

PETTT TECHNICAL REPORT

PETTT-01-TVI-01



Tutored Video Instruction Work at the University of Washington Bibliography

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Kors, K., Postner, L. and Shelton, B. (2001). Rethinking the “distance” in distance learning: the prospects and complexities of tutored video instruction. Submitted to AERA 2001.

This proposal essentially defines a plan for a next stage of TVI work. The “next stage” would consist of discourse analysis of transcribed discussions in TVI classes as well as video-taped interactions. The objective is to further understand the strengths and limitations of TVI as an instructional approach.

Note: This proposal was not accepted at AERA. The work described did not transpire.

Kors, K. (2000). Redesigning Tutored Video Instruction: Recommendations for Higher Education Programs Using TVI. Technical Report, Program for Educational Transformation through Technology, University of Washington.

- A. Executive Summary
 - a. Context
 - i. Emphasizes value-added of instructional approach
 - ii. Trying to see if TVI students achieve a significantly higher level
 - iii. Posits TVI as like lecture + recitation
 - iv. Posits that video has affordances
 - b. Observations
 - i. Video affordances not used
 - 1. Little replay of video (some skipping ahead)
 - 2. Little use of video at times other than class
 - 3. Little use of video to permit faculty to assess their own learning practices
 - ii. Video not an obstacle
- B. Users
 - a. Observations about uses
- C. Redesign (informed by Gibbons suggestions, meta analysis of use of video)
 - a. Attend to attitudes, personality, style, experiences of tutor
 - b. Support integration of video into instruction that is less “jerky”
 - c. Find ways to integrate instructor elaborations into original lecture
 - d. Strive to effectively relieve collaborative learning, small group learning
 - e. Consider motivation (although it may not be an issue)
 - f. Train lecturers
 - i. In video taped lecture, consider capturing some of live lecture participation
 - g. Make administration more visible
 - h. Continue collecting evaluation data
- D. Reflection
 - a. Further evaluation opportunities
 - b. Consider video data analysis (and look for paralinguistic cues)
 - c. Be cautious with extending TVI to other academic areas
 - d. Consider further emphasis on supporting discussion

Lowell, N. and Clelland-Dunham, Z. (2000). Student Course Evaluations and Grades in CSE142 and 243: Winter and Spring 2000, Technical Report, Program for Educational Transformation through Technology, University of Washington.

The Office of Educational Assessment at the University of Washington administered a variety of questionnaires prior to and following CSE 142 and 143 courses taught at UW

in a traditional lecture format and at community colleges in Tutored Video Instruction format. Analysis of students' responses was focused on student reaction to the TVI courses, and comparison of the academic performance of CC students using the TVI method to that of UW students enrolled in standard lecture courses. Winter quarter results indicated that students enrolled in TVI format were generally not as satisfied with the CSE course, highlighting technical problems and concerns about professor access. Additionally, UW students received higher scores on course exams and final course grade, partially due to marked differences among community colleges. Community college ratings of satisfaction with TVI format appeared to improve over subsequent quarters, but further long-term assessment is needed.

Note: Although the statistical grade differences do exist between all UW sections and all TVI sections, it appeared that only one TVI section really had lower grades. However, the

PETTT (2000). Section IV. Exemplar 2 – CSE TVI Pilot Project, *PETTT Annual Report*, Program for Educational Transformation through Technology, University of Washington.

This 5.5 page document characterizes the CSE TVI pilot project as a PETTT exemplar and summarizes work done with the project. Specifically, the CSE TVI pilot is characterized along five dimensions (learner, learning domain, instructional approach, learning environment, and learning technology). The document also summarizes the results of the 1999-2000 observational studies of TVI. In these studies, observations were taken at three TVI sites and lead to insights about how TVI was the same at all sites and different across the three sites. Similarities across the sites included tape stoppage issues (instructors mainly stopped tape) and video distraction issues (UW references in tapes were not as effective at community colleges). A primary difference across the sites was the “stance” taken by the three instructors observed. They understand and made use of the TVI method differently. These observations led to recommendations in three areas – selection of facilitators, training of facilitators, and changes to recording of video lecture,.

Postner, L. and Shelton, B. (2000). *Tutored Video Instruction, Technical Report*, Program for Educational Transformation through Technology, University of Washington.

- A. Describes 6 recommendations of Gibbons
- B. Observations in a total of 6 classes, at two community colleges
- C. Describes how TVI transpired
 - a. Goal –
 - b. Video lecture –
 - c. Technical environment for streaming video
 - d. Students (this is mainly from literature about community college)
 - e. Tutors (this is mainly from observations AT community colleges, ** results)
 - i. Passive
 - ii. Attempt at integration
 - iii. Work around
- D. Redesign – focusing on issues with large lectures and other alternatives
- E. Field observations
 - a. Tutors – stoppages, student issues
 - b. Tutor skepticism
- F. Reasons for differences from Gibbons

- a. Lecture content
- b. Tutor expertise
- c. Student characteristics
- d. Subject matter
- e. Technology and presentation environment
- G. Redesign – starts with discussion of CS learning
 - a. Tutor expertise
 - b. Lecture issues
 - c. Subject matter issues
 - d. Technology and presentation environment
- H. Open question
 - a. Did we really achieve all of Gibbons recommendations???

Postner, L. (2001). How is tutored-video instruction really used? A look inside TVI classrooms. Working Paper, College of Education, University of Washington.

- A. Introduction focused on challenges in teaching CSE
- B. Background described Gibbons
- C. Background on computer science education (teaching and learning)
- D. Methods
 - a. Observation of 6 classes, what sites, what products
 - b. Participants
- E. Data analysis
 - a. Compare to Gibbons
 - b. Tape stoppages, who and why
 - c. Type of stoppages, effect
- F. Limitations
 - a. No final interview
 - b. Variables out of control
- G. Results, very unlike Gibbons, look to explain WHY
 - a. Original lecture (cannot compare)
 - b. Technology and presentation environment (cannot compare)
 - c. Students
 - d. Tutor Expertise (and approach and skepticism)
- H. Discussion – Changes to TVI to make it more viable
 - a. Quality of taped lecture
 - b. Community colleges could alter classroom setup
 - c. Facilitator choice, orientation/training
 - d.