Book Reviews

Anthony Adams and Esmor Jones. TEACHING HUMANITIES IN THE MICROELECTRONIC AGE. England: The Open University Press, 1983. 150 pp. \$10.00.

One question raised by this title in the back of many people's minds is, how can a machine ever teach something called a humanity? Never mind the expostulations from computer people, that machines do only what people tell them can a machine seriously represent what it is to be human? Even if we keep an open mind about the strange modern possibility that human beings may indeed be systems that run on the same lines as certain machines that can be envisaged, where among us is that godlike paragon of systems designers who will presume, now, to design the ultimate model of a human in machine form? Would the rest of us trust such a claimant to represent - in that concept of humanity - anyone else but himself?

Well, we see in part, and we prophesy in part. And that which is perfect in computers is not yet come - but who will claim after all that human teachers have ever been perfect in passing on a grasp of the humanities to all their students? There is seldom much rationality behind the resistance put up by guardians of the culture - to the advent of computers in schools, a resistance that Adams and Jones have felt they must constantly counter-attack in this book - hostile reactions guite certainly more infuriating in the halls of academe of England than on this side of the Atlantic. However the authors do seem a little haunted by it all; one weakness this book may have. apart from various redundancies arising from the speed with which they have brought it out, is the recurring note of mild hysteria that emerges from time to time, expressed in dire warnings couched in the absolutist rhetoric of letters to the Times: "The one thing that is quite certain about that world (of the 1990s) is that it will be very different from that which any of those teaching (its future school leavers) can possibly

envisage"; "there are strong economic and social pressures that may well mean that we shall have to radically reorganize society if we are to survive at all."

The valuable things in this book however, will not easily be found anywhere else, and will come like manna to many a teacher struggling with such doubts and fears and looking for a way that will both make sense and bear fruit among the small throngs of (potential) humanity waiting in their classrooms. Adams and Jones very frequently cite, in satisfying detail, good cases of inventive computer use in classrooms - cases that open one's eyes in an instant recognition that "This is good stuff.". They bring these in not as items in a how-to-do-it text, but in support of their argument that teachers themselves must and can take control of this new medium.

The same breadth of view with which the authors have attempted to range the entire field of issues in society that are at all related to their topic (leading them into some digressive and at times repetitious polemics) renders the practical side of their book really rewarding. With these practical illustrations they establish very effectively certain major educational objectives that computers are uniquely qualified to teach (and at a very early age). These are confidence with machines; skill with the keyboard; freedom from drudgery when calculating, and in locating information; for slow learners, accessibility and high motivation; and most important, sophistication in classifying things, and in asking the right questions when solving new problems.

Reading their chapter on the "Language Arts" curriculum, we consider how working with a group on adventure games trains students in cooperation, lateral thinking, and various novel elements of linguistic skill (such as making essential refinements in the two-word sentences that computers understand); and at the same time does much to solve the familiar management problems that a teacher faces in conducting practice in talk within groups in class. We consider also the opportunity for story developments of a challenging variety, along the lines of "Dungeons and Dragons" but equipped with the situations and the casts of characters taken from various literary classics; the emergence of participation stories and of such new literary forms as kinetic poetry; the undertaking of creative writing by a class in two stages - first analysing and controlling the manipulations of language that are appropriate to a given genre, and then themselves inventing, using the same parameters that they have just discovered; and using drill programs, that can check spelling or can put students through cloze procedures and sequencing problems (along the lines of a language or reading lab - and we are of course warned about incurring the known dangers of such systems).

There is an equally useful chapter on social studies, focusing on computer awareness as a social need, followed by

another, general chapter on teaching the humanities curriculum. However, it is as we read this last, with its sections on readability and information provision, and on games and simulations, that we begin to wonder if a main point about humanities has not been missed somewhere in the sands of argument that keep drifting across the discourse of the book.

Early on, among the preliminaries of Chapter Two, the authors had quoted Marshall McLuhan: "Electric information environments ... alter our feelings and sensibilities **especially** when they are not attended to." As we reach the end of the book, these feelings and sensibilities - which a humanities curriculum presumably exists to protect and refine - seem hardly to have been attended to by the authors themselves, who had underlined that phrase in the quotation. They perhaps have left this rather basic duty to those future collaborations of teachers that they rightly and urgently advocate throughout the book. That would be understandable, but not altogether satisfying; groups of teachers are just as susceptible as anyone else to the prevailing fashions, in value or in denial of value, that alter feelings and sensibilities.

The thing is that our authors do have another value in mind. They are excited as all get out (as who wouldn't be after reading Papert's "Mindstorms"?) about the potential with computers for the early acquisition by youngsters or real knowledge, knowledge which is not merely information but also the power to make something of it - an agility with and mastery of concept-making that will reward them with mental independence. This is heady stuff for academics, when you see children in elementary school eagerly and easily grasping ideas that undergraduates at university have traditionally struggled with. It is no accident that in Papert's discussions of the discoveries children make with Logo the word powerful repeatedly crops up. For knowledge is power, and one of the things Adams and Jones greatly fear is a concentration of that sort of power in the hands of a commercially sustained, technocratic elite. They would like to see a socio-economic revolution that would upset all that at the hands of a population controlling its own learning at the keyboard, and they're worried that it may be already too late.

There seem to be two things that could be objected to in this scenario of theirs (if indeed it is a fair presentation of their views). First, a monopoly of communication and understanding is really hardly feasible under modern conditions. Even in totalitarian regimes which keep the supply of telephones down to one per village, governments are constantly having to come to terms with the fact that their peoples know a lot more than they used to, and consequently are far more aware of the alternatives that they can reasonably expect. In our own society, as the film **War Games** shows, the mighty and intimidating wizardry of corporate computers can be dissolved by the touch of that modern fairy prince, the high school kid in sneakers with a heap of electronic junk in his bedroom. Finally, the authors' own book demonstrates the working of one factor in keeping the doors to independent action open wide - the freedom to publish.

Second, knowledge in its abstract state is unfortunately not what most people want, except in the limited quantities that will serve for their immediate use. They will make do with just enough power and information to manage, in a complex and to them sufficiently interesting world, the emergencies of their personal existences. Very few can enjoy or afford exercising the sustained inquisitiviness of the scholar into matters that are not apparently pressing. Although it is clear that children of all kinds find working with computers, rightly done, an exhilarating pursuit that can have lasting benefits, they will give the same enthusiasm to sports and puzzles - but rarely for life. We must not get too upset, then, if most people continue to prefer simply to be carried along by cars and aeroplanes and computers without knowing how they work, implicitly trusting their fellow citizens who do to monitor each other and to keep things within humane bounds.

How then to safeguard the humanities? Trust in others has a lot to do with it, for the humanities have always been learned by interacting with and empathizing with other people who handle their feelings and sensibilities well and who consider them important enough to discuss. How much more interesting than stuff coming from a computer can ever be, are drama and the stuff of literature. These engage us with people. The quickness of the eye and mind will beat the average hand on the keyboard (and the coding and decoding that goes with it) everytime. Just consider the clumsy repartee to which the machine treats us at the best of times. Only by relating with other human personalities in whom we can recognize ourselves do we discover and shape our own.

The devices and activities with machines to which Adams and Jones introduce us will make it much more likely that young people of the future will approach the humanities with lively minds. But the transition from interacting with the machine to engaging with the human, whether that engagement be within ourselves or with others, is vital and must be ensured. Some other book perhaps will get to that.

Adams and Jones enlarge rather optimistically, for example, upon the possibilities held out by word processing in class. No question that the labour-saving, the instant clean look of the text, and the ease of reformulating it are powerful and beguiling incentives that can make the whole approach to literacy and writing vastly more attractive, especially for those to whom, having as yet inadequate skill, it has otherwise been a drudgery without reward. But when they predict that this machine will "significantly affect our whole approach to the composing process and that, for students and professional writers of the future, writing and composing will become a much less linear process than hitherto," they betray a notion of how one writes well that is surely misleading. Few professional writers would call the critical element in that process linear, no matter how fluently in any actual drafting their words may flow in lines across the page. The crux of writing lies in the poised attentiveness of a fully functioning mind, flickering constantly back and forth over all the intricacies of itself and its subject in a determination to grasp it all both whole and in detail. No matter how skilful our future students may become at the keyboard, even the tiniest distractions of coding and decoding involved will hardly permit that utter concentration on one's subject, vital to achieving subtleties in language, that is fundamental to sensitive composing.

Such very occasional lapses notwithstanding, this book in its own way conveys the same rare sense of wholesome excitement about the basic healthiness of computers that Papert's **Mindstorms** did; and we owe such authors honour who, by publishing, are keeping open for the rest of us options of great promise. That is no small service to the human race.

> John K. Harley McGill University

Frank Smith. WRITING AND THE WRITER. Toronto and New York: Holt, Rinehart and Winston, 1982. 257 pp. \$20.25.

Writing and the Writer presents the view that the ability to write fluently is as important and as accessible to most of us as is the ability to read. Writing, the author insists, is far too important to be left entirely to the professionals; it is an essential means whereby we can discover what we know, by which we organize our knowledge, give shape to it, and acquire new insights. Writing is not thought, anymore than language is thought, but unlike other forms of language, writing enables us to observe the products of our thought, to interact with them, to "put thinking to work and increase its possibilities."(p.35) The results of this process of self-discovery can lead us to change our view of the world; for the author, writing is potentially a revolutionary activity.

The reader will not be surprised, then, to discover that Smith places much less emphasis on the effect of audience in determining the shape of what one writes than do many other authorities in this field. The communicative function of writing