

Why Haven't Secondary Social Studies Teachers Adopted Information Technologies?

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Each of us has many examples of secondary social studies teachers using digital technology¹ thoughtfully and effectively. During the past four years, as part of a long term program in 14 rural Indiana schools, I have helped several social studies teachers develop curriculum units integrating technology into their classrooms². The teachers taught the units and used action research to document effectiveness in promoting student learning.

However, my personal knowledge of effective digital technology use in social studies classrooms – like yours – considers teachers one at a time. But what of social studies teachers in the aggregate? A much different picture emerges. From the beginnings of research on simple incidence of teachers' technology use – not effective, thoughtful use, but just any use – we have a record of very little activity by social studies teachers, both as a proportion of the total, as well as relative to teachers of most other subjects. In 1987 Allen Glenn and I reviewed research about computer-based education in the social studies, and, based on survey studies, found very low percentages (Ehman & Glenn, 1987). Henry Becker's early survey (Becker, 1986) found one per cent of social studies teachers in grades 9-12 used computers in any way, compared to 12% for all subjects. Other, less comprehensive, research of that time showed similar levels of use. In 1991 there was evidence of increased use, up to about five per cent of social studies teachers (Ehman & Glenn, 1991).

These surveys predated the impact of Internet use in teaching. In contrast, Becker conducted a 1998 national survey (Becker & Ravitz, 2001) in which he showed that over all subject areas, 25 per cent of secondary teachers have students use computer-based technology on

a weekly basis in their teaching, with 12 per cent of the social studies teachers doing so. There has been a slow progression of adoption, perhaps spurred by the Internet, but given the potential for enriching the social studies curriculum, why aren't digital technologies used even more?

The Internet, particularly the World Wide Web, has much to offer as a learning resource for secondary social studies teachers and their students, perhaps more than in any other subject. Critical thinking skills, particularly those involving research, can be fostered through use of information on the World Wide Web. Social studies teachers can create structured activities that require students to locate and evaluate information about questions and problems. Careful assessment of the quality of information is always an important part of research, and the Web certainly confronts us with a distressingly wide range of quality! Compared to more traditional, print resources, the Web requires even more sifting and judging of information quality, using criteria like accuracy, bias, authority and currency, before selecting material to use in organizing, analyzing, and synthesizing to answer questions or solve problems. Viewed in this way, the chaos of the Web is an opportunity for social studies teachers for fostering critical research skills.

Web-based information has other advantages for teaching the social studies. There is a very wide range of opinion and viewpoints regarding controversial issues. Simple but important critical thinking activities, like analyzing and comparing coverage of specific news stories or controversial issues by different newspapers or other media, is made possible by access to the Web.

The Web also affords currency of information not possible with more traditional material, particularly textbooks. Students can access contemporary information about and interpretations of a large number of subjects, and generate comparisons and analyses of debates, recent theories, and solutions to social problems.

I am not urging reliance on the Web, excluding other sources of information. The library, individuals in the family and community, newspapers and news magazines – they are all still very important sources for research and learning the social studies. Sole reliance on the Web teaches a very bad lesson – that only Web information is valuable, or it is more valuable than information from other sources. Students must learn that the quality of information is most critical, not the source.

But the Web does add an important new medium for teachers and students, and can be used in concert with traditional sources. The WebQuest, one example of a Web-based instructional technology, most often combines traditional and Web resources, and requires students to use both in researching questions and problems.

Now, let me return to my opening question. In general, three reasons are often cited to explain general low classroom use of digital technology: 1) lack of training; 2) lack of support; and 3) limited access to sufficient software and hardware. However, with regard to secondary social studies teachers, Anderson and Becker (2001) present troubling evidence that contradicts these reasons in explaining low use by social studies teachers specifically. They analyzed their survey data for relationships between investments in technology by schools³ on the one hand, and teachers' use of technology on the other. One would expect to find positive correlations between higher investments, like increased access to software and hardware, and teachers' frequency of use in their classrooms. Anderson and Becker found this true in the aggregate (with very modest correlations), but not at all true for social studies teachers. Furthermore, when they looked at support and training separately, they found that "...social studies teachers participate in learning how to use computers as much as other teachers, but they don't actually tend to use what they learn" (Anderson & Becker, 2001, p. 17). These findings undercut, for secondary

social studies teachers, three of the most often cited explanations for not using information technology.

So, while training, support and access offer plausible explanations about why secondary teachers in general tend not to adopt information technology for use in their classrooms, Anderson and Becker's data suggest there is something quite different about social studies teachers. What is it about social studies teachers that make them much more resistant or reluctant? Is it the qualities of the innovation, interacting somehow with the nature of the content they teach, or their conceptions about purposes of teaching, or their distrust generally of what technology represents? Here are three speculations:

One partial explanation might lie in a general fixation by secondary social studies teachers on using textbooks to the exclusion of alternatives. The predominant instructional strategy in social studies is that of a teacher covering as much of the adopted textbook as possible. If valid, this dominance of the text, combined with a ground-covering urge, displaces most teachers' opportunities to integrate digital technologies such as the Web.⁴

A second partial explanation might have to do with the interaction between what subjects are most and least valued in schools, and availability of computer resources for teachers. In my state of Indiana, the relative value of social studies, compared to other subjects like language arts and mathematics, is clearly shown by the absolute absence of statewide standardized testing in social studies. If computer resources, like access to lab time or classroom computers, are allocated according to these differential values, then social studies teachers will tend to be slighted if they compete for the scarce computers in their schools.⁵ It is notable that according to Anderson and Becker, science teachers use computers at about the same relatively low level as social studies teachers. Science, too, is omitted from Indiana testing, as it is in other states.

My third partial explanation has to do with controversial issues in social studies content intersecting with school, community and teacher fears about inappropriate Web use by students. In coaching many teachers in my in-service technology infusion program in Indiana, I have become painfully aware of the many forms of interference in free use of the Web by teachers. School administrators erect barriers, including written (or often, unwritten) policies, internal network firewall software, and Web filtering software. Fear of parental reaction lead teachers to self-censor. These are all factors that impact all teachers, but for social studies teachers the fears might be compounded by the relatively controversial quality of the subjects they teach, leading them to conclude that the potential problems are not worth the risk of including Internet use, whatever its instructional and learning potential.

I have offered only speculations to answer the question posed in the title of this paper. But I want to conclude by questioning the question itself. How we frame such a question might be as important as how we answer it. In his most recent work, Larry Cuban (2001) argues against blaming teachers with such questions. In reflecting on Cuban's point, I fear that my question assumes that teachers should use information technologies because they are there, not because they are valuable. Or, teachers should embrace change because any change is good. Cuban and others remind us that digital technologies are not value free, and must be examined critically, not embraced and promoted because of perceived societal pressures or technological inevitabilities.

References

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¹ By "digital technology" I mean computer-based approaches or strategies to assisting teaching and learning, as distinct from the software, computer and peripheral hardware, and systems like the Internet and World Wide Web.

² The program referred to is the "Teacher Institute for Curriculum Knowledge about Integration of Technology", or TICKIT program, I co-direct with Curt Bonk, also of Indiana University. The program's Web site is: <http://www.indiana.edu/~tickit/>. A comprehensive description of TICKIT can be found in a paper: <http://www.indiana.edu/~tickit/infocenter/pdf/model.pdf>.

³ They analyzed total investment plus three components, including hardware, software, and support/training.

⁴ A graduate student at Indiana University, Paul Worfel, suggested this explanation to me.

⁵ A graduate student at Indiana University, Marliisa Hughes, suggested this explanation to me.