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978-0-521-74008-1 - Development of Professional Expertise: Toward Measurement of Expert Performance and Design of Optimal Learning Environments

Edited by K. Anders Ericsson

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#### DEVELOPMENT OF PROFESSIONAL EXPERTISE

Professionals such as medical doctors, airplane pilots, lawyers, and technical specialists find that some of their peers have reached high levels of achievement that are difficult to measure objectively. In order to understand to what extent it is possible to learn from these expert performers for the purpose of helping others improve their performance, we first need to reproduce and measure this performance. This book is designed to provide the first comprehensive overview of research on the acquisition and training of professional performance as measured by objective methods rather than by subjective ratings by supervisors. In this collection of articles, the world's foremost experts discuss methods for assessing the expert's knowledge and review how we measure professional performance and design-training environments that permit beginning and experienced professionals to develop and maintain their high levels of performance, using examples from a wide range of professional domains.

K. Anders Ericsson, PhD, is presently Conradi Eminent Scholar and Professor of Psychology at Florida State University. For the last 30 years he has studied the development of expert performance in domains such as music, chess, medicine, business, and sports and how expert performers attain their superior performance by acquiring complex cognitive mechanisms and physiological adaptations through extended deliberate practice. He has edited several books on expertise, including *Toward a General Theory of Expertise* (1991), *The Road to Excellence: The Acquisition of Expert Performance in the Arts and Sciences, Sports, and Games* (1996), and the influential *Cambridge Handbook of Expertise and Expert Performance* (2006). His research has been recently featured in *The New York Times*, *Scientific American*, *Fortune* magazine, *New Scientist*, and *Time* magazine. He is a Fellow of the American Psychological Association, the Association of Psychological Science, and the Center for Advanced Study in the Behavioral Sciences.

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# Development of Professional Expertise

TOWARD MEASUREMENT OF EXPERT  
PERFORMANCE AND DESIGN OF OPTIMAL  
LEARNING ENVIRONMENTS

Edited by

K. Anders Ericsson

*Florida State University*



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