

## Overview

The Pojoaque Valley Schools was awarded \$50,000<sup>1</sup> by the New Mexico Public Education Department to establish a K-6 core curriculum. This one-year funding will advance the district's mission to "provide students with the skills and knowledge to enable them to become productive and responsible citizens by exceeding the competencies set forth by the New Mexico State Department of Education."

The foundation for the developing curriculum is the New Mexico Content, Benchmarks, and Performance Standards. These state standards were developed from the premise that students can achieve at high levels and that foundational concepts should be introduced early and expanded in subsequent years. The Core Knowledge standards®, which closely align to the NM Content Standards, provide an outline of specific content and are built on the premise that knowledge must be:

- Shared – common to members of the culture;
- Solid – persistent over time;
- Sequenced – each year building on the knowledge, skills, and abilities of the previous year; and
- Specific – based on concrete expectations for learning.

The district established collaborative articulation teams, with at least one teacher representative from each grade, K-6, in the content areas of language arts, mathematics, science, and social studies. These articulation teams utilize a modified lesson study format to:

- A. Analyze current and past student achievement data;
- B. Examine existing curriculum plans against the NM academic standards and the Core Knowledge sequence to identify gaps in content emphasis;
- C. Reach consensus on grade-specific expectations, resources, and research-based learning strategies; and
- D. Institute a formative evaluation system that is able to assist teachers in identifying individual learning gaps and reduce existing achievement gaps between student groups.

The process is supported in four ways. First, Janette Archuleta, Assistant Superintendent, provides oversight and guidance to the curriculum teams in the curriculum revision process as well as in the identification of research-based instructional practices and learning resources. Second, Sharon Dogruel, Director of The Education Center coordinates a team of content experts who have a strong working knowledge of the NM standards and the Core Knowledge sequence assists the instructional teams map grade-level expectations<sup>2</sup>. Third, instructional teams participate in professional development opportunities provided by the Public

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<sup>1</sup> 2005-2006 academic school year; a continuation award was made by the PED for the 2006-2007 academic year

<sup>2</sup> Based on the work of Heidi Hayes-Jacobs

Education Department (PED). Fourth, Dr. Steven Sánchez, Senior Consultant to The Education Center serves as the external evaluator and provides regular reports on implementation efforts to the Superintendent, the Assistant Superintendent, principals, and instructional team members.

## **Curriculum Development Process**

A modified lesson study format incorporates the principles of Japanese Lesson Study, a form of professional development that breaks a tradition of isolation in classrooms and academic departments to bring teachers together as a professional community. Lesson Study – Pojoaque Style is designed to improve teacher practice through a structured reflective process by which teachers examine and refine their instructional effectiveness, while at the same time constructing the district’s curriculum framework. This approach to professional development builds on teachers' knowledge and experiences and provides a structure for continual improvement of instruction focused on student learning. Its principles are to:

- Maintain a constant focus on student learning goals, where the goal of improving teaching is fundamentally to improve student learning;
- Reflect on the practice of teaching as a community of professionals who believe that long-term improvement of teaching depends on the development of effective pedagogy that is responsive to the diverse needs of learners;
- Encourage teachers to monitor changes in practice so that their learning can be shared with the broader teaching community;
- Provide support within the school context because successful improvements in teaching are those developed in classrooms where teachers teach and students learn; and
- Value teachers as the driving force behind school improvement because it is they who can ensure that students' learning improves in the classroom.

Lesson study – Pojoaque Style is facilitated by the external content experts who assist the curriculum writing teams using the following structured sequence.

### **Step 1 – Identifying gaps and establishing the overarching goal**

As the lesson study process begins teachers examine their existing curriculum in relationship to the NM Content Standards, Core Knowledge Standards, student achievement data, and what they know about their students' learning, literacy levels, and content connections across the curriculum.

Teams:

- A. Complete a gap analysis as the basis for the design of the district curriculum.
- B. Develop learning goals.
- C. Design a plan for improving student knowledge and understanding.

The following questions guide the work of each team:

- What are the enduring “understandings” we want our students to have?

- How will we assess student engagement and understanding?
- What learning opportunities need to be designed to support students' "understandings"?

### **Step 2 – Developing the research question**

Teams reflect on the overarching achievement and literacy goals established for the district. Teams relate these goals to the learning needs identified in Step 1 and then identify the problem areas that may be interfering with students' ability to learn the content. This frames the research question that guides the development of the curriculum.

### **Step 3 – Mapping the curriculum**

Teachers utilize relevant data on difficulties students experience in the identified problem areas. They then move into the planning stage where the curriculum is mapped within specific disciplinary contexts to support the overarching achievement and literacy goal. Study teams:

- A. Plan the context for the curriculum by considering:
  - The content students must learn;
  - The communication, discourse, and resources necessary for student engagement;
  - The kinds of data needed to assess progress; and
  - The principles that promote engaged learning environments.
- B. Develop a research-based curriculum that is aligned to the standards and develop and implement a pilot lesson in each core content area that is peer-critiqued.

### **Step 4 – Debriefing, reflecting, and fine-tuning the curriculum**

At this stage, all team members consider the following.

- *Design:* What is the plan for learning?
- *Content:* Is the content aligned to the NM standards and state assessments? Does the draft curriculum include specific formative assessment ideas for teachers to assess student understanding or lack of understanding? Are essential literacy skills included across the curriculum to ensure better student understanding of the content?
- *Environment:* Is there information provided to teachers on how to structure the learning environment to ensure student engagement?

In order to ensure buy-in from participating teachers, the content experts help the groups develop debriefing guidelines that serve instructional teams in their continuing analysis (beyond grant funding) of the effectiveness of the developed curriculum.

### **Step 5 - Sharing what has been learned**

As individual classroom teachers begin to develop curriculum-based lessons for classroom applications, the original curriculum development team will be able to lead collaborative meetings and share their knowledge of the students, achievement data, content of the curriculum, and identified research-based learning strategies embedded

in the revised curriculum. Classroom teachers will be able to use these team members as resources. In effect, the Pojoaque schools will have created a job embedded professional development model.