



Educational Considerations

Volume 27
Number 1 *Theme Issue: Technology*

Article 8

9-1-1999

Privacy, Information Technology, and the Educational Process

Tweed W. Ross
Kansas State University

Follow this and additional works at: <https://newprairiepress.org/edconsiderations>

 Part of the [Higher Education Commons](#)



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 4.0 License](#).

Recommended Citation

Ross, Tweed W. (1999) "Privacy, Information Technology, and the Educational Process," *Educational Considerations*: Vol. 27: No. 1. <https://doi.org/10.4148/0146-9282.1318>

This Article is brought to you for free and open access by New Prairie Press. It has been accepted for inclusion in *Educational Considerations* by an authorized administrator of New Prairie Press. For more information, please contact cads@k-state.edu.

...Technology often has unintended consequences and the drive to use information technologies in the classroom may well have as its unintended consequence the end of teaching as an essentially private activity.

Privacy, Information Technology, and the Educational Process

Tweed W. Ross

In the middle of the Information Age (Toffler) educational institutions have focused on a wide range of issues relative to the application of new information technologies. Child safety on the world-wide has been a great concern for schools. Effective implementation of teacher training to use new technologies has swamped the available resources of even the most affluent schools and universities. Equal access to the tools of the information age is an important issue for schools wishing to avoid creating another inequality between those who can afford the latest technologies and those who cannot. Criminal activities involving computer hackers, drug dealers, and terrorism are significant worries. Overlooked in this plethora of concerns have been serious questions concerning student and faculty privacy and how the new means of electronic monitoring impact education.

For whatever reasons, teaching— which appears to be a fundamentally public activity— has often been the most private of concerns. Faculty members, through their negotiated agreements and common practice, have insured academic freedom by maintaining a policy of privacy. Examples of this practice are found at both the K-12 and collegiate level. In the K-12 arena administrators are often limited by negotiated agreements to classroom visits only after announced pre-conferences. University faculties quickly assert their rights to “academic freedom” when questioned about what goes on in their classroom.

A recent memo from the Provost of a major land grant university went so far to give faculty members “ownership rights” to their lectures. The Provost’s memo cited an opinion of the university attorney that professors held copyright interests in their lecture and its accompanying notes which could not be posted on the web. This opinion gave credence to the view that professors owned a private holding not to be shared outside the classroom. Teachers at all levels feel invaded if video cameras were set up without their consent to record their class for later showing in a public forum.

Lewis Perelman in *School’s Out* stated that, “Learning was an activity thought to be confined to the box of a school classroom.” (22) It is more accurate to state that “teaching” was an activity confined to a classroom box.

Victor Hugo’s great novel, *The Hunchback of Notre Dame*, has a scene where the dean of the cathedral explains that a printed work will destroy the cathedral and by implication the Church. Information technology undermines the educational enterprise by subverting the

privacy held so closely in a tacit arrangement between teachers and the public. Hugo’s example relates that before it was possible to print many copies of a book, architecture was a way to leave a teaching device for future generations. Hand copied books only existed in a handful of cloistered libraries and had little impact on the general populace. Knowledge was a private acquisition gained only after hard work, diligent scholarship and held only by those whose responsible use of the knowledge had been thoroughly molded and tested by the church. Books widened the available knowledge to the great masses that only had to decode reading to be able to learn the wisdom of the ages. However, books only expanded the knowledge authors wished to share.

The invention of the printing press, and the ability to mass-produce books allowed scholars a measure of certainty that their ideas would survive their deaths and be accessible to others. The energy expended in great architectural works was an effort towards building something for later generations but not wide distribution. Hugo’s cleric believed the availability of a more direct way to express ideas (printed books) would lead to all energy being channeled in different directions, and that the golden age of architecture would come to a close. Not only would the *raison d’être* of the Church crumble, but the institutional framework as well would vanish.

Privacy, at least in education, may well be one of the casualties of the Information Age. Lewis Perelman, the outspoken critic of the educational establishment openly calls for the abolition of privacy in education sloganeered by the phrase “learning anything, anytime and anyplace.” Open learning as a dominant practice, threatens the residential university and the compulsory attendance school which are no longer needed to retain the trappings of the educational establishment— scholars with annual contracts, tenure and expectations of employment. Electronic technologies that break the privacy of the classroom box, provide little merit in establishing cloistered centers of learning except to maintain the dreams of years gone by for the alumni.

Perelman was not the only critic that questioned the value of the current educational establishment. Neil Postman, *The End of Education*, redefined education, sans the educational institution. He noted that privacy and its access to the privately held knowledge of the faculty is crumbling, “Schooling may be a subversive or a conservative activity, but it is certainly a circumscribed one.” (ix). Schooling is circumscribed by time frames, classrooms, curriculum, and licensing of its practitioners. Were this to fall away and education become a public open learning environment, privately held knowledge would be jeopardized.

The Information Age may provide the open, public forum enjoyed by Socrates where the only basis for knowledge was the acceptance through logic of persuasive argument. If schooling is to be defined within the forum of public debate and learning— not a closed educational exposition in a classroom— professors and teachers will find themselves open to much examination for what goes on in their new technology driven Agora. Information electronic technologies seem to be a can-opener, prying the lid off the private holdings of the educational establishment in much the same way Gutenberg’s Press and Aldus’ book pried open the tightly held containers of the Church and monastery.

There is a long held difference between public activities— which have no expectations of privacy— and public activities. For example, as we walk our dogs in the evening, we have no real expectation the

Tweed Ross is an Assistant Professor of Foundations and Adult Education and Director of Technology in the College of Education at Kansas State University.

community will look the other way to insure our private stroll. On the other hand both Constitutional and community standards have combined to insure that what is done in our own homes is secure from government and individual snooping. However, there is a large, ambiguous field between these two extremes. If government agents were to document every public move, every walk, every purchase in the grocery store, every conversation, privacy would be grossly compromised. Yet the activities, viewed as individual activities, carry with them no expectation of privacy. The process of monitoring and accumulating data about personal public activities can easily be viewed as a threat to privacy.

Electronics have greatly enhanced the power of individuals and public agencies to document others' day to day comings and goings. Documentation provides a thousand fold increase in the ability to invade privacy, without invading space. As the privacy of the classroom is stripped away by electronic technologies new concerns about the practice of teaching emerge. I have tried in the next few paragraphs to create some interesting- if as yet fictional- scenarios.

Uniformity

Professor Electro has been teaching Introduction to English Literature successfully for many years. This year his class has been equipped with devices where students can press a button indicating that they understand the concept and its development and Professor Electro sees a display of student understanding throughout the class period.

To help other professors this display has been kept for analysis to provide quality monitoring of Intro. To English Literature. This scenario allows the classroom to focus on only those methods the provide conceptual understanding by the most students and other methods—which may meet the needs of some learners— can be discarded for efficiency's sake.

Electronic classrooms have been enthusiastically equipped with electronic monitoring devices where students record their understanding of difficult concepts during lectures. This has been hailed as a way for teacher to modify their presentation and content “on the fly” to meet the needs of students. Would it not also provide an excellent way to insure that all instructors were teaching the same content in the same “tested” way? As state and national governments pursue establishing uniform learning standards to benchmark student progress, electronic technologies insure those in charge of instruction are working to meet politically inspired goals. The drive to test and evaluate in the name of quality assurance seems an adequate example of micro monitoring. Coupled with the power of technology it is a small step to monitor classroom teaching on a daily basis.

Data Mining

A small liberal arts college is approached by a major soft drink manager wanting to fund a substantial research project on the soft drinks preferred by its business majors. They want to be able to track the career paths of these majors and how their soft drink preferences change after they leave school.

Data mining is the process of correlating information from vast databases to establish patterns of behavior. An ominous process in public education might be to compare student test reports to immigration and naturalization reports or the Internal Revenue Service as a method of finding illegal aliens or tax cheats. Other examples compare alumni records, unpaid student loans and tax reports. Schools are the repository of vast databases about both students and parents. To

insure uniformity and serve great many social purposes the individual privacy for students and parents may be erased. Much of this information is already present and available in yearbooks and phonebooks. The power of electronic technologies allows easy searching to find correlations at a much greater speed. While individual privacy may remain secure, the school in this instance has become part of process which identifies groups and opens up their collective behavior for examination.

Commodity

Professor Electro, earlier mentioned as having developed and now refined his Intro. To English Literature course, sadly passes on. The school however has taped his program and with graduate students to monitor classroom concerns, continues long into the future to offers this Intro. To English Literature course to eager students.

Information as a commodity becomes a valuable holding for educational programs to sell or exchange with commercial enterprises. Consider one small example of new student and faculty identification cards embossed on the back with the name of a local bank and a credit card emblem. As new cards are issued to the incoming freshmen each year has the information associated with the student become a commodity that the educational institution has chosen to barter for convenience?

Education and teaching in a public arena become “works for hire.” Schools seeking additional funding may find outstanding classroom teachers' presentations, not as an individual performances by talented educators, but as profitable demonstrations to be captured and circulated electronically.

Global Village

Washington School District initiates a policy to help parents and students keep up on what is happening in the classroom. Using streaming video, classes are made available on the internet to students who have to remain at home or parents who want to know what their children are learning. Thirty miles away, Lincoln School District adopts the same beneficial program for its students and parents. Now the public, can for itself, compare quality of instruction in either school district.

The “global village” of McLuhan painted an idyllic vision an analogy of world where information and knowledge were shared much as knowledge about neighbors is shared in a small town. Small towns have much to recommend them. One of the things given up for living in small communities is the privacy that comes from anonymity. Neighbors know the comings and goings of virtually all who reside there. Small towns tend to be suspicious of those from the outside who enter their tranquil space.

To move to an electronic global village (albeit McLuhan never envisioned the World Wide Web) would require the professorate to come out of its village and welcome strangers into their midst. The implications of having teachers presentations and work compared in a public, electronically distributed forum, may have many hidden consequences.

Ubiquitous E-mail

An administrator sends a message reprimanding a teacher for an action which took place in their class and notes that this message will become part of their evaluation materials. Accidentally, the administrator presses the wrong key and the message is sent not to the teacher, but to the entire faculty.

The nature of traditional mail communication was founded essentially on concepts of point-to-point communications. One wrote a letter to another person. With some exceptions, such as memos and bulletins, authors expected their communication with others would remain private. If not private their communication would remain in the control of the person they had trusted with their thoughts in the first place. Someone might share the contents of a letter. They might even make copies and share their thoughts. But there was a sense of intimacy and control in traditional postal services, not present in e-mail.

E-mail, which at first seems to be a point to point communication has a greater inclination to "shouting from the rooftop." Once the e-mail is sent to another, the very ease of the electronic forwarding totally dissolves the concept of private communications. Having once experienced the effect of forwarding a joke to another, who forwarded it to ten others, who in turn forwarded it to ten others quickly makes one recognize that privacy in electronic communications is non-existent.

Adding to the problems associated with forwarding, one should carefully consider if their electronic mail is being watched. Most would argue forcefully that school officials should periodically scan electronic mail to insure no illegal or unethical activities are being conducted. It is a small step from there to scan email for unwarranted curriculum decisions, union activities, and administrative grumblings. This very nature of privacy invasion may well have the deleterious effect of curtailing the freedom of thought and speech that has marked the liberal traditions of education.

Web publication.

A syllabus for new and unique course is published on the web for the students to use along with a copy of the professor's new book which, although the professor has a contract with a publisher to sell this book, he feels that this would be a great boon for the students. Another professor while "surfing the net" stumbles into this syllabus and its accompanying text and links to the first syllabus.

There is a great move on in universities to create and "publish" web based courses and syllabi. If the design of a course and its layout in the syllabus is the "heart" of the program, publishing them on the web makes them the most public of expositions. It takes little technological effort to copy another's syllabus, make modest changes and post it on a web server. It takes even less to read the syllabus, now available to anyone and use the major ideas in the creation of another course.

Conclusion

Each of these scenarios is not meant to be the grist of new Luddite mongering. They are how meant to open the discussion on what the future of teaching and education will appear to be in a world where the privacy that has been central to classrooms is replaced by an open forum. Learning in an open public environment as different from the closed monopolistic practices of teaching and schooling will be fundamentally different. As Edward Tenner (1996) has been quick to point out, technology often has unintended consequences and the drive to use information technologies in the classroom may well have as its unintended consequence the end of teaching as an essentially "private activity."

References

- Agre, P. E. and Gothenburg, M. (Eds.) (1997). *Technology and Privacy: The New Landscape*. MIT Press: Cambridge, MA.
- Denning, D.E. and Lin, H.S. (Eds.). (1994). *Rights and Responsibilities of Participants in Networked Communities*. Washington, DC. National Academy Press.
- Johnson, D. G. (1999). Is anything wrong with mining data? *Beyond Computing*, June, 16-17.
- Johnson, D. G. and Nissenbaum, H. (eds.) (1995). *Computers, Ethics & Social Values*. Prentice Hall: New York.
- Mann, C. C. (1998.) Who will own your next good idea. *The Atlantic Monthly*. On-line: <<http://www.theatlantic.com/issues/98sep/copy/htm>>.
- Noam, E. M. (1995). Electronics and the dim future of the university. *Science*, 270, 247-249.
- Perelman, L. J. (1992). *School's Out: Hyperlearning, the New Technology, and the End of Education*. William R. Morrow: New York.
- Postman, N. (1995). *The End of Education: Redefining the Value of School*. Vantage Books: New York.
- Tenner, E. (1996). *Why Things Bite Back: Technology and the Revenge of Unintended Consequences*. Knopf: New York.
- Toffler, A. (1990). *Powershift: Knowledge, Wealth and Violence at the Edge of the Century*. New York: Bantam.