Computers and MORE Help in Lectures

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Talk at Emerging Technologies III, sponsored by Apple Computer and the Association of American Publishers McGraw-Hill Auditorium, New York City, November 15, 1991

- + I. Using off-the-shelf software in teaching
 - A. Using programs for "displaying outlines"
 - + B. What you are seeing now
 - Hiding and showing "children"
 - You can see how it's done
 - + C. Available outlining programs
 - + For the Macintosh
 - This is MORE, by Symantec
 - + Other programs
 - ACTA, also by Symantec
 - Persuasion, by Aldus
 - CA-Cricket Presents
 - PowerPoint by Microsoft
 - + For IBM-compatibles
 - ThinkTank
 - Storyboard
 - Show Partner
- + II. My view of the teacher
 - + A. Selects and presents information
 - My own subject is American government
 - My typical class has over 200 students
 - + I do use an American government textbook:
 - Kenneth Janda, Jeffrey Berry, Jerry Goldman
 - The Challenge of Democracy, 3rd ed.
 - Boston: Houghton Mifflin, 1992
 - + B. Helps students learn the information
 - + Teaching depends on the setting
 - level of the students
 - size of the class
 - available technology
 - + Large courses pose special problems
 - Lectures can be difficult to follow
 - Hard to present some types of information
 - Students lack access to the teacher
 - + C. Inspires them to learn more on their own
 - Make the subject interesting

 - Make it intellectually challenging
 - Raise questions to study
- + III. My view of the computer
 - A. Can help in presenting information
 - B. Can help in learning the material
 - C. Can provide opportunities to learn more
 - D. But teachers do the inspiring, not computers

+ IV. Using computers in teaching

+ A. Outside the classroom

+ programs tailored to the subject

- to explore ideas or to conduct research

+ software with The Challenge of Democracy

- IDEAlog--for analyzing political values

+ CROSSTABS--for quantitative research

on roll call voting in the 101st Congress
on voting behavior in the 1988 election

1987 EDUCOM/NCRIPTAL Software Award

+ Videopaths to American Government

- developed with a grant from Apple

+ 90 minutes of video images

- the Watergate affair

- ideology and political participation

presidential popularitythe civil rights movement

- the Vietnam War

+ Multi-Media approach

Links video images on laserdiscs
to the computer with hypercard

+ something for all courses:

- electronic mail

- students have another point of contact

+ B. Inside the classroom

+ Depends on the subject & class size

+ Computers help little when . . .

- teachers aim for student discussion

- classes are small and teaching is personal

+ Computers can help when . . .

- teachers convey structured information

- class size demands that teachers lecture

+ Example: lecturing on American politics

- lecture hall holds 260 students

+ equipped with an electronic console

- audio tape

- video tape

video projector

- Macintosh SE30 computer

+ V. Lecturing with MORE

+ A. Presenting substantive arguments

+ The Purposes of government

- Maintain order

- Provide public goods

- Promote equality

+ Three political values

+ Order

- Physical: life and property

- Social: authority and behavior

+ Freedom

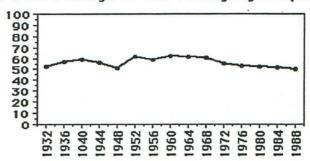
- Freedom TO

Freedom FROM

+ Equality

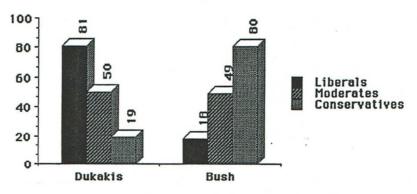
- Political: one person, one vote
- + Social:
 - Equality of opportunity
 - Equality of outcome
- + B. Presenting quantitative data
 - Voting turnout

Voting Turnout in Presidential Elections Over Time as a Percentage of the Voting Age Population



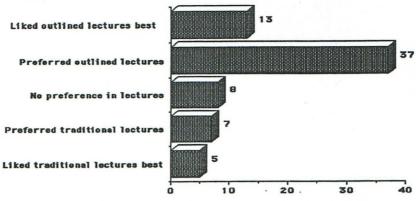
- Voting choice

CBS/New York Times survey of voter choices in 1988



- + VI. How do students like projected outlines?
 - + A. In 1990, I alternated teaching methods
 - Blackboard & traditional talk one day
 - Projected outlines using MORE the next
 - + B. Response to survey at end of class
 - Students preferred the outlines

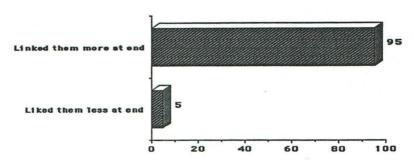




Percentage of 207 students responding

- + But students had to adjust to them
 - 55% changed opinions during the term
 - Most changed favorably

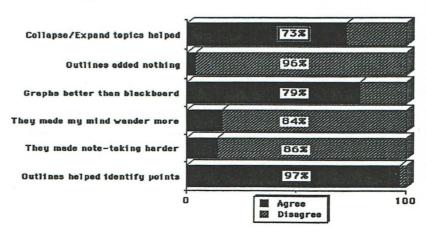
Change in opinion toward projected outlines at end of the term



Percentage of 116 students who changed opinions

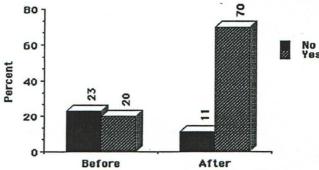
- What students liked about outlines

Student agreement with statements about the outlines



- + VII. Does it make a difference?
 - + A. Positive Findings
 - Before and after survey

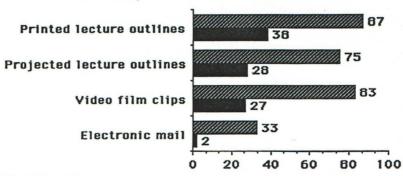
Can computer-based technology make large lecture courses more effective for learning?



Student responses before and after the class

- Reactions to each innovation

How much students "liked" electronic processes and how much they helped learning



Liked the most Improved ability to learn

- + B. Negative Findings
 - Because all students take better lecture notes,
 - + students can rely on someone else's notes.
 - If students can miss class with MORE confidence,
 - + MORE students will miss class.
 - So, student attendance suffers somewhat.
- + C. Conclusion of teaching with computers
 - + It raises pedagogical issues
 - + Issues like declining attendance
 - + This sensitizes teachers to their craft
 - Ultimately makes for better teachers