Preface

Many colleges and universities have recently focused on empowering learners to understand core attributes of global education and citizenship: global awareness and global literacy. It has also become critical for university courses to be more globally focused and internationally relevant due to the increasing number of international students in the classrooms and the recognition that learning institutions have a responsibility to prepare all students to be successful in an interdependent and global world (Schuerholz-Lehr, 2007). Further, to be able to teach for global awareness and intercultural sensitivity among learners, instructors have to be socially responsible and interculturally knowledgeable citizens themselves.

Similarly, in order to overcome the various challenges in developing curricula that are relevant, transformative, and engaging across content areas (e.g. art, science, history, technology, engineering, and mathematics), there is need for faculty who are competent in multiple 21st century skills including having a thorough understanding of global awareness, global literacy, and technology integration competencies. Global awareness is the extent to which a person is cognizant of the fact that experiences and events are part of an international, global, or world society, and his understanding of himself as a member of that society, while global literacy is the ability to function effectively in the global community (Schuerholz-Lehr, 2007). Global literacy is acquiring an understanding of what is happening around the world and not judging but respecting others’ rights to live those differences (Bender-Slack, 2002).

In teaching global literacy, there are two main approaches considered for being globally literate. Knowing means to get it right as opposed to knowing as using disciplinary practices to show it is right. The first one focuses on knowing facts and procedures and the second one focuses on the process and strategies behind the facts and procedures: deeper understanding. Similar to internal and external aspects of culture (Hall, 1976), for example, knowing the facts about Korea, their observable (overt) formal aspects of their culture such as food and music, versus experiencing the deep (covert) and non-observable cultural nuances and understanding about Korean culture such as values and belief systems.

Technology integration is an integral part of the evolution of the 21st century college classroom. Essentially, there is a pressing need for college faculty not only to prepare teachers to meet the teaching and learning demands of the modern technology-rich classrooms but also to address the core literacy skills of their students to succeed in their programs as well as in the global workplace. Additionally, the 21st century millenial learners must master more than the core curriculum to succeed in the global workplace through the acquisition of core global literacy skills, including critical thinking, creativity, communication, and collaboration skills. Ultimately, effective learning will incorporate global education programs that focus not only on the knowledge about cultures, food, and history but also integrate global literacy into all disciplines.
Global learning or global literacy is in a continuum. It can be acquired over time through cross-curricular as well as experiential co-curricular activities. Global literacy also encompasses other themes such as global competency, global self-awareness, civic engagement, intercultural knowledge, and ethical reasoning. Through global learning experiences, college students should: 1) become informed, open-minded, and responsible people who are attentive to diversity across the spectrum of differences, 2) seek to understand how their actions affect both local and global communities, and 3) address the world’s most pressing and enduring issues collaboratively and equitably (Association of American Colleges and Universities [AAC&U], 2011).

Partnership for 21st Century Skills (2007) identified a framework for 21st century learning that defined literacy beyond basic reading, writing, and arithmetic. Literacy for 21st century classrooms means to be competent in global society. Literacy is considered as the building blocks of freedom by the United Nations (UN). With the rapid advancement in science, medicine, engineering, and technologies, preparing the future generations for careers as educators, doctors, and scientists demands global literacies that include media, information, and cultural literacies and competencies. Rather than focusing on facts (e.g. capital cities and flags of counties as well as locating a country on the map) and technical skills (e.g. for being able to use a mobile device), global literacy welcomes a more interconnected and transdisciplinary approach to teaching and learning that develops critical thinking and 21st century skills among the students. Students will be able to read between the lines in a media advertisement, deconstruct a news article, and make decisions based on not simply watching a news show but their own critical autonomy (Masterman, 1985).

In summary, the current workplace is very diverse and global, implying the need to prepare globally competent educators who can also empower learners to acquire effective global literacy knowledge, skills, and attitudes necessary to become effective and successful global citizens. Additionally, the focus on creating global citizens implies the need to train teachers who can effectively work in an increasingly diverse and modern technology-rich classroom. Therefore, Promoting Global Literacy through Technology-Infused Teaching and Learning examines the function and role of global literacy in 21st century teaching and learning, especially in the light of technology integration as well as the need to prepare and empower global educators and global citizens.

Chapter 1 posits that educational technologies are anticipated to change in the future to support global awareness. The chapter covers four related areas: the enhancement of global literacy through linguistic and intercultural competencies, the use of technology to enhance intercultural and linguistic competencies in language courses, the use of technology in teacher training for administrators and policymakers, and instructional approaches for using various technology tools in the classroom.

Chapter 2 presents the historical foundations, the pedagogical theoretical underpinnings, and illustrative examples from the implementation of a curriculum of technology-enabled active learning within the undergraduate anthropology program at a moderately-sized, commuter campus, in the Midwestern United States.

Chapter 3 evaluates a multi-step technology integration unit that develops in pre-service teachers the skills necessary to plan and carry out learner-centered communicative instruction. As student teachers learn to repurpose mobile applications for the language-learning classroom, they empower articulate digital natives and foster 21st century learning.

Chapter 4 explores the perceptions of technology held by professionals in two distinctly different districts in the Midwest. Based on the study informing this chapter, media literacy provides students with navigational tools that will guide them toward success in the ever-changing, globally connected world.
Chapter 5 posits that student learning outcomes are less dependent on delivery mode and instead dependent on a teacher’s pedagogical practices; it is the skill of the teacher as the facilitator that drives the effective development of the learning community and influences student learning outcomes. Further, it is suggested that constructivism, as a pedagogy of teaching, be considered, regardless of delivery mode; students construct their own knowledge as the teacher facilitates the process through providing opportunities for active engagement and critical inquiry within a community of learners.

Chapter 6 provides both theoretical underpinnings and practical examples of designing and implementing the “thinking curriculum” for the “global classroom.” This chapter is a practical guide for teachers who wish to think about their curriculum in a scientific way and recognize the value of creating a global classroom for preparing students in their roles in the global economy.

Chapter 7 presents results of the survey of students in a mid-sized public university in the United States to establish their preference for the various instructional delivery methods, classroom seating arrangements, levels of students’ engagement, the use of guest-speakers and video shows, different test types, and continuous assessment methods.

Chapter 8 explores the perceived relevance of computer technology among international students and their past technology experience levels in one of the Midwest universities in the United States. The study reveals that different continents have varied technology experiences that might adversely affect international students’ academic work.

Chapter 9 provides the experiences of six effective teachers who engaged in a 21st century global phenomenal experience during a course on the “Inquiry Curriculum.” The participants describe their lived experience with selected students in their classes and the guidance of a 21st century global curriculum. The findings underscore the challenges many 21st century teachers face and how those challenges affect instructional decisions in P-20 settings.

Chapter 10 provides a literature review on forging global practitioner and researcher relationships. Implications call for initiating innovative international collaborations in teacher preparation to explore complex, evolving definitions of diversity shaped by global and local discourses, and learning from each other about what is important and effective across international settings (Darling-Hammond & Lieberman, 2011).

Chapter 11 explores a collaborative teacher training service-learning project on the global literacy development of K-12 pre-service teachers of ELLs with a focus on: how a global literacy experience raises pre-service teachers’ awareness of their pedagogy; what this experience means for their belief system and the knowledge base they hold about teaching linguistically and culturally diverse students; and how to prepare future teachers of ELLs to teach in a global society by gaining experience working with multicultural and multilingual learners.

Chapter 12 addresses the theoretical and practical strategies that empower educators to meet the growth in institutional and professional development. The proposed framework provides an effective approach and strategies for preparing teachers, faculty, and institutional leaders on developing a conceptual framework model that promotes international and Global literacy, and collaboration on professional development for K-20 teachers and educators.

Chapter 13 is intended to provide a conceptual definition of mentoring, an example of a mentoring evaluation program, case examples of global and cultural mentoring experiences that impact pre-service teachers, examples of how educators can implement globalization activities in instructional materials, and an intellectual discussion of future strategies that impact practical and field experiences in teacher education programs.
Chapter 14 introduces a case of an educational robotics competition and its efforts to promote global collaboration among participating teams. In addition, the chapter shares anecdotal accounts of both participating students and organizers that confirm the positive impact the new approaches to competition have already had on encouraging collaboration among participating students.

Chapter 15 reviews the infusion of technology such as the integration of computers into programs like simulation to promote higher cognitive skills among engineering undergraduates. The authors examine the evolution of engineering education, the challenges faced in the learning environments, and the technological trends in engineering curriculum.

Chapter 16 explores the reality of the modern workplace: the demand for global citizens well-exceeds the supply. While a manager in the 21st century must increasingly be a global citizen manager, this goal is seldom attained. The chapter presents some key tools on the technology roadmap for use in educating global citizens and training the 21st century manager.

The hope is that these scholarly essays will help forward the agenda, discussion, and the significance of the need to advance awareness, knowledge, and the understanding of global awareness and global literacy . . . and more importantly, the need for educational institutions to prepare globally competent educators who can also empower learners to acquire effective global literacy knowledge, skills, and attitudes that are necessary to help them to become effective and successful global citizens.

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REFERENCES


