Preface

Technology has permeated society in general, and major government and economic stakeholders have recognized the importance of incorporating technology throughout education in order to prepare a competitive workforce in a global economy (Farmer, 2010, p. 276). Thanks to Malcolm Knowles who made this predication about incorporating technology into education, especially the education of adult learners in the 1970s. Indeed, education in the 21st century is being delivered electronically. Learners, young and old, take advantage of acquiring knowledge through technology. Teachers of all ages try to deliver their educational programs to students through WebCT, Blackboard programs or other cutting edge programs simply because learning can be facilitated through the use of technology. While E-learning at the K-12 educational settings has been conducted on a trial and error basis, it has become a major force in adult education on any campuses in any countries including developing countries. Because working adults cannot come to campuses for the face-to-face meetings, acquiring knowledge through technology, especially Web 2.0's interactivity, can occur anywhere, any time.

When Patricia Cranton (2010) addresses the three kinds of knowledge (instrumental knowledge, practical knowledge and emancipatory knowledge) advanced by Habermas, she indicates that a changed learner cannot occur without reflecting on the first two kinds of knowledge. Practical knowledge (communicative knowledge in Mezirow's terms) is emphasized more in the Western educational arena among the three kinds of knowledge. Indeed, it is through communication with others or discussion that we learn to transform ourselves. When we think about how educators and learners acquire knowledge through the lens as specified by Habermas, Cranton, Mezirow and others, we cannot underestimate the power of information communication technologies. Although there is multiple access to knowledge, acquiring knowledge through information communication technologies has proven to be the most convenient, flexible means in the new century. By incorporating technology throughout education, both educators and learners teach and learn by hearing, seeing and doing. And this concept confirms the Chinese saying, "I hear, I forget; I see, I remember; I do, I understand."

Mention Phoenix University and most people in other countries know that it is an online university located in the United States. Yet, learners from around the world can take its courses anywhere, anytime. The university has created classrooms without borders. As Bash (2003) noted, "in 2002, the University of Phoenix, part of the Apollo Group, saw its enrollment surpass 100,000 students—making it the largest institution of higher learning in the United States." No need to say that this enrollment figure must include students from overseas. Other universities do not want to lag behind in this regard. Increased communication, interactivity among participants and incorporation of collaborative pedagogical models are

made possible by recent developments in technology. All the above mentioned opportunities cannot occur without information communication technologies. Indeed, classes taught via information communication technologies have many advantages over the classes taught via the traditional four walled-classrooms:

- instantaneous (synchronous) and delayed (asynchronous) communication modes,
- access to and from geographically isolated communities around the globe,
- multiple and collaborative among widely dispersed individuals,
- ultimate convenience, when and where you choose,
- interaction with and among individuals from diverse cultures, and
- ability to focus on participants' ideas, without knowledge of age, race, gender, or background. (Shrum, 2000)

Literature on adult education is readily available as AAACE (American Association for Adult and Continuing Education) publishes its handbook of adult education every ten years. Since its inception in 1833 when the word "andragogy" was first coined by the German grammar school teacher Alexander Kapp, principles of adult learning have been used one way or the other to guide adult education practice in the field. The field of adult education was formally established in the 1920s in North America. Then, Knowles popularized the concepts of andragogy in North America in the 1970s. Adult learning principles have been critiqued, analyzed and refined. The next question that can be asked, "In what ways have information communication technologies contributed to adult education? Or how has adult education integrated information communication technologies?" The answer is we cannot find a comprehensive encyclopedia that documents information communication technologies and adult education integration in the literature. In developing this work as scholars, professors, practitioners and graduate students, we have now filled this much needed void in the literature so that we can truly enhance andragogy, the art and science of helping adults learn (as defined by the father of adult education, Malcolm Knowles), via information communication technologies in the 21st century. Every time learners access this Encyclopedia of Information Communication Technologies and Adult Education Integration, hopefully they may come to many "aha moments" in this information age.

Objective of the Encyclopedia

The Encyclopedia of Information Communication Technologies and Adult Education Integration is most helpful as it provides comprehensive coverage and definitions of the most important issues, concepts, trends and theories in adult education, adult ESL (English as a Second Language) and information communication technologies. This important new publication is being distributed worldwide among academic and professional institutions, and is instrumental in providing researchers, scholars, students and adult learning professionals with access to the latest knowledge related to information communication technologies. Contributions to this important publication were made by scholars throughout the world with notable research publications and expertise. The encyclopedia also features chapters authored by leading experts offering an in-depth description of key terms and theories/concepts related to different areas, issues and trends in adult education worldwide.

Adult education has matured as an academic domain, and is practiced globally in a conscious effort to retool adults and provide lifelong learning opportunities for ever-changing societies. The timing is ripe for an encyclopedia to cover the fundamentals and trends in this important field.

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