

Table of Contents

Foreword **V**
Henry Sanoff

Preface **IX**
Rotraut Walden

1 Introduction **1**
Rotraut Walden

1.1 Overview 1

1.2 Questions 12

1.3 Significance of the Topic 14

1.4 Schools Claiming to Be “Schools of the Future” 18

1.5 The Architect’s Leadership Role 19

2.1 History of the Schoolhouse in the USA **23**
Jeffery A. Lackney

2.1.1 Introduction 23

2.1.2 Educational Architecture in the Colonial Period 24

2.1.3 Educational Architecture of the Industrial Revolution 26

2.1.4 Educational Architecture in the Information Age 29

2.2 Historical Background of the Japanese School **41**
Kaname Yanagisawa (Japan)

2.2.1 A Brief History of Japanese School Planning 41

2.3	The Historical Development of School Buildings in Germany	51
	<i>Simone Schalz</i>	
2.3.1	Emerging Organized Schooling in Germany	51
2.3.2	School Buildings in Cities and Villages	54
2.3.3	Reform Pedagogy (1890–1932)	57
2.3.4	The “Reform Wave” (1918–1933)	62
2.3.5	The National Socialist Takeover	64
2.3.6	The Postwar Period	65
2.3.7	School Construction Today	68
2.3.8	Perspectives for the Future	82
2.3.9	Summary	83
3	The School of the Future: Conditions and Processes – Contributions of Architectural Psychology	89
	<i>Rotraut Walden</i>	
3.1	Requirements and Wish List	89
3.2	Color Scheme	94
3.3	Form Design	97
3.4	Lighting in Schools	98
3.5	Heating, Cooling, and Ventilation	101
3.6	Acoustics and Noise	102
3.7	Furniture and Equipment	106
3.8	Density and Crowding	108
3.9	Participation and User Design	113
3.10	Ecological Aspects	123
3.11	Organizational Aspects	130
3.12	After-Hours Use of Schools	133
3.13	Conclusion	135
4	Schools Designed with Community Participation	149
	<i>Henry Sanoff</i>	
4.1	Benefits of Community Participation	149
4.2	Davidson Elementary School as the Center of a Community	151
4.3	A Community School Designed for Accessibility	164
4.4	Summary	168

5	Trends in the Design and Planning of Schools from the Viewpoint of Information Technology and Communication	173
	<i>Kaname Yanagisawa</i>	
5.1	The Current State of Learning and Information Technology in Schools	173
5.2	Cases of Innovative Schools Worldwide	174
6	A Design Language for Schools and Learning Communities	185
	<i>Jeffery A. Lackney</i>	
6.1	Design Communication	185
6.2	Pattern Language	187
6.3	Developing Patterns	187
6.4	A Language of School Design	189
6.5	Bringing It All Together	196
6.6	Summary	198
7	Criteria for the Judgment of the Quality of School Buildings	201
	<i>Rotraut Walden</i>	
7.1	Procedure	201
7.2	Development of a System for Judging the Quality of Schools of the Future	212
8	Conclusion: What Makes a School a “School of the Future”?	223
	<i>Rotraut Walden</i>	
8.1.	General Recommendations for School Building and Environment	224
8.2	Summary	229
8.3	The Outlook for Schools of the Future	231
	Contributors	235
	Acknowledgments	239
	Appendix	243
	Descriptions and Photographs of 24 School Examples	
	from 11 Countries on 5 Continents	245
	Schools as Living, Empowering Places	293
	<i>Peter Hübner</i>	
	From a Creative Knowledge to Creative Ignorance	297
	<i>Friedensreich Hundertwasser</i>	

Schools for the Future

Design Proposals from Architectural Psychology

Walden, R. (Ed.)

2015, XIII, 297 p. 155 illus., 46 illus. in color., Softcover

ISBN: 978-3-658-09404-1