The Pedagopticon: Other Eyes in the 21st Century Classroom

Robert W. Sweeny

The Pedagopticon is a revolutionary new technology that allows educators to do away with outdated methods of discipline and punishment. Fusing traditional optical equipment (eye, camera lens) with the latest in high-tech gear (digital camera, weblinked connectivity), the ‘Pedagopticon’ is the future of teaching. It was once said that seasoned teachers had ‘eyes in the back of their head.’ Well, the scientists at ‘technologyisthedevil’ have taken this adage and made it real. Now, you can have eyes everywhere! No corner of your classroom is out of your gaze. The ‘Pedagopticon’ offers a full 360 degrees of monitoring, all viewed with ease on the patented teacher ‘pod-eye-um’. No more tedious scanning for hands eager to complete your thought! No more talk of ‘proximity’ or ‘engagement.’ With the “Pedagopticon,” you just sit back and let the images come to you. Pedagopticon: We put the “eyes” in instruction!

2 This piece is satire; although the references point to the fact that, while the technologies described are fantasy, the mechanisms behind them are all too real. The author would like to thank the organizers of the 2004 New Forms Festival, Vancouver, BC, for the opportunity to perform this paper as part of the conference.
Welcome, Ladies and Gentlemen, to the future. The future of technology, of education, of sight. What you will see in this informational article, or infarticle, is the very latest in developing technology, a device that borrows from the past in order to act upon the future, before it happens. The Pedagopticon.
The Peda-what, you may ask? The *Pedagopticon!* Part pedagogue, part Panopticon.³ The very latest in cyborg pedagogy,⁴ the *Pedagopticon* fuses the control that is inherent to teaching with cutting edge optical equipment, creating situations in which participation is guaranteed, disruptions are a thing of the past, and students are efficiently yet gently coerced into learning.

The *Pedagopticon* is the result of countless hours of research in laboratory environments, K-12 public school systems and university classrooms. It represents the combination of vanguard academic theory and time tested practice. In order to understand the potential for this device to alter the very face of education as we know it, I must first present a brief overview of relevant sight-based practices in the fields of education and surveillance.


⁴ Art educators Charles Garoian and Yvonne Gaudelius (2001) have proposed the idea of a ‘cyborg pedagogy’ that might address and critique the intersections that are more and more common in contemporary societies. Central to this form of pedagogy is the inherent performativity of education and the value of performance artists such as Stelarc and Guillermo-Gomez Pena who critique the cultural and social relationships between technologies and bodies. Garoian, C., & Gaudelius, Y. (2001). *Cyborg pedagogy: Performing resistance in a digital age.* *Studies in Art Education,* 42(4), 333-347.
Surveillance and Education: A View from Above

Surveillance has taken on a negative ring in recent times. The term, which derives from the French *sur*, meaning ‘over,’ and *veiller*, or ‘to watch,’ actually has positive connotations. The protective gaze of a parent over his or her child, the birds-eye view that allows the air traveler a majestic new perspective of the countryside; surveillance is not inherently bad.

The work of opportunistic groups such as the American Civic Liberties Union (ACLU) has presented a skewed view of surveillance as representing an imposition on civil liberties.\(^5\) The surveillance cameras that are increasingly found in public areas worldwide are simply the by-product of the global technology boom; a boom that benefits everyone! More cameras mean more money. In fact, many believe that the cameras effectively deter crime, making those under surveillance safer. This is a safety that one can feel, walking down the crowded sidewalk in New York or Chicago, although one rarely is aware that they are being watched.\(^6\)

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\(^5\) The recent ACLU report on “Combating the Surveillance-Industrial Complex” can be found at: http://www.aclu.org/SafeandFree/SafeandFree.cfm?ID=16224&c=207

\(^6\) As of 1999, The borough of Manhattan in New York City had over 2397 surveillance cameras in operation in public areas (source: http://www.mediaeater.com/cameras/overview.html). These cameras have been documented by the NY ACLU, as well as by The Surveillance Camera Players (http://www.notbored.org/the-scp.html).

A group called the ‘Institute for Applied Autonomy’ has made the location of each of these cameras public. Their ‘i-See’ project allows individuals to map paths of least surveillance through the city (http://www.appliedautonomy.com/isee.html)

In the UK, the massive boom in public surveillance cameras in the 1990's has proven that the technologies are effective crime deterrents. Adding to this preventative aspect is the accompanying placards that note the presence of the cameras. Walking through the crowded streets of London, the signs exude a calming effect. They become mantra-like: "You are being watched." "This area under surveillance." The ever watchful eye of the surveillance camera is merely extensions of a mother's loving arms, bringing those in her gaze closer to her protective bosom.

This is the love that is projected over the grid-like arrangements of desk/chair combo units in public school classrooms the world over. This is a love, in the form of the all-seeing eye, that is questioned by civil libertarians and unruly youngsters alike. Through the advanced technology available to us in these halcyon days of digital bliss, this love can now completely rain over each and every student, beams of light-love projecting from high-power spotlights, reflecting images of purity and uniform docility, captured by high resolution lenses, beamed wirelessly to the command console of the "Pedagopticon." The days of educational bliss are ahead of us, made possible by a simple combination of lens, wire, human, and computer chip. We have the father of surveillance and punishment to thank for this powerful gift: the eminent Michel Foucault.

The Panopticon: Metaphor, Myth, or Motherly Love

When Michel Foucault described the relationship between teaching and surveillance in his landmark self-help book *Discipline and Punish: The Birth of the Prison* (1972), he was speaking

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7 As of 2001, the UK has an estimated 2.5 million surveillance cameras in operation. While commonly described as being a deterrent for crime, the general crime rate in the UK rose by 4.3 percent over the same time period. Rosen, J. (2001). A watchful state. Retrieved August 2007, from http://www.nytimes.com/2001/10/07/magazine/07SURVEILLANCE.html
metaphorically. Schools are not prisons, and teachers are not guards. U.S. schools are increasingly using barred windows and metal detectors to protect those inside, not to prevent their escape.

While these advances are helpful, and profitable, primarily for industrial manufacturers, educational systems are finally getting with the program, replacing cumbersome metal detectors and aesthetically distasteful steel bars with advanced technologies. Closed Circuit Surveillance camera systems have been in operation for some time in many school districts. However, in the 21st century, schools are beginning to change with the times. The Biloxi, Mississippi, school system stands as a pioneering example of the willingness for tax dollars to be put towards something besides the old fashioned textbooks and instructional materials. School officials, in August 2003, installed surveillance cameras in every classroom in the district, at the cost of a mere two million dollars, raised from funds donated by local casinos. Bars and metal detectors out, cameras (and legalized gambling), in!

“A relation of surveillance, defined and regulated, is inscribed at the heart of the practice of teaching, not as an additional or adjacent part, but as a mechanism that is inherent to it and which increases its efficiency” (Foucault, 1977, p. 176). Foucault uses the examples of schools, hospitals, and military training facilities as well as prisons to describe the extensiveness of panoptic forms of self-control within primarily industrialized societies. It is important for educators to consider the connections between these aspects of society, particularly in regard to the emphasis upon regimentation and hierarchy that is prevalent in U.S. schools.


The move towards both disembodiment and luminosity that the Panopticon represents is described by Gilles Deleuze (1980) in his book on Foucault: “Prison, for its part, is concerned with whatever is visible: not only does it wish to display the crime and the criminal[,] but in itself it constitutes a visibility[,] it is a system of light before being a figure of stone, and is defined by ‘Panopticism’” (p. 32). Deleuze, G. (1988). Foucault. (S. Hand, Trans.). Minneapolis: University of Minnesota Press. (Original work published 1986)
While the Biloxi surveillance system is a step in the right direction, it does not put the power of the digital gaze in the hands (or eyesockets) of the educator. It also operates in a subtle manner, the ceiling mounted cameras blending in with the PA monitor and fluorescent lighting, all meshing together to create efficient networks of control. However, the gamblers of Biloxi deserve to see their tax dollars at work. It is the need for an affordable yet comprehensive form of surveillance that has brought us the *Pedagopticon*.

**The *Pedagopticon*: The Eyes Have IT**

Based upon the consumer demand for high-tech gadgets, as well as the general acceptance of all things futuristic by contemporary youth, the scientists at TechDevil have developed a wearable device that allows for complete control in the classroom, while appearing stylish and 'hip.' The Panopticon is a lightweight headset made of space age materials that incorporates two webcams and two high powered spotlights, providing 360° of unobstructed vision.

The *Pedagopticon* allows educators to do away with outdated methods of discipline. No more tedious scanning for hands eager to complete your thought! No more talk of ‘proximity control’ or ‘engagement.’ With the Pedagopticon, there is no doubt who is in control. It’s you, or more accurately, you and the *Pedagopticon*. Students will begin to see you and the *Pedagopticon* as one and the same. In fact, you might even find that your own eyes are less effective. Tests show that many educators gradually use their eyes less.

This tendency can also be seen in the development of consumer digital technologies -- slimmer, lighter laptops, smaller cellphones -- negotiating the gray area between invisibility and brand recognition. Cell phones are now Bluetooth-connected earpieces lodged inside the ear. This embodiment is similar to the incorporation that Foucault describes, although this process of increased invisibility is behavioral rather than physical – the technologies of surveillance begin to impose limitations on behavior through self-limitation rather than physical constraint from outside.
and less – the powerful lenses of the Pedagopticon take over, allowing many overworked teachers to catch up on much needed sleep.

No more futile tactics that keep students from participating. No more avoiding eye contact to remain silent during ‘question and answer’ sessions. With the Pedagopticon, all eyes are on you – literally! Best of all, the Pedagopticon merely extends the forms of visual control already in use in most classrooms. The prison space of the Panopticon becomes the loving environment in which every student is seen, every comment is heard (and documented), and every child is wrapped in the loving arms of an all-seeing eye.

Putting the ‘Eyes’ in Instruction

The *Pedagopticon* uses the forms of vision that are already in operation in the classroom, types of classroom management and control that are time tested. These ‘ways of seeing’ rely upon the physical arrangement of the classroom, as well as the ability for educators to see what will happen next.

Effective teachers use their power of sight to monitor individuals, preventing errant behavior and quickly acting to eliminate those in practice. The primary techniques observed by our scientists in laboratory situations are scanning, isolating, and comprehensive views. While the effective teacher uses these techniques in conjunction with one another, it has been impossible for anyone to use them simultaneously – until now!

The *Pedagopticon* simultaneously scans the classroom, isolates individual students, and provides a comprehensive overview of the classroom and its surroundings. The built in monitor displays these three views, allowing the educator to do the work of three traditional teachers. Teachers wield more power, school boards get three times the work, and students think the ‘space-age’ contraption is cool! An added bonus – recent studies find that many consumers feel safer in spaces equipped with surveillance technology. Everyone wins!

Educators have always relied upon the physical structure of their classroom to reinforce proper behavior. Desks are typically arranged in a grid, allowing for names to be easily learned, seating charts to be efficiently created, and to limit ‘blind spots’ – spaces where reluctant or unprepared children might hide.12

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12 In *The American School 1642-2000*, Joel Spring (2001) describes the tension between control and flexibility in classroom spaces in the early portion of the 20th century. The progressive education movement led by John Dewey evolved into a variety of forms including the push in the 1970’s for ‘open classrooms.’ These informal, student centered spaces were a response to the influence of behaviorist B.F. Skinner, who proposed that schools could be scientifically engineered to function optimally through reinforcements – both positive and negative – from management: teachers. For a discussion
The Pedagopticon builds upon the uniformity of the physical classroom space, allowing educators to easily and quickly see irregular behavior. These behaviors are recorded and digitally catalogued, using the Pedagopticon “Ped-a-pro” software, making unwanted behaviors such as note passing or nose picking a thing of the past. With the addition of the optional night-vision lens, you can even control those situations that have traditionally been rife with disturbances: the viewing of filmstrips or slide projections in darkened spaces. Spit-wads, make out sessions, or simple snoozing? How twentieth-century!

Effective teachers have traditionally used proximity control to reinforce appropriate behavior through nonverbal means. With the Pedagopticon, space is a thing of the past. Individual cameras can isolate certain behaviors from a distance, eliminating unnecessary movement. Ah, the ease of control and organization, all from the comfort of a fixed position in front of the class.

With the addition of the (optional) Pedagopticon “Pod-Eye-Um,” educators can connect the power of the Pedagopticon to a systemwide database, allowing for effortless access of individual student records and family histories made possible by the Total Information Act of 2001, in conjunction with the Department of Homeland Security and the USA PATRIOT Act.¹³


¹³ The USA PATRIOT Act, signed into law by George W. Bush on October 26, 2001, gives law enforcement authorities expanded access to surveillance procedures and search and seizure techniques, specifically impacting on-line activities (http://www.epic.org/privacy/terrorism/usapatriot/). Bush’s position on the impact of developing technologies and civil liberties is quite clear: “The gravest danger our Nation faces lies at the crossroads of radicalism and technology.” George W. Bush, National Security Council Address, September 17, 2002 (http://www.whitehouse.gov/nsc/nssintro.html)
The Pedagopticon is a teaching tool that is sure to please everyone involved in education, making sure that no child is left behind.  

See the Future Before the Future Sees You!
The future is surely in sight, with the Pedagopticon. The latest in the bountiful marriage between military technology and industrial organization, the Pedagopticon not only makes educational sense – it makes cents. Hundreds of thousands of cents, to be exact, cents that go straight to our research team, and our fine educational partners at Halliburton. The fun, and the funds, are guaranteed to keep coming. Think about it – a regimented student body makes for a diligent workforce and dutiful armed services. The Pedagopticon restores order to a society that has lost its way. And, best of all, it does so through the educational system that so many have given up on.

The 2004 arrest of Steve Kurtz, Associate Professor of Art at the University of Buffalo (NY) and member of Critical Art Ensemble, stands as a test to the implications of the USA PATRIOT Act in regards to both artistic and educational practices (see http://www.caedefensefund.org/ for a complete account of this case).

14 NCLB, or No Child Left Behind, is the comprehensive plan for educational reform introduced by the Bush Administration on January 8, 2002 (http://www.ed.gov/nclb/landing.jhtml?src=pb). It emphasizes accountability of individual schools, measured by elaborate standardized tests. Many have criticized the plan for requiring that school districts adopt new costly testing procedures without also providing appropriate funding, for emphasizing reading and mathematics at the expense of subjects such as art, and for aligning school reform with neoliberal political and economic policies. (See the American Educational Research Journal, 44(3), Special Issue on No Child Left Behind, September 2007, for a comprehensive critique of NCLB).

When school districts across the United States were resisting the NCLB Act, with the approval of the National Education Association, then-Secretary of Education Rod Paige called the NEA a “terrorist organization” in February 2004. His quick apology did little to appease the 2.7 million member group, who called for his removal.

15 “Sometimes willingly, sometimes not, the private sector is playing a key role in the push toward a frightening new surveillance society.” Jay Stanley, Communications Director of the ACLU’s Technology and Liberty Program (see http://www.aclu.org/SafeandFree/SafeandFree.cfm?ID=16224&c=207).
Close your eyes. Imagine a time when every aspect of your life was private, your every move was not recorded. Open your eyes, and see the future – Before the future sees you! *Pedagopticon.*