Foreword

My last week has included both a dinner with an education minister and a live media interview. What characterised both these events was a shared question: What is the single most important thing about teaching with new technologies? And of course therein lies the problem: there is no single uniquely important thing, no silicon bullet. Schools and other institutions of learning are complex places – single events like a road accident, or a windy day can and do change the nature of the school community. Students are all individuals and yet cohorts have their own character too. Teachers themselves also vary, and thank goodness; our best learning memories usually have a unique teacher as part of the mix. None of this is simple.

And, underpinning all this, the conveyor belt of innovation whisking us further forwards into this millennium accelerates in both the power and the choices we are offered year on year. We face, as has often been observed, the certainty of uncertainty and some kind of constancy of change. It is hardly surprising that in among all this, politicians and others ask for simple answers for 'the single most important thing', or revert philosophically to an earlier and less complex era, or to childhoods remembered. It is no help at all that companies also often suggest that they actually have 'the most important thing': adopt our solution, trust our anecdotes, keep taking our tablets …

Learning professionals, parents and children know better of course, and they will love this book; it is cogent, reflective and, crucially, it embraces the extraordinary complexity of making learning better in this exhilarating third millennium. Chapters can be dipped into and out of, or it can be enjoyed cover-to-cover, for its narrated insights.

Why would all this matter? Well first, in a world where many (although not all) may live way beyond 100 years, and where newly emerging complex problems occur seemingly weekly, a lifetime's passion for learning has never been more important. The educational stability of earlier eras cannot prepare us for the problem solving we need to tackle the exogenous change and stochastic shocks of eras to come. A mere decade and a half or so of full time learning must leave you ready and hungry to learn delightedly throughout a lengthy lifetime.

Second, for a significant swathe of the world's 2.2 billion children, education has not delivered what they need. Shortages (or often a complete absence) of teachers,

partial information, war, famine, bigotry and more have isolated them from any real chance of a traditional school education. We have to believe that technology has the ability to transform learning to make it affordably better for everyone. If so, surely it is helpful to start with a detailed look at the big issues and critical questions provoked by teaching with digital technologies.

Children, teachers, parents and technology have to lie at the beating heart of a vibrant new approach to learning. We need everyone's algorithmic thought; the world needs our collective digital ingenuity. New learning has the ability to mend this world. This book is not a bad place to start on the repair.

Professor Stephen Heppell
Felipe Segovia Chair of Learning Innovation at
Universidad Camilo José Cela, Madrid.
Chair in New Media Environments, CEMP,
Bournemouth University.