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Editor

Competence-based Vocational and Professional Education

Bridging the Worlds of Work and Education

Springer
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This comprehensive volume, entitled *Competence-based Vocational and Professional Education: Bridging the Worlds of Work and Education*, comes at a timely moment as the discourse on what education and training should look like in the post-2015 era reached its peak with the adoption of the ‘Education 2030 Framework for Action’ of the World Education Forum.

‘Education 2030’ builds on the achievements of ‘Education for All’ in promoting access to education at the primary level and extends this to promoting inclusiveness, equity, quality and lifelong learning for all. Education 2030 aims to transform lives through education, taking cognizance of the vital role of education in driving development and in achieving the United Nations’ Sustainable Development Goals, which purposefully include technical, vocational and tertiary education, and technical and vocational skills for employment and entrepreneurship.

Quality, equal access, mobility and lifelong learning underpin the new global educational vision. This implies the need for ensuring that education and training are systematically planned, monitored and measured, as well as aligned to the intrinsic purpose it serves. Competence-based vocational and professional education and training (CBE) highlights the core principle of aligning competence needs with the societal standards, norms or expectations regarding task performance. This view on the future developments of vocational and professional education necessitates a holistic approach to empower learners with adequate conceptual knowledge and demonstrated capacities to perform tasks, which enables them to move up the ladder of success of their career choice and to fulfil their personal development goals.

This well-composed volume with highly relevant parts and chapters intends to sharpen the understanding of the nature, approaches and innovations in this area. As the volume initiates a discourse on comparative approaches in CBE, it opens up an insightful window to the world’s successful strategies and frameworks of competence-based education and training.

In line with the Education 2030 agenda and Sustainable Development Goals, expanding competence domains needed for the world of work of today and tomorrow
and approaches to monitor and measure new competence domains are very well addressed in this volume.

Because of this, it serves as a very helpful resource for education and training practitioners, providers, policymakers and researchers to bring them up to speed on systematic approaches for developing society-relevant competence-based vocational and professional education and training. This makes this volume an important contribution to the knowledge base which is available to take the new education agenda effectively forward.

UNESCO-UNEVOC
Bonn, Germany

Shyamal Majumdar
Foreword

I am very pleased to be able to introduce this important volume on a central topic in vocational and professional education. As Professor Mulder notes in his Introduction, competence-based education and training (CBET) has had a long history, starting with competence-based teacher education in the 1970s. Since then, the influence of competence approaches to vocational and professional education more generally has expanded across the globe, as a quick glance at the contents of this volume will rapidly indicate.

This rapid expansion has itself brought problems in its train, problems that were implicit at the outset of the movement to embed the concept of competence at the heart of vocational and professional education. The first of these problems was the inadequate conceptualisation of competence, involving as it did an overreliance on the concept of skill, itself a simplification of the complexities of professional know-how. In Britain, for example, the term ‘competence’ is often used both to indicate a threshold level of performance of a skill and to indicate a job-relevant bundle of skills. Transversal abilities such as the ability to plan and communicate tend to be neglected in competence frameworks or, where they are included, tend to be reduced to associated skills, such as ‘planning skills’, ‘communication skills’ and so on. The confusion is completed through the confounding of transversal abilities with transferable skills such as can be found in the attempts at comprehensive classifications of know-how in the approaches of ESCO in the EU and O-Net in North America.

Second, the term ‘competence’, as it was adopted in the non-Anglophone world, also adapted itself to indigenous educational traditions, thus altering its meaning to such an extent that it is difficult to talk intelligibly of a unified concept of competence across the globe. Instead, we need to take a close look at the actual use of ‘competence’ and cognate terms in different jurisdictions and carefully try to understand how the concept is being employed in those contexts. If we fail to do so, then we run the risk of misunderstanding what our colleagues in different jurisdictions actually mean when they talk of professional competence.

The time is more than ripe, therefore, for a volume that tackles in a comprehensive way the complexities and puzzles that competence-based vocational and professional education has generated. No doubt Professor Mulder’s collection will
itself become the subject of lively debate in the years to come. This will be all to the
good as it is most important that both the conceptual and the comparative dimen-
sions of the study of competence are given their full due. The four sections into
which this volume is organised deal with all these issues and more, including the
critical issue of the implementation of competence-based approaches, competence-
based approaches and different education systems and last, but not least, competence-
based vocational and professional education and the labour market.

It is to be hoped and can be confidently expected that this volume will prove to
be an invaluable source for practitioners of, researchers in and students of voca-
tional and professional education for many years to come.

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Preface

Many countries, national and international institutions, schools and colleges, professional associations, chambers of commerce, companies and consultancy organisations were, and still are, struggling in getting the implementation of competence-based education, competence modelling, competence-based professional development and competence assessment right, in the midst of heated debates about competence in theory, research and practice.

Although competence appeared to be a fuzzy concept, there are many practices attached to it. Key features, which are widely addressed in this volume, are the alignment of education and work, the assessment of prior learning, demand-driven educational planning, authentic learning, formative assessment, and new competence domains. All these practices vary country by country, institution by institution and program by program. That makes the world of competence-based vocational and professional education intriguing and fascinating.

Competence appeared to be a very resilient concept. In the 1970s, the competence-based teacher education (CBTE) movement started. CBTE was heavily criticised by humanistic scholars, who, in turn, advocated humanistic-based teacher education (HBTE). Being educated as a school teacher in the 1970s and having had 5 years of experience in teaching in and managing of an elementary school, I had the impression that a mix between these approaches would be fruitful for the development of teacher education. Attention to the democratic ideal of education, personal professional development and identity formation, mixed with attention to actual teaching behaviour, could in my opinion be a productive blend of ideology and practice. I saw with my own eyes that theory and practice needed to be in balance. Too much theory or ideology resulted in poor teaching, whereas too much practice resulted in shallow reflection on professional action.

There is a massive amount of publications on competence; this reflects that competence-based education is a global innovation, especially in vocational, higher and corporate education. Currently we can really speak about the existence of competence theory, competence research and competence practice. The literature on competence has grown so big that it takes a lot to get a good overview. This volume may help to get that overview and to further appreciate its diversity.
The preparation of this volume started in the Spring of 2013, during my stay at the Toulouse Business School in France. Together with Jonathan Winterton, an outline of the volume was drafted, which was submitted to publisher Bernadette Ohmer of Springer and series editor Professor Rupert Maclean, who was at the Hong Kong Institute of Education at that time. The outline and tentative table of content were discussed with the series editor in March 2014, and various suggestions were given for more authors and chapters. After this meeting, candidate authors were invited, and we received a very good response. Only a few did not have the time to contribute to the volume because of research assessments or other important duties. During the process of communication with the authors, we detected various gaps in the intended content of the volume, and we added chapter titles and invited more authors. We were very fortunate that the publisher did not have any objections against this. On the contrary, we felt encouraged to compose a volume which would cover the field of competence-based vocational and professional education as widely as possible.

Authors were given a fair amount of time to write their draft manuscripts, and when these came in, a long process of reviewing started, making revisions and doing second reviews and other revisions.

As time passed by, Jonathan Winterton made a significant career move by accepting the position as dean of the faculty of business and humanities at Curtin Business School of Sarawak in Malaysia. Because of this life-changing event, he had to disengage from the book project. I would like to express my sincere gratitude for the discussions we had regarding the outline of the volume, for the reviewing and editing we did together and for co-writing Chap. 1. I greatly enjoyed the time spent together in Toulouse and Amsterdam while working on the volume. It was also a privilege to have had the opportunity to speak about the book project at the International Conference ‘Skills for the future: Training, employment, occupations employability in turbulent times’, at the Toulouse Business School in September 2014.

A book project of this size takes time. From the start of the project in 2013, the year 2016 was anticipated as the publication year, which is achieved with the collective effort of all involved authors and colleagues from Springer.

This volume could not have been realised without the support of many people. I have already mentioned Jonathan Winterton. Had I known that I would have to complete this project alone, I might not have had the courage to start it in the first place. It is because of our initial cooperation that the book project took off. Thanks.

Many thanks also go to Bernadette Ohmer, who was the initial publisher of the volume. She was very responsive and positive about the idea of the volume. When she took notice of the ever-growing book project, it seemed as if her enthusiasm further increased with it. There were hardly any objections against our plans, even when they were adjusted over time.

Rupert Maclean, as said, series editor of the volume, has been very positive and encouraging, right from the beginning of the book project. He suggested a number of authors of which some have indeed contributed to the volume. His warm feedback on new ideas and the quality of the chapters and his patience to see the volume grow to full maturity are greatly appreciated.
Without the commitment and achievements of the many chapter authors of this volume, it would not have been realised. To all the authors, many thanks for your contributions.

Lawrence Liu, Education and Language editor at Springer, the final publisher of this volume, working with you was a pleasure. I am deeply impressed by the rigour of the publishing process of Springer. It greatly added to the quality and appearance of the volume.

My colleagues in ECS, the Education and Competence Studies Group, at one of the world’s leading universities in the field of life and social sciences, Wageningen University, also deserve a big compliment. We have had numerous debates about competence theories, definitions, research and measurement and have published a large number of professional and scientific articles together, based on our research. The many interactions during the last 18 years we have been working together greatly contributed to deepening and widening my thinking on competence.

Colleagues in the vocational education and training, professional education, higher education, human resource development and human resource management communities have also contributed a lot to the knowledge about and insight in competence theory and research. During the many conferences at which research papers on competence development were presented and discussed, various, and sometimes fierce, debates were held about the competence construct, competence research and competence practice, which further sharpened the insights in this field of study. Thanks for these interactions.

Finally, also on behalf of the chapter authors, I hope this volume will help in further understanding the complex field of competence-based vocational and professional education and, ultimately, help to effectively bridge the worlds of work and education.

Borne, The Netherlands

Martin Mulder

May 2016
Work is a major feature of 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 ‘applied learning’, 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.

This Springer book series on TVET seeks to provide comprehensive information about many cutting-edge aspects of TVET. The series showcases best and innovative approaches to skills development for employability and seeks to create an effective bridge between research, policy and practice. It is an ongoing project which commenced in 2005. Since then, this Springer book series provides a comprehensive picture of current issues, concerns and prospects in TVET worldwide.

This book, which is edited by the eminent TVET researcher, writer and academic Professor Martin Mulder, examines an important, cutting-edge topic, that of competence-based vocational and professional education, and most effective ways of bridging the world of work and education. Applied learning, to be effective, needs to actually be ‘applied’, not just theoretical in orientation, and so it must be competence- or performance-based. This book is a substantial contribution to this field, the aim being to examine existing worldwide experience concerning how to best and most effectively bridge the world of work and that of education. This is a sizeable book of 50 chapters which examine important matters such as: approaches to the development of conceptual foundations; worldwide trends and innovative approaches to competence-based education in Europe, North America, Asia, Australia and Africa; competence and key aspects of education systems; recognition, assessment, quality management and effectiveness; transversal competence domains; and lessons learned from previous experience and the best way to move ahead as this specifically relates to competence-based teaching and learning in technical and vocational education and training.
This is an important, cutting-edge volume on a topic that is of great importance to researchers, policymakers and practitioners throughout the world. I have no doubt that this book will be widely read and that it will have an important impact on policy and practice in this area.

QAPCO Professional Chair in Vocational Studies                    Rupert Maclean
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April 2016
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