

BOOK REVIEW

Is Technology Good for Education? Neil Selwyn (2016), Polity Press, New York, 160pp., hardcover \$US64.95, ISBN 978-0-74-569646-1

The most influential factor in accepting the request to review this book was its title. The book argues that it is necessary to set technology and education in their social, economic, and cultural contexts. In the ‘digital era’, criticism of technology is intriguing.

This book, which discusses the digital technologies that have become fundamental components of learning in terms of the concept of education, also examines the necessity of the technology. Since many digital environments, such as many web technologies, virtual classrooms, and mobile technologies are widely used in formal education, it is possible to assume that the digital era is located at the very heart of education. In many countries, government policies also support digitalization and technology research in education. The author aims to provide answers by analysing the question from another perspective.

The first section of the book, ‘Digital technology and educational change’, discusses the alterations observed in education. The advantages of using technology are contingent on such matters as the economy, speed, and effectiveness. It also highlights the popularization of virtual environments, online games that replace face-to-face learning with digital technologies. Education 3.0 has been replaced by Education 4.0 (even Industry 4.0 is being developed) and now debates about Education 5.0 are taking place. Universities and schools strive to adapt to the technology, and teachers struggle to update themselves. The author also explores the argument that digital technologies in contemporary education provide a corrective to a corrupted education system.

The author declares that the technological transformation is a complex process and provides a detailed overview of current tensions and the challenging questions encountered in education. Should education be more democratic? Should technology be a democratizing power? The popular use of technology, particularly in the American education system, has been much criticized. Nevertheless, e-learning and technology-based learning created with internet technologies provide access to education from anywhere. Digital openness, initiated with open-source software, enables the masses to access information through MOOCs. Drawing attention to the development and implementation of state policies, online learning systems, and sustainable innovations for the popularization of education, the author stresses the significance of the human factor in the elimination of social disadvantages for the sake of democracy in education and in such requirements as equality, social justice, and equity and culture.

The book’s third section questions the personalization of education and various personalization elements, such as user-defined icons, fonts, and colours, including the themes used in the presentation of digital course materials. Many systems allow personalization, including the sites of leading brands, the citizenship services of government, and even health services and e-government applications. Systems based on the learner, such as Montessori, free school education, and home-schooling are becoming popular. In the context of the philosophy of lifelong learning, it is not possible to use a single design that would be attractive and useful for all age groups, including both children and adult learners. In this context, personalization of the learning environment and instructional materials is essential. However, personalization also provides data and comprehensive information about individuals to institutions. In this section, the author highlights the need for self-directed learning systems to increase the learner’s motivation. The consumer society is the big data provider for governments and product-service providers alike. It would be possible to conduct research on artificial intelligence, wearable technologies, and other technologies that would provide data on education. In addition, new dimensions of personalization are possible, such as the organization of individual learning experiences and the development of personal assistants (Mutlu, 2016).

The fourth section discusses if it is possible to render education more computable and how to achieve this if it is possible. In particular, the availability of large data fed by daily life activities is discussed. Data, coding, and algorithms are at the very heart of the latest developments in education. Drawing attention to talent management practices in schools, the author stresses the significance of digitalizing education, machine learning, learning analytics, and using big data in online environments. Thanks to technology and big data, smart schools are being developed, the learning management systems are becoming widespread and access to education is being made easier. Selwyn argues that learners and teachers/trainers will play a critical role in shaping the education organization and the future of the education through systems recording all the personal data of learners. Selwyn is right on this point. Algorithms for teaching machines with artificial intelligence (Oberlander, 2018; Sardi *et al.*, 2018) can be used as a point of reference for the innovation that teaching and education systems will require in the future. Tegmark (2017) asserts that strengthening human intelligence with artificial intelligence will be an unprecedented development that has the potential to help civilization advance as never before.

Selwyn argues that the ability to design, manufacture, and implement digital technology is beyond the capacities of national governments, governmental organizations, and educators. The information technology industry constantly produces designs and conducts research and development in support of education. MOOCs and free content-sharing platforms can truly be considered commercial activities with educational purposes. Deep learning methods and wearable technologies will have a major influence on the future of learning and education systems, particularly the future of universities.

Digital transformation is a challenging process and it may confront resistance. Selwyn proposes a host of recommendations for government policy, financial support, research, and for the social and cultural development of the education systems required to keep pace with the latest technology. Although not mentioned in the book, transhumanism, which will cause the restructuring of education systems (Uğur, 2018), is relevant to Selwyn's argument. The author offers both researchers and the general public the opportunity to discuss and review one of the most significant pressures on the educational system. In doing so, he reveals the inequalities and privileges in the use of technology in education.

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