Electronic Performance Support

Using Digital Technology to Enhance Human Ability

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Foreword

Life, especially our work life, is becoming increasingly complex in the 21st Century. At first glance, this seems counterintuitive given that our performance of work is increasingly supported by ever more sophisticated technology. But new evidence appears on a daily basis that despite ubiquitous powerful technologies such as networked computers, global positioning systems, and cell phones, human failures in decision-making and performance continue to have disastrous consequences. As this book goes to press, the world teeters on the brink of economic depression, ecological devastation, and/or global pandemic, all of which can be traced back to fundamental failures in human performance. On a smaller, local scale, the daily news highlights a plane crash with no survivors ‘due to a combination of pilot error and technical faults,’ fatal automotive accidents traced to people text-messaging while driving, and deaths from secondary infections stemming from the failure of hospital personnel to disinfect their hands, despite widespread availability of sterilization technologies.

With these and other global and local catastrophes in mind, this book, Electronic Performance Support: Using Technology to Enhance Human Ability, reminds everyone involved in education, training, human performance engineering, and related fields of the enormous importance of their efforts. Philip Barker, Paul van Schaik, and the other contributors to this volume provide invaluable insight and guidance that will inform experts as well as novices in all fields related to learning and performance. The extraordinary expertise shared in this book is especially valuable because of the degree to which the authors emphasize the psychological aspects of performance support. The fundamental limitations of human memory, perception, cognition, conation, and psychomotor skills and how they can be reduced through electronic performance support is one of the most important pursuits of this still young century, and this book points the way in a clear and inspiring manner.

Of course, Barker, van Schaik, and their collaborators do not underestimate the importance of technology and its ever increasing impact on our lives. They remind us of Alex Broers’ contention that ‘Technology will determine the future of the human race.’ Moreover, they directly address the obvious corollary question: ‘How should we use technology to build performance-support tools to help humankind solve the problems it will face in the future?’ The global as well as local challenges we face today are more urgent than most people seem willing to acknowledge, and there is no time to waste putting the ideas expressed in this book into action. Ironically, the more complex technology becomes, the more performance support may be needed. I sincerely hope that the authors’ optimism about the power of electronic performance support to enhance learning, problem-solving, and decision-making spreads widely so that the gaps between our potential knowledge and existing knowledge as well as our necessary performance and actual performance are closed. It’s not too late... yet.

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