Professional and Practice-based Learning

Volume 30

Series Editors
Stephen Billett, Griffith University, Brisbane, Australia
Christian Harteis, University of Paderborn, Paderborn, Germany
Hans Gruber, University of Regensburg, Regensburg, Germany

Professional and practice-based learning brings together international research on the individual development of professionals and the organisation of professional life and educational experiences. It complements the Springer journal *Vocations and Learning: Studies in vocational and professional education*.

Professional learning, and the practice-based processes that often support it, are the subject of increased interest and attention in the fields of educational, psychological, sociological, and business management research, and also by governments, employer organisations and unions. This professional learning goes beyond, what is often termed professional education, as it includes learning processes and experiences outside of educational institutions in both the initial and ongoing learning for the professional practice. Changes in these workplaces requirements usually manifest themselves in the everyday work tasks, professional development provisions in educational institution decrease in their salience, and learning and development during professional activities increase in their salience.

There are a range of scientific challenges and important focuses within the field of professional learning. These include:

- understanding and making explicit the complex and massive knowledge that is required for professional practice and identifying ways in which this knowledge can best be initially learnt and developed further throughout professional life.
- analytical explications of those processes that support learning at an individual and an organisational level.
- understanding how learning experiences and educational processes might best be aligned or integrated to support professional learning.

The series integrates research from different disciplines: education, sociology, psychology, amongst others. The series is comprehensive in scope as it not only focuses on professional learning of teachers and those in schools, colleges and universities, but all professional development within organisations.

Please contact Grace Ma at grace.ma@springer.com if you wish to discuss a book proposal.

More information about this series at https://link.springer.com/bookseries/8383

Simon Flandin • Christine Vidal-Gomel
Raquel Becerril Ortega
Editors

Simulation Training through the Lens of Experience and Activity Analysis

Healthcare, Victim Rescue and Population Protection

Springer

Editors
Simon Flandin
Faculty of Psychology and Educational Sciences
University of Geneva
Geneva, Switzerland

Christine Vidal-Gomel
Centre de Recherches en Education de Nantes
University of Nantes
Nantes, France

Raquel Becerril Ortega
Adult Education
University of Lille
Lille, France

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Series Editors' Foreword

A key goal of the Professional and Practice-based Learning book series is to contribute to discussions about and processes for improving the enactment of occupational capacities through practice-based learning experiences for both the initial learning of those capacities and their ongoing development. A related goal is associated with understanding and enhancing the contributions that different kinds of experiences can make to the formation and continuity of those occupational practices and from different conceptual and methodological orientations. To date, the volumes in this series have contributed a range of perspectives, approaches and outcomes to these discussions. This volume continues that tradition through its focus on simulation training and from a Francophone orientation and through detailed and grounded analyses of how simulation experiences can be designed, organised, enacted and engaged with.

The authors argue that the demands of work and work requirements have become more complex, interrelated and, perhaps, less easy to be taught and learnt. However, to date, the focuses on the use of simulation training have been often quite specifically focused and narrow. It follows then that their volume seeks to redress this issue. It does this through providing detailed descriptions of the learning potential of simulation training through considerations of its strengths and limitations; identify how it can be used to achieve strong learning outcomes within occupational preparation and ongoing development, and, also inform further how practice based approaches to learning can be effectively harnessed. Given that the learning of occupations where risk is high to both the practitioners and those who are serviced by them, the ability to provide experiences through simulations but avoid harm to either and offer scenarios, options and ways of representing occupationally based experiences that can be adapted to either performance requirements or learners' needs brings with it enormous potential. The question is how these simulations can be most effectively designed, implemented and experienced by learners.

In responding to these challenges, a particular feature of this volume is that it adopts a Francophone approach that focuses upon activities and experience as an analytical and procedural orientation. This includes engaging the readership in a consideration of ergonomics from a cognitive and activity perspective that is central

to the Francophone approach. In doing so, it draws upon illustrations from and appraisals of simulation training activities occurring within a range of sectors including healthcare, firefighting, security, policing and civil security. The discussion within the volume acknowledges the issues arising from the significant advance in electronic and digital technology that has occurred rapidly and continues to do so thereby opening up a whole range of ways in which experiences can be provided and activities organised and enacted as learning experiences. Within this development is the ongoing focus on addressing fidelity of experiences and validity of their learning potential. The grounded orientation to understanding occupational practice and learning that is central to the Francophone approach is well suited to illuminate and appraise issues of validity and fidelity.

The organisation of the volume is structured in ways that outlined these key concerns and issues within the contributions in the initial part, followed by parts that provide empirical and methodological contributions that explore these facets, with two summarising chapters comprising the final part. In this way, both individually and collectively, the contributions to this volume do much to advance understandings about the conceptual premises through which the design, organisation and enactment of simulation training might progress, and sets of procedural considerations to realise its contributions and secure efficacy.

In these ways, the volume makes a significant contribution to the field of professional practice-based learning and addresses an important gap both conceptually and procedurally about the ways in which experiences can be provided to achieve learning and developmental outcomes that go beyond what would be permissible, could be achievable and possibly engage with by learners, in so doing.

University of Paderborn
Paderborn, Germany
Christian Harteis

University of Regensburg
Regensburg, Germany
Hans Gruber

Griffith University
Brisbane, Australia
Stephen Billett

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Keywords

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Urban fire simulation
High-intensity simulated training
Activity-based training design
Use-of-force simulation-based training
Decision-making in police training facilities

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About the Authors

Simon Flandin is a researcher in the CRAFT lab in the Faculty of Psychology and Educational Sciences at the University of Geneva. His research consists of analysing the occupational and training activity of professionals in order to determine the best methods of generating transformations that improve performance, health, and development. His research approach is grounded in French-speaking Ergonomics and in Enaction theory, and his main fieldworks are video and simulation uses in various contexts of vocational education and professional development. Since 2016, his research agenda is polarised by safety and crisis management training. In 2019, he was the first educational scientist to obtain a SNSF (Swiss National Science Foundation) Ambizione Fellowship.

Christine Vidal-Gomel is Full Professor of Educational and Training Sciences. She is affiliated with the Centre de Recherche en Éducation de Nantes (CREN) at the University of Nantes (France). Her research approach consists of analysing the activity and development of professionals from the theoretical and methodological frameworks of French-speaking Ergonomics and Professional Didactics. She works on the design of 'enabling' training situations, integrating professional development and occupational health and safety. She carries out field studies in different domains, such as healthcare, building and civil engineering, and autonomous vehicle driving.

Raquel Becerril Ortega is an industrial engineer and Associated Professor of Educational Sciences in the CIREL laboratory (University of Lille, France). Her work consists of analysing occupational and training activity in order to design and develop adult training courses using simulation. She teaches to both academic and professional audiences. Her main interests are theories of adult learning and training, training design, simulation, and occupational activity analysis. In 2018, she obtained a research fellowship from the French National Institute for Research in Digital Science and Technology to contribute to a research and development programme on simulation training at the University of Santiago, Chile.