Considerations for Planning a State Virtual School:

Providing Web-based courses for K-12 students

SREB

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Courses delivered over the Web can help a state meet the academic needs of all students. SREB states are creating state virtual schools to support and manage the efficient, effective use of Web-based courses. These state virtual schools vary greatly in goals, staffing and funding. The Florida Virtual School, the nation's largest state virtual school, offers more than 60 high school academic courses and expects to serve nearly 8,000 students this year. The Kentucky Virtual High School coordinates the services and courses that schools offer to students. Other state departments of education — including those in Maryland and West Virginia — have staff who work closely with schools and school districts to identify needs, evaluate courses and coordinate student access. Before determining whether to build a state virtual school, the Texas Legislature in 2001 directed the commissioner of education to establish a program to examine state policies and requirements or restrictions affecting districts that offer electronic courses to local students. The Texas Education Agency is scheduled to submit a report in December 2002.

A key issue for each state is to determine whether it will lease or purchase courses, instead of creating them. The answer likely will depend on what courses the state needs. A state may need to develop courses unique to the state, such as a state history or foreign language course. For example, West Virginia has mandated that middle grades students be offered foreign languages. The state is working with the Florida Virtual School to develop several such courses. Because technology is changing so rapidly, there is much to learn about developing and using Web-based courses successfully. Leasing or purchasing courses should be considered whenever possible because these options are less expensive than developing and maintaining courses.

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"Building a school" — key policy choices

- Which courses are needed?
- How can the state work to eliminate policy barriers to online learning?
- Should the state coordinate or manage efforts of school districts?
- Should the state lease or create courses?
- How will the state's program for online courses be funded?

Steps for states that consider creating a state virtual school:

- Establish the state's vision: Why should a state be involved in online learning for K-12 students? Online learning provides all students throughout the state with equal access to quality courses. Kentucky Governor Paul Patton said: "The Kentucky Virtual High School is a major step forward in terms of equality of opportunity for all students. The Kentucky Virtual High School is a statewide educational service delivering high school courses and online learning opportunities to Kentuckians." In a letter to Florida students, Governor Jeb Bush wrote: "Your involvement in the Florida Virtual School makes all of you pioneers in that you have gone beyond the traditional means of learning. You are experiencing the future of schools and learning today." The Web offers value and opportunities to increase students' access to quality education and to improve student achievement.
- Identify which courses are needed: What academic needs may be filled by Web-based courses? West Virginia requires each school superintendent to designate one person in each school to be a contact person for Web-based issues. These staff provide the state with systematic, timely information about students' academic needs. Such information contributes significantly to eliminating the academic gaps among students statewide.

Students at many schools in SREB states lack access to a variety of core academic courses in mathematics, science and foreign languages and to Advanced Placement (AP) courses. Sixty-three percent of schools in SREB states offer Advanced Placement courses. Percentages range from 32 to 96 percent. Even students whose schools offer Advanced Placement courses may not have access to all — or even most — of the 33 AP courses available.

Why don't schools offer a broader range of K-12 courses — including advanced courses — needed by students? One reason is that there may not be enough qualified teachers. This problem is not new, but is has intensified because of higher student enrollments, high turnover among new teachers and an increased emphasis on reducing class sizes. Even teachers who are available often are not prepared adequately in the subjects they teach. Only 73 percent of secondary teachers in the SREB states have majors in the primary disciplines they teach. These percentages range from 53 to 86 percent.

■ Organize actions to meet state needs: What administrative structure will be required to manage the delivery of courses, coordinate activities, and assess the quality of courses and the effectiveness of the program? To create a state virtual school, a staff will be needed to determine what courses will be available and how to measure quality. These staff members will continue to administer and support the initiative. Maryland and some other states have assigned one person to work closely with school districts to identify students' academic needs; provide administrators, teachers and parents with

information about online learning; and help increase students' access to online courses. Kentucky trains online teachers, contracts with providers of Web-based courses and provides electronic access to the courses. Staff members also collect funds from local schools and manage the virtual school's budget of nearly \$500,000. Florida has an extensive staff to manage its state virtual school. State staff members developed all 62 of the courses offered. The Florida Virtual School hires and trains teachers to teach these courses and markets the courses to other states.

- Determine costs and funding methods: A state that is creating a state virtual school needs to have a budget that addresses the costs of management, technical support, development or lease of courses, and hosting of courses. No state has resolved the problem of finding adequate funding sources to create and maintain a state virtual school and to support Web-based course tuition for students. The Florida Legislature provides the Florida Virtual School with sufficient funding so that any student in Florida may take courses at no cost to the student or the school. The Kentucky Virtual High School offers online courses to school districts, which pay \$275 for one-half credit and \$500 for a two-semester course.
- **Determine course quality:** States use many indicators to help ensure the quality of traditionally delivered courses. Is course content aligned with the state's academic standards? Is the school accredited? Is the student in class for a designated period of time? Is the teacher certified in the state? However, these indicators are not sufficient to guarantee the quality of Web-based courses, which raise unique issues related to instruction, management and evaluation. The SREB report *Essential Principles of Quality* identifies many of the issues that states need to address in order to ensure the quality of Webbased courses. As more and more Web-based courses become available to students, states also will need to judge quality by reviewing results. Are the courses successful? Do students complete the courses? How do students who take these courses perform academically? The Florida Virtual School has answers to these questions. More than 70 percent of students in the Florida Virtual School complete the program. Of the 137 students who took Advanced Placement courses through the Florida Virtual School in 2000-2001, more than half earned scores of 4 or 5 (on a scale of 1 to 5) on the exams. About 65 percent of the students earned scores of 3 or higher, compared with 61 percent nationally.
- Evaluate the program: There is little information about expectations for and assessments of state virtual schools and students who take Web-based courses. Each state's plan needs to spell out who will assess the state virtual school and Web-based courses and how these assessments will be conducted. The Florida Virtual School has addressed the level of participation by local districts, the standards that students must meet to receive credit for the courses, the peer review process through which teachers will validate all courses, the staff monitoring of course delivery, and an external evaluation to

assess the program and recommend improvements. As a result of these efforts, the Florida Virtual School is accountable for 100 percent of the courses it offers. These courses are reviewed by users to ensure that course goals are met, that the course content is aligned with state standards and that the course content and final assessment are linked clearly. The Florida Virtual School's goals are that at least 80 percent of the students will earn A's or B's; every course will have a completion rate of at least 70 percent; at least 80 percent of the parents of students will indicate on surveys that they are satisfied with the courses; and all teachers will be certified in the subjects they teach. The Florida Virtual School's efforts to assess its program illustrate the complexity and range of issues that states must address to ensure that Web-based instruction succeeds.

Summary

In the last few years several states have shown interest in creating state virtual schools. Florida and Kentucky are among a few states nationwide that have invested significant funds, personnel and time. Other states — including Maryland, Texas and West Virginia in the SREB region — are moving slowly but systematically to understand how best to use this new technology and what changes are needed to offer the maximum opportunities for students.

A state should consider whether to "build" a state virtual school and, if so, what academic results to expect. This decision requires attention to the funding amount and sources, to assessment procedures and to policies that will guide the state virtual school. What state goals will a state virtual school help to achieve? What academic needs will it help to meet? How will its role be defined in relation to traditional schools and school districts? To what extent will schools and school districts participate in the state virtual school? The issues associated with a state virtual school go beyond technology; the most important issues are related to the state's role in ensuring that each student in the state has access to a quality education.