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Strengthening Instruction Through Web-based Curriculum Mapping

Strengthening instruction requires a process much like that needed to construct a sturdy building. Just as architects need blueprints to guide construction, school leaders need curriculum maps to guide equitable and cohesive K-12 education. Web-based curriculum mapping tools are particularly useful because they align existing curriculum with state standards and allow teachers to operate collaboratively rather than independently.

At the David Douglas School District, a diverse, urban district in Portland, Oregon, teachers traditionally mapped curriculum using paper and pencil. Although this method initially served the district's efforts to navigate the curriculum within grade levels, student achievement data revealed its limitations in outlining and delivering a comprehensive K-12 curriculum.

In an effort to develop and implement an effective K-12 curriculum, a group of educators and a local Web developer began to build an interactive curriculum mapping Web site. Based on research by international education consultant Heidi Hayes-Jacobs, the David Douglas Curriculum Mapping System allows teachers and administrators to easily align curriculum with state standards, document what is actually being taught in classrooms, and identify gaps and repetition in instruction. It also allows real-time collaboration by permitting a number of teachers to work on a map simultaneously, individual teachers to copy maps, and teachers and administrators to communicate through a message center tied to district e-mail.

Benefits for Principals

A Web-based curriculum mapping tool provides principals with access to what is happening in the classroom on a much broader scale than individual classroom visits. Although formal observations and informal visits provide opportunities to view daily classroom activities, they do not provide a vehicle for knowing and understanding the progression of the curriculum and how it relates to student learning.

By allowing principals to search teachers' maps by name, grade level, specific keywords, and content area, a Web-based curriculum map opens doors for principals and teachers to have meaningful conversations about teaching and learning in real time. Communication is increased because principals can begin conversations with teachers about standards, assessment, curriculum, and instruction by sending e-mails through the message center. Principals also can compare and contrast teachers' curriculum maps to ensure equitable instruction within and across grade levels.

Benefits for New Teachers

Many new teachers find themselves isolated and unsure of what and how they should be teaching. Access to other teachers' curriculum maps via the Web provides a treasure-trove of ideas and quality resources, leaving time to focus on daily lesson plans. New teachers also can collaborate in real time with teachers in other grade levels and schools. In addition, because the Web site serves as a collaborative historical archive, new teachers can use it to access curricular frameworks from a number of master teachers.

Impact on Teaching and Learning

Web-based curriculum mapping serves as a tool that teachers can use

to build a solid record of instruction by electronically documenting their instruction throughout the year. The ability to access, create, revise, view, and compare maps at any time provides teachers with a unique opportunity to collaborate both horizontally and vertically across classrooms, subjects, grade levels, schools, and districts, allowing them to more easily identify and address gaps and repetition in instruction.

This tool also provides a method for structuring and documenting the work of professional learning teams, a key component in ongoing professional development. Curriculum mapping ensures that instruction is organized so that students have opportunities to learn and demonstrate skills prior to standardized tests.

Implementing the Project

To encourage teachers to use Web-based curriculum mapping, coaches were designated for every school in the district. These were teachers who were technologically savvy, had strong backgrounds in curriculum and instruction, and were trained, supported, and given the opportunity to lead the mapping effort in their schools. Ongoing professional development via video conferencing with consultant Hayes-Jacobs provided continuous direction and focus, as did regular feedback on the Web site.

The Next Step

Because our vision for Web-based curriculum mapping is evolving, it has met the usual resistance and struggles associated with systemic change in curriculum and instruction. However, by developing our own mapping software, we have been able to expand the Web site to meet our specific needs. The next step is for the Web site to become the center for a districtwide system that allows principals, teachers, and parents to access the district's core curriculum and common assessments and instructional strategies, and for teachers to begin building integrated classroom maps and lesson plans based on both state standards and the core curriculum. **P**

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