

The BEST site on the Internet: An online resource for Beginning and Establishing Successful Teachers

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Abstract: Beginning teachers face enormous challenges in their first year of teaching. High attrition rates of teachers within the first five years attest to the difficulties inherent in commencing professional life as a teacher. This paper describes the design, development and evaluation of a website designed to relieve many of the problems of professional isolation encountered by beginning teachers. The website allows new teachers, and preservice teachers on school practice, to communicate with each other and expert teacher mentors through discussion boards, and provides access to a range of resources including lesson plans, annotated lists of useful websites, weblogs, wikis and frequently asked questions. The paper describes the theoretical foundations of the approach, the features of the site in detail and the plan for effectiveness evaluation of the site.

Beginning teachers at risk

Beginning teachers, in their first year of teaching, face enormous personal and professional challenges. In a physical sense, many are isolated from their usual sources of support, when they are sent to remote and rural areas or unfamiliar cities for their first teaching post. Many begin teaching without the support of a single familiar face, often in a location that presents a significant geographical, cultural or psychological change. The broad failure of the profession to induct its neophyte teachers results in substantial numbers of resignations within the first five years. It is estimated that up to 39% of beginning teachers in the USA leave the profession in their first five years of teaching (Ingersoll, 2001). In the UK the figure is 30% (Adams, 2003) and in Australia 25% (DEST, 2003). These figures represent an enormous loss to the profession.

Designing a resource for beginning teachers

In 2005, the Faculty of Education at the University of Wollongong in Australia implemented an online resource to support beginning teachers called the 'BEST' site: *Beginning and Establishing Successful Teachers*. The site has been developed specifically for primary and early childhood teachers, although it is being further developed for other specialised cohorts, such as physical and health education teachers. The site uses the Janison Learning Management System (<http://www.janison.com.au>) and is organised around significant problem-based issues identified by beginning teachers, with communication tools that enable support and reflection.

Online communities of practice exist, for teachers generally (e.g., *Tapped in*), and for beginning teachers in particular (e.g., *Novice Teachers Support Project*). They display a wide variety of approaches to issues based resources and avenues for support and mentoring. For example, some sites simply offer resources in the form of lesson plans. Other sites offer mentoring by expert teachers. The design of such sites do not appear to be based on any theoretical notion of learning, appearing instead to rely on the potentialities of technology and the lesson learned in implementation. In comparison, the design of BEST is based upon Herrington and Oliver's (2000) nine characteristics of authentic learning identified from an extensive body of literature on situated learning, and successfully applied to multimedia for preservice

mathematics teachers (Herrington, Sparrow, Herrington & Oliver, 1999). This paper will describe the main features of the online community of practice and show how they relate to the characteristics of authentic learning.

Theoretical foundations of the approach

The site has been developed based on characteristics derived from situated learning. Herrington and Oliver (2000) identified nine characteristics of authentic learning environments from an in-depth literature review, specifically: *authentic contexts* that reflect the way the knowledge will be used in real-life (e.g., Brown, Collins, & Duguid, 1989); *authentic activities* which are ill-defined and allow sustained thinking (e.g., Brown et al., 1989); *access to expert performances* and the modelling of processes (e.g., Lave & Wenger, 1991); *multiple roles and perspectives* (e.g., Spiro, Feltovich, Jacobson, & Coulson, 1991); *collaborative construction of knowledge* (Collins, Brown, & Newman, 1989); *opportunities for reflection* (e.g., Boud, Keogh, & Walker, 1985); *opportunities for articulation* to enable tacit knowledge to be made explicit (e.g., Vygotsky, 1978; Lave & Wenger, 1991); *coaching and scaffolding* by the teacher at critical times (e.g., Greenfield, 1984) and *authentic assessment* of learning (e.g., Reeves & Okey, 1996). Features of the site will be described and justified in relation to these characteristics.

Metaphorical interface (Authentic context)

The site uses the metaphor of an Internet café (Figure 1) where teachers can communicate with a mentor and access issues-based resources that will assist them in solving real classroom problems. The metaphor is meant to represent the type of friendly, inviting environment where a teacher might meet with a more experienced friend or mentor to discuss the problems and issues they have in their new job. Resources are provided within the environment to give ideas and suggest appropriate approaches, and importantly to share thoughts and feelings about teaching with other new teachers and more experienced mentors. Teachers can navigate through the site, either by clicking on the objects in the interface or by selecting the appropriate item from the menu on the left of the screen.



Figure 1: The main interface of the beginning teacher website

Authentic context is instantiated in the investigation and support of real problems and issues of immediate concern to real teachers in Australian schools. These issues have been identified from the literature and from the opinions of graduating teachers who were surveyed at the completion of their final year in 2004. Major issues have been identified as: classroom management, teaching and learning, professional responsibilities, special needs, assessment and casual teaching.

Discussion forums and FAQs (Authentic activity)

The issues around which the communication and resources relate, were identified by beginning teachers as critical for the success of beginning teaching. Identifying, discussing and reflecting upon these issues, and accessing and building

resources relevant to the issues are seen as the main authentic activities within this online community. Authentic activity is manifested in the interactions, collaborations and responses provided by the participants themselves as they use the website to solve problems and ameliorate concerns.

Mentoring by exemplary teachers (Coaching and Scaffolding)

A mentor has been assigned for each major issue. The mentors are exemplary teachers recognised by the *Australian College of Educators* (www.austcolled.com.au). These expert teachers have volunteered their time to assist by providing advice and support on a regular basis. Figure 2 shows the discussion boards assigned to each of the identified major issues. Mentors also have their own private space on the site where they can communicate with each other and share resources.



Figure 2: The mentor-led discussion boards listed under major issues

Coaching and scaffolding is provided through the guidance given by the mentoring teachers and by the university lecturers monitoring the cohort groups. The support provided by other neophytes and teachers who have survived their first year is also useful in creating the sense of community that is so lacking for many beginning teachers.

Newsletters (Multiple perspectives)

Newsletters that are continually and automatically updated (RSS feeds) have been resourced from *Edna Online* (www.edna.edu.au), an online education clearinghouse developed and initiated by Australian State and Federal Governments (Figure 3).

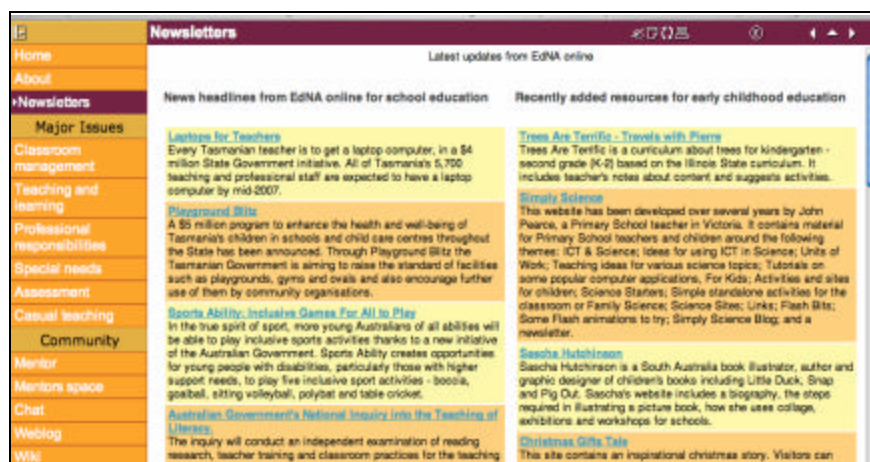


Figure 3: The newsletter feeds from *EdNA Online*

The newsletters relate directly to issues facing primary and early childhood teachers. Multiple perspectives are provided not only through the newsletters, but through a range of human and media sources to gain different views and perspectives on the same issue, such as from beginning teachers, mentors, highly accomplished teachers, university lecturers, and preservice teachers.

Lesson plans and resources (Expert performance)

In New South Wales, the K-12 curriculum is organised around Key Learning Areas (KLAs). For each KLA there is an RSS newsletter feed from *Edna Online* which provides updated information relevant to these areas. When any link is clicked, the external website opens within the BEST site rather than as a separate window (Figure 4), but teachers can easily navigate back within the site using the side menu bar.

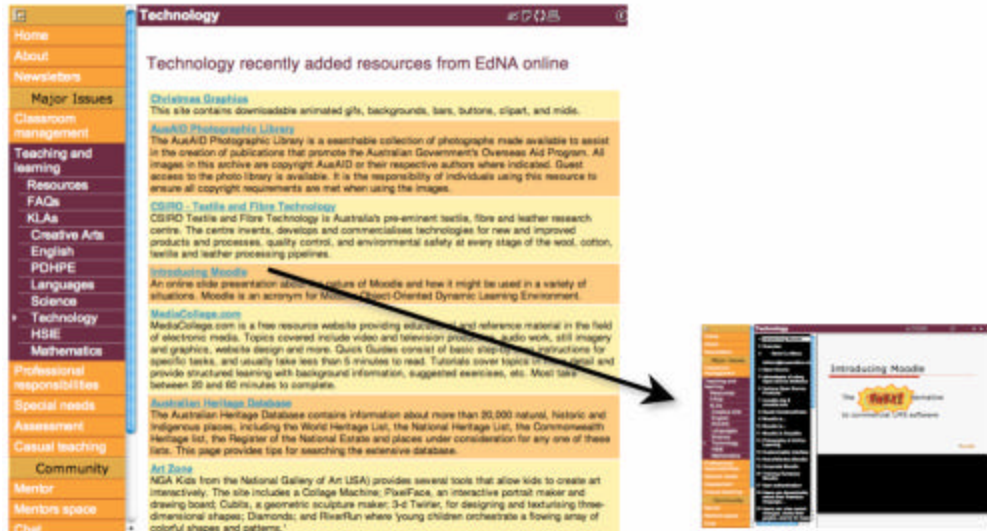


Figure 4: The Key Learning Area newsletter feeds from *EdNA Online*

Lesson plans and other relevant links are also provided as exemplary activities for beginning teachers, under each of the identified issues. For example, clicking on the Classroom management link offers resources on student discipline, motivating students and dealing with bullying (Figure 5). Expert performance can be accessed through these directed URLs and links (including Education Departments and Professional Associations) as well as the contact with teachers and professionals more experienced than the beginning teachers.

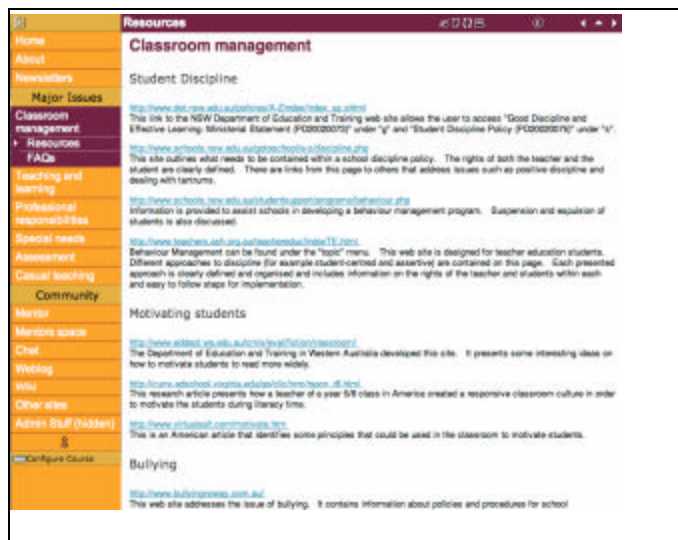


Figure 5: Resources available for the major issues

Wikis (Collaboration and articulation)

The website incorporates a site to enable the shared creation of resources through the development of wikis related to the major issues (Figure 6). 'Wikis' enable teachers to publish and edit directly to the web.

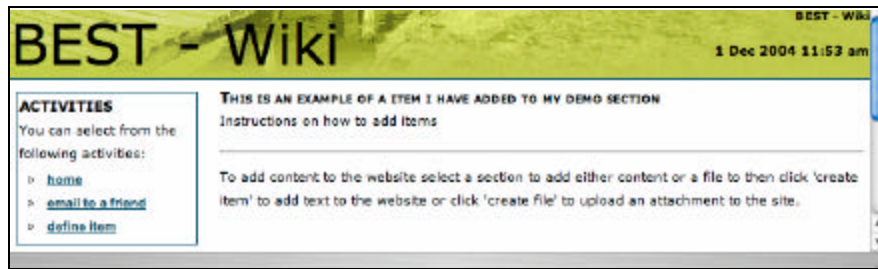


Figure 6: The wiki page enabling shared creation of resources

This feature enables teachers to articulate their ideas, suggestions, and approaches around the critical issues encountered in beginning classrooms. In addition, wikis enables other users to collaborate and build upon those ideas helping to create shared solutions to critically relevant problems.

Weblogs (Reflection)

This feature provides a space where beginning teachers can log their first year teaching experiences. The weblog enables users to critically reflect not only on their own developing expertise as they write in their logs, but also to compare their experiences to others. Figure 7 shows a sample weblog provided on the site.

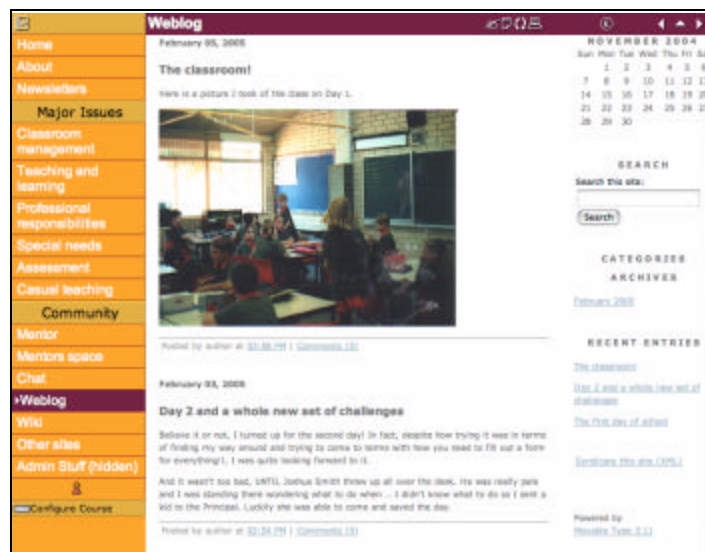


Figure 7: The sample weblog provided on the site

Opportunities for reflection are accommodated on the site by providing the resources to allow teachers to reflect, monitor and evaluate their own teaching through online journals, where personal observations and growing understanding can be articulated.

Evaluation (Authentic assessment)

A research agenda has been established to evaluate aspects of the site. Evaluation has been a critical component of each stage of development, as recommended by Reeves and Hedberg (2003). A review of existing online communities of

practice for beginning teachers (cf., Herrington & Herrington, 2004), together with a literature review, informed the project conceptualisation. The use and perceptions of beginning teachers in regard to the functionality and usability of the site will be assessed. When the project is fully implemented, further effectiveness evaluation will be conducted, and later impact evaluations will also provide critical information on long-term effects of the beginning teacher website. If and how teachers use the site to solve authentic classroom based problems will also provide evidence of authentic assessment of teachers' learning in this online community of practice.

References

- Adams, C. (2003). *Address to the North of England Education Conference*. Retrieved May 3, 2005 from <http://www.gtce.org.uk/news/newsDetail.asp?NewsId=480>
- Boud, D., Keogh, R., & Walker, D. (1985). Promoting reflection in learning: A model. In D. Boud, R. Keogh & D. Walker (Eds.), *Reflection: Turning experience into learning* (pp. 18-40). London: Kogan Page.
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32-42.
- Collins, A., Brown, J. S., & Newman, S. E. (1989). Cognitive apprenticeship: Teaching the crafts of reading, writing, and mathematics. In L. B. Resnick (Ed.), *Knowing, learning and instruction* (pp. 453-494). Hillsdale, NJ: LEA.
- Department of Education Science and Training. (2003). *Australia's teachers: Australia's future: Advancing innovation, science, technology and mathematics*. Canberra: AGPS.
- Greenfield, P. M. (1984). A theory of the teacher in the learning activities of everyday life. In B. Rogoff & J. Lave (Eds.), *Everyday cognition: Its development in social context* (pp. 117-138). Cambridge, MA: Harvard University Press.
- Herrington, A., Sparrow, L., Herrington, J., & Oliver, R. (1999). Investigating mathematics education using multimedia. *Technology and Teacher Education*, 7(3), 175-186.
- Herrington, A., & Herrington, J. (2004). University to work transition: Implications for the evaluation and design of online communities of practice In R. Atkinson, C. McBeath, D. Jonas-Dwyer, & R. Phillips (Eds.), *Proceedings of the 21st ASCILITE Conference* (pp. 379-386). Perth: ASCILITE.
- Herrington, J., & Oliver, R. (2000). An instructional design framework for authentic learning environments. *Educational Technology Research and Development*, 48(3), 23-48.
- Ingersoll, R.M. (2001). *Teacher turnover, teacher shortages, and the organization of schools*. Washington: CSTP
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: CUP.
- Novice teacher support network. (nd.). Retrieved May 3, 2005 from <http://ntsp.ed.uiuc.edu/>
- Reeves, T. C., & Okey, J. R (1996). Alternative assessment for constructivist learning environments. In B. G. Wilson (Ed.), *Constructivist learning environment* (pp. 191-202). Englewood Cliffs, NJ: Educational Technology Publications.
- Reeves, T.C., & Hedberg, J.G. (2003). *Interactive learning systems evaluation*. Englewood Cliffs, NJ: EdTech Publications.
- Spiro, R. J., Feltovich, P. J., Jacobson, M. J., & Coulson, R. L. (1991). Knowledge representation, content specification, and the development of skill in situation-specific knowledge assembly. *Educational Technology*, 31(9), 22-25.
- Tapped in. (nd.). Retrieved May 3, 2004 from <http://tappedin.org/tappedin/>
- Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes* (V. J.-S. M. Cole, S. Scribner, E. Souberman, Eds., & Trans.). Cambridge, MA: Harvard University Press.