

DOINGWHATWORKS



Video

FULL DETAILS AND TRANSCRIPT

Connecting Classrooms to the World

Normal Park Museum Magnet Elementary School, Tennessee

March 2008

Topic: How to Organize Your Teaching

Practice: Abstract-Concrete Connections

Highlights

- Teachers at this elementary school use learning expeditions to make abstract concepts more concrete for their students.
- Giving students a chance to see, listen to, touch, or re-create what they are learning helps them understand what they read from a book at a much deeper level.
- These experiences are memorable and shared among all students, making them powerful tools for retaining information and developing life-long learners.

About the Site

Normal Park Museum Magnet Elementary School

Chattanooga, TN

Demographics

73.1% Caucasian

22.1% African American

1.5% Asian

2.1% Hispanic

1.2% Native American

36.2% Economically Disadvantaged

Normal Park Museum Magnet staff plan curriculum in grade-level teams to organize instruction that promotes student understanding and retention of key concepts. Distinctive features of the school includes:

- Nine-week interdisciplinary curricular modules based on “essential questions” and “enduring understandings”
- Weekly learning expeditions to partner museums that connect abstract concepts taught in modules to concrete and real-life experiences
- Quarterly Exhibit Nights where students create displays and act as museum docents to demonstrate their understandings
- Differentiated instruction in reading, math, and spelling where individualized lessons are designed to alternate between teacher modeling and student practice
- Socratic Seminars, text- or art-based discussions where teacher questioning leads students to explore of key ideas through a cooperative process
- Hands-on, intensive professional development in the summer and throughout the year

Full Transcript

Lindie Roden, Second Grade Teacher: At Normal Park, we use learning expeditions to bring abstract ideas from the classroom and to make them more concrete and meaningful to the students through our museum visits and learning expeditions. All of our learning expeditions, I see it come together for the kids when they see the actual animal doing what we talked about in class or they see the place that was talked about in a book, you just see a light come on in their eyes, and they really are getting the content.

Liz Smith, Third Grade Teacher: I think for third graders, one of the most abstract and hard to understand concepts is government and economics, because it's totally new for them. They haven't really experienced any of those things before. We go to the Chattanooga Regional History Museum and they are able to make moon pies, which are native to Chattanooga, so they are really excited about actually getting those hands-on—they get to make the moon pies and eat them. But we set it up so that there are two groups: one is focused on individualized production and one is focused on specialized production. And so they get to experience the differences between an assembly line production and then making everything step-by-step themselves. And then we talk about the differences and how it felt and who was able to produce more quality moon pies, and they get a better understanding of what production is and how it affects their lives.

Robin Cayce, Fifth Grade Teacher: I think, too, they transfer that knowledge because in fifth grade, when we were learning about the Roaring Twenties and the Great Depression, we came across assembly line in the textbook—we were reading a chapter about Henry Ford and automobiles, and they immediately went back to that moon pie experience and said, “Oh, gosh, we know exactly how an assembly line works.”

Lindie Roden: This year, we also had the chance to watch the octopus camouflage and it changed colors over and over again and the texture of its skin changed and a second grader could not—well, they might be able to, but they get a better understanding of what that means to camouflage and how it really happens in nature by really watching it. And another really meaningful learning expedition is when we do our dinosaur unit, and we talk to the kids about fossils and how they do help us learn about what was here thousands and millions of years ago and we identify crinoids and brachiopods. And we actually take the children to an area of town where the highway has been cut into the side of a mountain, and the kids really find those fossils and they are so excited to know that this really is real, it’s not just in a book, they can really go investigate and learn about the past.

Liz Smith: I think for third grade, one of the science standards that we talked about this nine weeks were animal adaptations and so we were able to visit the zoo and the aquarium and have museum educators bring out specific examples like the cane toad—that was one of their favorite ones. And we discussed poison sacs that they probably haven’t encountered in animals here in the United States, and they were able to see the toad and ask questions to the museum educator and really get more concrete examples in their heads of how those adaptations work in animals they haven’t seen before.

Brenda Cothran, Kindergarten Teacher: Just walking the hallway today and I read an understanding a child said in her exhibit statement, that seeds fall to the ground and sometimes if the snow covers them then that seed may not be able to grow into a plant, and this particular child participated in a play that we wrote—we based it on Eric Carle’s book, *The Tiny Seed*, and she participated as a snowflake. And so it helped me to see that she understood that if the snow covers the seeds and they don’t actually continue to blow on and on in that cycle, then they may not be able to grow into a plant. So that—for me to see that statement was like, “Yeah,” you know, just her being able to participate in that part in the play, I think it helped her to really click and know that, wow, seeds don’t always make it into a plant.

Robin Cayce: When we go to the Citizen Cemetery during our Civil War Module, it’s always kind of a neat experience as a teacher, because when we have talked about the effects of war on loss of life, that’s one thing, but when they actually walk around and read of children who died and babies and fathers and all the epitaphs that they get to study and kind of write down, it really, the children kind of realized, “Oh, my gosh, war caused death, and it had an impact on human life,” and I really think that’s one trip that I really very intimately realized the children are grasping that the effects of war are very physical sometimes.

Lindie Roden: It’s so important to make those connections between the abstract learning and the concrete real experiences, because it makes the learning lifelong. They are experiences that these children will not

forget. They don't forget, as we have seen, they carried them from grade to grade.

Liz Smith: It's theirs; they can do it not just at school. That's one of the coolest things about when we study simple machines, they study them at school, we have talked about simple machines that they see in the classroom, and in one of the last learning expeditions we go to the Creative Discovery Museum and go to the River Play exhibit and they are responsible for pointing out different simple machines that they see. And they get so excited and, you know, point all the time, "I can see that pulley, it's right there." They can do it by themselves, not just with my help; it's theirs.

Robin Cayce: Well I think we are empowering students, too, by taking something very abstract and making it concrete, we are giving them— we are helping them form background knowledge that will take them on into their middle school and high school years and even adult life.