Archived Information

BACKGROUND: eLearning has recently made significant advancements as business and educators explore ways to take advantage of powerful technology. Hundreds of companies use eLearning to train partners and employees. Universities and school districts make instruction available to students on campus and at a distance. State Departments of Education fund eLearning initiatives, recognizing the importance of technology in the classroom.

The impressive growth of eLearning is not surprising, given its powerful advantages:
- Learning can be delivered anywhere, anytime to anyone.
- Material is available in modules, so the learner need only work on key topics.
- The elimination of travel expenses is an enormous savings, in time and money.
- Just-in-time access is available to the latest information as courses are updated instantly.
- A risk-free environment is available for learners to make mistakes and cover materials others might expect them to already know.
- Customization leads to higher retention and faster rate of absorption.
- Collaboration is enhanced through coaching and mentoring, discussion groups, project teams, chat rooms, e-mail and bulletin boards, without regard to geographical limitations.

Cisco Systems, Inc. has long been involved in eLearning. Launched in October 1997 with 64 academies in 7 states, the Cisco Networking Academy Program is the largest eLearning solution in the world and a model for private involvement in delivering educational outcomes. This academically based program now serves 350,000 students in 152 countries with more than 29,900 instructors over a scalable, reliable, secure and distributed network. Solid pedagogical instructional design includes 'train the trainer' programs as well as assessments that generate personalized feedback to each student. The delivery tools and the assessment engine have proven themselves to be a scalable eLearning solution.

NEXT STEPS: To broadly utilize the lessons learned from the Networking Academy, Cisco Systems, Inc. founded a non-profit corporation, Cisco Learning Institute (CLI), in 1999 *to enhance the way people teach and learn by integrating and advancing educational technology.* CLI is creating scalable professional development for middle school math and science teachers using the CLI Virtuoso™ E Learning Platform and adapting proven concepts from the Networking Academy. This will expand to teachers of math and science at all grade levels, pre- and in-service. The goal is to create an infrastructure empowering teachers, students and subject matter experts to collaboratively master and share content.

CLI envisions a blended learning environment that employs eLearning as well as instructor-facilitated and learner-managed interaction. The model would have:
- Multi-tiered learning opportunities for teachers to acquire the knowledge that they need to teach rigorous math and science concepts, which they might have missed in their formal training or for which they hold misconceptions.
- Focus on topics in mathematics and science on which student performance is low thus yielding rapid performance gains.
- Personalized content for remediation or reinforcement based on frequent evaluation of understanding and progress.
- Professional and accurate measures of mastery through formative and summative assessments.
- A program that addresses individual learning preferences and offers intellectual engagement.

CLI is engaged in discussion with potential content partners about the development of prototypical eLearning modules. These prototypes will be piloted with teachers and subject to continuous improvement based on feedback. Discussions are also underway to identify corporate sponsorship and public or private funds to enable the development of full courses of content linked to middle school math and science courses. Many modules will be readily accessible in the public domain at no cost. CLI will also partner with several organizations to ensure widespread knowledge of the existence of the eLearning opportunity.