

INTRODUCTION

When I began this book, all of the students, media specialists, and teachers I talked to had great respect for the world wide web as an educational medium. Perhaps the most passionate advocate of all was one English teacher, Steve LeRouge. Great in the classroom and passionate about the web, he was more familiar with online resources than most people. He had his students use the web for numerous class projects and even taught a special unit in web page critique. In fact, he was so optimistic about the web in education that he made me feel as if online commercialism—the focus of my study—was no big deal. “Teachers don’t have to be that savvy,” he told me. “Kids know a spiel when they see one. They’ve been exposed to spiels all their lives. Kids do know about commercialism and they don’t get taken in easily.” Steve was far more worried about government efforts to filter “adult” web content from school sites than he was about internet commercialization.

But three years later, my research was done, and I emailed some of my conclusions to Steve. As usual, he was smart and funny, but he also had a different mindset to the pure optimism he showed before. Steve was clearly getting fed up with the onslaught of commercial messages that were obstructing his students’ research and learning. Indeed, his reply to me amounted to a scathing indictment of what the web had become:

The pop-up ads alone are annoying, but many (probably most) sites also sandwich whatever article is of interest between columns of advertisements. Even pretty reputable sites like Time.com or ScientificAmerican.com throw pop-ups and columns of ads at the students; even .org sites like pbs.org want to sell you stuff at their "Shop PBS" link! For the most part, if the research topic is a traditional social issue topic like date rape or alternative fuels or sports injuries, the students can pretty much ignore the ads. But, when the research topic is a little more "edgy," the ads follow suit, and then I know I have trouble:

"Hey, Chris, c'mon over here and check out this cool bong!"

"No way, man, that's just not possible!"

"Fer real! they're usin' .50 caliber casings for the bowl!"

"Aw, that's just too whack!"

You get the idea. Do anything on designer drugs or music censorship or legalization of drugs or street racing and I spend 90 percent of my time puttin' out fires. I even had a "good" student (who, I know, wouldn't intentionally stray) get locked into a porn loop when he followed a link on F1 racing. Go figure. I had a student do a paper on disc golf this last semester. Since there are no traditional

sources on the topic, his entire paper was almost entirely based on Internet sources. Do you have any idea how many ads there are for sports equipment and diet supplements on sports-related sites? Once he was past the blizzard of pop-ups and flashing ads, he still had to navigate the home pages, which are designed to give you no real information, but only links, which trigger another wave of pop-ups and ads. Sometimes the actual articles are three or four layers deep. Oy Vey!

Steve was now grappling with online commercialism, which has grown from annoying online ads to something much larger. And that's what this book is about. It's about what capitalism has done to the web, turning what was promised as an "information highway" into a commercial highway in every classroom. Not only has advertising become more pervasive, but commercial interests have also undermined the integrity of search engines and compromised the educational value of most of the web's vast holdings. This book is the story of how this happened, but it also concerns the steps educators, policy makers, and citizens need to take back the internet for education

The year 1995 was a pivotal year in the history of communication technology. It was the year the internet took off in schools—the most exciting communication technology in education since television, thirty years earlier. Educators, librarians, parents, and internet promoters called the new medium a library of information at children's fingertips, and identified the internet as a panacea for education. It was the year President Clinton first "challenged" all American classrooms to get on to the "information superhighway," citing research that the internet would drastically help at-risk students. It was the year community members across the U.S. gave up their weekends to roll up their sleeves, pull cables, and wire schools. These "Net Days" were heavily publicized in local papers and on local TV. Even President Clinton and Vice President Gore (who had coined the term "information super-highway") donned their work clothes to participate in several Net Day wiring efforts.

The year 1995 was also the year that several high-profile advertising campaigns began promoting the internet as a key to greater knowledge and as a technology for both an educational and democratic revolution. The blitz of print and television advertisements portrayed children poised in front of their computers, enthralled with the "knowledge" pouring directly into their brains. Some ads touted that children gave up recess time to stay inside and interact online. In other ads, children magically floated above their desks, buoyed by their imagination and the online conversations they were having with real astronauts. The ads *en force* suggested that children, with their proficient keying skills and easy grasp of technology, were the savvy drivers on the information highway, more adept, even, than adults.

The year 1995 was also the year that Microsoft leader Bill Gates published his best-seller *The Road Ahead*, which introduced his vision of the "Connected Learning Community" via the internet. Gates publicized the book with speeches all over the U.S. expounding on the educational promise of internet technology, and donated the proceeds

of his book to support technology in public schools. It was the year when the internet was surely positioned as an educational technology.

Most significantly, amidst the extensive campaign to exult prospects of the internet for public education, 1995 was the year that the internet became privatized. Built over the previous three decades with government-supported, publicly-funded programs, the internet's U.S. backbone was quietly sold to telecommunications and computer giants in 1995. Thus, at the same time the prominent rhetoric about education and knowledge was in ascendance, powerful corporate interests were reshaping the internet as a commercial tool. It had become a ubiquitous tool as well. By 2000, more than 97 percent of U.S. schools had internet access; a majority of U.S. homes and offices were connected as well. In five short years, the internet had become a mass medium, achieving this benchmark more quickly than any communication technology before (Kurtz, 2000).

To any student of media history, the commercialization of the internet should come as no surprise. Every major communication technology, despite its initial promise as a medium for greater education and democracy, has been overtaken by commercial interests. Film, which promoters claimed would replace textbooks and make all learning visual, did not last long as an educational technology: its high cost of production resulted in dreadful educational film content. The slickest educational film productions were often just thinly-veiled corporate public relations pieces for the classroom. Film would serve the entertainment industry, not education.

Radio, which was more affordable and accessible than film, had greater promise as an educational medium. Initially developed, like the internet, by grass-roots efforts and government investment, radio found teachers and students as its earliest adopters. Radio's early success in education, however, was soon squashed by the intense power and lobbying efforts of the commercial radio industry. U.S. public airwaves were won by commercial interests in 1934, although unlike the internet, there was intense debate over the matter. Then came television, which was hobbled as an educational tool because it was based on radio's commercial model from its inception. Furthermore, the high cost of broadcast TV production made it an uneconomical educational tool. All these technologies would not serve education, no matter how promising. The internet, it now seems, is following suit.

Today, the information highway looks more like a shopping mall than a library. By 1999, researchers determined that 83 percent of the Web served commercial purposes, with only 6 percent serving science/education (defined as serving university, college and research interests) (p. 107). Commercial advertisements, most commonly in the forms of interactive banner, pop up and pop under displays, dominate the web. But more consequentially, commercial services have successfully managed to route users from *all* that the world wide web has to offer to into an increasingly finite and incestuous web of commercial enterprise.

First, commercial web navigation services, which initially generated income through web display ads, now make much more revenue by directing users to the web sites of clients who pay for such placement. Content directories like LookSmart and America Online (AOL) and commercial search engine providers such as Overture accept payments for prominently displaying commercial web sites within their directories or

search result lists. Overture's strategies, which are now common practice in the search engine industry, illustrate the extent to which commercial online ventures are willing to sacrifice content and neutrality for profit. Even those search engines that use rigorous methods to maintain integrity in searches—for example, Google—still end up with search results that are inevitably skewed by the enormity of commercial sites now dominating the web.

Then there are the intensifying efforts among the largest media companies to funnel web content (and web users) into increasingly narrow channels, which are either owned by them or are in partnership with them. With their dominance as internet service providers (ISPs), email and instant messaging service providers, and their strong brand-name identification, companies such as AOL Time Warner, Yahoo! and Microsoft can more easily control the way people use the web and the breadth of information people can locate online. This is not to say that there are not incredible, valuable and wonderful web sites that offer a host of different ideas and a wealth of information. This book makes the argument that the internet does indeed belong in the classroom. No technology since radio has so captivated educators' attention. The medium has enormous potential as a place to share ideas, as a place to publish school projects, and as a place for educators to join together and exchange teaching methods and lesson plans. It has enormous potential as a research tool, as a library, and as a laboratory. As a vehicle for written, audio and visual communication, the internet has unprecedented flexibility and adaptability.

Indeed, the citizens and schools already use the internet for education and many are using it well. But the end result of the internet's now extensive commercialization is that users continue to be directed to an abundance of commercial sites—some valuable, many not—while other potentially valuable online materials are being marginalized as public and nonprofit online spaces are becoming increasingly difficult to find. This is both a problem for educators, who have no organized response to these developments, and all citizens, for success of the internet as a democratic medium and educational tool is dependent upon a plurality of voices.

A Guide to This Book

This book investigates the implications that the privatized, commercialized internet has as an educational resource for students, particularly those in grades K-12. My perspective is informed by studies of *political economy*, which try to understand social practices by analyzing the political and economic connections between macro level power structures (e.g., capitalist enterprise, private ownership of the means of production) and the development of social systems (e.g., schools, the internet). The approach is based on the presumption that the political and economic context of a social system dramatically influences the system's makeup. When considering the internet as a private enterprise, the political economy perspective offers a platform from which to ask important questions about information access, content control, and the future of the internet as an educational and democratic information tool. This perspective enables me to investigate to what degree the internet can and will be an information highway, as its

early promoters called it, or the opposite: a commercial highway filled with advertisements, “buy” buttons, and “information” placed by undisclosed corporate sponsors. .

I use two methodological approaches to examine potential inroads of commercialism in the classroom: historical analysis and case study. As such, the book falls into two distinct parts. Part I historically situates present-day internet educational content in terms of previous educational media (film, radio, and television) and makes comparisons between internet content and the content of earlier media, all of which became dominated by private interests. Part II complements this historical analysis with an explanation of how educators approach and discuss internet content for classroom use. Besides documenting nationwide trends, I offer the results of a year-long case study that tracked the everyday use of web sites in three technologically-advanced Midwestern U.S. schools within the same progressive school district. With this case study I investigate the degree to which commercial interests have entered present-day classroom culture via the web, and the way teachers and students understand and evaluate such web content.

I conclude the book by considering the future of the internet in schools, and point to ways in which the world wide web could be better used as an educational tool. First, I argue that we should work to better understand the internet as a commercialized mass medium, and help teachers expand their critique beyond individual pages of the web to include an evaluation of the internet as a commercially compromised information superhighway. Second, I assert that we should take the next step in the project of the information superhighway. Yes, the “highway” infrastructure had been built, but there has been shamefully little attention paid to the “information” part—the actual educational content of the web.