BOOK REVIEW

TEACHING IN A DIGITAL AGE:
## GUIDELINES FOR TEACHING AND LEARNING
Written By Anthony William (Tony) BATES

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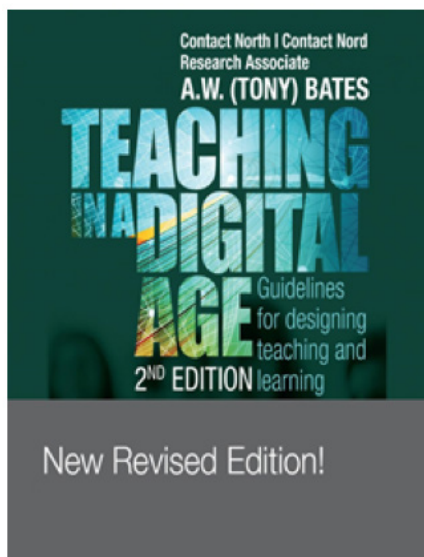
INTRODUCTION

Dr. Tony Bates is a contemporary theorist in the field of educational technology. One of his most important books is Teaching in the Digital Age, which has received considerable attention around the world, and most of the educational planners and educators in the field of distance education use the book as a practical guide in the educational design of digital environments and is one of the internationally recognized sources in the field of online teaching. The book introduces the principles for effective teaching in an online environment and provides an instruction and guide for instructors about online teaching and learning and is also a good practice guideline for redesigning teaching and enables teachers and instructors to earn the knowledge and skills they will need in a digital age. This valuable collection has been translated into different foreign languages around the world includes translated versions in Turkish, Spanish, Vietnamese, French, Persian, Chinese, Portuguese, and is available on the BCcampus website in Canada as a recognized and credible open-source. Many countries are trying to translate the book Teaching in the Digital Age into the official language of their country in the future and make it available to researchers in the field of distance education.

REVIEW Of THE BOOK

The book provides the essential principles for effective teaching, especially when using technology in teaching. Primarily, is intended for teachers and educators but it can also be helpful for students to develop the knowledge and skills needed in the digital age. Generally, the book Teaching in the Digital Age also is appropriate for use instructional designers to redesign the classrooms in the digital age and can help them make these decisions in the field of choosing face-to-face and online methods or a combination of these two methods. The book reviewer used two approaches and methodologies to review the book. The first step we provided based on the descriptive approach the essential information about specifications, content, and structure of the book then presented the goals of each chapter. Finally, the key features are described in the

conclusion section with an analytical and critical perspective, also the book reviewer tries to analyze the second edition for the first time. To explain the topics of the book, first, refer to the book chapters, the book covers 13 chapters:

Chapter 1

Fundamental Change in Education

In the first chapter, the author states that we are in the digital age, and technology has surrounded us and has affected classrooms. Learners in digital environments need digital skills, as a result, communications skills, the ability to learn independently, ethics and responsibility, teamwork and flexibility, thinking skills, digital skills, knowledge management are the skills needed by learners in the world of technology. Today, the landscape of higher education has changed and technology is the focus of the classroom and most universities are moving towards open and online learning and the use of blended learning is rapidly increasing as a new teaching method in universities.

Chapter 2

The Nature of Knowledge and the Implications for Teaching

In Chapter two, Dr. Tony Bates tries to introduce the epistemological foundations of learning theories and states that our core beliefs and values are often shared by other professionals in a subject area and shape our approach to education and teaching. As a result, these beliefs are usually not explicitly stated and affect the whole teaching process in a classroom, and Learning theories are different and have different views on the nature of knowledge. Generally, Objectivism and behaviorism, Cognitivism, Constructivism, and Connectivism are from the main perspectives of epistemology and every educator is influenced by an epistemological perspective or learning theories in their teaching, although they may not be aware of their perspectives and beliefs.

Chapter 3

Methods of Teaching: Campus-Focused

In Chapter three, Dr. Tony Bates describes the different teaching methods, he believes that there is no single way to teach educators in the digital age. In this chapter, he argues that teaching methods that focus primarily on conceptual development such as dialogue and discussion, experiential learning, and practical learning in the real world are more appropriate for developing the skills needed in the digital age.

Chapter 4

Methods of Teaching with an Online Focus

In the fourth chapter, the main concept is teaching methods in online environments. The author believes that we need design models for teaching and learning that lead to the development of the skills needed in a digital age and there are no specific models for teaching in the digital age, and the choice of models depends on the environment in which it is used. Online collaborative learning, the ADDIE model, Competency-based learning is the most widely used design models in online and digital environments.

Chapter 5

MOOCs

Chapter five of the book is one of the most interesting chapters of the book, the readers are introduced to the concept of MOOCs as a new educational tool and a form of online learning. The focus of the chapter is on the types of MOOCs and their classification such as xMOOCs and cMOOCs, and at the end of the chapter, the strengths and weaknesses of MOOCs and their applications in the higher education system are provided as essential points.

Chapter 6

Building an Effective Learning Environment

In the sixth chapter of the book, the author tries to explain the concept of an effective learning environment. The learning environment generally influences learning, pedagogical and epistemological strategies and by reading the content of the chapter, readers are introduced to the various components of effective learning environments.

Chapter 7

Understanding Technology in Education

Chapter seven focuses more on the difference between media and technology in educational contexts, the author introduces six major media:

1. Face-to-face teaching
2. Text
3. Graphics
4. Audio
5. Video
6. Computing (including animation, simulations, and virtual reality).

In the continuation of the chapter three key characteristics or dimensions are introduced:

- Broadcast vs communicative
- Synchronous (live) vs asynchronous (recorded)
- Single vs rich media

In chapter seven, Dr. Tony Bates emphasizes that these characteristics or dimensions of media then need to be evaluated against the learning goals and outcomes desired, and professors can use powerful tools for teaching and learning by choosing rich communication and asynchronous media.

Chapter 8

Pedagogical Differences between Media

Chapter eight focuses on the pedagogical differences between the media. The author believes that the choice of media is generally influenced by the teaching philosophy, structural requirements in providing content, and skills needed by learners. One of the highlights of the chapter, which differs from the first edition of the book, is the introduction of emerging technologies such as virtual reality, augmented reality, simulators, artificial intelligence, and educational games. For this reason, the new topics of chapter 8 are the distinctive components in the difference between the first and second editions of the book.

Chapter 9

Choosing and Using Media in Education: The SECTIONS Model

The main purpose of the chapter is to provide a framework for making effective decisions about the choice and use of media for teaching and learning. The framework used is the SECTIONS model. The framework used is the SECTIONS model, which stands for:

- Students
- Ease of use
- Costs
- Teaching functions
- Interaction

- Organizational issues
- Networking
- Security and privacy

Chapter 10

Modes of Delivery

In Chapter 10, Dr. Bates states that there are four factors to consider when choosing the mode of delivery, (face-to-face or online).

- Student needs;
- Teaching strategy
- The pedagogical requirements of the subject matter
- The resources are available for an instructor.

And emphasizes that the move to blended or hybrid learning means reorganize the use of the campus and the facilities needed fully to support learning in a hybrid model.

Chapter 11

Trends in Open Education

The main focus of the chapter is on open educational sources, also Dr. Bates states that the availability of OER, open textbooks, open research, and open data means that in the future, almost more academic content will be open and freely accessible over the internet.

Chapter 12

Ensuring Quality Teaching in a Digital Age

One of the main differences between chapter 12 and other chapters of the book is the focus on quality issues. The chapter presents nine steps for teaching quality in the digital age, also presents a new different definition of quality. From the point of view of the author of the book, quality is teaching methods that successfully help learners develop the knowledge and skills they will require in a digital age.

Chapter 13

Supporting Teachers and Instructors in a Digital Age

The chapter focuses on supporting educators and learners in the digital age, and to develop such knowledge and skills in the digital age, teachers, and instructors need to set clear learning outcomes and select teaching methods that will support the development of such knowledge and skills. The move to blended, hybrid, and online learning and greater use of learning technologies offers more options and choices for teachers and instructors, as far as they can to be able to improve the skills needed by learners in the digital age.

CONCLUSION

One of the salient points of the second edition of the book, which distinguishes it from the first edition, is the emphasis on the introduction of emerging technologies in education. The first edition of the book emphasizes the concepts, principles of learning in the digital age, and Dr. Tony Bates tries to explain the importance of the skills needed by learners in the digital age. From the point of view of the author of the book, learners and educators will not be successful in teaching and learning without the necessary skills in the digital age, but in the second edition of the book, the author tries to add new sections to the richness of the book, and in chapter 8 the author refers to emerging technologies in education such as serious

games, gamification, virtual and augmented reality, and artificial intelligence, of course, in other chapters, the author has added new sections to the previous content, which has marked in green. After various reviews of the different books in the field of online learning, the book reviewer concluded that the book is one of the most prestigious international references in the field of online teaching in the digital age. We can describe the book with unique features such as:

Merits of the Author of the Book

Dr. Tony Bates has a Ph.D. in educational administration from the Institute of Education, the University of London. He has been a professor of educational media studies at the Open University of England for 20 years, then emigrated to Canada at the end of 1989, where he worked for five years as the Executive Director of Strategic Planning at the British Columbia Open Learning Agency. He then became Director of Technology and Virtual Education at the University of British Columbia, where he designed, developed, and taught his first online courses and then helped launch the first fully online programs at UBC. In 2003 he was retired from UBC and set up a consulting company to provide specialized advice to universities, colleges, and government agencies on online and hybrid learning strategies. He has worked with more than 50 universities and colleges and several government agencies in Canada, the United States, and Europe and has contracted with the World Bank, UNESCO, and the OECD worldwide. In 2014, he decided to write a book with the title Teaching in the Digital Age, he has published the book as an open textbook through BCcampus, making this appreciable work available to a global readership as a unique work.

He also has written eleven books on educational technology and distance learning and has been translated into many languages including French, Chinese, Spanish, Korean, Serbian, Vietnamese, Portuguese, Arabic, Turkish. He also holds honorary degrees from the Open University of Portugal, the Open University of Catalonia, the Open University of Hong Kong, the University of Athabasca, and Laurentian University. The book reviewer strongly agrees with Dr. Sir Daniel at the University of London that Tony Bates is one of the global most literate and mindful scholiasts on educational technology.

Multiple and Different Audiences

The text is most appropriate as a practical reference for researchers about teaching and learning in the digital age, also the book has different audiences including school educators, faculty members, curriculum designers, educational technologists, college heads, and educational policymakers, and students.

International and Global Dimension

A notable feature of the book is public acceptance at the global level. Today, in many developing countries that are not native English speakers, they are facing a shortage of valid and international resources, therefore these countries have to translate top books from other countries especially from English into their languages. Translating such books can be very helpful as a practical guideline for teaching and learning in education, the book Teaching in a Digital Age has been translated into many languages and is used in most universities and academic centers in the field of online teaching and learning. These translations show that this valuable collection has universal respect and attention, also the text is an international book without any discrimination or prejudice in matters of culture, gender, ethnicity, national character, age, disability, education, also all translations of the book are available together on the BC campus website, and it is available as an open-source to the public and those interested in the field of online learning.

Comprehensiveness

The text has comprehensiveness very high and covers all areas and ideas of the subject appropriately and reflects all the components and concepts of educational technology from the past to the present. Dr.Tony Bates has tried to introduce the activities of prestigious universities around the world in the field of distance education innovations from North America to Canada and from Asia to Europe and Africa, he also

introduced global and leading findings in distance education and educational technology so that the reader gets a comprehensive view of the virtual education topics, as a result, the audience can get acquainted with leading and progressive universities in the field of distance education after reading the book.

Structure and Sequences

The topics in the text have been expressed in a rational, clear manner and throughout the book, the author has used fixed and specific terminology. The content and sections of the book are very relevant and they have a regular sequence, also there were no noted grammatical or spelling errors and the language of the book is very pleasant and impressive along with interesting analogies. The structural form such as the table of contents, chapters, and subsections provides a clear intellectual order for reading the contents of the book so that chapters begin with a statement of purpose and conclude with keynotes, as a result, the reader can follow the goals of each chapter and at the end of each topic, and also activities are considered at the end of each chapter. The references of the chapter are provided at the end of each chapter with an access link and each chapter is divided into subsections so that create a concept map in the reader's mind and the author has tried to present each chapter with a tutorial scenario to stimulate the minds of the audience in understanding the topics. Generally, content is up-to-date, especially in the second edition and the text is written in transparent, accessible prose and has no bias.

Dynamic Activities

The book contains a variety of activities and questions that are presented throughout chapters and these questions most often aim to require readers to analyze and evaluate issues from their point of view. The different activities such as scenarios, stories, conversations in a way that actively attracts the reader to understand the content, concepts, and methodology, and in general, the reader is engaged in solving exercises and activities and at the end of each section provide an opportunity for audiences to express their views on the questions raised and as a result, an intellectual communicate is created with the author of the book. The readers can receive information by click on the podcasts, in general, the book considers as a flexible and dynamic source.

Use a Combination of Text, Photos, and Videos with Hyperlink Features

One of the prominent features of the book is the use of very clear, relevant, and attractive images, pictures and photos, and videos, in this way the reader can understand the whole subject by looking at the pictures and graphs. The author has used a variety of global examples from around the world and the references of the book have hyperlinks and readers can view the sources by clicking on the references. Overall, the author has attempted to shows an understandable and alive image of issues through various photos and videos.

Top Author Experience

One of the highlights of the book is that the author has presented 40 years of international experience in higher education especially in the field of educational technologies and distance education in England, Canada, and around the world. Dr. Tony Bates also is one of the most famous contemporary theorists in the field of education technology and distance education, therefore he has experience setting up the first online courses in the 1980s at the University of London and is one of the outstanding designers of distance education internationally. The author of the book is very familiar with Asian and Middle Eastern countries, he has come to these countries to do a consultancy and to help with the design and operation of open universities in the past years.

A Free and Well Known Open-Source on Bccampus

The book with translations into different languages is available on the BCcampus website as an open-source and audiences can access to book easily and freely via mobile or tablet and since the book access is an open and electronic source, it has become a user-friendly book. It should also be noted that BCcampus focus is to

support the academic institutions of British Columbia as they apply their teaching and learning practices to create a better experience for students.

BIODATA and CONTACT ADDRESSES of AUTHOR

Dr. Mohsen KESHAVARZ, has a Ph.D. in virtual education planning. Currently, he is a faculty member and the Director of the Virtual Education Center of Torbat Heydariyeh University of Medical Sciences now. His research interests include online and virtual learning, blended learning, telemedicine, new educational technologies, e-health, and multiple literacies in online environments. He has published several articles on virtual education in the international Journal. He is an energetic advocate of distance learning in his home country of Iran, having translated Tony Bates's book *Teaching in a digital age* to Persian in addition to several other projects, some with international collaborators. He has recently been introduced as an international figure in the field of online learning by the site of leaders & legends of online learning.

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