Contents

PART	1: A REVIEW OF DEVELOPMENTS	
1.1	Experience in Using Computers for Learning by D. Hawkridge	5
1.2	Information Technology and Education: the Approach to Policy in England, Wales and Northern Ireland by R. Gwyn	35
1.3	Computers and Teacher Education by J. B. H. du Boulay	51
PART	2: EDUCATIONAL COMPUTING IN PRACTICE	
2.1	The Evaluation of Student Learning by S. Kemmis, R. Atkin and E. Wright	63
2.2	The Spanish Main: an Exploration of an Educational Role for Computer Simulation by B. Holmes	73
2.3	Boys Muscle in on the Keyboard: Girls and Information Technology by M. Gribbin	83
2.4	The Shame of American Education by B. F. Skinner	87
2.5	Who Controls CAL? The Case of TRAY by P. Surgey and P. Scrimshaw	101
PART	3: EDUCATIONAL SOFTWARE	
3.1	Why LOGO? by B. Harvey	117
3.2	Programming by Rehearsal: an Environment for Developing Educational Software	137

3.3	Words which Dance in Light by D. Chandler	145
3.4	LOGO Programming and Problem Solving by R. D. Pea	155
3.5	Why PROLOG? by J. Dean, J. Harland Briggs and J. Nichol	161
PART	4: THE FUTURE OF EDUCATIONAL COMPUTING	
4.1	An Introduction to Artificial Intelligence by P. H. Winston	181
4.2	Themes and a Case Study of Knowledge Engineering by E. A. Feigenbaum	193
4.3	Production Systems for Modelling Human Cognition by R. M. Young	209
4.4	The Institutionalization of Mediocrity and the Influence of Outsiders by J. Self	221
4.5	Social, Political and Economic Problems by D. Hawkridge	235
4.6	Information Technology, Education and the American Future by J. C. R. Licklider	253
4.7	A Prototype Electronic Encyclopedia by S. A. Weyer and A. H. Borning	271
4.8	Microcomputers in Education: Living and Dead Labour by P. Linn	297

335

Index . . .