

PBS TeacherLine: Online Professional Development for Teachers

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Abstract

Through PBS TeacherLine, WCET (Cincinnati's public television station) and the Mayerson Academy (a regional education professional development specialist) offer five-week online professional development courses for active and preservice teachers. These asynchronous courses in math, technology integration and pedagogy, provide professional growth opportunities that can be contoured around the hectic schedule of a teacher. The courses can be accessed through any Internet connection and are available for graduate credit from the University of Cincinnati or for LPDC credit (Local Professional Development Committees provide approval for teacher license renewal in the state of Ohio). Local specialists in education professional development facilitate the courses by encouraging participants, answering technical and content questions, and assessing participant performance. The project website, <http://www.wcet.org/teacherline/>, features professional development information for teachers and online registration for the courses.

Introduction

PBS TeacherLine, funded by a grant from the U.S. Department of Education, is committed to helping our nation's preK-12 teachers acquire the quality math and technology instruction they need to prepare students for a successful future. TeacherLine, <http://www.pbs.org/teacherline/>, provides online learning opportunities, state and local certificate programs and access to exemplary resources. TeacherLine's unique model allows teachers to receive professional development customized to meet their state and local standards.

TeacherLine Website Overview, <http://www.pbs.org/teacherline>

- **Modules** - Facilitated mini-courses that are customized to meet state and local standards by 32 PBS member stations from across the nation.
- **The Community Center** - Live Chats with educational experts and ongoing, subject-driven discussion boards where teachers can collaborate with their colleagues. The online

Community Center provides teachers with a forum to share ideas and dialogue beyond school or district boundaries. Teachers will also find articles and links to resources.

- **The Virtual Mathematics Academy** - Self-paced professional development based on NCTM's Principles and Standards. The Virtual Mathematics Academy (VMA) is a self-directed online resource for all grade levels. The VMA uses interactive activities to allow teachers to investigate and apply the National Council of Teachers of Mathematics' Principles and Standards for School Mathematics, explore exemplary mathematics practices, and refine their teaching practices — on their own time.
- **Resources** - Educational content that builds upon many ideas found in modules, the Virtual Mathematics Academy and Community Center discussions.
- **My Portfolio** - Tools teachers can use to document and plan their professional development.

What Is PBS TeacherLine?

PBS TeacherLine is creating a bold new vision to bring teacher professional development to the Internet for the nation's teachers. Funded by the U.S. Department of Education, TeacherLine is pioneering a new and innovative model for on-demand, high quality, and standards-based teacher professional development using the Internet in the areas of mathematics and technology. It is designed to be adapted to local and state professional teaching standards and integrated into current professional development efforts through local partnerships between public television stations and state departments of education, local education agencies (LEAs), and school districts.

TeacherLine is a unique collaboration powered by the national expertise of the National Council of Teachers of Mathematics (NCTM) and the International Society for Technology in Education (ISTE). Through a network of nationally recognized educational content providers, including universities and other educational organizations, TeacherLine provides content specifically designed to help educators more effectively integrate technology into teaching and learning, improve the teaching and learning of mathematics, and ultimately help educators enhance their teaching to improve student learning.

Why Is TeacherLine Needed?

TeacherLine directly addresses the policy recommendations of three recent high-level studies described below.

In 1999 the National Commission on Mathematics and Science Teaching for the 21st Century, chaired by John Glenn and appointed by the Secretary of Education, concluded that teacher training is not "simply a matter of preparation; it depends just as much-or even more-upon sustained, high-quality professional development." The Commission recommended the establishment of an ongoing system to improve the quality of mathematics and science teaching in grades K-12.

In 1999 the Web-based Education Commission, appointed by President Bill Clinton, Education

Secretary Richard Riley, and Congress, called for continuous, relevant training and support for teachers, and it called for public-private partnerships to develop more high-quality online educational content.

The National Research Council, in a study performed at the request of the U.S. Department of Education and the National Science Foundation, concluded that short-term, fragmented professional development has been shown to be ineffective for developing teaching proficiency. It recommended that teacher professional development programs should not only be of high quality, but also sustained and systematically designed and deployed in order to maximize effectiveness.

At the same time, technology is having an impact on education just as it has at home and in the workplace. Schools have been connected to the Internet at breakneck speed and 98% of schools were connected to the Internet in 2000, according to the National Center for Educational Statistics (NCES). This rapid pace of change has left many teachers struggling to integrate these new technology tools into their teaching and learning. In fact, despite advances in computing and connectivity, the NCES study also shows that only 20% of teachers feel capable of integrating technology into classroom instruction. It is clear that a great gap exists between teachers' access to technology and their comfort using it in the classroom. As mounting evidence links student achievement to teacher quality, flexible professional development programs are more critical than ever before.

What Makes TeacherLine Unique?

TeacherLine recognizes that traditional professional development programs can be greatly enhanced with an ongoing, online addition. TeacherLine online professional development opportunities provide educators with the tools they need to create their own professional development plan based on their unique goals and schedules. TeacherLine also recognizes that high-quality teacher professional development:

- Is an ongoing process
- Needs to be aligned with school district goals as well as local, state, and national education standards
- Requires local support and input
- Needs to be available to all teachers when and where they need it and on their own time

TeacherLine Partners

TeacherLine benefits from the unique local partnerships that member stations and local school districts bring to the service. The national Web site offers both unfacilitated and facilitated online professional development, meeting a range of local needs and challenges. Combining local resources with national infrastructure makes TeacherLine a powerful professional development service from urban centers like Prince George's County, Maryland, and San Antonio to outposts in the Mississippi Delta and rural New Hampshire.

A total of 32 local public television stations are partnering with TeacherLine to bring anytime, anywhere online professional development to schools and districts in their local area. Stations and LEAs provide face-to-face TeacherLine training and support educators as they transition to learning online. Stations and LEAs also partner with local universities to provide graduate credit options for TeacherLine modules. Local customized websites further expand community options as stations and LEAs offer teachers online professional development.

TeacherLine Professional Development Opportunities

Both the mathematics and technology professional development strands of TeacherLine provide access to a full range of excellent professional development opportunities that stress quality content while creating community, building collaboration and providing flexible choices. TeacherLine is currently developing modules in language arts, science and social studies.

PBS TeacherLine currently has two strands of professional development: one for teachers of mathematics and one for teachers wanting to integrate technology into their classroom practice. Below are descriptions of two main TeacherLine professional development components: The NCTM Virtual Mathematics Academy and facilitated modules.

TeacherLine/NCTM Virtual Mathematics Academy

PBS TeacherLine and NCTM are collaborating to bring the content of the NCTM Academy Institutes to a Web-based environment. Self-directed and self-paced, the Virtual Mathematics Academy focuses on mathematics instruction and offers professional development opportunities in an online environment designed to enhance learning with high-quality resources. It provides an informal learning environment in which educators can explore the NCTM Principles and Standards for School Mathematics (PSSM) at their own pace. Using video, interactive computer applications, text, audio clips, links, and exemplary resources, the Virtual Mathematics Academy puts mathematics professional development within reach of any teacher.

There are no assignment deadlines in the Virtual Mathematics Academy. Users can complete the activities at their own pace. The first Virtual Academy focuses on the six Principles outlined in PSSM. Educators learn about each of the Principles from equity to assessment; explore their effective use through applets (interactive activities), streaming video, and other activities; design and implement a plan to put the Principles into practice in their own classrooms; and reflect upon the resulting changes. Future sections of the Virtual Mathematics Academy will focus on the ten Standards outlined in PSSM.

TeacherLine Modules

Formal professional development is available to all educators through TeacherLine competency-based modules that are facilitated "mini-courses" in mathematics, mathematics and technology, and technology. TeacherLine modules illustrate a wealth of technology and mathematics applications and explore pedagogical issues involved in integrating computers into classroom practice. Through streaming video, slides, animations, and applets and with the guidance of

trained facilitators, modules present educators with interactive learning opportunities that let them experience new approaches and techniques.

Designed to be adapted to local and state professional teaching and content standards, TeacherLine is easily integrated into professional development efforts. Schools and districts can incorporate TeacherLine offerings into their professional development plans and may customize TeacherLine offerings so that the district can offer teachers continuing education credits (CEUs) or professional development points (PDPs) for completing modules.

The TeacherLine modules are competency-based on the knowledge and skill requirements of the ISTE National Educational Technology Standards (NETS). Additional competencies have been extrapolated from state standards for technology integration in a variety of content areas, and TeacherLine will provide a tool that correlates state and national standards with module content that focuses on the main competency areas. In addition, schools, districts, and state departments of education can use high-quality TeacherLine modules to construct local certificates in mathematics and technology.

Flexible Choices and Accessible Options

In order to provide educators with flexibility, TeacherLine offers a variety of ways to access modules, including through stations, local school districts, and colleges or universities. Additionally, TeacherLine provides an environment in which teachers can collaborate directly with other education professionals, comparing their thoughts and work in a supportive online community.

TeacherLine: Your Choice, Your Way

Schools and districts across the nation are adapting TeacherLine to meet local needs. Teachers are targeting professional development that they need and want on their timetable. Local stations are working with LEA partners to deliver TeacherLine in urban and rural schools. TeacherLine is harnessing the power of the Web, building quality content collaborations, making online professional development a reality for PreK-12 teachers in mathematics and technology, and helping educators enhance teaching to improve student learning in America.

The PBS TeacherLine website has more than 14,000 registered educators using its online content and more than 5,400 teachers across the nation have completed TeacherLine's online courses.

WCET and the Mayerson Academy have partnered to bring TeacherLine to educators in southwest Ohio. Through this partnership, teachers receive free quality online professional development from national education experts and information about local teacher resources and issues.

TeacherLine in Cincinnati, <http://www.wcet.org/teacherline/>

Have engaging discussions with your peers, learn about effective classroom practices, refine your teaching methods...in your pajamas. TeacherLine in Cincinnati is anytime, anyplace

learning. Log in before school, after school or from home, what ever time works best for you. These online courses fit into your schedule and can be accessed through any Internet connection.

Courses are available for LPDC credit (30 contact hours) or for graduate credit from the University of Cincinnati. LPDC credit (Local Professional Development Committee) is free and UC credit is \$280 per course (\$140/credit hour, each module is two graduate credit quarter hours). Each course lasts for five weeks and participants can expect 5-6 hours of work per week.

One week before the course starts participants receive an email explaining how to get started in the course. Registration for UC is sent to participants in the mail. All UC credits will appear on winter or spring quarter 2003 transcripts. Each course has a local facilitator who can answer questions related to the course content and to any problems with technology related to the course.