

Contents

Introduction	5
Chapter 1. Key Issues in Computer Education	8
1.1. The Role of Education in the Information Society	8
1.2. Introducing IT Education to Schools	11
1.3. The Role of Computers in Education	12
1.3.1. The Functions of the Computer in Learning and Teaching	14
1.3.2. Computers in Teaching	14
1.3.3. The Negative results of ICT in Education	18
1.3.4. Computer Education and the Cognitive Constructivist Theory	19
Chapter 2: IT in Teacher Training	23
2.1. I.T. Solutions and Their Application in Teaching	23
2.2. New Technologies and Their Application in the Classroom	24
2.3. I.T. and Teachers' Education	26
2.4. IT Self-Teaching for Teachers	28
2.5. E-learning in Teacher Training	29
2.6. E-Teacher Training	31
2.7. Technical Musts for IT Education	32
2.8. Social, Legal, Ethical and Educational Aspects of IT Education	34
2.8.1. On Some Uncertainties Concerning IT Education	35
2.8.2. Rules and Procedures in Information Security Policies	39
2.8.3. Anti-Malware Security	41
2.8.4. The Reliability of Communication and Validity of Information on the Internet	43
Chapter 3: The Methodological Basis for the Research	48
3.1. The Discrepancies Between the Quantitative and the Qualitative Approach	48
3.2. The Subject and the Aims of the Research	50
3.3. Research Problems and Hypotheses	52
3.4. Variables and Their Indicators	55

3.5. Description of the Sample	56
3.6. Research Methods and Instruments	57
3.6.1. Statistical Analysis in the Research Project	62
3.7. Research Procedures	64
3.8. The Technical Details of the Research Project	64
3.8.1. The Technical Aspects of the Survey	65
3.9. Unresponsiveness in Pedagogical Research	65
3.9.1. The Lack of Response to Single Question	67
3.9.2. Refusal to Participate in a Study	67
Chapter 4: IT in the Teaching Process – a Comparative Analysis ...	70
4.1. Factors Influencing the Usage of IT Solutions in Education	70
4.1.1. IT Solutions in General Education – Profiles of the Teachers	70
4.1.2. Why do Teachers Use or Not Use IT in General Education?	76
4.1.3. Teachers and Their views on Teacher Training and IT Education	81
4.1.4. The profile of a teacher who uses IT in the classroom	86
4.1.5. Personality Characteristics of the Teachers Who Use IT in the Classroom	88
4.2. Stereotypes and Ambiguities Concerning Computer-Assisted Learning	95
Bibliography	103
Appendices	116
Tables	116
Charts	117
Questionnaire	118
Graphs	124