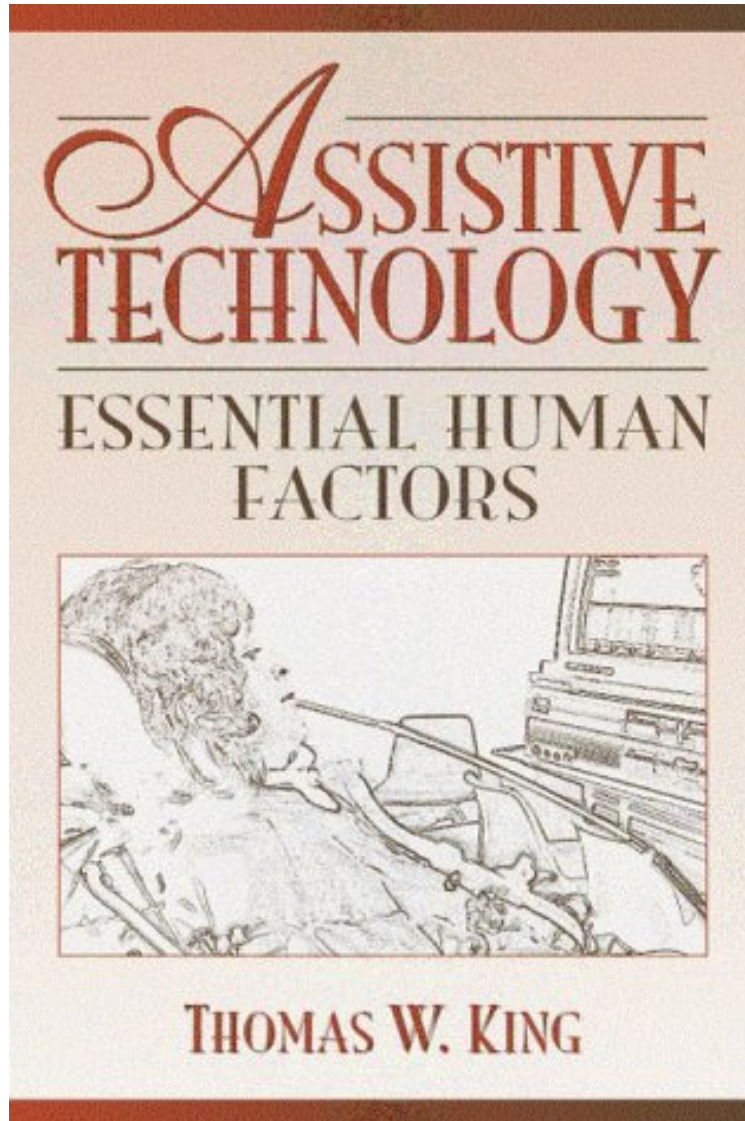


Assistive Technology: Essential Human Factors

Thomas W. King

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Thomas W. King : Assistive Technology: Essential Human Factors before purchasing it in order to gauge whether or not it would be worth my time, and all praised Assistive Technology: Essential Human Factors:

1 of 1 people found the following review helpful. Useful for anyone involved with designing usable assistive technology By Robert Stuthridge Ph.D., CPEI made some use of this book for my doctoral research on errors in the design process for assistive technology (AT - by which I mean here the modifications to the built environment made to accommodate the needs of disabled people). For a short book (269 pages including glossary, excluding references), King crams a lot of useful guidance between the covers. I liked the fact that he discusses AT from an ergonomics

perspective, which is my own specialty, and there was much here with which I was familiar. At the same time, King avoided writing a dull book by providing enough fresh perspective and personal opinion to make it an interesting read. Each of the nine chapters includes study questions, and there are plenty of useful photographs and drawings used to illustrate and clarify the text. King wrote this with "senior-level undergraduate students and beginning-level graduate students in a variety of rehabilitation, education, and medical fields" in mind, as well as "working professionals, AT users, and their families" (page xi). The work is written and organized in a way that reflects these aims, and it does so very well. King writes plainly and avoids unnecessary jargon, while managing to convey complex notions in a highly readable style. I am pleased that, unlike so many in this AT field, King does not over-emphasize the use of electronics. He avoids equating "AT" with "Computers," and differentiates between "No-Tech," "Low-Tech," and "High-Tech" solutions. This is as it should be; I have worked as a rehabilitation ergonomist for almost twenty years, and I can attest that most enablement is achieved by non-electronic AT. While electronic AT has its uses, of course, enabling the completion of tasks that non-electronic AT could not enable, it is useless when the power is out, and for that reason, is limited in its applications, especially where safety in an emergency is involved. Far too often these days we hear only about the computing side of AT, which accounts for a much smaller proportion of AT than the countless physical modifications made to our environment which improve access for people - things like ramps, differentially-textured surfaces, improved handles/grips, wheelchair accessible counters and desks, hand controls in vehicles, reaching devices, walking aids, manual wheelchairs, magnifying glasses, and so on. These non-computer modifications continue to be the mainstay of enablement, although one would hardly gather this this when scanning the titles of workshops at AT conferences! One major problem of including electronic AT in a textbook is that by the time it goes to press, the AT is out of date, and perhaps even unavailable. Fortunately, King provides enough human factors information for the AT professional to make informed decisions regarding the usability of new assistive technology, so the chapters in this book on controls and displays are still very useful. No single book can convey all aspects of ergonomics (human factors) relating to AT, and of course there are omissions, but there are enough inclusions to make this a worthwhile purchase. Originally I borrowed it from my university's library and liked it enough to buy my own copy for future reference, and also to incorporate some of it into my own teaching of AT ergonomics to AT professionals and students. Why only four stars? I would have liked to see King address how modifying the environment for person A can inadvertently make the environment less usable for person B. There is an assumption that AT creates a more usable, accessible world, but this is not always or inevitably the case. My research identified people who shared a modified task with the disabled worker, and suffered injury as a consequence, because the AT was only designed with the disabled user in mind. Still, this does not deny King's intention is quite proper - until we have a routine "inclusive" approach to design that mirrors the natural variation in human functional capacity, we will be forced to adapt poorly designed environments and objects to enable all people to participate equally in society. Also, any book that gets five stars would need to be "perfect," and King, like any honest author, knows that perfect text books simply do not exist, and will never exist! So four stars it is, with a very high commendation for anyone involved in disability issues to buy it and to read it.

2 of 2 people found the following review helpful. What is Missing from Special Education
By Richard Many teachers are fond of saying that, "computers are just another educational tool." This implies that there is no computer revolution in education. A black board or a pencil is very similar to a computer. What they miss is how those tools changed education. Changes in pedagogy did not happen because educators wanted to change education. They happened because humans interacted differently with their environment because of these tools. Assistive Technology: Essential Human Factors, particularly chapters five and nine, helps educators assess how to evaluate the effectiveness of assistive technology and computers. Before you create your lesson plan or schedule an IEP meeting, you should know what an assessment of human factors would tell you about your educational plans. And if, by chance, you think this is the responsibility of your school district educational technologists, just ask them what they know about the human factors involved in using technology. This is an excellent book to begin to explore why some assistive technology works and some fails.

7 of 7 people found the following review helpful. excellent resource for all SLPs
By A Customer This book provides guidelines to follow when working with clients who use assistive technology. It is an excellent resource for all present and future Speech-Language Pathologists and all those who interact with users of assistive technology. A must have reference for your professional library!

The Information Age has transformed the way in which humans communicate and interact with each other in almost every aspect. This new relationship between humans and technology has been an added convenience for some, and a sheer blessing for others; for those with physical and communication impairments, modern-day technology has transformed daily living into a journey toward capability instead of disability. In its examination of assistive technology, this book serves as an essential resource for clinicians, product developers, families and individuals as they recommend, select, purchase, design, and use assistive technology. Combining real experience and academic research, King examines how humans can adapt to machinery and increase the acceptance, effectiveness, and efficiency of technology. This book investigates how psychological factors (such as fear, stress, rejection, etc.) can

affect the efficiency of assistive technology. Product developers, speech pathologists, audiologists, occupational therapists, rehabilitation counselors, special educators, nurses, and businesses. A Longwood Professional Book

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