

## **The Use of Video Cases in Teacher Education**

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*Abstract:* The use of video cases has received increasing attention in recent studies on technology integration into teacher education curricula. Even though the use of case studies in education already has a long history, videos, especially online formats of them, are quite new. In this study I will look at the latest literature on this topic and also provide information on some useful sites and resources.

The use of cases in teacher education programs offers a new approach to teaching. Although cases have been used to some extent in teacher education for centuries, the emergence of case-based teaching is only identifiable after the 1980s. Merseth (1996) believes there are several reasons for recent increased interest, which is also associated with a rise in interest about constructivist teaching and learning. First, the theoretical studies about constructivist teacher education focuses more on the nature of teacher knowledge. Teachers should have more practical and contextual knowledge in order to apply theoretical underpinnings of constructivism, which might be very challenging to adopt in teaching. And, because the nature of teacher knowledge is context-specific, non-fixed, and continually evolving (Clark & Lampert, 1986; Lampert, 1985) it should be learned “in context” rather than abstractly. Cases are one way of learning “in context” rather than from textbooks that describe abstract general principles. Much of the current literature on learning to teach suggests that teachers should ground their skills in a mixture of theory and praxis (e.g., learning in context). Another reason is that the reform movements of teacher education programs emphasize alternative methods of instruction more than ever. Understanding these alternative methods is often best accomplished through cases and other in-context experiences such as internships and work in professional development schools.

### **What Is A Case?**

“A case is a descriptive research document based on a real-life situation or event” (Merseth, 1996, p.726). One important characteristic of a case is its potential to provide data and information for discussion. Therefore, cases provide important practical information for pre-service and in-service teachers and stimulate discussions, which may encourage reflective thinking about different frameworks, paradigms, and methods of teaching and learning. There are four major gains of using cases in teacher education: “the ability of cases to help develop problem-solving and decision-making skills; the ability of cases to increase awareness of

multiple perspectives and other educational settings; the ability of cases to enhance beliefs about personal authority and efficacy; and the ability of cases to habits of reflection” (Merseth, 1996, p.731). According to Simmons (2000) another feature of cases plays a very important role in pre-service teacher education programs: the strength of cases in terms of encouraging the students to look at dilemmas from the *inside out*. Students see teaching through the eyes of teachers and students in context. Many cases are stories in which professionals make choices involving dilemmas faced daily by teachers. Moreover, cases guide discussions among teacher education students, and that discussion often involves a high level of questioning, redirecting questions, clarifying, probing, and highlighting the points or issues –but not by dictating a predetermined solution or bias (Simmons, 2000).

Printed cases that students read have been used for many years. Over the past decade “video cases” have also become popular, and, recently, online cases have emerged as a way of sharing cases across the Internet. A growing number of multimedia-supported cases on the Internet offer great sources for teacher educators all over the world. They can be played directly from the Internet if the connection speed allows, or downloaded and played from a local hard drive. Perry & Talley (2001, p.27), two well-known authorities on the topic, think “the Internet and hypermedia, which includes the nonlinear integration of video, audio, graphics, and text, can provide a rich environment for case studies that promotes the construction of knowledge about integrating technology into the curriculum in a learning community of peers and faculty facilitators.” The capabilities of the Internet in terms of simulating real world complexities and making the case more realistic through the use of multiple media are plusses. When you add the advantages of hypertext navigation features in the presentation of cases this format is a very powerful tool for preparing professionals in fields like teaching (Kovalchick et al., 1999).

In their research study on this topic Perry & Talley (2001) have gathered recommendations from experts in the effective use of video cases in teacher education programs. According to them the number one recommendation is that video cases should be used as *best practices* of the field. (However, other developers of video cases argue that less than perfect examples of teaching give students many opportunities for discussion and reflection.) The experts also highly recommended grounding online video cases in theory and research. Three major theories they suggested were: situated cognition, cognitive flexibility, and reflective practice. Technological factors that have impact on the quality of video cases are: (1) camera techniques, such as using short segments, simple backgrounds, or avoiding the wide angle shots and (2) equipment recommendations such as use of good microphones, tripod and lights. Although the recommendations of Perry & Talley (2001) are not universally accepted, their

work is one positive start in the field in terms of creating guidelines and expectations. The following paragraphs will present two best examples of video cases in the field:

### **CaseNex: A Commercial Example**

The University of Virginia has been a leader in the development and use of online case studies for teacher education (Willis & Samborska, 2001). CaseNET was a consortium of universities developing multimedia cases for teacher education students and faculty. In time CaseNET has evolved into CaseNex, a commercial education company that emerged in 2000 from CaseNET at the University of Virginia. The company provides products which are based on case studies of problems in K-12 schools and there is a fee for using the products. Although this is a commercial initiative, the demos developed by a very experienced team may be examined as best examples (<http://casenex.casenex.com/casenet/demo.html>)

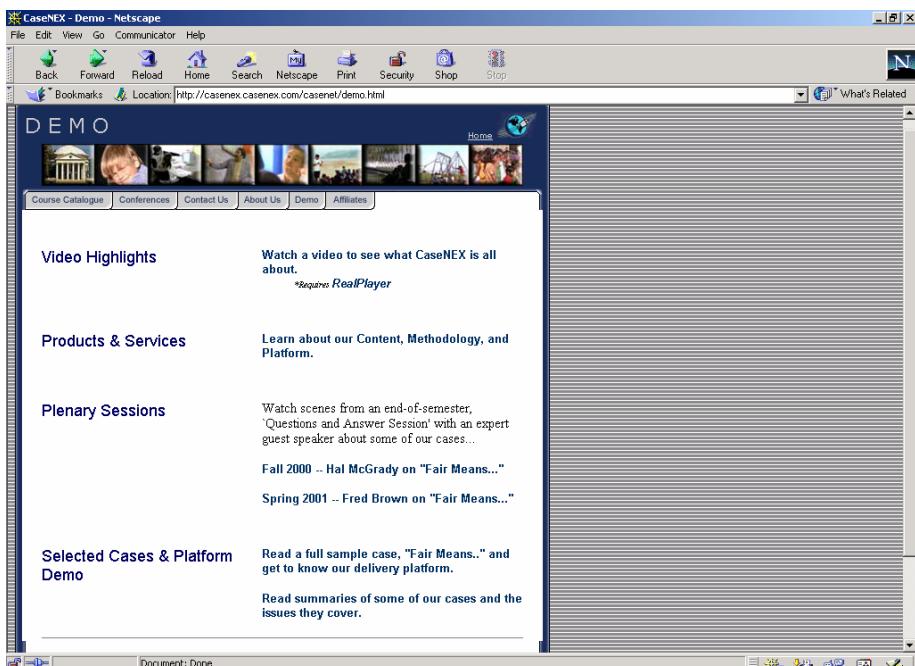


Figure 1. CaseNEX Demo Page

### **InTime: A Free Internet Resource**

The University of Northern Iowa (UNI), unlike the CaseNEX commercial venture, makes their work available free for all teacher educators in the world. InTime, the UNI initiative supported by a Preparing Tomorrow's Teachers to Use Technology (PT3) grant, is an effort to

support technology use and integration in teacher education programs funded by the American federal government. UNI has produced a large number of video cases for K-12 teachers, and the web site for the project has a number of articles helpful resources about how to use the video cases. The searchable database for cases lets you look for cases along several different dimensions: grade level, subject matter, teaching strategy. InTime's web site (<http://www.intime.uni.edu>) is one of the largest and most sophisticated resources on video cases.

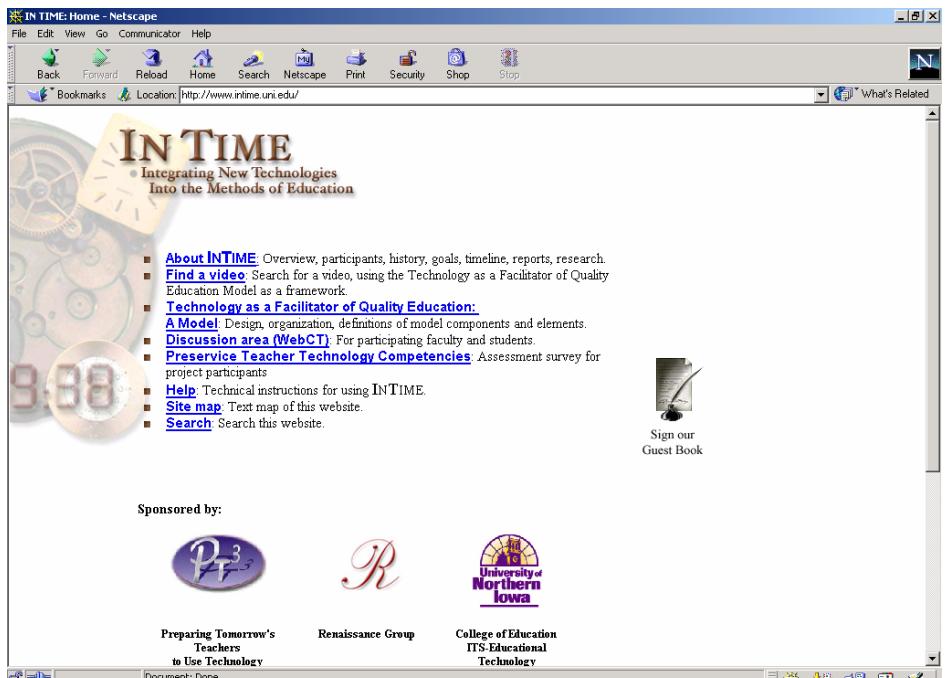


Figure 2. InTime Web Site

### Summary

The use of online video cases in teacher education has grown very quickly in recent years and with the increased interest there has been a growth in video cases available on the World Wide Web. Today there are many video cases on the web that support alternative approaches to pre-service teacher instruction. Using terms like *case*, *teacher education*, and *video* to conduct a web search will generate many hits, and quite a few of them are for sites where freely available cases are stored. However there still remains many questions about the ways video cases can be used. For example, there are many different types of case studies. How can we use the different types for different purposes? Should they reflect best practices or only pose a problem? Or how might the Internet and multimedia be used more effectively? Even though the flexible nature of hypermedia offers many opportunities, the bandwidth may limit

the video quality unless you download the cases to a local hard drive. There is a growing literature about these questions. If you would like to begin to explore this literature the following web sites are good starting points:

- Teaching with Online cases

<http://www.uky.edu/~halesr/case.html>

- Online Video Case Studies

<http://www.intime.uni.edu/ovcs/vision/>

- Online Video Case Studies and Teacher Education: Policy issues

<http://hale.pepperdine.edu/~gyperry/gyp/policy.pdf>

- Case Study Applications for Teacher Education

<http://www.abacon.com/sudzina/index.html>

- Developing Multimedia Case Studies for Pre-service Teacher Education

<http://www-rohan.sdsu.edu/faculty/jbowers/overview.htm>

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