

International Handbook of Education
for the Changing World of Work

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International Handbook of Education for the Changing World of Work

Bridging Academic and Vocational Learning

 Springer



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Dedication to David N. Wilson

This **International Handbook of Education for the Changing World of Work** is dedicated to Professor David N. Wilson. David Wilson contributed significantly to the development of this handbook, from the planning stages and the process of identifying contributors, through to the assembly of completed chapters into a prototype. It is very unfortunate that David did not live long enough to see the final product of his hard and cherished labour. However, he will be remembered for his leadership role and the important intellectual guidance he provided to this project.

David Wilson was an outstanding teacher and a world-class scholar in the field of development education. He has trained and mentored many graduate students who are playing key leadership roles in development education throughout the world, be they policy-makers, researchers or practitioners. As a researcher, David has contributed substantially to furthering our understanding of the field of comparative education and of development education, particularly as it relates to education for the world of work. His prolific scholarly contribution is a legacy left behind as a testimony of his commitment and dedication to his profession and to the advancement of knowledge and of humanity. David was firmly committed throughout his life to international development and, as such, was very keen to use education as leverage to improve human conditions with regard to poverty alleviation, improved equity and justice, especially in developing countries.

Those who have worked with David over the years will unanimously agree that he was not only a good collaborator, but also a good friend. David will be missed a great deal, but his memory and sphere of influence will live on through his students and through the legacy of his extensive range of scholarly works.

Preface

The idea of developing and publishing an ‘International Handbook of Education for the Changing World of Work: Bridging Academic and Vocational Learning’ goes back to discussions between myself and David Wilson as early as 2001.¹ We commenced work immediately; nevertheless, it has taken some seven years to bring the Handbook to full fruition.

Readers will not be surprised by the time it has taken to complete this project, since this has been a mammoth, complex undertaking, involving some 218 authors, 197 chapters and a manuscript of 1.2 million words, which is now published in six volumes. This *Handbook* is the first of its kind, bringing together leading educational researchers, policy-makers and practitioners from all parts of the world; and from developed and developing countries. At every stage the aim has been to develop chapters of the highest quality. Thus, the matter of quality assurance has been at the forefront of our minds throughout the project. I hope that all who read this *Handbook* will agree that the considerable time and effort involved has been more than worth the trouble.

In 1991, the World Bank published a policy paper written by John Middleton, Adrian Ziderman and Arvil Van Adams. This was widely interpreted (and also widely misinterpreted) to say that school-based technical education was not a sound investment. The consequences wrought by this policy paper had a strong impact on TVET, earning the authors a reputation going well beyond their intentions. In a gesture to redress this involuntary milestone, we invited one of these authors, Arvil Van Adams, to write a prologue to this *International Handbook* on a subject of his own choosing. He decided to discuss the non-governmental delivery of TVET in Sub-Saharan Africa.

On behalf of the editors, I wish to acknowledge the contributions of the many individuals who have worked so hard through all the different stages to bring this *Handbook* to successful completion. Thanks are conveyed to all the authors for their commitment to this project and for their well-conceived, scholarly contributions. Recognition is also due to the section editors for helping to co-ordinate the work of the authors and, most importantly, for their efforts to ensure content validity and the high quality of chapters.

Secretarial and editorial work by staff in the UNESCO–UNEVOC International Centre for Technical and Vocational Education, in Bonn, Germany, under the able

leadership of the Head of Publications, Ms Natalia Matveeva, with assistance from Joachim Lapp, was also an essential contribution to the successful completion of this *Handbook*. Ms Matveeva's work was subsequently taken over and brought to a successful conclusion by Ms Alix Wurdak.

Special thanks are due to Associate Editor Professor Chris Chinien, who agreed at short notice to become a joint editor of the Handbook, and so enabled its successful completion after the untimely death of General Co-editor, David Wilson, in October 2006. In addition to being a Section Editor and the author of several chapters in the handbook, Chris made a substantial contribution to finalizing the content and structure of the whole Handbook, especially with regard to quality assurance.

Special thanks also to John Fox for desk editing the entire manuscript so professionally, thoroughly and in a timely way.

Finally, we would like to thank Harmen van Paradijs and Marianna Pascale of the publishers Springer for the considerable care with which they have assisted and guided this project throughout the lengthy period of gestation.

UNESCO-UNEVOC, Bonn
Germany

Rupert Maclean

Note

1. This *Handbook* is part of the larger 'UNESCO-UNEVOC International Library of Technical and Vocational Education and Training', which consists of two Handbooks, a book series and various other publications. Full details are provided on the following pages.

UNESCO-UNEVOC International Library of Technical and Vocational Education and Training

International Library of Technical and Vocational Education and Training

Work is a major feature in most people's lives. Not only does it provide them with the means to meet basic needs, such as food, clothing and shelter, but also the type of work undertaken by individuals and groups has a major impact on their self-identity, social status and standard of living. Technical and vocational education and training (TVET) is concerned with the acquisition of knowledge and skills for the world of work to increase opportunities for productive work, sustainable livelihoods, personal empowerment and socio-economic development.

The UNEVOC International Library of Technical and Vocational Education and Training is a series of publications that provide comprehensive information about many cutting-edge aspects of TVET. The Library showcases best practices and innovative approaches to skills development for employability and seeks to create an effective bridge between research, policy and practice. It is an on-going project and publications prepared as part of the Library complement each other. Elements of the Library are:

- UNESCO-UNEVOC International Handbook of Education for the Changing World of Work: Bridging Academic and Vocational Learning;
- International Handbook of Technical and Vocational Education and Training Research;
- UNESCO-UNEVOC Book Series 'Technical and Vocational Education and Training: Issues, Concerns and Prospects';
- UNESCO-UNEVOC Discussion Papers;
- UNESCO-UNEVOC Annotated Bibliographies of Technical and Vocational Education and Training;
- UNESCO-UNEVOC Case Studies of Technical and Vocational Education and Training in Selected Countries.

Most of these publications are published by Springer Science and Business Media, and some others by UNESCO-UNEVOC itself. The audience for the publications in the Library includes policy-makers, practitioners, administrators, planners, researchers, teachers, teacher educators and students, as well as colleagues in other fields interested in learning about education for the world of work and TVET in developed and developing countries, countries in transition and countries in post-conflict situations.

UNESCO-UNEVOC International Handbook of Education for the Changing World of Work: Bridging Academic and Vocational Learning

General Editors: Rupert Maclean and David N. Wilson

Associate Editor: Chris Chinien

Springer — (2009)

English

The UNESCO-UNEVOC International Handbook of Education for the Changing World of Work is the first reference tool of its kind. It provides a comprehensive coverage of cutting-edge developments in research, policy and practice in TVET within a single source and aims to assist those involved in TVET at any level in making informed decisions and to further advance and improve the field.

The six volumes and nearly 200 chapters of the Handbook cover such topics as: TVET policy and reform; financing TVET systems; TVET teacher education; assessment in TVET; TVET research and curriculum development; participation in formal TVET programmes; regional TVET profiles; information and communication technologies in TVET; TVET for youth and in ageing societies; TVET in informal economies and in countries in post-conflict situations.

Some 220 TVET experts explore the prospects and challenges in each of these areas from diverse perspectives. The authors are from developing and developed countries, UN agencies, universities, national and international research centres, leading training institutions, national and international statistical offices and ministries of education.

Order the International Handbook of Education for the Changing World of Work: Bridging Academic and Vocational Learning from: <http://www.springer.com/education>

UNESCO-UNEVOC Book Series ‘Technical and Vocational Education and Training: Issues, Concerns and Prospects’

Series Editor: Rupert Maclean

Publisher: Springer

English

While the International Handbook of Education for the Changing World of Work provides a survey of the field, the Book Series explores selected aspects of TVET in depth and focuses on topics that require a more detailed analysis. The series closely follows new developments and innovations in TVET and showcases these. It presents best and innovative practices, explores controversial issues and uses case studies as examples.

Topics covered in the Book Series include: the vocationalization of secondary education; international perspectives on teachers and learners in TVET; TVET for sustainable development; TVET in the informal sector; the transformation of TVET

in transition economies; how changing work situations form personal identities; understanding learning for and throughout working life; TVET as a factor of life-long learning; vocational content in mass higher education; self-directed learning in TVET; modern apprenticeships and qualifications research.

Titles published to date (as of February 2009) are:

- Vocationalisation of Secondary Education Revisited, by Jon Lauglo and Rupert Maclean (eds.), 2005.
- Meeting Basic Learning Needs in the Informal Sector: Integrating Education and Training for Decent Work, Empowerment and Citizenship, by Madhu Singh (ed.), 2005.
- Training for Work in the Informal Micro-enterprise Sector: Fresh Evidence from Sub-Saharan Africa, by Hans Christian Haan, 2006.
- The Transformation of Vocational Education and Training (VET) in the Baltic States: Survey of Reforms and Developments, by Frank Bünning, 2006.
- Work, Subjectivity and Learning: Understanding Learning through Working Life, by Stephen Billett, Tara Fenwick and Margaret Somerville (eds.), 2006
- Identities at Work, by Alan Brown, Simone Kirpal and Felix Rauner (eds.), 2007.
- International Perspectives on Teachers and Trainers in Technical and Vocational Education, by Philipp Grollmann and Felix Rauner (eds.), 2007.
- Work, Learning and Sustainable Development, by John Fien, Rupert Maclean and Man-Gon Park (eds.), 2009.
- Rethinking Work and Learning: Adult and Vocational Education for Social Sustainability, by Peter Willis, Stephen McKenzie und Roger Harris (eds.), 2009.
- Technology and Vocational Education for Sustainable Development: Empowering Individuals for the Future, by Margarita Pavlova, 2009.

Order publications in the UNEVOC Book Series 'Technical and Vocational Education and Training: Issues, Concerns and Prospects' from: <http://www.springer.com/series/6969>

Handbook of Technical and Vocational Education and Training Research

Editors: Felix Rauner and Rupert Maclean

Springer — (2008)

English

Technical and vocational education and training (TVET) research has become a recognized and well-defined area of interdisciplinary research. This is the first handbook of its kind that specifically concentrates on research and research methods in TVET.

The book's sections focus on particular aspects of the field, starting with a presentation of the genesis of TVET research. They further feature research in relation to policy, planning and practice. Various areas of TVET research are covered, including on the vocational disciplines and on TVET systems. Case studies illustrate

different approaches to TVET research, and the final section of the book presents research methods, including interview and observation methods, as well as of experimentation and development.

This handbook provides a comprehensive coverage of TVET research in an international context, and, with special focus on research and research methods, it is a cutting-edge resource and reference.

Order the Handbook of Technical and Vocational Education and Training Research from: <http://www.springer.com/education>

UNESCO-UNEVOC Annotated Bibliographies of Technical and Vocational Education and Training

Editor: Natalia Matveeva

Published by UNESCO-UNEVOC

English

The UNESCO-UNEVOC Annotated Bibliographies of Technical and Vocational Education and Training are a series of literature reviews on key issues in TVET that provide information about the latest developments, current innovations and best practices. The Bibliographies reflect the range of currently available literature, such as articles, books, government reports, documents of UN agencies and donor communities, research theses and other sources available on the Internet. They provide bibliographical aid to policy makers, researchers and practitioners in TVET.

Titles published to date in print and electronic format:

- TVET for Sustainable Development, 2004.
- Women and TVET, 2004.
- Youth Unemployment: Meeting the Needs of Youth, 2004.
- Exploitative Work: Child Labour, 2004.
- Occupational Health and Safety, 2004.

Access or order the UNEVOC Annotated Bibliographies of Technical and Vocational Education and Training free of charge from: <http://www.unevoc.unesco.org/publications>

UNESCO-UNEVOC Discussion Papers

Editors: Rupert Maclean and Natalia Matveeva

Published by UNESCO-UNEVOC

English (some titles are available in other languages)

The Discussion Papers facilitate the dissemination of crucial research and innovative ideas in technical and vocational education and training (TVET). They are shorter documents that aim to stimulate debate about TVET issues and promote the field. The topics covered in the Discussion Papers range from orienting TVET

for sustainable development to establishing national qualifications systems and analysing statistical data on access to formal TVET worldwide.

Most of these Discussion Papers are published by UNESCO-UNEVOC in collaboration with partner institutions. Titles published to date in print and/or electronic format include:

- Orienting TVET for Sustainable Development, 2006.
- The Development of a National System of Vocational Qualifications (in co-operation with the Scottish Qualifications Authority), 2006.
- The 6Es Plus Education Makes Seven: Why Is Education Central to the Youth Employment Summit (YES) Campaign?, 2006.
- Research for TVET Policy Development, by Jon Lauglo (in co-operation with InWent — Capacity Building International), 2006.
- The Bologna Declaration and Emerging Models of TVET Teacher Training in Germany, by Frank Bünning and Alison Shilela (in co-operation with InWent — Capacity Building International), 2006.
- Participation in Formal TVET Programmes Worldwide: An Initial Statistical Study (in co-operation with the UNESCO Institute for Statistics), 2006.
- Approaches to Action Learning in Technical and Vocational Education and Training, by Frank Bünning (in co-operation with InWent — Capacity Building International), 2007.
- Education for Livelihoods and Civic Participation in Post-conflict Countries: Conceptualizing a Holistic Approach to TVET Planning and Programming in Sub-Saharan Africa, 2007.
- Why Do German Companies Invest in Apprenticeships? by Klaus Schaack, 2008.
- The Changing Status of Vocational Higher Education in Contemporary Japan and South Korea, by Roger Goodman, Sachi Hatakenaka and Terri Kim, 2009.
- Why Is Skills Development for Work/Employability Essential if EFA and the Dakar Framework for Action Are to Be Achieved? (in press).

Access or order UNEVOC Discussion Papers free of charge from: <http://www.unevoc.unesco.org/publications>

UNESCO-UNEVOC Case Studies of TVET in Selected Countries

Editor: Efison Munjanganja

Published by UNESCO-UNEVOC

English

The Case Studies of TVET in Selected Countries provide in-depth information on issues of specific importance in the TVET systems of selected countries and regions. An initial collection of case studies from Sub-Saharan Africa and South-East Asia is in preparation.

- Revitalizing a Technical Training Institute in Kenya. A Case Study of Kaiboi Technical Training Institute, Eldoret, Kenya, by John W. Simiyu, 2009.

Access or order UNEVOC Case Studies free of charge from: <http://www.unevoc.unesco.org/publications>

Other UNESCO-UNEVOC Publications

In addition to the publications that form the **UNESCO-UNEVOC International Library of Technical and Vocational Education and Training**, UNESCO-UNEVOC also publishes stand-alone publications both on its own behalf and jointly with other organizations. These include newsletter, books, reports and brochures on key TVET issues.

Newsletter (Bulletin/Forum)

Editors: Maja Zarini and Natalia Matveeva

The UNESCO-UNEVOC Bulletin is the newsletter of the UNESCO-UNEVOC International Centre. It informs TVET experts about the activities of UNESCO-UNEVOC, UNEVOC Network members and other agencies engaged in TVET. It is the only international newsletter that brings together the major international agencies involved in TVET in order to report on their activities.

The Bulletin contains a supplement called UNEVOC Forum. The Forum is distributed with the Bulletin, but is also available separately and on the web. Researchers, policy-makers and practitioners from around the world are invited to contribute their views in the form of a long article on a key issue, concern or proposal regarding TVET. Both the Bulletin and Forum are available in print as well as in digital format and are distributed to about 2,600 individual/institutional recipients.

The UNESCO-UNEVOC Bulletin and the UNEVOC Forum are published several times each year. Both are published in Arabic, Chinese, English, French, Portuguese, Russian and Spanish.

Access or order the Bulletin and Forum free of charge from: <http://www.unevoc.unesco.org/bulletin>

Learning To Do: Values for Learning and Working Together in a Globalized World

UNESCO-APNIEVE Sourcebook No. 3 for Trainers, Teachers and Students in the Area of Technical and Vocational Education and Training

(UNESCO-UNEVOC and UNESCO-APNIEVE)

Editors: Lourdes R. Quisumbing and Joy de Leo

Chinese, English

This book examines values education in the workplace. It is comprised of modules related to core values that are crucial for personal development. Integrated into TVET, these values can prepare workers and citizens with the knowledge, values,

attitudes, behaviours and skills they need to be able to participate fully in their economy and work—effectively and responsibly in a globalized world.

This Sourcebook is conceived as a teacher's manual. It follows the steps of a holistic teaching/learning cycle and contains lesson plans that can be adapted by TVET educators to be integrated into their own training packages, lessons and resource materials.

Shortly after the English version of the Sourcebook appeared in 2005, it was translated and published in Chinese.

Access or order the Sourcebook free of charge at: <http://www.unevoc.unesco.org/publications>

Agencies for International Cooperation in Technical and Vocational Education and Training: A Guide to Sources of Information

Published by UNESCO-UNEVOC
English

This Donor Agencies Guide has been conceived for key personnel engaged in the development of projects and programmes. The guide provides an overview of sources of Official Development Assistance by the twenty-two Member States of the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD). Its focus is on technical and vocational education and training. The Guide includes information on:

- Current trends in international co-operation policies;
- Potential donors and their policies;
- Donors' requirements concerning project definition, project and budget management, assessment and evaluation techniques, and reporting procedures.

Access or order one of the most frequently requested titles free of charge from: <http://www.unevoc.unesco.org/publications>

Motivating for Skills Development: A Campaign Package

English, French, Portuguese and Creole (DVD with sound track)
English (booklets with texts, illustrations and transcript of sound tracks)

The aim of the 'Skills Development Package for Learning and Working' developed by UNESCO-UNEVOC is to help facilitate the organization and implementation of awareness and motivation campaigns for marginalized groups in least-developed countries.

The idea behind the Package is to offer a platform and produce an environment that would motivate people living in adverse economic conditions to enrol in TVET courses and take up self-employment activities in order to improve their economic situation.

The backbone of the Skills Development Package for Learning and Working is a set of DVDs. These are complemented by a series of documents that support the material that can be viewed on the DVDs. The Package is in itself not a tool for skills development, but rather an ‘eye opener’ and ‘discussion starter’. It is anticipated that targeted groups will be encouraged to engage in tasks similar to those shown in the DVDs.

Order the Package free of charge from: <http://www.unevoc.unesco.org/publications>

TVET Teacher Education on the Threshold of Internationalisation

(UNESCO-UNEVOC and InWEnt)

Editors: Frank Bünning and Zhi-Qun Zhao

English

This book has been written as an outcome of the conference ‘Development and Implementation of a Master Degree Standard for Teacher and Trainer Education in TVET in East and South-East Asia’, which took place at the University of Tianjin, China, in December 2005.

The conference represents an outcome of the close co-operation between InWEnt – Capacity Building International of Germany, the Ministry of Education (MoE), Beijing, China and UNESCO-UNEVOC, and it set a precedent for the further development of master degree programmes in TVET.

This conference summary will be of service to both researchers and policy-makers involved in teacher and trainer education in TVET in East and South-East Asia, as well as for the broader context of joint initiatives in the area concerned.

Access or order free of charge from: <http://www.unevoc.unesco.org/publications>

Special Issue of PROSPECTS, Quarterly Review of Comparative Education

(UNESCO-UNEVOC and UNESCO-IBE)

Arabic, Chinese, English, French, Russian, Spanish

Rupert Maclean, Director of the UNEVOC Centre, was Guest Editor of the September 2005 issue of the IBE journal *PROSPECTS*. This issue focuses on the topic of ‘Orientating Technical and Vocational Education for Sustainable Development’ and contains eleven contributions dealing with its various aspects of this theme.

Order the Prospects from: <http://www.springer.com/education>

Vocationalisation of Secondary Education: The Come-Back?

Article, published in Education Today newsletter, UNESCO

In 2005, UNESCO-UNEVOC made contributions to a major article (4 page-spread) in the issue of *Education Today*, the newsletter of UNESCO's Education Sector, on 'vocalisation of secondary education'.

Access or order a reprint of the article free of charge from: <http://www.unevoc.unesco.org/publications>

Meeting Reports

UNESCO-UNEVOC publishes final reports of all the meetings it organizes on its own behalf or in collaboration with other partner organizations. Copies of the reports are usually sent to all meeting participants and to specifically interested parties.

Access or order the UNEVOC meeting reports free of charge from: <http://www.unevoc.unesco.org/publications>

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To inform its public about the main areas of work of UNESCO-UNEVOC and of activities undertaken during each year/biennium, UNESCO-UNEVOC regularly updates and publishes the following materials:

- Mission statement
- UNEVOC in Brief (brochure)
- Flyers on areas of work
- Annual/biennial reports

Access or order these materials free of charge from: <http://www.unevoc.unesco.org/publications>

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Contents

List of Figures	xxxix
List of Tables	xlvii
Contributors	lv
Foreword: TVET for the Sustainability of Human Kind	lxix
Introduction	lxxiii
Rupert Maclean and David N. Wilson	
Prologue: Skills Development in the Informal Sector of Sub-Saharan Africa	cxiii
Arvil V. Adams	

VOLUME 1

Part I Overview

1 The Pedagogical Roots of Technical Learning and Thinking	5
Ron Hansen	
2 A Conceptual Framework for Technical and Vocational Education and Training	19
Jay W. Rojewski	
3 Towards Achieving TVET for All: The Role of the UNESCO- UNEVOC International Centre for Technical and Vocational Education and Training	41
Astrid Hollander and Naing Yee Mar	
4 TVET Glossary: Some Key Terms	59
Jeanne MacKenzie and Rose-Anne Polvere	

Part II The Changing Context of Work and Education

Section 1 Changing Workplace Requirements: Implication for Education

Margarita Pavlova and L. Efison Munjanganja

- I.1 Overview: Changing Economic Environment and Workplace Requirements: Implications for Re-Engineering TVET for Prosperity** 81
France Boutin, Chris Chinien, Lars Moratis and Peter van Baalen
- I.2 The Right to a New Utopia: Adult Learning and the Changing World of Work in an Era of Global Capitalism** 97
Budd L. Hall
- I.3 Decent Work for All: From ILO Initiative to a Global Goal** 111
Peter Poschen
- I.4 Redefining Gender Roles in the Workforce** 129
Karen F. Zuga
- I.5 Anticipation of Skill Requirements: European Activities and Approaches** 147
Manfred Tessaring
- I.6 Redefining the Status of Occupations** 161
Walter R. Heinz
- I.7 Changing Work, Work Practice: Consequences for Vocational Education** 175
Stephen Billett
- I.8 Traditional and Transitional TVET Systems** 189
Poonam Agrawal
- I.9 Partnering to Meet the Needs of a Changing Workplace** 203
LuAnn Hiniker and Robert A. Putnam
- I.10 Bridging the Learning Divide: A Study into Adult Learning and Peer Mediation in the Workplace** 219
David Johnson

Section 2 Education and Training in Informal Economies

Madhu Singh

II.1	Overview: Education and Training in the Informal Sector	235
	Madhu Singh	
II.2	Tinkering with the Tinker: Meeting Training Needs in the Informal Sector of Chad	245
	Joshua A. Muskin	
II.3	The Traditional Informal Apprenticeship System of West Africa as Preparation for Work	261
	William Ahadzie	
II.4	Initiatives to Link TVET to Self-Employment in Ghana	277
	Robert Palmer	
II.5	Criteria for Training Policy in the Informal Sector: Demands and Challenges in Latin America	291
	Enrique Pieck	
II.6	Informal Learning at Work: The Case of Working Children in Egypt	307
	Laila Iskandar	
II.7	Informal Learning and Work: From Genealogy and Definitions to Contemporary Methods and Findings	319
	Peter H. Sawchuk	
II.8	New Learning Spaces in TVET: The Contribution of Social Partnerships	333
	Terri Seddon, Kathleen Fennessy and Kathleen Ferguson	
II.9	Social and Cultural Aspects of Informal Sector Learning: Meeting the Goals of EFA	349
	Madhu Singh	

VOLUME 2

Part III Education for the World of Work: National and Regional Perspectives

Section 3 Reforming National Systems of Vocational Education and Training

David Atchoarena and Peter Grootings

III.1	Overview: Changing National VET Systems through Reforms .	365
	David Atchoarena and Peter Grootings	
III.2	Latin America’s Efforts in the Vocational Training of Young People from Poor Backgrounds	379
	Claudia Jacinto	
III.3	Accountability and Career Technical Education (CTE) Policy: A Brief Review of Six States of the United States	393
	Joshua D. Hawley and Alexandra de Montrichard	
III.4	The Regional Perspective of Vocational Education and Training	411
	Mike Coles and Tom Leney	
III.5	Vocational Education, Training Reform and Regional Integration in the Middle East	427
	Munther Wassef Masri	
III.6	The Influence of Qualifications Frameworks on the Infrastructure of VET	439
	Mike Coles and Patrick Werquin	
III.7	Reforming Skills Development, Transforming the Nation: South African Vocational Education and Training Reforms, 1994–2005	453
	Simon McGrath	
III.8	Reform of Vocational Education in the Russian Federation	469
	Olga Oleynikova and Anna Muravyeva	
III.9	Vocational Education in the Netherlands: In Search of a New Identity	483
	Jan Geurts and Frans Meijers	
III.10	Facilitating Policy-Learning: Active Learning and the Reform of Education Systems in Transition Countries	499
	Peter Grootings	
Section 4	National Initiatives for Reengineering Education for the New Economy	
	Joshua D. Hawley	

IV.1 Overview: Regional Reviews of TVET	515
Joshua D. Hawley	
IV.2 To Vocationalize or Not to Vocationalize? Perspectives on Current Trends and Issues on TVET in Africa	531
Moses O. Oketch	
IV.3 TVET in the Asian Region: Issues, Concerns and Prospects ...	547
P.P.G. Lionel Siriwardene and Muhammad Ashraf Qureshi	
IV.4 Transforming TVET Systems with the CPSC in the Asia and Pacific Region	565
Man-Gon Park	
IV.5 European Action Programmes for Lifelong Learning	583
Johanna Lasonen	
IV.6 VET in the Baltic States: Analysis of Commonalities and Differences of Reforms in Estonia, Latvia and Lithuania	597
Frank Bünning and Berit Graubner	
IV.7 Education and Training Needs of Rural Communities: A Situational Analysis of Selected Villages in Fourteen Provinces of Fiji	609
Paula Cavu, Isimeli W. Tagicakiverata, Seveci Naisilisili and Viliame Rabici	
IV.8 Social Partnership in Vocational Education and Training in Lithuania: Challenges and Perspectives	619
Lina Kaminskiene	
IV.9 Integrating Education and Work: The Status of Vocational Education in Brazil	637
Lucília Regina Machado and Carlos Roberto Jamil Cury	
IV.10 China's Higher Technical and Vocational Education: Development and Reform	649
Jing Mi and Aihua Wu	
IV.11 The Adoption and Adaptation of the Work-Team Concept in Urban Thai Workplaces	659
Chitrlada Burapharat	

IV.12	Globalization of the Labour Culture in the Republic of Korea: What ‘Tripartite Relations’ Mean for Workers	673
	Phoebe Moore	
IV.13	Involvement of Labour-Market Partners in TVET in the Russian Federation	689
	Olga Oleynikova	
IV.14	Strengthening TVET to Achieve Lifelong Learning for All: Historical Snapshots and Recent Initiatives in Myanmar	703
	Naing Yee Mar	
IV.15	Technical and Vocational Education and Training and Rural Development	721
	Lavinia Gasperini	
IV.16	An International TVET Programme Development by the International Baccalaureate Organization	735
	Monique Conn	
IV.17	A Profile of TVET in the Asia and Pacific Region: A Survey of Progress, Innovations and Promising Practices	749
	Chris Chinien, Elspeth McOmish, Mohan Perera and Alex Chinien	
Section 5	Learning for Employment and Citizenship in Post-conflict Countries	
	David Johnson and Lyle Kane	
V.1	Overview: Vocational Education, Social Participation and Livelihoods in Post-Conflict Countries	767
	David Johnson and Lyle Kane	
V.2	From Assessment to Planning: Hope for TVET in Uganda	775
	Bilal Barakat, Lyle Kane and Alex Inglis	
V.3	Linking TVET to Economic Opportunities in Post-Conflict Liberia	787
	Lyle Kane	
V.4	Deepening the Divide: The Differential Impact of Protracted Conflict on TVET Versus Academic Education in Palestine	799
	Bilal Barakat	

V.5 Co-ordinated Programming for Skills Development and Livelihoods in Post-Conflict Societies: What Promise Does TVET Hold for Southern Sudan?	813
Zuki Karpinska	
V.6 Vocational Training in Post-War Sierra Leone and Liberia	827
Andrew Benson Greene Jr.	
V.7 TVET and Community Re-Integration: Exploring the Connections in Sierra Leone's DDR Process	835
Julia Paulson	
V.8 TVET, Women and Conflict: Palestinians in the Lebanese Civil War	849
Rachel Yarrow	

VOLUME 3

Part IV The Management of TVET Systems

Section 6 Policy and Management of TVET Systems

Rupert Maclean and Chris Chinien

VI.1 Overview: Navigating the Policy Landscape: Education, Training and Work	869
Dennis R. Herschbach	
VI.2 Research for TVET Policy Development	891
Jon Lauglo	
VI.3 The Reform and Governance of Public TVET Institutions: Comparative Experiences	905
Keith Holmes	
VI.4 National Versus Regional Policy Dimensions of TVET	921
Peter Noonan	
VI.5 Planning for Education and Work: Alternatives and Issues	939
Dennis R. Herschbach	
VI.6 South African Technikons and Policy Contestation over Academic Drift	961
Andre Kraak	

VI.7	New Policy Actions and Government Roles: China's Reconstruction of TVET Systems Since the 1980s	977
	Deyu Sun, Jingwen Lu and Jun Li	
VI.8	Some Generic Issues in TVET Management	989
	George Preddey	
VI.9	An Overview of Contemporary TVET Management Practice .	1003
	George Preddey	
Section 7 The Economics and Financing of TVET		
	David Atchoarena	
VII.1	Overview: Issues and Options in Financing Technical and Vocational Education and Training	1029
	David Atchoarena	
VII.2	Education, Skills, Sustainability and Growth: Complex Relations	1037
	Kenneth King	
VII.3	Financing Mechanisms and Instruments: A Conceptual and Operational Approach	1051
	Richard Walther	
VII.4	Financing Training Through Payroll Levies	1075
	Adrian Ziderman	
VII.5	Financing Vocational Education and Training in South Africa	1091
	Martin Gustafsson and Pundy Pillay	
VII.6	Voucher-Financed Training for Small Businesses	1107
	Félix Mitnik	
VII.7	Employers' Participation in Training Finance: An Example from Brazil	1123
	Candido Alberto Gomes	
VII.8	Funding Lifelong Learning from a Life-Course Perspective ...	1137
	Barry J. Hake	
VII.9	Economic Perspectives on Technical and Vocational Education and Training in Australia	1155
	Gerald Burke and Christopher Selby Smith	

Part V Teacher Education for Vocational Education and Training

Section 8 The TVET Profession

Stephen Billett

VIII.1 Overview: The Technical and Vocational Education and Training Profession 1175
 Stephen Billett

VIII.2 Professionalization of VET Teachers and Lecturers and Practices in TVET Institutions in an International Perspective 1185
 Philip Grollmann

VIII.3 Teachers, Instructors and Trainers: An Australian Focus 1203
 Erica Smith

VIII.4 TVET Teacher-Training Requirements in the Russian Federation 1219
 Vasily P. Kosyrev, Petr F. Kubrushko and Andrei N. Kouznetsov

VIII.5 TVET Teachers and Their Professionalization in China: A Problem Analysis 1229
 Zhiqun Zhao and Lianwei Lu

VIII.6 The Development of Training Modules for Instructors 1243
 Fred Beven

VIII.7 Literacy and Learning: Are TVET Professionals Facilitators of Learning or Deliverers of Knowledge and Skills? 1259
 Jean Searle

VIII.8 Vocational Education in the Private Sector in Brazil 1271
 Elenice Monteiro Leite, Marinilzes Moradillo Mello and Nacim Walter Chieco

VIII.9 TVET and Teacher-Training Curricula: A Developed National Perspective 1285
 Vasily P. Kosyrev, Petr F. Kubrushko and Andrei N. Kouznetsov

VIII.10	Vocational Qualifications: The Role of Trade Unions as Negotiation Fora	1293
	Antônio Almerico Biondi Lima and Fernando Augusto Moreira Lopes	
VIII.11	Vocational Education and Development	1307
	Gaudêncio Frigotto, Maria Ciavatta and Marise N. Ramos	
VIII.12	A Technical and Vocational Teacher-Training Curriculum	1319
	Bonaventure W. Kerre	
VIII.13	Transforming Teachers' Practice Through Action Learning	1333
	Stephen Billett	
VIII.14	Professional Learning and TVET: Challenges and Perspectives for Teachers and Instructors	1351
	Christian Harteis	
VIII.15	Industrial Attachments for Instructors in TVET Delivery	1367
	Sarojini Choy and Sandra Haukka	
VIII.16	I Hate Left-Handers or Occupational Health and Safety Training	1383
	Richard Gagnon	
VIII.17	The Bologna Declaration and Emerging Models of TVET Teacher Training in Germany	1393
	Frank Bünning and Alison Shilela	
VIII.18	Standards for Occupation-Directed Professional Development of TVET Personnel in Developing Countries	1407
	Peter Gerds	
VIII.19	Curriculum Research and Design as a Subject of TVET Teacher Training: Practice and Experiences from Two International Projects	1423
	Joachim Dittrich	

VOLUME 4

Part VI Education for Work: Research, Curriculum Development and Delivery

Section 9 Research and Innovation

Felix Rauner

IX.1 Overview: TVET Research	1443
Felix Rauner	
IX.2 Methods of TVET Research	1461
Felix Rauner	
IX.3 TVET Research as an Aid to Improved Policy and Performance in TVET	1469
Christopher Selby Smith	
IX.4 Repositioning the Role of Research in the Innovation of TVET	1483
Anneke Westerhuis	
IX.5 TVET Research as a Dimension of Innovation	1495
Klaus Ruth	
IX.6 <i>Modellversuchsforschung</i>: Pilot Project Research in Germany	1505
Peter Dehnbostel	
IX.7 TVET and R&D Evaluation: The Potential for Optimizing TVET	1521
Ludger Deitmer and Lars Heinemann	
IX.8 TVET Research Organizations and Scientific Communities: Challenges to the Institutionalization of TVET Research	1535
Wolfgang Wittig, Uwe Lauterbach and Philip Grollmann	
IX.9 Qualifications Research	1553
Felix Rauner	
IX.10 Measuring Educational Quality in TVET	1563
Robert D. Renaud	

Section 10 Curriculum Development and Delivery

Felix Rauner

X.1 Overview: TVET Curriculum Development and Delivery	1579
Felix Rauner	

X.2	The Mutual Shaping of Work, Vocational Competence and Work-Process Knowledge	1593
	Nicholas Boreham and Martin Fischer	
X.3	Situated Learning and Cognitive Apprenticeship	1611
	Michael Gessler	
X.4	Curriculum Approaches and Participative Curriculum Development	1627
	Georg Spöttl	
X.5	The Deskillling and Upskilling Debate	1639
	Ulrich Heisig	
X.6	The Pedagogy of Apprenticeship	1653
	Uwe Lauterbach	
X.7	Approaches to Designing TVET Curricula	1669
	Richard Huisinga	
X.8	Collaborative Work-Related Learning and Technology-Enhanced Learning	1687
	Alan Brown, Jenny Bimrose and Sally-Anne Barnes	
X.9	Action-Based TVET	1699
	Hans-Dieter Höpfner	
X.10	Vocational Learning: Contributions of Workplaces and Educational Institutions	1711
	Stephen Billett	
X.11	Work-Based Learning: An English Experience	1725
	James Avis	
X.12	Language Mastery Development within TVET for Professional Mobility	1739
	Andrei N. Kouznetsov	
X.13	Why do German Companies Invest in Apprenticeship?	1747
	Klaus Schaack	
X.14	Workplace Learning: Metacognitive Strategies for Learning in the Knowledge Economy	1763
	Hugh Munby, Nancy L. Hutchinson and Peter Chin	

X.15	Literacy, Design and Technology: New Contexts for Learning and Skills Development in South Africa	1777
	David Johnson	
X.16	The Education Gospel and Vocationalism in an International Perspective: The Promises and the Limits of Formal Schooling	1791
	W. Norton Grubb and Marvin Lazerson	
X.17	The Vocationalization of Secondary Education: The Relationships between Vocational and Technology Education .	1805
	Margarita Pavlova	
X.18	Valuing Experience as well as Knowledge in Schools	1823
	Ron Hansen	
Section 11 Information and Communication Technologies (ICTs) in Vocational Education and Training		
	Maja Zarini, Tapio Varis and Naing Yee Mar	
XI.1	Overview: The Growing Role of ICTs in Education and Training	1835
	Maja Zarini, David N. Wilson, Naing Yee Mar and Tapio Varis	
XI.2	The Pedagogical Framework for On-Line Learning	1847
	Shyamal Majumdar	
XI.3	A Short Method for Building Web-Based Teaching and Learning Systems: the CPSC Experience	1863
	Myong Hee Kim and Man-Gon Park	
XI.4	ICT Application in TVET	1879
	Boris Kotsik, Natalia Tokareva, France Boutin and Chris Chinien	
XI.5	Technology and Leadership in the Fourth Wave of Environmental Changes with Ubiquitous Technology	1895
	Man-Gon Park	
XI.6	Knowledge Workforce Development for Computer-Supported Collaborative Work Environments	1911
	Man-Gon Park and Myong Hee Kim	
XI.7	The Role of ICTs and TVET in Rural Development and Poverty Alleviation	1923
	Chiranjib Kumar Basu and Shyamal Majumdar	

XI.8	Switched on: International Approaches to Skills Development through ICTs	1935
	Maja Zarini	
XI.9	VOCED: The International Research Database on Vocational Education and Training	1947
	Miriam Saunders and Radhika Naidu	
XI.10	What are the Limits of ICTs and Media in the Delivery of TVET? An Australian Focus	1959
	Peter Kearns	
XI.11	Education System Profile: South Africa	1971
	Tracey Wallace	
XI.12	Integrating TVET with Open and Distance Learning: Taking Skills Training to the Doorstep	1989
	Vinay Swarup Mehrotra and Avant Kumar Sacheti	
XI.13	Distance Education: The State of the Art in Career and Technical Education	2003
	Christopher J. Zirkle	

VOLUME 5

Part VII Learning for Life and Work: Bridging Academic and Vocational Education

Section 12 Participation in Formal Programmes of Learning and Skills Development

Rupert Maclean and Hendrik van der Pol

XII.1	Overview: Participation in Formal Programmes of Learning and Skills Development	2025
	Natalia Matveeva and Joachim Lapp	
XII.2	Access to TVET for All: An Essential Basis for Education for All	2039
	Phillip Hughes	
XII.3	The Challenges of TVET Global Monitoring	2053
	Manuel Cardoso	