The study of Digital Video Library Artifacts as a Medium for Teacher Development

Technology Based Learning and Research is at the leading edge of designing and developing a digital video library in several areas, notably a hybrid DVD and Internet delivery system, a web-based commentary and library object building engine, and webcentric database technologies. The research and development team is continually developing new tools and approaches; for example, we have recently implemented what is termed the DVL Builder. The DVL Builder is an online tool for experts to view digital video lesson examples, make comments on observed events, and generate metadata for video clips. This user-centered tool provides student users with expert commentary and instructor users with customized library objects. Combining a research focus with real users performing real tasks provided a unique opportunity to test innovative approaches against user needs and preferences.

Web-based resources (e.g., digital libraries) are becoming more readily available for use by teacher educators and preservice teachers, yet effective use or pedagogical implementation processes have not been identified to guide resource adaptation. Year Two of a three year project emphasized the importance of cycling among studies of tasks and user experiences with prototypes as a way of bringing an understanding of specific task practices into the development process as a basis for innovative design and better utilization of research findings.

During the fall, 20 video lesson examples were added to the National Educational Technology Standards (NETS) Digital Video Library (DVL) with supporting artifacts. Video lesson examples edited from PK-16 classroom footage provide (a) opportunities to develop observational and analytical skills and (b) stimulus to develop reflective practice. Implementation studies will be conducted beginning Spring 2003.

DVL Presentation

This session will present video lesson examples of teacher education faculty modeling the National Educational Technology Standards (NETS) for Teachers and PK-12 teachers modeling the NETS for Students. Presenters will (a) briefly describe design and development methodologies, (b) discuss DVL innovations, (c) present four examples of the available online digital video lessons, and (d) provide an implementation guide for using the DVL in classroom instruction.