

Online Video Repository and Supportive Community for Beginning Teachers

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Abstract: Nearly half of public school teachers leave in their first five years of teaching, and the inadequacy of their preparation is a significant challenge to their success. Teacher attrition results in part from frustration caused by inadequate preparation and lack of a professional development support system. Beginning teachers lack access to exemplars of effective teaching practices. This paper proposes a design framework addressing these problems via a free Internet-based resource for teachers to share videos of their teaching practices and exchange ideas through a supportive online community. This resource would present easily accessible videos of model practices, problem representations, problem solutions. The website would provide a supportive community for beginning teachers; enable them to: form groups centered on common interests, exchange messages, and offer one another feedback on teaching practices; facilitate sharing of classroom materials and best practices; and allow teachers to post profiles of professional and personal information.

Introduction

40% to 50% of all US public school teachers leave the profession in their first five years (Ingersoll, 2003), and the inadequacy of their preparation has been documented through outcome, observational, and self-report studies (Collinson & Ono, 2001; US Department of Education, 1999; Wanat & Cancino, 1996). Part of the attrition is due to low salaries (American Federation of Teachers, 2005; Ingersoll & Smith, 2003); however, part is due to teachers' frustrations caused by insufficient knowledge and skills (Department of Education Science and Training, 2002; MacDonald, 1999) and by lack of a professional development support system (Dymoke & Harrison, 2006; Johnson & Birkeland, 2003). With teacher attrition close to 50% in their first five years, the cost of teacher training is approximately twice what it would be without such attrition. Furthermore, beginning teachers' lack of adequate skills results in human costs of frustration and disillusionment for these teachers, as well as substandard educational outcomes for their students. Beginning teachers face numerous challenges in their induction into the profession: acquiring on-site knowledge of students, curriculum, and the school; developing appropriate coursework and lectures; implementing an initial repertoire of lessons; cultivating the classroom learning environment; creating a professional identity; and learning in and from practice (Feiman-Nemser, 2001). Teachers additionally encounter a variety of challenges throughout their careers, including broad problems such as how to maintain classroom discipline and how to motivate their students to learn, as well as very specific issues such as how to best teach a particular type of math problem. Current approaches to the development of beginning teachers' skills include the training they receive in their teacher education program, professional meetings, and professional journals. However, traditional teacher training programs are generally insufficient (McCormack & Thomas, 2003). Professional meetings are expensive for teachers to attend – costing time and money, including the need to hire substitute teachers to cover the classes of those at such professional meetings. Furthermore, few professional meetings present actual models or examples of effective teaching practices, and professional journals generally do not provide actual models of practices.

Multiple Internet-based distance learning tools have been developed to facilitate teacher education and professional support; examples include Teachscape, BEST, and Survive and Thrive Virtual Conference for Beginning Teachers. Teachscape (www.teachscape.com) provides an online resource for professional development training in teaching (Dede, 2003), which includes some video content of models of practice and interviews of experienced teachers and examples of coursework. The BEST (Beginning and Establishing Successful Teachers) website (www.uow.edu.au/educ/students/best.html) seeks to address the problem of teacher attrition by providing an online professional community for teachers through web forums and discussion boards, weblogs and sharing of curriculum materials (Herrington & Herrington, 2006). Survive and Thrive Virtual Conference for Beginning Teachers (www.survivethrive.on.ca) strives to support beginning teachers by providing online conferences given by experienced teachers on the following themes: literacy, working with parents and families, professional issues, classroom management, special education, and assessment and reporting. Limitations of currently available services include: (a) They do not permit the large-scale sharing of videos of teachers in practice; (b) They are not all free to

use; (c) Their content is restricted behind registration and login barriers; (d) Social networking functionality is generally not available on the sites; (e) They lack a tagging functionality that would enable users to easily search for and access specific exemplars relating to teaching challenges facing them. This paper proposes a design framework to address the practical problems described above through the construction of a web-based resource for beginning teachers (see Figure 1). The resource would provide videos of models of teaching practice and serve as a supportive community for beginning teachers.

Video Representations of Teaching

Given the utility of exemplars of practices for those learning a set of skills (Woody, 2003), approaches to improve the performance of beginning teachers should provide multiple models of various aspects of teaching in a manner that is easily accessible to teachers. Research in educational psychology has shown that people with these representations do better work (Woody, 2003). By 'easily accessible', we mean inexpensive with respect to resources such as money and time, as well as convenient to teachers' schedules. The design of the website should follow the guiding principles of authentic learning environments, which include: realistic contexts and true-to-life activities (Brown, et al., 1989); access to expert performances and models of practices (Lave & Wenger, 1991); numerous viewpoints and roles (Spiro, et al., 1991); collaborative knowledge creation (Collins, et al., 1989); occasions for reflection (Boud, 1985); occasions for articulation (Lave & Wenger, 1991); mentoring and scaffolding (Greenfield, 1984); and authentic assessment (Reeves & Okey, 1996). The online video resource proposed here will have user-provided variety of representations of teaching problems and problem solutions. This approach also proposes to include a user-rating system to provide peer review of the video segments that are posted. The video-sharing website, YouTube (www.youtube.com), demonstrates that such an Internet video resource can feasibly be built and that video on the Internet is widely used. A limitation of this proof of concept is that YouTube is primarily a recreational resource rather than an educational resource, although YouTube certainly has the capability to deliver instruction. Nevertheless, the multitude of distance learning applications on the web such as Stanford Online (<http://scpd.stanford.edu>) and Harvard Distance Education (<http://www.extension.harvard.edu/DistanceEd/>) demonstrate that distance learning can be successful.

An Online Community for Teachers

This proposed research will provide an online professional community to support teachers. A supportive professional community for beginning teachers would help reduce attrition by minimizing new teachers' sense of isolation in the classroom. The website would include functionality such as the ability to join groups focused on topics of shared interest, the ability to: exchange messages, give feedback on teaching practice, share classroom course material and best practices, and post teacher profiles of professional and personal information. The online community would be a source of encouragement and inspiration for beginning teachers through their interactions with peers and models of practice. This resource would provide a means for beginning teachers to seek advice from peers and mentor teachers to help them solve specific practical problems facing them as they are inducted into the profession. Facebook (www.facebook.com) serves as a proof of concept that an online community can be created and used extensively. However, this proof of concept is limited in that Facebook is primarily a social, rather than an instructional resource, and restricted to predetermined communities, whereas the proposed approach would be open to anyone.

Additional Characteristics of the Proposed Approach

This resource would be free to users. The pilot project could be supported through government or foundation educational research and development funding. If the user-base grows, the website could be supported through advertising. A measure of the project's success could be the extent of site utilization (number of users). Some might argue that the approach proposed here is not practical, because privacy concerns make the display of children's faces problematic. The developers of the website could seed the video repository with only videos of teachers and not display the faces of the children or their names. Users of the site could be required to agree to the terms of service, which would specify that neither the faces, nor last names, nor any other personally identifying information of any minor or other individual besides the teacher would appear on the video. Thus, concerns about privacy would be addressed.

Figures

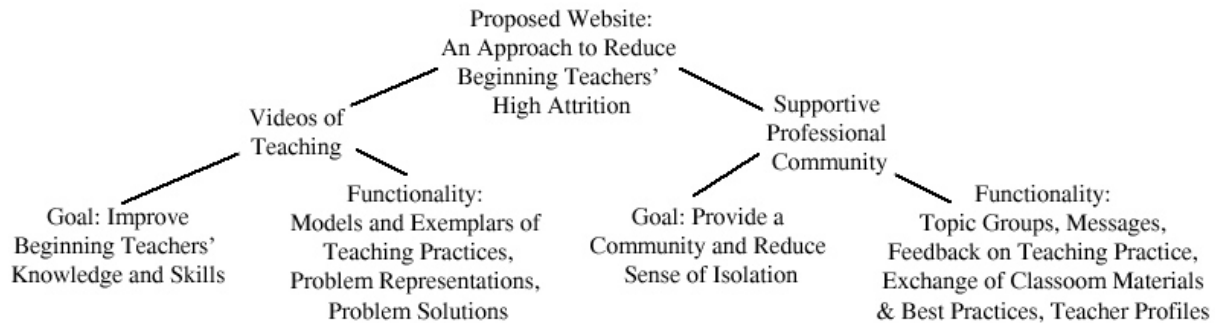


Figure 1. Proposed Website Organization

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