Like every other district in Texas, the Taylor Independent School District is required to teach to a set of state standards. But standards are not a curriculum. The district had worked to develop a curriculum linked to the state standards, but a few years ago the curriculum was neither clearly articulated nor clearly aligned.

Teachers functioned largely independently of one another, so the district had layers and layers of unlinked curricula. Teachers and principals had difficulty determining whether students were learning material linked to all the state standards as the children moved through the subjects and grade levels.

Another problem was accessibility. Teachers associated the “curriculum” with huge vinyl binders full of standards, objectives, and activities — binders hauled out over the summer for clerks to spend hours typing in...
Moving beyond scissors and glue.

In summer 2002, teachers representing four main subject areas in each grade level began working in teams to take the Texas state standards (Texas Essential Knowledge and Skills, known as TEKS), the old vinyl binders of curricula, and other teacher materials and create new curricula clearly aligned to the TEKS and vertically aligned from prekindergarten to 12th grade. Building principals picked these teachers, and they were paid $75 a day from the district’s general fund.

The teachers worked together in the high school’s cafeteria with an external facilitator who had curriculum development experience. The teachers were asked to review existing curriculum documents, determine and address gaps and overlaps, and create a new curriculum document reflecting vertical alignment.

The group included 12 teachers, one from each grade level, in each subject area of English language arts, math, social studies, and science for 48 teachers total.

Teachers literally used scissors and glue as they tried to piece together a vertically aligned curriculum that made sense. As they looked at units and objectives grade level by grade level, subject by subject, teams found holes and overlaps in the concepts being taught because they had never looked at curricula across grades and subjects before.

As they worked over seven days, teachers began to see specifically how the curriculum they taught as individuals built — or didn’t build — from what was taught in previous grades or other subjects, and how the grade-level curriculum set up students for the next grade or subject.

The work was challenging in part because it was new and different. Some teams found it more challenging than others. Resistance, tension, and competition were all evident and had to be worked through, even argued, with the facilitator’s help. Importantly, the participants found unexpected expertise in teachers at other grade levels and learned that the very process of coming together for this work was powerful professional development. They began to overcome the sometimes isolated nature of the teaching process and understand the benefits of collegiality.

But the process itself still was cumbersome as the teachers sorted through volumes of printed curricular material and standards. Many were reluctant even to consider a second session the following summer without a better method of navigating the vast amount of information they were developing. Professional developers leading the process also wanted a curriculum that would be easy for teachers to use and available on their desktop, as well as accessible on their home computers.

In winter 2003, the district began using a database application, Curriculum Facilitator, that the database’s creators had specifically customized to the Texas state standards.
The software allowed professional development leaders to work through the process with teachers in a very different way, using the software structure to form a curriculum guide, unit templates, and a computerized database of standards.

District curriculum specialists linked the state standards to Taylor’s set of local standards in the database. The specialists’ next step was to work with teachers to enter specific study units and model activities into the database, work that began in April 2003 and continues.

Back in the high school cafeteria for the second year, the subject-area teams became curriculum design teams of three to four subject-specific teachers representing all the levels to design units and activities that would scaffold learning across the grades. The teams began this large task by focusing first on the concepts students had had the most difficulty learning. Classroom teachers had identified these from recent test and subtest information, and the development teams compiled the information from the buildings to develop a starting focus.

The design teams created model lessons or exemplars spanning all grade levels that addressed the identified needs and that all teachers in those grade levels would have access to in order to teach. Teachers also used outside sources to incorporate high-quality model activities that helped clarify the objectives in units taught according to the district’s defined sequences.

For example, in science, students at all grade levels had difficulty with the concepts of force and motion. The K-12 science design team created units for force and motion for science teachers at every level and in every high school science course to teach, with units in one grade building on concepts presented in the prior grade. The teams designed and taught the lessons, then gathered feedback using a formal small group feedback protocol. They then presented the lesson to the entire design group for reaction. After the whole design group reviewed and edited the lesson, the district’s curriculum specialist in that subject area entered the lesson into the database. At that point, other teachers could access the online lesson.

“With all the data in there, it’s a fairly painless way for other teachers to access what has been done by the design team members,” said Carol Lindell, a Taylor curriculum specialist. “Teachers who want subject or grade-level information anywhere in the district can go into the database and click on any subject or grade level and see what’s being taught and how it’s being taught.”

The program also enables a design team member to verify whether all applicable objectives have been linked to a particular unit. The online system reports which standards have and have not been linked to units at all — which standards are not being taught.

Finally, after every teacher at a grade level or subject area taught a lesson, those teachers gathered to reflect on the lesson and provide feedback to the design team.

THE IMPACT ON TEACHING AND STUDENT LEARNING

Anecdotal measures of success are numerous. Based on informal discussions and periodic, brief interviews with teachers, the district curriculum specialists report that teachers are happy they don’t have to work with the old vinyl binders and redevelop the curriculum each summer. Their perception of curriculum development as a task few tackled with enthusiasm is changing. And the process itself has increased collegiality.

“The teachers are no longer working in isolation,” said Debbie Matthys, district curriculum specialist. “Increased grade-level cooperation in lesson planning and teaching is evident. This is a real team effort.”

Another benefit is that having an aligned curriculum online allows classroom teachers to easily view the curriculum to help them eliminate any gaps in their own instruction.
Teachers also can access other subject areas, making it easier to work together to coordinate units of study across curriculum areas. Teachers can access the curriculum for the entire district, including the sequence used for the year in the four main content areas.

As Michelle Champion, a 5th-grade English/language arts teacher, said, the new curriculum “helps you think about your students’ needs and how to differentiate — you can confer with colleagues to gain different ways of teaching the same concept.”

Collaboration between grade levels also has been facilitated. “I can check what is happening at the next grade to see how they are teaching a certain concept,” Champion said. “It helps me make sure that I do not teach the same novels as other grade levels.”

**NEXT STEPS**

Curricula are never finished. The 2003-04 school year was a building year for the curriculum development process and database. In 2004-05, professional developers will work with more teachers throughout the district to continue expanding its use, introducing new content and new system features and capabilities. Groups of grade-level teachers will edit, revise, and enter new content throughout the year. In addition, six nearby districts have joined Taylor to create a Curriculum Management Consortium of districts that will share the online curriculum database, resulting in even greater opportunities for collaborative professional development and sharing best practices.

Another goal for 2004-05 is to develop more “horizontal” integration, especially in the lower grades. Math and science teachers, for example, could coordinate how they teach the metric system. “They may decide that math will give the preliminary instruction and science does the application, or vice versa,” Lindell said. “There’s always some of that being done, but we want to see it continue and expand.”

The district has met its goal to have an effective, vertically aligned curriculum that identifies what students should learn at every step. In addition, the curriculum has been made accessible to the teachers whenever they need it through the online curriculum management system, and curriculum development is no longer a chore.