

Mind of a teacher

Steven Pinker, researcher, author and teacher, has put his course at MIT on the net. John Bald meets him

Tuesday June 24, 2003

[The Guardian](#)

Steven Pinker, internationally famous researcher and author, is first and foremost a teacher. He may be director of the Center for Cognitive Neuroscience at the Massachusetts Institute of Technology, but he also holds an MIT teaching award as a MacVicar Fellow.

This reflects both his lucid and enthusiastic teaching style - "nearly the entire class is actually participating in every lecture," said one colleague - and also what comes across as a natural belief in teaching and learning as an expression of democracy.

His introduction to psychology course was the prototype for MIT's open courseware programme, which allows the general public (or students at other universities) access to the course materials of the world-famous university. Emails to his MIT website receive thoughtful replies, signed "Steve". He accepts congratulations on his move to Harvard - "institutionally in a month, physically end of summer" - with a straightforward grace.

Pinker sees his main strength as a teacher as "explaining difficult concepts in ways people can understand, breaking them down, systematising them". He takes care over analogies, trying to find one "that goes to the heart of the concept that must be explained. It doesn't hurt to entertain, but if you just do that, students see through it very quickly."

His style also seems to inspire confidence in students; as one put it, following his teaching award, "learning from Professor Pinker, all at once one feels smarter". The main weakness in university teaching is, in Pinker's view, a tendency to "have teaching reflect very closely the practices of research". Too often, he says, teaching is based on presenting and analysing flaws and contradictions in research data. This, he says, "leaves the student in a state of confusion. Why spend all this time on flawed experiments and false theories? Why can't we think about true theories and why things do work?"

"You have to give people some kind of conclusion that is defensible, but not always focus on research techniques. For undergraduates, you want to convey some increased understanding, not get totally bogged down in contradictions and flaws."

How far, then, can good teaching be made available to students in less prestigious institutions than MIT and Harvard? Pinker has had "surprisingly little" feedback from his internet course in terms of questions from readers, but was placed on an MIT committee to consider the consequences of the system. There was a fear that star professors would take courses they had developed in the institution, package them commercially and sell them.

There was also a real fear that people would not share their work with other faculty members, and that the idea could be the end of the traditional, expensive, American university. Why pay \$35,000 (£21,000) a year to hear Pinker when you can pay \$500 (£300) to hear him on the internet? There was even thought of "some New University of Costa Rica - students could work on their tan and fire up lectures by Stephen Jay Gould, Samuelson and other stars, with no need to go to the bother of hiring professors". To date, MIT's internal analysis is much more optimistic, with over 92m visits to the open courseware site (44m from North America, 19m from western Europe, 17m from Eurasia, and just over half a million from Africa).

Users include a group of refugee Ethiopian engineers from Kenya, a chemical engineer from India, and large numbers of teachers and students from other American universities. Despite snags with individual courses - the Shakespeare in Film and Media course, for example, is not fully accessible because of copyright problems - open courseware already allows students at any university access to the basic MIT course.

However, Pinker sees a risk that the internationalisation of knowledge may not bring any increase in democracy. One reason is the high cost of scientific journals. Journal publishers, says Pinker, "add virtually zero value, don't pay editors or writers, and make a fortune. All they ever did was smear ink on the paper and put copies in the mail."

Contributors, including himself, have to pay to have their own work published, and do all the refereeing gratis. Pinker is "fed up" with all of this money going from libraries to publishers, and thinks the "huge prices" are keeping journals out of the reach of third world university libraries, and hence of "bright kids in Africa and India". Computers have changed the nature of publication, and he sees a revolt coming, beginning with mass resignations of academic staff from journals.

Pinker is in London to promote the paperback edition of his book, *The Blank Slate: The Modern Denial of Human Nature*. While he sees the continuous, politicised debate over nature and nurture as "banal", he can't avoid it. Not least because what he sees as his main scientific evidence - studies of genetic factors in twins - is based squarely on an analysis of the effects of genes versus the effects of being raised in the same family.

He has preserved himself from tar and feathers partly by his transparent commitment to freedom of thought, but also by quick thinking and careful phrasing. For example, he considers that IQ can account for individual differences in groups of people, but not for differences between groups, a distinction that removes him from the Bell curve racial controversy. Pinker acknowledges that the blank slate theory was never scientific, that no one believes in it any more, and even that it was based on the good intention of making racism, sexism and class prejudice "factually untenable".

But, somehow, its underlying tenet, derived from Locke's idea that our minds begin as "white paper void of all characters, without any ideas" grew into an "official theory", enforced by "accusation, intimidation, name-calling and moralising intellectual questions that are questions of fact".

Pinker is not displeased with the idea that he has written the theory's obituary. He is rude about philosophers in his book ("philosophy today gets no respect") but appears more generous in conversation, recognising early philosophers, from Plato to Locke, as "proto-scientists and armchair psychologists".

What has brought him most flak, he says, is his attack on modernism in art. Pinker thinks the decrease in the number of "compelling" works in music and painting can be traced to "movements denying that there was any such thing as human taste or pleasure in art". Art, he says, "is in our nature, in the blood and in the bone," and "artists are sexy".

- *The Blank Slate: The Modern Denial of Human Nature* is published by Penguin, price £7.99