP program espouses using effective, research-based strategies to improve student learning and student achievement. These techniques are particularly important to the sciences as they mirror the actual work of scientists and encourage participants to think like scientists.

Community of Learners

Science STARS participants developed strong communication networks that facilitated their learning. This camaraderie was noted by instructors and participants alike. As one teacher wrote in the final summer survey, “I have attended a host of professional development over the years, and this was by far the best professional development I have experienced. I was especially impressed with the seriousness and professionalism among the teachers selected. The majority were actively engaged in the learning and not just warm bodies. I loved it!!! I learned more in these three weeks than I have in any other professional development.” Another teacher remarked, “The MSP program brought together a group of teachers who were passionate about education; so we not only gained information from the workshop, but were also able to forge new collaborations with peers.”

Project Quotes

“The expectations were high from the start.”

“The presenters were true experts in their field of science and were able to answer any questions we posed throughout the experience. I really enjoyed learning about misconceptions students have and how to teach toward fixing or reversing their misconceptions.”

“The strengths of the MSP program were the hands-on learning, the in-depth knowledge the instructors had and were able to communicate to us, and the opportunity to collaborate and share with other fifth grade teachers.”

“I thank you for creating a program that speaks to the need and importance of science in our curriculum, and the re-teaching and elimination of common misunderstanding in science.”

“During this training, a wealth of information was shared, not only from a best practices standpoint, but also from teachers who use the same tools and have the same information to present to students.”

“The presenters were really great and very helpful in giving us tips to help our students learn the content.”

“I appreciate the opportunity for this training. I feel it will directly impact my students this coming year.”

“I feel I have made a network of teachers that I did not know before who will help me to expand my knowledge and become a better science instructor.”