

Book Review: ICT: Changing Education

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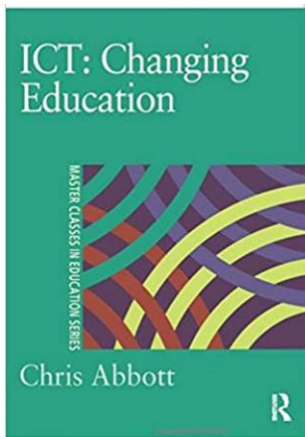
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Abstract

“*ICT: Changing Education*” is edited by Chris Abbott. The book was published in 2001 and it has 142 pages. The ISBNs of the book for different versions are as follows; ISBN-10: 0750709502; ISBN-13: 978-0750709507. The book describes the evolution of computer use in education and addresses the notion of virtual learning communities through case studies involving learners, parents and educators along with national education policies of some countries, such as the UK and Sweden.

Book Review

1. Introduction



“*ICT: Changing Education*” is edited by Chris Abbott. The book was published in 2001 by Routledge and it has 142 pages. The ISBNs of the book for different versions are as follows; ISBN-10: 0750709502; ISBN-13: 978-0750709507. The book describes the evolution of computer use in education and addresses the notion of virtual learning communities through case studies involving learners, parents, and educators along with national education policies of some countries, such as the UK and Sweden.

The ultimate aim of the respective book is to shed light on how the use of technology in education has been changing over years, and to presume some projected impacts of technology on teaching practices. It provides readers with a comprehensive understanding of the use of ICT in education both in the past and at present by demonstrating the national education policies of some countries. To fulfill its goals, the topic has been discussed in seven chapters which are going to be taken into consideration singly in this review.

2. Review of the Chapters

Chapter One: ICT and Literacy

Chapter one begins by the fact that with the advent of technology, there have been changes in varied practices including shopping, banking. Education is not far from these changes led by the use of the internet.

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What the first chapter puts forward is that the use of technology in education has called forth changes in teaching practices. To clarify it, computers, which used to be regarded as solely text-based until recently (White, 1985), provided scant facilities in the past compared to today's unlimited perks of the technology. That is to say, current internet access offers a variety of sources including images, videotape, and cassette to be used in teaching unlike the one offered in the past, so it is indicated by the author that the use of book in education will be out of fashion very soon, and there will be a possibility of teaching knowledge through the use of motion picture. Eventually, there will be a shift in teaching setting from the formal educational setting to home-based educational setting.

The first chapter, 'ICT and Literacy,' addresses this central issue and explains how notions of literacy are evolving as a consequence of the use of Information and Communications Technology (ICT). The author indicated that the use of ICT in education does have a profound impact not only on changing schooling but also on the notion of literacy. Namely, though literacy was composed of the only word-based texts till the end of the twentieth century, now it is a more comprehensive concept that also holds inside multimedia, picture, sounds, and moving image. Today, it is possible to speak about multiliteracies due to advancing technology. Street (1996) criticized multi-literacies by providing his definition of multiple literacies. What he alleged is that literacy consists of three models including Autonomous model, Critical Literacy, and New Literacy Studies. The first chapter provides readers with information regarding these three models.

All in all, the first chapter of the book is mainly concerned with the developments in technology, and the impact of technology on education. In addition to these, it is emphasized by the author that the concept of literacy has been evolved and fragmented into different sections in consequence of ICT.

Chapter Two: Virtual Communities

The second chapter, 'Virtual Communities,' explains how ICT is altering communities and forming new, mostly virtual groupings. It is stated in the chapter that although it might be difficult to relate the words of online and community at first, it shows that it is actually possible to associate these two notions with one another. That is to say; as a result of developing technology there is no need to become a member of a community physically, so it can be said that communities are beyond borders through the instrument of the technology. In this respect, this chapter demonstrates previous initiatives to develop online communities, and it also touches upon the close relationship which takes place between community and identity.

The second chapter underlines that there have been attempts to create virtual communities even before computers. The use of telephone and Citizens' Band (CB) radio were indications of how people formed communities through technology. However, these communities were limited in number compared to the ones which have been created recently through a computer or the internet.

In the second chapter, the close relationship between identity and community is also explained. The author's opinion on this subject is that self-defining choices of young people enable them to create their identity and to become autonomous adults. As a result of increased use of internet, and existence of virtual communities, it is probable to say that online platforms also play a decisive role in establishing the identity of a young adolescent in the sense of allowing them to make choices about varied aspects of their life. Even it is said that people view computers as a way of creating their identity.

Newsgroups and Into the Dungeons are among those virtual communities mentioned above that contribute to the formation of identity. Whereas Newsgroups, usually known as Usenet, allows its users to become a member of groups that are related to their practices, and hobbies, Into the Dungeons provides its users with adventure stories in which users are given choices, and they are asked to decide on one thing among choices, so that users lead the stories with their choices that they make.

Lastly, the second chapter shows how long it took to make people become aware of the significance of the internet. Furthermore, it is indicated that online communities mostly comprised of the young, middle class,

male, either European or American people. Also, the reason why virtual communities consisted of lonely young people is that virtual communities were found more welcoming compared to real life settings.

To sum up, the second chapter is mainly about virtual communities, and their effect on identity formation.

Chapter Three: Changing Schools

The movement of educational technology from its conventional foundation, the classroom, to the home setting is discussed in the third chapter, 'Changing Schools.' The chapter firstly puts emphasis on a significant point that learning is not only limited to school, so it is not wrong to claim that life outside school comprises of the most of the learning. In medieval times, education was regarded as "complex, lifelong, and unplanned" (Illich, 1973). On the other hand, in today's world, the concept of lifelong has started to attract attention recently. Till the end of the twentieth century, there were some concerns related to the efficiency of the model which views school as the most substantial part of learning, so the home-school movement gained popularity in the second half of the twentieth century by the help of technology.

The third chapter also discusses library practices affected by advancing technology. The author provides the following example; the Blair government has become aware of the importance of online content in education, so the government has provided its librarians with training regarding the development of online content.

It is also revealed in the third chapter that in the 1960s, there was a kind of misconception on the part of teachers regarding the point that technology is all about machines which would replace the teacher. Thus, teachers did not always appear to welcome these teaching machines in their classrooms. Yet, some training programs like the New Opportunities Fund made a contribution in a way that teachers started to view the computer or teaching machines as a useful tool rather than a teacher.

Having a look at the situation in England in terms of the place of computers in education, the UK government, like Sweden government, seems fully aware of the substantial position of ICT in education so that the government has made investments in education by ensuring teachers in-service training concerning the use of ICT, and integrating ICT in the curriculum.

The final point that the third chapter discusses is basically concerned with whether ICT is a subject or a tool. Whereas some view ICT as a tool to help people gain knowledge in subjects of curriculum, others dissimilarly see it as a subject in its own right.

Chapter Four: Learning, Computers and Social Interaction

Chapter 4, 'Learning, Computers, and Social Interaction,' expands on the debate about how ICT is changing education and focuses on social interaction between students. A case study of a young person who developed professional IT skills in this manner is demonstrated in this part. There are connections made between educational theory and ICT use, and the concept of post-geographical learning is proposed: learning that occurs by the online social networking of communities whose members do not live in the same physical location.

The fourth chapter explains changing perceptions regarding learning in the sense of some learning theories. The distinct views these theories hold with regard to how learning occurs are explained in the section as well. Behaviorists' perspective advocates the necessity and importance of "stimulus-response", and it puts emphasis on drills and practice in the learning environment. In this way, early software developers adopted this view in their pieces. On the other side, there have been attempts to create alternative programs to which basically depends upon drill and practice. Papert's computer program called LOGO is one of these initiatives in which the main focus is on making students use computers to think, and carry out exploration on their own rather than using computers to program learners. Though LOGO was a favored program all

over the world in the 1980s, later on, the use of LOGO in education was limited to mathematics and geometry; in fact, this program could be used in varied disciplines. Papert, who is the developer of the program, lays weight on the issue by saying that schools should change. For doing so, alternative school models in which learners will actively engage in learning need to be developed. Paper also takes the interaction between learners and computer into account from two distinct program developers' view; the instructionist and the constructionist. Instructionist presents school style learning through a game that a designed program asks questions, and learners are supposed to give reaction to those questions. On the other hand, constructionist draws attention to making students enable to design the game.

The fourth chapter also explains that due to advancing technology the home school movement gained popularity all around the world, especially in the US, in the 1960s and 1970s. However, this movement is not without its drawback. It is criticized since it does not provide the learner with enough social interaction.

Chapter Five: Educational Responses to Technology

In Chapter 5, 'Educational Responses to Technology,' a variety of alternatives are examined, ranging from the 1960s teaching machines to today's multimedia connected PC. It provides a complete understanding of the use of technology in education before computers.

In the chapter, it is highlighted that new technologies in educational systems are not embarked swiftly. Because, conservative views with respect to commonly accepted methodologies and understandings hold schools off technological developments. This is also valid on the part of teachers. As to give an example, Mellon, though who is a professor in Educational Technology department, still believes in substantial position of teacher in classroom in spite of a variety of sources available, and she stated that "Technology cannot guarantee learning; students cannot be forced to learn; learning styles differ widely; and teachers are more important than even the most sophisticated educational tools." (Mellon, 1999)

This chapter also demonstrates the insight of educational software. As it is already mentioned in the previous chapter, the use of the computer in early times was based upon behaviorist view. Accordingly, early educational programs mostly included drill and practice exercises for pedagogical reasons.

In the chapter, it is highlighted that in the UK, local authorities took a leading role in promoting the use of computers in education, so Computer Software Packages were prepared for education in order to improve teaching quality, to enable individual learning, to save teaching time, and to boost motivation on the part of learners. These packages consisted of different kinds of programs to be used in teaching practices. Yet, only LOGO and Developing Tray among varied programs maintain their popularity even at recent times.

In addition to these, the chapter provides information in detail regarding a program named Integrated Learning Systems (ILSs) which has been created in the UK. Integrated Learning System is a computer-aided program that provides learners with individual curriculum material, and feedback regarding their performance with the aim of facilitating their learning.

Chapter Six: The Rise of the Internet and the Race to Connect

Chapter six basically discusses the rise of the internet, and countries' competition for connecting internet to their schools.

It is connoted by Abbott that the common reaction given to the internet has been one of the following; "either wild unsubstantiated assertion or blanket denials of relevance" (2001). In addition to this, in the early reactions the internet was mostly regarded as paper-based media, notwithstanding, it offered a lot of distinct features.

The chapter shows how countries are in for setting targets concerning the use of ICT for their schools. It is indicated in the chapter that a set of targets have been put forward by the UK government in order to

promote the use of ICT in the community. The UK government is fully aware of the fact that the internet will notably change the educational system in a sense that more focus should be put on distance learning methodologies, and informal learning.

Chapter Seven: Towards a New Understanding of ICT and Schools

Chapter 7, titled "Towards a New Understanding of ICT and Schools," brings together this range of change and growth to suggest a new insight into the potential and shortcomings of ICT within an evolving educational system. It also touches upon some countries' national ICT policies as a result of the rise of the internet and Information Technologies.

Initially, what the chapter claims is that each country adopts different ICT policy due to its approaches and priorities. In this regard, the chapter takes policies in the UK and Sweden into consideration in an effort to make comparison and contrast in initiatives set in different countries with regard to ICT.

It is indicated that the European Union also seems more interested in supporting the use of ICT in education. Thus, the Commission of Union offers a report named "Tomorrow's Education: Promoting Innovation with New Technologies" with the object of addressing the following issues; equality and access.

Once for all, the seventh chapter, as the other chapters have done, explains the profound impact of ICT on changing education and schooling. Furthermore, it also gives information regarding how virtual classes will take over conventional classes in terms of enabling learners to have lesson whenever and wherever they want it to happen.

3. Conclusion

This book can be favored since it provides its readers with a profound understanding of the use of ICT in education. In addition to this, the book is substantially useful particularly for professionals in terms of allowing them to gain knowledge concerning the place of ICT both in the past and at present. Although each chapter provides insight into different points, the main focus of the book is all about the impact of the use of ICT on educational practices. In this way, the book gives information regarding national educational policies of some countries including the UK and Sweden that changes in policies are caused by the development of ICT. It should be noted that this book was published in 2001, so it can be considered historical in the sense of educational technology, so this gives readers the chance to evaluate today's educational technology from the past perspectives.

All in all, it is possible to say that this book can be regarded as a valuable source especially for professionals who are into Information Technologies.

References

- Abbott C. (2001) *ICT: Changing Education*. Routledge Falmer, London
- Illich, I. (1973). *Deschooling Society*. Harmondsworth: Penguin
- Mellon, C.A. (1999). Technology and the great pendulum of education. *Journal of Research on Computing in Education*, 32 (1), 28–35.
- Street, B. (1996). Multiple literacies and multi-literacies. Paper presented at the Domains of Literacy, Institute of Education, London.
- White, E. (1985). *Teaching and Assessing Writing*. San Francisco: Jossey-Bass.