## NEW INFORMATION TECHNOLOGIES

## A CHALLENGE FOR EDUCATION

В	1	8	l.	Ì	O	T	H	E	K	
 nven	:: <del>*****</del> *	A100-2411111	1981 HS10	/	7	<u> </u>	37	ን		₩.

Fachbereichsbibliothek Informatik TU Darmstadt

## TABLE OF CONTENTS

• REFACE	,
Chapter I	
POLICIES WITHIN A CONTEXT	9
The Context The Growth of Information The Cultural and Existential Concerns The Demands of the Economy Pressures from within Education The Policies Policies for Schools Policies for Higher Education Pragmatism, Flexibility and Uncertainty	11 14 16 18 19 24
Chapter II	
STRATEGIES OF IMPLEMENTATION	27
Non-School Strategies in the Éducational Response Programmes for the General Public Programmes for the Young Telecommunication-based Projects Strategies of Policy Implementation Developments in Primary and Secondary Education Developments in Higher Education More Unresolved Questions	28 29 31 33 33 41
Chapter III	
THE IMPACT ON LEARNING	44
The Time Dimension of Learning The Context of Learning The Content of Learning Reading Writing Numeracy The Evolution of Basic Skills The "Other Virtues" of Computer Programming Pedagogical Approaches Information Technology as a "Translator" Information Technology as an "Evaluator"	48 50 50 52 53 54 55 55 60
Chapter IV	
THE IMPACT ON THE EDUCATION SYSTEM: TEACHERS, TEACHING AND CURRICULUM	. 64
Teachers and Teaching	

	Teachers as Appliers Teachers as Users Teacher Training Curriculum Elementary and Middle Schools Upper Secondary Schools Higher Education Emerging Issues and Problems	70 72 74 75 76 77
Cha	pter V	
•	THE IMPACT ON THE EDUCATION SYSTEM: BUDGETS, STRUCTURES AND CLIENTS .	83
	Budgets Costs Impact on School Budgets Structures Partnership Administration and Employment Equipment and Physical Facilities Distance Learning The Clients Age Class Gender	83 87 88 88 89 91 93 94 95
Cha	pter VI TOWARDS POSSIBLE FUTURES	100
<i>:</i>	Issues and Dilemmas The Web of Influences The Location of Expertise Dilemmas for Policy Dilemmas for the Institution Dilemmas for Research Objectives Research and Development Objectives in Selected Countries Recommendations from the Conference Working Groups Selection Criteria for National Resaearch Projects Responsibilities	101 102 104 105 106 108 109 111
BIB	LIOGRAPHY	
	I. ANALYTICAL PAPERS PREPARED FOR THE OECD CONFERENCE TO WHICH REFERENCE IS MADE IN THE TEXT	. 118
	II. EARLIER CERI PUBLICATIONS ON COMPUTERS AND EDUCATION	. 118
	III SELECTIVE DIDLIGGD A DLIV	110