

WIRING JUDE THE OBSCURE

AN INTERVIEW WITH ROBERT McCLINTOCK,

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IA: We took a look at your strategic plan for education leadership — "Educating America for the 21st Century"— and we think one of the very important points you raise there is that educational change shouldn't be technology-driven, but that information technology actually alters the spectrum of potentialities within which we act. So educational change is still very much a question of creating sophisticated learning environments. What would you expect from this kind of an environment, what would be your dream environment?

RM: I hope I live long enough to witness my dream environment. We've had a series of projects that have been moving towards that environment: one is the **Dalton Technology Plan**. Starting around 1990, we had around a million dollars a year to really build a well-designed technology environment at the school. The project has slowed down over the last couple of years, and the intersection of it with the rise of the World Wide Web has altered the opportunities and constraints a little bit, but it is a major step towards what we want. The key thing there was that we realized that the computer as an education resource is a social artifact rather than an individual one. A personal computer is misnamed in a way, it should be something that a small group gathers around and that contains a shared project that they're working on. The real education takes place in the interaction of people with powerful tools that the well-read environment provides to children of all ages. We've done a lot of exploration curriculum design or curriculum design that involves exploration in information environments. Since then, we've had the **Harlem Environmental Access Project**, which links five schools and the County Cullen Branch Public Library into the World Wide Web through Columbia University. We work with teachers in the schools to develop earth science environmental education issues. . . . We are also involved with two new projects, one called **Reinventing Libraries** which will go into the school libraries with broadband connections, and then will have connections from the library — using it as a curriculum resource base — out into the classrooms. We're working with schools, in a sense, to redefine the role of the school library, from the keeper of books and the circulation of printed resources to a place that can help teachers and students to maximize their use of the Web and other online resources. Most recently, we've been working along with the **Center for Collaborative Education**, which is a small center that formed through funding by the **Annenberg Foundation**, in order to build up public schools that are reforming on the small schools principle — about a hundred students per grade. We have a large challenge grant for technology and education that just got funded and that will expand the kind of networking arrangements of these other three projects, form a

broader base of schools and academics who are interested in working with kids in the schools, and a kind of long-term five-year horizon.

IA: If you look at those projects respectively, which ones have been most successful, what did you learn from them, and what didn't you anticipate when you started out?

RM: What we didn't anticipate particularly was how much equipment and infrastructure was there when we went into the Harlem schools and other schools that are in poor areas, low socio-economic areas. The image that there are schools like Dalton that are all "have schools" and schools that are all "have-not schools" has a kernel of truth to it, but it needs to be understood in a much more complex way. Much of the equipment in those schools was not being well used, but it's there and it's highly usable equipment. There is a major opportunity for projects like our challenge grant to have some multiplier effects, because there is already a lot of usable and useful equipment in place that the Internet, World Wide Web and broad-bandwidth endeavors can activate and that may serve quite effectively to facilitate endeavors at greater educational equity.

IA: One term that is now frequently heard in this context is "media literacy": do you find that kids are sometimes more media-literate than their teachers?

RM: Just as there is a great amount of street-smarts in the kids, there's a lot of media- and computer-smarts. We need to recognize that the era of educational authority where the teacher is the main font of knowledge and information for kids just doesn't pertain anymore. Often the kids are far along in their mastery of technology; they need help with broadening and deepening the cultural, aesthetic, political sensibilities that they can activate with all of that. There are many resources in the kids, in the schools and in the teachers and the technology gives us a chance to work with them in a new way. It can be deployed in ways to make all the nightmares come true, but it can also be deployed in creative and liberating ways that promote social interaction, that promote collaborative work, promote a sense of efficacy in the kids — so that they can cope with the world much more effectively. The culture often suggests to them they can't. All those things are very positive, and no more expensive than filling a room up with thirty computers, without any elbowroom, and having everyone learn how to type in unison. It really is a matter how x-number of resources are deployed and utilized.

IA: Technology in education certainly brings about a certain restructuring of hierarchy. As you said, teachers become more like intellectual coaches. There sometimes seems to be some resistance to this model — have you experienced any problems when you've tried to implement programs?

RM: Yes and no. Most teachers are actually trained in an environment that puts a premium on progressive pedagogy— that's the Greek palaver, Jean-Jacques Rousseau, Dewey — and at one level that's what they think really good education is all about. I

think most teachers who have experience in the system as it exists — whether it's here in New York, in Paris or Istanbul, virtually any place in the world — are working under the limitations of having to work with textbooks, and against tests, and within a relatively standardized curriculum where the whole process is much more bureaucratized. They learn that to succeed in that system they have to set aside a certain amount of what they believe in and work with the constraints as they find them. When you introduce technology configured to promote group work, a pedagogy of inquiry, and project-based learning, some will react and say, "Ah, this won't work! All my experience tells me that the world is not this way." A few will say, "Maybe it will work, let's try it." Then they begin to find that it really does work, and it's not hard for them to shift out of an authoritative instructional mode to one where they are managing the inquiry of their kids. Others begin to see that, and the process spreads by contagion...

IA: So how do you envision the future of distance education? Right now, it's often promoted in terms of saving money—"it cost much less than building a high school" which, to some extent, has dangerous implications. So what do you think will happen?

RM: Right now, I suspect the American public and other publics of being parsimonious partially because the controlling smart-money judgment for the last several decades has been that it would be great if it were possible to make something work much better — but that you can really pour money into it limitlessly and not have much effect, that it is just a bottomless bucket. I think that if it can be shown — and this is the strategic principle behind a number of our projects and a number of other good projects around the country — that there are reforms possible in education that may cost x-amount but will really work, it will not be hard to mobilize that x-amount, even if it is a significant increase in total expenditures. If you could show that, with an added 2% of GNP, you could wipe out Alzheimer's disease and cancer, then people would invest, but right now there's a growing skepticism that any added expenditures will really help very much.

IA: Speaking of money and education, "knowledge" and "capital" get mentioned together fairly often these days. It's striking to see the Web, which is used to some degree in ways that are familiar to people who do research in an academy or library, suddenly become so famous in the media. Is there a way in which the aura of this technology is at least momentarily opening a few windows because it affects assumptions about the underlying value of knowledge, makes knowledge appear more important?

RM: Not only more important but more accessible. However; I'd like to go beyond the term access because it's too passive. Participation — participation in culture, participation in knowledge, participation in art — is becoming much more feasible for a broad spectrum of the population who in the past have known that it existed somewhere over there, but had difficulties in breaking through, to be on the inside of it Thomas Hardy's *Jude the Obscure*, I think, is a wonderful late nineteenth-century novel about this difficulty for a peasant who had all the capacities to take part in the university life of

Oxford or Cambridge, but just wasn't able to make the cultural moves that would provide entry. We're now on the desktop of any school in Harlem or any other location in the world. Literally, there's detailed entry into virtually the life of every institution of higher education — if you use something like Yahoo's listing of homepages of colleges and universities in the United States or anywhere else in the world. That means that kids from early on and from any social origin — in so far as they have access to the Net — will have the ability to acquire a familiarity with the life of higher education that would exceed that which has been possible at virtually any private elite school up until a few years ago. It will take a while for us to realize all the social implications of that kind of thing. One of the things that interest me about the public presence of art is that the difference between the museum as the work of its curators and professional staff, and the museum as something publicly presented is something that, I think, is going to break down. I'd like to see programs develop where not only what's hanging at the Metropolitan Museum but also what's in the Met's warehouses is available online, along with some of the curatorial and acquisition reports-programs where there are virtual museums in which nothing is hung, but where you are now curating the "American Paintings" wing of the Metropolitan Museum. What are you going to hang? Why? Do it in our virtual museum. I think that will get people thinking about our artistic heritage in a much more active and participatory way — that's just one instance of what I think is an almost endless breakdown between esoteric knowledge and public participation.

IA: So our contemporary *Jude the Obscure* can more easily find himself or herself on the inside.

RM: Exactly. Outside is then for those who lack access to the information infrastructure, but the whole information infrastructure turns inside out.