Proposal for
The Online Academy for Teachers
University Certificate Program

Introduction

The Internet is perhaps the most transformative technology in history, reshaping business, media, entertainment, and society in astonishing ways. But for all its power, it is just now being tapped to transform education. . . . The World Wide Web is a tool that empowers society to school the illiterate, bring job training to the unskilled, open a universe of wondrous images and knowledge to all students, and enrich the understanding of the lifelong learner. The opportunity is at hand. The power and the promise are here. . . . Web-based education is just beginning, with something of far greater promise emerging in the middle distance. Yet, technology, even in its current stage of development, can already allow us to realistically dream of achieving age-old goals in education

To center learning around the student instead of the classroom.
To focus on the strengths and needs of individual learners.
To make lifelong learning a reality (Web-Based Education Commission, 2001, pp. 3-4).

So proclaims the Congressionally-appointed Web-Based Education Commission (2001). Are claims such as these hype or reality? Only time will tell. What is certain about online learning is the reality of its inevitability. Regardless of whether or not online learning reflects sound educational practice, it is changing the landscape of education. Online learning has already captured the attention of the corporate sector and much of higher education with 70 percent of colleges and universities in the United States now offering at least some courses online. Forty percent have created online degree programs, and, in the fall of 2001, Arizona became the first state to formally recognize an online graduate degree in educational administration toward principal certification. The leader in the field, University of Maryland University College, had more than 62,000 online enrollments in 2001 and offered 20 complete degree programs online (Russo, 2001). Web-based training is the fastest growing segment of the $60 billion corporate training market (Baer, 1999).

And the online learning trend is spreading to K-12 education. Twelve states have established online high school programs, and five others are developing them. Twenty-five states allow for the creation of so-called cyber charter schools, and 32 states have online learning initiatives under way (Editors, Education Week, 5/9/02). Ten states are piloting or planning to administer online testing. Oregon and South Dakota are already using Web-based assessments. Roughly 15 percent of high schools provide access to online courses. About 5 percent of classroom teachers and students have firsthand experience with an online course. With the arrival in Fall, 2002 of Bennett's K12 and the anticipated entrance of other media companies into the field, many predict massive growth in online education over the next few years (Russo, 2001).

These K-12 online learning programs are opening the doors of online education to tens of thousands more students. In fact, recent estimates suggest that as many as 40,000 to 50,000 K-12 students will have enrolled in an online course by the end of the 2001-02 school year (Clark,
2001). More recently, Davis (2004) stated “virtual schooling -- especially in rural areas -- is expanding rapidly, with a recent study showing more than 15 percent of all high school students nationally enrolled in online courses.” Although most virtual students are high school students, the momentum is building to make online courses available to elementary and middle school pupils (Clark, 2001). Thus, although the literature reflects numerous benefits and an equal number of concerns, it is likely that “the virtual school movement is the 'next wave' in technology-based K-12 education (p. 3)."

**Online Learning Pivots on Informed and Inspired Online teaching**

Ultimately, teachers are the ones responsible for transforming lifeless equipment into valuable learning tools. Creating high-tech educational tools and insightful pedagogical models that capitalize on these tools without educating teachers to use them would be “as useless as creating a new generation of planes, without training pilots to fly them (Web-Based Education Commission, 2000, p. 10) ” or like giving students paper and pencil and telling them they can only use the eraser. Teachers must be educated to use these tools well or investments in high-tech educational resources will be wasted. It is the teacher, after all, who guides instruction, shapes the instructional context, and facilitates teacher-student and student-student interactions. It is a teacher's skill at this, more than any other factor, that determines the degree to which students learn. Teachers must be knowledgeable about technology, able to apply it appropriately, and conversant with new technological tools, resources, and approaches (Web-Based Education Commission, 2000, p. 11).

Twenty-eight percent of teachers hired to teach courses associated with virtual high schools are full-time instructors. Another 6 percent of virtual instructors are part-time (Clark, 2001). Clearly, these teachers need specialized knowledge, skills, and dispositions if online teaching is to enable the potentials inherent in online learning possibilities. Educating only those teaching online is worthwhile but insufficient, because online teaching is not a phenomenon limited to only a few teachers who practice in online learning environments. All teachers can and ought to be able to e-teach since online learning has implications for practice in face-to-face classrooms as well as exclusively virtual classrooms.

While online learning and online teaching will probably not totally replace conventional face-to-face learning nor will they be for everyone, what we learn from online learning and online teaching can inform our efforts to transform learning and teaching in schools everywhere. Those who entertain the challenges and possibilities of online teaching “find that they are bringing new technology skills, new teaching strategies, and a revitalized enthusiasm for teaching back into their local classrooms, thus passing the benefits of their experiences on to countless additional students and colleagues (Droste, 1999).”

Much is know about the art of teaching. Yet, the unique contexts created by online learning challenge teachers to rethink these practices and to develop new practices. Online learning offers educators a new frontier. It offers a “learning space” less defined by time-honored practices and with new tools and new capabilities. It offers a “space” to reinvent learning and teaching.
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Colleges of Education are charged with the education of America’s teachers, both those that want to enter the profession and those already in the profession who seek professional renewal and growth. Yet, there are only a few education programs available that focus on the preparation of teachers to teach in virtual online environments. States Davis (2004): “The number of teachers qualified for online teaching is not adequate to meet the growing demand. And all teachers need to be able to coach students.” Developments in online learning suggest that the time has come to design and offer a certificate program to teachers wishing to develop expertise in online teaching.

The proposed Online Academy for Teachers would serve to meet the challenge of preparing qualified teachers to teach online. It makes sense that such a program would be offered online. Part of learning to teach online is to experience online learning for oneself and to see models of online practice that promote excellence. In addition, such a delivery system supports local, statewide, national, and potentially international participation. Thus, the number of potential teachers enrolling in the certificate program is potentially limitless.

Such a program would not only support teachers interested in online learning generally, it will also support the GSE/GMU Collaborative to design a virtual high school program, The Online Academy. The Online Academy is a collaborative between the Graduate School of Education at George Mason University and three Virginia school divisions – Frederick County Public Schools, Loudoun County Public Schools, and Stafford County Public Schools. Combining resources, knowledge, and expertise, these school divisions and George Mason University are developing virtual high school courses that reflect robust learning opportunities for students and meet Virginia’s Standards of Learning. Course design is guided by Virginia’s SOL, school divisions’ curriculum guidelines, relevant text-based materials, and an innovative design model. The Collaborative completed 6 online courses during AY 2003-2004 and is developing five additional courses in AY 2004-2005. Completed courses include Algebra I, Geometry, World History I, World History II, English 11, Earth Science, and Chemistry. Courses being developed include Algebra II, US History, English 12, Biology, Physics, and a Fine Arts elective. The Collaborative has been extended to include another development cycle in years 2005-2007.

This Collaborative is governed by a Policy Board consisting of representatives from each of the four Collaborative members. Of great concern to the Policy Board is the education of highly qualified teachers able to teach high school courses in this virtual environment. As the certificate program was developed, the Policy Board reviewed the courses and designated completion of the Certificate as a prerequisite to teaching employment by the Collaborative virtual high school, The Online Academy. Thus, enrollment will include teachers identified by their school division for participation as well as a broad spectrum of local, state, national, and perhaps international students.

The Online Academy for Teachers University Certificate program is proposed as a 15 graduate credit hour program. The courses will consist of six newly designed courses to include:
EDIT 641 - Understanding Virtual Schools (1 credit hour)
EDIT 642 - Meet The Online Academy (1 credit hour)
EDIT 643 - Online Mentoring 1: Building Relationships (1 credit hour)
EDIT 644 - Online Mentoring 2: Promoting Self-Regulation (1 credit hour)
EDIT 645 - Online Mentoring 3: Conceptual Learning (1 credit hour)
EDIT 646 - Online Mentoring 4: Moderating (2 credit hours)

In addition to these proposed courses, the Certificate will use three existing courses rendered in an online format. These include: EDCI 790 - Practicum in Instructional Technology (2 credit hours), EDCI 714 - Methods of Integration (3 credit hours), EDIT 611 – Distance Education (3 credit hours). Course descriptions for all courses follow, and course syllabi for the six proposed new courses are attached.

Proposed New Courses

EDIT 641 - Understanding Virtual Schools (1 credit hour): This one credit hour course is designed to develop students’ knowledge about the world of online learning for K-12 students. As part of the course, students will examine the history of online learning, current trends in online learning, and the characteristics and learning needs of K-12 virtual learners. In addition, students will examine and critique sample virtual high school programs as well as selected demonstration courses made available by a wide range of service providers. Finally, students will examine the literature related to the benefits, limitations, and important criticisms of virtual learning opportunities for K-12 students. The course culminates in the submission of a briefing paper presenting clear recommendations to educational policy makers.

EDIT 642 - Meet The Online Academy (1 credit hour): This one credit hour course is designed to develop students’ knowledge about GMU’s virtual high school program, The Online Academy. The course will focus on the design model that structures online courses with particular attention to the role of representative problems, performances of understanding, communities/fields of practice, and online mentors. Students will role play a virtual high school students and complete one learning module as well as role play a virtual high school student supporting an adolescent online learner. From these role playing experiences, students will come to understand the structure and interactions embedded in the design model.

EDIT 643 - Online Mentoring 1: Building Relationships (1 credit hour): This one credit hour course is designed to assist students in the development of online mentoring skills related to the integral role that building relationships plays in the success of online learning. Students will examine online mentoring strategies including appropriate questioning, effective listening, assessing communication for underlying messages, and responding to virtual learners’ need for connectedness adult interaction. Through a series of case studies, students will examine online interpersonal communications and discuss ways to improve and/or refine those communications. Finally, students will participate in role playing activities simulating email exchanges with virtual high school learners.
EDIT 644 - Online Mentoring 2: Promoting Self-Regulation (1 credit hour): This one credit hour course is designed to assist students in the development of online mentoring skills related to the integral role that self-regulation plays in the success of online learning. Students will examine and build expertise in support of virtual learners' efforts to manage time, use effective note taking strategies, implement effective text comprehension strategies, and build self-efficacy as learners. Through a series of case studies, students will examine online self-regulation communications and discuss ways to improve and/or refine self-regulatory support for online learners. Finally, students will participate in role playing activities simulating email exchanges with virtual high school learners.

EDIT 645 - Online Mentoring 3: Conceptual Learning (1 credit hour): This one credit hour course is designed to assist students in the development of online mentoring skills related to the role that support of conceptual and content understanding plays in the success of online learning. Students will examine the language of thinking, thinking dispositions, mental management, strategic thinking, higher order knowledge, and transfer of learning as well as the way in which these can be supported in online learning environments. Through a series of case studies, students will examine online communications related to conceptual learning and discuss ways to improve and/or refine those communications. Finally, students will participate in role playing activities simulating email exchanges with virtual high school learners.

EDIT 646 - Online Mentoring 4: Moderating (2 credit hours): This two credit hour course is designed to assist students in developing expertise with moderating student learning in online environments. The course will include attention to moderating in both synchronous and asynchronous environments to include discussion boards, bulletin boards, chat rooms, and virtual classrooms. Students will develop expertise with moderating strategies to include social dialogue, argumentative dialogue, pragmatic dialogue, community building strategies, questioning, prompting reflection, facilitating conceptual understanding, and serving as a generative guide.

Existing Courses to Be Included

EDCI 790 - Practicum in Instructional Technology (2 credit hours): This two credit hour course is designed to bridge theory and practice. Through robust "student-teacher" like relationships with expert virtual high school teachers, students will shadow a virtual learner and online mentor through the successful completion of a learning module or unit. The student will have opportunities to discuss their observations of the ongoing learning process with the online mentor. Following this experience, students will take on the challenge of serving as an online mentor for a virtual high school learner while being shadowed by an expert online mentor. Students will have opportunities to consult with the expert online mentor as well as receive constructive feedback from the expert online mentor as the learning module or unit progresses.

EDCI 714 - Methods of Integration (3 credit hours): This three credit hour course is designed to engage students in a consideration of curriculum design strategies appropriate for the design of online learning opportunities. The course will include examples of curriculum design strategies, readings, discussions, and the design of lessons or units appropriate to online learning contexts and contents. This course will refine concepts previously introduced in the course, Meet
The Online Academy, and focus on problem-based learning, problem-centered curriculum design, authentic instruction, and rationales and processes for implementing authentic assessment. Particular emphasis will be placed on the Norton & Wiburg (2003) FACTS model of design and the Norton (2004) COPLS model.

**EDIT 611 – Distance Education** (3 credit hours): Students explore the latest innovations in distance learning technologies and environments as well as the theoretical issues central to distance education. The course will cover online distance learning environments including, but not limited to online learning communities and communities of practice. Hands-on activities with these technologies focus on planning, implementation, and evaluation. Students discuss emerging applications in distance learning and how new approaches to learning can be integrated into today's K-12 classrooms.

**References**


