Resources

The number of resources available to support professional development and preservice teacher education in this field is growing. Although the list of resources below has been arranged under topics, many of these resources have multiple purposes and audiences, or may be adapted for wider use. The list starts with professional development programs that have already been developed for teachers and VS site facilitators.

Programs of in-service professional development for virtual schooling

The following are examples of professional development created to support virtual schooling. Some professional development is specifically related to the virtual school offering the course to VS site facilitators, counselors and/or teachers:

- Boise State University has a range of professional development for staff in collaborating virtual schools.
 - http://edtech.boisestate.edu/courses.htm
- Florida Virtual School has training materials for school counselors and VS site facilitators working with FVS. It also has a training program for its teachers. Some of these resources have also proved to be useful within preservice programs.
 - http://www.flvs.net/products services/p s course demos.php
- **lowa Learning Online** has developed a course for its VS site facilitators who are called ILO coaches. They have also developed courses to induct teachers new to teaching online.
 - http://www.iowalearningonline.org/
- Plymouth State University in collaboration with VHS has a range of professional development for VHS staff and also for others.
 - http://www.govhs.org/Pages/ProfDev-Home

Curriculum resources for use in professional development

The range of resources developed for virtual schooling includes handbooks and multimedia materials several of which are disseminated through NACOL and its partners:

- NACOL National Primer on K-12 Online Learning, by John Watson (May 2007). The NACOL National Primer report provides answers to the many basic questions about online learning and is a helpful guide for administrators, teachers and parents.
- The SREB Educational Technology Cooperative and SREB Online Learning Web site provides up-to-date information and resources about K-20 initiatives, projects and publications that are related to online learning and state virtual schools.
 - http://www.sreb.org/programs/EdTech/OnlineLearning/index.asp
- The National Education Association *Guide to Online Teaching* is a useful introduction. It includes an overview of online education with some detail about preparing and supporting online teachers, including future teachers, plus recommendations for 19 skills of online teachers.
 - http://www.nea.org/technology/images/onlineteachguide.pdf

- Southern Regional Education Board (2003). Essential principles of high-quality online teaching: Guidelines for evaluation of K-12 online teachers underpins the NEA guide.
 http://www.sreb.org/programs/EdTech/pubs/PDF/Essential_Principles.pdf
- Kearsley, G., & Blomeyer, R. (2003). Preparing K-12 teachers to teach online.
 http://home.sprynet.com/~gkearsley/TeachingOnline.htm

Resources developed for preservice teacher education

- Resources from the TEGIVS project supported by FIPSE include a linked and categorized list of demo
 courses, labs for secondary and elementary preservice teacher education, multimedia resources
 and reading for methods courses and pre-student teaching field experience. Particularly useful for
 preservice teacher education
 - http://www.public.iastate.edu/~vschool/
- Case studies and guidance for practical and lab activities in online education that originally guided to establishment of Iowa Learning Online.
 - http://ctlt.iastate.edu:16080/~tegivs/vhs/

Publications on online education

- Essential Elements. Prepare, Design, and Teach Your Online Course by B. Erlbaum, C. McIntyre and A. Smith (2002). Atwood Publishing. This is an easy to use guide for web-based teaching that comes from the developers of the first Virtual High School.
- The Virtual High School: Teaching Generation V, by A. Zucker and R. Kozma with others (2003). Teachers College Press. It tells the story of the development of the first Virtual High School in the U.S.
- Assessing learners online by A. Oosterhof, R-M Conrad and D.P. Ely (2007). Pearson. This recently
 published book provides excellent guidance for rigorous online assessment that takes advantage of
 the media and modes of teaching online, but it does not specifically focus on K-12 education.
- Online Professional Development for Teachers: Emerging Models and Methods, Dede, C. (Ed.) (2006). Harvard Education Press. This is a product from Harvard's Usable Knowledge Invitational Conference and is one of the only resources that looks closely at exemplary online professional development programs, compares them carefully with one another and draws helpful conclusions about them. Although, the focus is not online professional development for virtual education, the observations about online professional development are useful for all online professional development programs.
- Facilitating Online Learning Effective Strategies for Moderators, G. Collison, et al, (2000). Atwood Publishing. This handbook describes strategies and skills for moderating online discussions.
- Learning and Leading with Technology, ISTE's journal, has published a range of articles on virtual schooling and online learning, particularly in 2007.

Other relevant items for virtual schooling, including K-12 online learning

- Cathy Cavanaugh's Online Learning Research References Dr. Cavanaugh, NACOL Research Committee Chair, has an excellent and comprehensive website listing books, articles and journals for online learning.
 - http://drscavanaugh.org/distlearn/research_references.htm
- NACOL Issues Brief: Equity and Access in Virtual Education (2007) by Ray Rose and Bob Blomeyer identifies the issues that also impact professional development.

- Southern Regional Education Board (SREB). (2006d). Online teaching evaluation tool.
 http://www.sreb.org/programs/EdTech/pubs/2006Pubs/OnlineTeachingEvaluationSVS.asp
- Sloan Foundation: K-12 Online Learning: A Survey of U.S. District Administrators
- NACOL National Standards for Online Courses: NACOL conducted a comprehensive review of course standards available. Based on this review, the Southern Regional Education Board (SREB) Standards for Quality Online Courses, used by the 16 states in the southern United States was adopted as the source for the NACOL National Standards for Quality for Online Courses. NACOL added a standard to include 21st Century Skills.
 - http://www.nacol.org/nationalstandards/
- Laboratories of reform: Virtual High Schools and innovation in public education by Bill Tucker (2007). Education Sector Reports.
 - http://www.educationsector.org/usr_doc/Virtual_Schools.pdf
- Virtual School Clearing House is a web site documenting collaborative research in this area sponsored in the nine state AT&T regions.
 - http://vs.education.ufl.edu/virtualschool/
- *Virtual Schools and 21*st *Century Skills* paper by NACOL and the Partnership for 21st Century Skills (2006). NACOL reports.
 - http://www.nacol.org/docs/VSand21stCenturySkillsFINALPaper.pdf

Curriculum resources for use in higher education faculty development

There is a wide range of resources developed for higher education flexible and distance learning. Caution is required when adapting their use to K-12 distance education, including online learning.

- Faculty Development Process. A four-stage faculty development process, created by State University of New York Learning Network, leads to high faculty satisfaction with teaching online.
 - http://www.sloan-c.org/effective/details4.asp?FS_ID=15
- Guiding Principles for Faculty in Distance learning from Indiana Partnership for Statewide Education creates guidelines that institutions can use to help faculty members teach courses online http://www.ihets.org/archive/progserv_arc/education_arc/distance_arc/guiding_principles_arc/index.html
- Training for Online Teaching, University of Nebraska http://www.sloan-c.org/effective/details4.asp?FS_ID=52
- Learning to Teach Online Program
 http://www.sloan-c.org/effective/details4.asp?FS ID=42
- Supporting Online Adjunct Faculty: An Online Mentoring Program http://www.sloan-c.org/effective/details4.asp?FS_ID=48
- Online Faculty Development Workshops, University of Maryland http://www.sloan-c.org/effective/details4.asp?FS_ID=55
- Comprehensive Online Training Course for Online Teaching, University of Maryland http://www.sloan-c.org/effective/details4.asp?FS_ID=56