Preface

The importance of critical thinking has found renewed exuberance among academics in higher education. The importance is undeniable, yet the methods of developing this ability have created an ongoing debate due to America’s realization that many students, upon college acceptance, require remediation and lack the ability to think, engage in rich discussion, and lack a sufficient writing ability to express their ideas. Although much has been written regarding the ‘lack’ of critical thinking, less has been written on the success of methods implemented to develop this fundamental skill. Trilling and Fadel (2009), in their text, 21st Century Skills: Learning for Life in Our Times, noted the rapidity of change underway in teaching and learning and the necessity for a unique set of skills; critical thinking is an important component. Throughout the current literature references to 21st Century Skills abound; Kay and Greenhill (2013) described critical thinking as “the first among equals when it comes to the topic of . . . student readiness” (p. 12) and noted that without critical thinking an organization or an individual will fail to improve. Friedman and Mandelbaum (2011) explained a new stress placed on us all, particularly related to our work that now demands critical thinking skills. The compounding of advancements in technology has left this country with “an educational challenge – to expand the analytical and innovative skills of Americans . . . no less profound than the transition from plow horses to tractors or from sailing ships to steamships” (p. 20). Many agree on the importance of critical thinking; it’s the ‘how’ within our unique context and times that fuels the ongoing debate.

For the purpose of this text, critical thinking was defined as a process that requires a skill set useful in decision-making, similar to the research process. As researchers, our daily work with doctoral students requires that the process of critical thinking begin with a problem, after which students gather information, analyze, and synthesize to draw their conclusions. Educators responsible for development of critical thinking within their students have considered application, analysis, and evaluation, as well as identification of appropriate sources of information for problem solving, contribution of life experiences, and forms of communication, to guide students in strengthening their skills. The co-editors serve as faculty within a higher education institution and view this skill foundational to reasoning utilized throughout our daily lives during communication and observation. Everyday decisions make demands on the individual to apply and analyze. It was important to the co-editors that we explore how educators in a higher education setting develop and strengthen the necessary skills for critical thinking in our students. Application of the critical thinking skill set applies to academic involvements, work-force readiness, and preparation for future life experiences. Discussion of ideas related to critical thinking has the potential to be diverse, varied, differentiated, rich, and rewarding. The editors sought to provide a forum of discussion related to higher education and critical thinking skills, as developed in our undergraduate and graduate students. Chapters included in this book contribute to the scholarly field of
education research, philosophies and foundations for teacher preparation, and continued development of strategies for application of critical thinking. Our readers include all learners, regardless of their level of knowledge related to critical thinking. This text was written to meet the needs of those with a simple interest, as well as those seeking current application and research. The authors’ intent was to create a diverse handbook on critical thinking, and one written from a global perspective.

In his examination of how doctoral students learn to critically think, Peter Smith from the University of Sunderland in the United Kingdom, utilizes action research, the process of self-reflection, to think critically on the role of dissertation supervisor. In his chapter titled, Developing Critical Thinking in Doctoral Students: Issues and Solutions, Smith who has mentored over 50 students to dissertation completion, concludes that critical thinking is an integral component of earning a doctorate. As a reader you will hear directly from his students, related to the process of earning this degree.

As teachers we need to allow increased opportunities for critical thinking, as described by Schoper and Wagner in their chapter, Developing Meaning-Making to Promote Critical Thinking, on the ‘learning partnership model,’ a method to promote meaning-making in the development of critical thinking at the University of Western Illinois and Buena Vista University.

Online learning requires a new form of student teacher relationship, moving from the historic ‘brick and mortar’ institution to an online context. Both historic and social forces are investigated in the chapter, University Teachers’ Interactions with Their Online Students at an Australian University, by Mamun, Danaher, and Rahman from the University of Southern Queensland, in their study utilizing affordance theory to increase the readers’ understanding of this relationship when teaching online.

An historical analysis, working definitions, and a description of Socrates as a person and teacher is presented by Francesco Giuseffi, who currently serves as Dean of Students at a Military Academy in the United States, in his chapter titled, Ancient Thinking and Modern Challenges: Socratic Education in the 21st Century. Giuseffi examines the effectiveness of the Socratic Method of teaching.

Many university faculty might agree with John Long’s thesis that the requirement to incorporate critical thinking within our classrooms is missing. Dr. Long, an Assistant Professor at Lindenwood University, in his chapter, Critical Thinking, Socratic Seminars, and the College Classroom, asserts that too many of our students are passive learners, and without a structure to promote critical thinking within college classrooms an opportunity is lost. The process Dr. Long has found to be successful is discussed and offers the reader an instructional design to consider.

Dana Delibovi, a philosophy instructor at Lindenwood University, believes before critical thinking can be taught in higher education classrooms, our students must first develop the character to ‘face the consequences of critical thought.’ This author notes the process of developing critical thought is interwoven with the character evidenced by students in her chapter, Critical Thinking and Character.

Stephen Brookfield, University of St. Thomas and a leading author on the development of critical thinking, describes the importance of teachers modeling critical thinking utilizing a team teaching approach. In his chapter, Teaching Critical Thinking and the Role of Team Teaching, Brookfield notes that critical thinking develops when students witness the process of adults engaged in their own skill development.

Caulyne Barron from Dunlap–Stone University, in her chapter, Developing an Assessment Program to Measure Critical Thinking: A Case Study at a Small, Online College, explains research related to the assessment of critical thinking skills in a post-secondary setting. Using a case study research design, this author explains how an online university developed a plan for meeting the university’s mission.

The concept of critical thinking is borderless, evidenced by the chapter written by Maria Bednarikova, Slovak University of Technology in Slovakia, Critical Thinking as a Multifaceted Phenomenon: A
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Scheme of Interdisciplinary Research Platform. Bednarikova describes critical thinking as multifaceted and interdisciplinary; developed through scientific methodology spanned across the relationship between language and cognitive operations.

An action research study, conducted by Donna Velliaris of Eynesbury Institute of Business and Technology, Australia, adds to the current literature through her work, *Interdisciplinary Perceptions: Academic Acculturation and a Pathway to Improved Critical Thinking*, with an investigation of a unique pre-university pathway and the inconsistencies found among academics who teach within this unique educational setting.

Student mobility across borders, was described by Ryan Guffey, Lindenwood University, as ongoing and rapidly increasing, creating a push-and-pull between various factors, which form a possible relationship between institutional characteristics and a student’s demographics, including country of origin.

Additionally Japan’s economic conditions were discussed by Erin Kalkbrenner, *The Japanese Tertiary Education System and its Impact on Economic Conditions from 2000 to 2010: Human Capital Formation*, also of Lindenwood University, in which she applied a regression analysis to produce outputs for government and educational policy recommendations related to tertiary education enrollment and the real growth rate in the Asian region.

During the experience of pre-service teaching there is an opportunity to promote critical thinking. Barrera and Dowell, Louisiana University, share with readers in their chapter, *Academic Service-Learning as a Pedagogical Tool and Strategy: Promoting Critical Thinking among Pre-Service Teachers*, study results with regard to the increasingly stratified student population and the predominately white, female perspective on critical thinking; implementation strategies of academic service learning (AD-L) are also discussed.

The concept of diversity is foundational to Wisdom and Weir’s Lindenwood University three-year case study related to a university’s transition from NAIA to NCAA D-II sports participation status. They discuss in their chapter, *NAIA to NCAA D-II Sports Transition: A Three Year University Case Study*, how the transition required the use of critical thinking among all aspects of the university when making this shift; detailed factors of before and after the change are described, as one way to document this historic event.

The application of the logic model to real-world phenomena in the chapter, *Developing Meaning-Making to Promote Critical Thinking*, was discussed by Shepperson and Blakey, faculty at Eastern Kentucky University. Data collection occurred over the span of two years during the application of visualization and inquiry methods to assist teacher leaders using online learning.

Simply mentioning critical thinking within the higher education experience is not enough; what is needed is a return to liberal education described by Michael Hepner, Saint Louis Community College. In his chapter, *The Erosion of Critical Thinking Development in Post-Secondary Education: The Need to Return to Liberal Education*, the author notes the complexity in defining the nature of critical thinking and method of assessments that should be expected due to the diverse set of disciplines found within our institutions. Hepner writes on the history and strategies, along with assessments that could lead to an increase in common language.

Watching TV News: Should We Approach It Like Reality TV?, written by Joseph Cernik, Lindenwood University, applies critical thinking to current issues, specifically constitutional interpretation and the Affordable Care Act (ACA), *Obamacare*, reported by television news. Cernik shares with the reader the frustration of over simplifying complex issues and describes specific methods of instruction that can be applied in the classroom with students whose predominate knowledge of current events is oversimplified.
Dr. Wisdom, Co-Editor of this publication and Associate Professor at Lindenwood University, School of Education, Department of Educational Leadership, frequently works with doctoral students in the process of gathering data and statistical analysis to complete their dissertations. Faculty within the department strive to promote critical thinking throughout their coursework, specifically as students develop their studies. Wisdom reminds the reader in her chapter, Faculty Support and Guidance for Doctoral Candidates: Promotion of Critical Thinking, that the process of critical thinking is not a skill that can be taught, but a process students must undertake to develop and sharpen their already existing ways to acquire knowledge and think critically. The author notes Reichenback’s six steps of critical thinking: knowledge, comprehension, application, analysis and evaluation, along with an author included in this publication – Stephen Brookfield, who supports the idea that critical thinking is a process that includes seeking and checking one’s assumptions, gaining another perspective, and then active participation. Wisdom provides the reader with a detailed description of one doctoral program, data that supports its development, and the process of ongoing evaluation.

Although everyone ‘thinks’, writes Little & Feldhaus, Indiana University - Purdue University, in their chapter titled, Critical Thinking Skills in Virtual Learning Environments, not all of us participate in the process of critical thinking. Definitions of critical thinking and Paul & Elder’s model of critical thinking are discussed within the context of the next generation of learning contexts: online, blended/hybrid, and MOOCs, along with social media. These authors note that, regardless of the learning environment critical thinking can be developed and is dependent upon the individual pedagogy of each course. These authors remind the reader of the barriers and challenges of developing critical thinking using an online format.

As higher education continues to undergo continual development due to the rapidly changing technology and global context, critical thinking will continue to be necessary for all students to be successful. The multifaceted nature of today’s student and the ongoing discussion throughout the current literature on how best to define and apply critical thinking remains a priority, not only in institutes of higher education, but in k-12 systems of learning, as well.

The co-editors strived to achieve a varied representation of national and international research in the hopes of adding to the current literature related to critical thinking within a global higher education context. This scholarly handbook is meant to inform and inspire further discussion of critical thinking among its readers.

Sherrie Wisdom  
Lindenwood University, USA

Lynda Leavitt  
Lindenwood University, USA

REFERENCES

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