Learning Interventions in China: Lessons for Educational Leadership in the USA

Carol A. Mullen, PhD
Virginia Tech
Professor of Educational Leadership
School of Education
Blacksburg, VA 24061 USA
Email: camullen@vt.edu

U.S. Fulbright Scholar for 2014–2015
Institute for Society, Culture and Environment (ISCE) Fellow, Global Issues Initiative (GII) grantee,
Virginia Tech

Citation for this draft paper:
Mullen, C. A. (2015, August). *Learning interventions in China: Lessons for educational leadership in the USA*. Paper presented at the National Council of Professors of Educational Administration (NCPEA), Washington, D.C.

Note. This manuscript is a draft of the fieldwork just completed in China; the Fulbright visit to China was only completed in mid-July 2015, just prior to the NCPEA conference in August 2015 where this preliminary work will be presented. Thus, the data analysis phase of this study and meaning making about the coded data are next on the horizon to complete.

Paper presented at the National Council of Professors of Educational Administration (NCPEA), in Washington, D.C., August 2015.

Abstract

The purpose of this study is to enact the work of Educational Leaders Without Borders in transnational spaces of China, striving "to enhance cultural community through educational leadership research within the context of a global perspective and thus expand leader mindsets to reach beyond the confines of national borders" (Eadens, Papa, & Eadens, 2014, p. 198). China's educational approach has been characterized as formulaic. Based on international test scores, China is viewed as a model of success. Consequently, U.S. education policy upholds narrow measures of student achievement. It is essential that educational leadership programs emphasize complex, open-ended problem solving. Field research in China has been completed, with analyses underway.

Relevance and Background of This Study

The broad purpose of this study is to enact the work of Educational Leaders Without Borders in transnational spaces of China, striving "to enhance cultural community through educational leadership research within the context of a global perspective and thus expand leader mindsets to reach beyond the confines of national borders" (Eadens, Papa, & Eadens, 2014, p. 198). More specifically, this research focuses on radical interventions of learning in China for shaping education policy and the civic society. As the researcher, I will be examining Chinese leaders' level of interest about best practices in learning and mentoring, individually and with others. This field project explores how leaders and educators in China envision learning in the 21st century and possibilities for a more creative, critical, and inclusive enterprise. Addressed is the theme of Educational Leaders Without Borders (derived from the title and focus of the consortium cofounded by Dr. Rosemary Papa and Dr. Fenwick English) whereby the related goal of my project is to pursue first-hand understandings of education within a transnational and transcultural context (i.e., involving more than one country or culture) (*Merriam-Webster*, 2015).

This paper, a work-in-progress, is based on conceptual frameworks, the relevant literature, and the anticipated research program (e.g., data collection and analysis phases). The lengthy Scope of the Project documents and the Virginia Tech-IRB approved protocols were endorsed by the Fulbright Office and the Fulbright host institution. But because plans for studies to be conducted at international Fulbright sites are known to change (Burns, 2014), the specifics outlined in this planned project may have changed by the time they are presented in the USA. Also another issue is that the data may not have been written up (or hence interpreted) by the August 2015 NCPEA conference, although it will have been collected onsite. Worth noting, leadership research is itself "tenuous and fragile," with "variables [that] are so interactive, complex, and contextually situated that most research is highly qualitative in nature from which robust generalizations are nearly impossible to formulate" (Papa, English, Davidson, Culver, & Brown, 2013, p. 37). Thus, my orientation for approaching and writing up this research project aligns with the realities that study of leadership, learning, and policy in China may offer insight but is impossible to generalize.

This study extends beyond the Fulbright stay at the host institution, with an itinerary of invited talks and keynote addresses following it. These talks address some of the topics specified herein but extend beyond them to encompass such areas as strategic planning and faculty development. The post-Fulbright talks are not covered in any detail because they fall outside the parameters of the planned study. The Fulbright visit will take place for one month and the speaking tour will last for 2 weeks. For this 6-week engagement, I will be functioning first as a Fulbright Scholar and then as an ISCE-GII Scholar.

China Itinerary

CHONGQING (May 31-June 27, 2015)
SOUTHWEST UNIVERSITY: U.S. Fulbright Scholar: giving keynote addresses and speeches on different topics, conducting seminars on a range of issues; teaching a course I developed, carrying out a Virginia Tech teleconferenced series on education/al leadership topics I have organized, as well as carrying out a research study in education already (VT-IRB approved)
SHANGHAI (June 27-29, 2015)

June 29, 2015: Shanghai University of International Business and Economics (SUIBE), speech (host: Yanyan Wang): titled "Mentoring and Self-Regulated Learning in Education: A Model of Integration for Academic Success"
NANJING (June 30-July 1)
June 30, Nanjing University (Education Institute), contact: Yumei Jiang, faculty, speech
June 30 or July 1 (to be determined): Nanjing Institute of Technology (NIT), Nanjing; host, Dr. Zhang Yan, Head of Development and external Cooperation Department, speech
BEIJING (July 3-11, 2015)
National Institute for Educational Sciences, Under Ministry of Education, speech
Beijing Normal University, speech
Peking University? (in process)
Beijing Ministry of Education, press release of Carol Mullen's Fulbright Visit? (in process)

In China, education has been characterized as formula-driven without much attention on developmental learning. Yet its education system is widely viewed as efficient and successful due largely to its national standards and college entrance exam (*gaokao* determines admission to universities based on a single test score) (Tucker, 2011). In 2008 China was cited as the best education system by the Programme for International Student Assessment (PISA) (orchestrated by the Organisation for Economic Co-operation and Development [OECD]) based on three test scores of 15-year-olds in reading, math, and science. PISA's declaration of excellence in education has strong buy-in from U.S. policy leaders and many world leaders (Zhao, 2014).

China has adopted a laserlike focus on education as a strategy for dealing with its stark poverty and limited opportunity. A perplexing global concern is that America, well behind China on PISA test score outcomes, is looking to China as the gold standard for educational success without considering the socioeconomic demands of impoverished school communities and learning from the serious consequences incurred by China's testing regime (Zha, 2013; Zhao, 2014). China's testing mindset has influenced U.S. education policy, which places intense pressure on schools and states to compete not only nationally but also internationally on very narrow measures of success (Tienken & Orlich, 2013). However, China's rigid education system has been criticized, even by its leaders, as strictly a means for supporting labor markets at the expense of approaches that foster intellectual creativity, critical-analytic thinking, and the ability to solve ill-defined problems (Tsang, 2000; Zha, 2013; Zhao, 2014).

According to Chinese scholars in the U.S. (e.g., Zha, 2013; Zhao, 2014), while Shanghai's spot at the top of the OECD league has spurred the U.S. to imitate its success, within China parents, students, and government officials have condemned the education system's emphasis on rote learning and irrelevant content. Rapid surges of students are flocking to overseas universities to escape what is perceived as a second-class education at home; hence, China has more students studying outside its home country than other countries, signaling low confidence in its quality of education. Beijing is trying to transform China's education system by fostering creative thinking in a new economy based on invention, not factory production (Zhao, 2014). Given these challenges, China seems poised to discover, with collaborators, innovations in learning and new forms of leadership development for preparing global citizens.

Within this context of education policy, I am prepared to converse with campus and government leaders about American approaches to learning, with the goal of a synergistic cultural effect that could lead to enhanced cooperative relations. A starting point necessitates exploration of how leaders, officials, and educators in China envision possibilities for learning more creatively and critically and for educating with respect to a global citizenship. The purpose of this paper is to formulate—as a U.S. Fulbright Scholar for 2014–2015 and as an Institute for Society, Culture and Environment (ISCE) scholar/grantee—a preliminary program for understanding how leaders and educators in Chinese universities conceive of creative and critical approaches to learning and mentoring in an era where global mindsets are directed at instrumental goals (e.g., achieving high test scores for college placement and employment).

Perhaps a counter-voice, Professor Ruth Hayhoe from OISEUT Canada underscores what she believes is a stereotype about China and learning in that country. Contrary to popular opinion, she

cautions against thinking that Chinese students question less and defer more to authority than western students. Based on her decades of experience teaching and living in China, she reflects that

> It's not that [Chinese students] don't question, it's that they absorb what they're reading at a deep level before they react, whereas western students almost immediately tend to jump in and question. It's a different sort of pace of interaction, but there can be quite a deep connection and reflection and sharing that goes on between students and faculty. (cited in Lavender, 2014)

Conceptual Framework

Questions guiding this qualitative study have benefitted from Zha's (2013) education research in China: How do leaders in China comprehend processes of learning, creativity, and innovation of young and adult students? How might they respond to learning and mentoring theories and practices that promote human capital and continued learning? How well do education theories and practices of learning (e.g., peer mentoring, research apprenticeships) translate culturally? What new knowledge and skills can be produced in educational settings? Within the educational leadership literature, questions include, how do campus and government leaders use dialogue to foster awareness of the role of leaders and the importance of leadership and teacher preparation that promotes agency and activism within policy contexts and school communities? (e.g., Brooks & Witherspoon Arnold, 2013; Tienken & Orlich, 2013)

Areas of American research expertise ripe for development involve creative expertise drawn from the human and social sciences. Namely, understanding and operationalizing academic learning and its regulation through personal learning, peer mentoring, and research apprenticeship (Cargill, O'Connor, & Li, 2012) could yield untapped capital for growing human capacity in ways that are unprecedented for China and valuable for the U.S.

Dynamic global mindsets of individuals and schools premised on "world-mindedness" rely on conditions and processes whereby mentors and protégés, learners and peers, regard each other not only as cooperative agents but also as interdependent collaborators shaping an intentional web of relations within a rapidly changing, more diverse world (Harris & Mixon, 2014). Educators are more familiar with prescribed formats (e.g., exams) and technical communications (e.g., procedural knowledge); yet learning and mentoring take an array of creative and intentional forms, and students in China often do not fully benefit from them.

Self-directed students regulate their own learning, set goals, evaluate progress, and develop beliefs about their capacity to learn (Zimmerman & Schunk, 2011). Cargill et al. (2012) report that Chinese students feel frustrated with the technical English they are just being taught and that writing for publication in English, such as in international journals, is challenging. They say that they lack confidence with learning English (Wang, Schwab, Fenn, & Chang, 2013), yet they make gains in groups as research apprentices learning academic writing (Cargill et al.).

Students and leaders who regulate their learning coordinate their self-regulation competencies (e.g., remembering). Self-regulation is not the same as obedience or compliance—those who regulate their learning act the same way regardless if someone is observing. In theory, we know that learning is enhanced by such relationships, which are flexible and informal (Zimmerman & Schunk, 2011). In socially shared regulation, students and leaders learn interdependently and develop positive synergies (Hadwin, Järvelä, & Miller, 2011).

Self-regulated, coregulated, and socially shared regulated learning correspond with mentoring. Critical mentors help students become better learners and present the learning relationship as collegial, confronting hierarchy (Allen & Eby, 2007). Studies of learning and mentoring depend, perhaps too heavily, on surveys for assessing perceived gains. In traditional apprenticeships, protégés imitate tasks in specific domains, whereas in research apprenticeships, protégés delve deeper, learning new concepts, engaging in problem-solving, and applying skills independently. They learn from demonstrations, coaching, and feedback, with the goal of thinking and performing independently (Collins, 1991). Traditional methods of learning can help students think critically, write effectively, and evaluate, consume, and generate knowledge successfully. Peer mentoring occurs with peers only or with the guidance of faculty or other mentors. An example of constructive doctoral study is from Austin's (2009) study of conditions enabling students to reflect on their progress and problems while practicing skills with

peers outside of formal classes. In a critical reading context, students started to become more confident as scholars and they were being socialized into the profession by developing interpersonal skills.

Literature Review

Areas of American research expertise ripe for development involve creative expertise drawn from the human and social sciences. Namely, understanding and operationalizing academic learning and its regulation through personal learning, peer mentoring, group mentoring, and research apprenticeships (Cargill, O'Connor, & Li, 2012; Schunk & Mullen, 2013) could yield untapped capital for growing human capacity in ways that are unprecedented for China and valuable for the U.S.

Dynamic global mindsets of individuals and schools premised on "world-mindedness" rely on conditions and processes whereby mentors and protégés, learners and peers, regard each other not only as cooperative agents but also as interdependent collaborators shaping an intentional web of relations within a rapidly changing, more diverse world (Harris & Mixon, 2014). Educators are more familiar with prescribed formats and formal communications through such means as procedural knowledge and exams; yet learning and mentoring take an array of creative and intentional forms, and students in China often do not fully benefit from them.

Self-directed students regulate their own learning, set goals, evaluate progress, and develop beliefs about their capacity to learn, perform, and succeed (Bandura, 1997). Chinese students who are struggling with this developmental process experience frustration with the technical English they are only learning, which makes writing for publication in English in international journals particularly challenging. These students report a lack of confidence with learning English (Wang, Schwab, Fenn, & Chang, 2013), yet they are able make progress with guided apprenticeship interventions (Cargill et al., 2012). When people regulate their learning with others, they engage in coregulated learning and coordinate their self-regulation competencies (remembering, attending, brainstorming) in social contexts. Self-regulation is not to be confused with obedience or compliance—self-regulated learners behave the same way regardless if someone is observing. In theory, we know that learning is enhanced by such relationships, which are characterized by flexibility and informality (Schunk & Mullen, 2013; Zimmerman & Schunk, 2011). In socially shared regulation, learners commit to interdependent regulatory processes aimed at attaining a mutual outcome (Hadwin et al., 2011), such as coauthored studies. While there is little research on this topic, technology is being used to promote interactions and collective actions among students (Järvelä & Hadwin, 2013).

Importantly for my purposes, self-regulated, coregulated, and socially shared regulated learning correspond with mentoring. Mentors help protégés become better learners and present the learning relationship as more collegial, less hierarchical (Allen & Eby, 2007). Studies of learning and mentoring heavily depend on surveys for evaluating learners' experiences. Mentoring is guided learning over time that focuses on both career and psychosocial functions and goals; protégés are paired with professors or other mentors, including more knowledgeable peers (e.g., Mullen, 2011). Mentoring can be structured or left to chance, and promising models seem to be especially mediated by research apprenticeships and electronic networks (Mullen, 2011; Schunk & Mullen, 2013). In traditional apprenticeships, mentees imitate tasks in specific domains, whereas in research apprenticeships, protégés delve deeper, learning new concepts, engaging in problem-solving, and applying skills independently. They learn from demonstrations, coaching, and feedback, endeavoring to think and perform independently (Collins, 1991).

Peer mentoring occurs with peers only or with the guidance of faculty or other mentors. As one example of constructive doctoral study, Austin (2009) created conditions for students to reflect on their progress and problems while practicing skills with peers outside of formal classes. In this critical reading context, students started to become more confident as scholars and they were socialized into the profession by developing interpersonal skills with cohort members.

In a longitudinal context, doctoral students met monthly for instruction and practice in academic writing and otherwise engaged in electronic mentoring. Mullen's (2011) Writers in Training program was designed to enhance self-regulated learning. The students completed self-reports and interviews regarding the academic skills they had learned, their progress in dissertation writing, their confidence in writing effectively, and support for their learning and sense of control over it. Students judged that they learned

skills for improving their writing and strategies for effectively analyzing writing (e.g., giving and accepting feedback). They also reported that their learning goals were clear and attainable and that participation strengthened their motivation to write and graduate. They had grown accustomed to practicing their skills (e.g., analyze research studies) outside of the sessions to gain regulatory control over learning.

A longitudinal study of this group corroborated the results (Mullen & Tuten, 2010). Mentoring behaviors included explanations, demonstrations, and coaching of academic skills and learning processes and outcomes were measured (e.g., through surveys). A shift was revealed from social regulation to guided self-regulation, to increased self-regulation through writing skills development. Regulation of learning requires that social influences aided by mentoring become internalized so that the ideas and skills learned can be made use of from then on.

Hypotheses and Questions

It is hypothesized that to the extent that leaders and educators in China understand the need for adult students to be exposed to different learning opportunities and to feel confident about directing their learning with peers and mentors, they will want to generate effective strategies for stimulating creativity and criticality. While trade agreements propel U.S.–China economic agendas of interdependence (Wang, 2010), the educational terrain must also be tilled. A higher education intervention could produce mutual gains in learning, research, and relations beyond China's focus on English-language acquisition and proficiency. Educators in America can fulfill more than the instrumental capacity of English language teaching, thereby intensifying collaboration and interrogating U.S. policy shortfalls.

Three questions, derived from Zha's (2013) research, guide this study:

1. How does education in China contribute to an individual's continued learning trajectory and well-being, particularly in the sense of being in a civil society where people interact outside of formal schooling, the family, and the market to explore common interests?
2. How does education build social, academic, and political capital, and what are the possibilities for pursuing new directions for educational development in China and with its global partners, such as the U.S.?
3. To what extent are education leaders in China critical of structures of discipline and rote memorization and open to expressions of creativity, criticality, and independence, particularly in the regulation of learning and discovery of new approaches to mentoring?

Study Methods and Procedures

Hypotheses

It is hypothesized that to the extent that leaders and educators in China understand the need for adult students to be exposed to different learning opportunities and to feel confident about directing their learning with peers and mentors, they will want to generate more effective strategies for stimulating creativity and critical thinking. While trade agreements propel U.S.–China economic agendas of interdependence (Wang, 2010), the educational terrain must also be tilled. An intervention could enable mutual gains in learning, research, and relations beyond China's focus on English-language acquisition and proficiency and America's limited synergies.

Data Collection

The data collection timeline for this research project is based on a month-long (06/02/15-07/26/15) immersion at a university in China (referred to herein as "the Fulbright host"). The time commitment for data collection includes observation, in addition to group sessions and individual meetings and gatherings, both formal and informal. The participants can be the same from day-to-day or changing with respect to who participants in which of the various research activities. This flexible approach to data collection is realistic given that universities in China have a lighter load during the summer term.

Observation, think-alouds, dialogue, and document analysis support the data-collection phase, and the study design builds upon the aforementioned research questions. (An IRB has been completed.) Observation accelerates the rate of learning and the amount of knowledge acquired (Bandura, 1986; Schunk, 2012). The researcher will keep a field journal and will use a storying approach to the details.

Observations

Observational learning will occur in site visits and involve mindfully attending to events, interactions, and dynamics. Attention will paid to people's conceptualizations of innovative student learning in mentoring contexts, thus observations are essential. Observational notes will be transcribed and coded to characterize learning and mentoring processes and interest in general related to education and global issues.

Think-Alouds

To gain from using think-alouds (Schunk, 2012), the researcher will provide informational materials and protocols for response, such as vignettes for illustrating peer mentoring (e.g., Austin, 2009) and research apprenticeships (Cargill et al., 2012; Collins, 1991). Another tool that will be used for fostering dialogue are models (e.g., diagrams) of self-regulated learning and mentoring interactions, as well as instruments (surveys, interview protocols) from published studies. Theory-informed seminars will be supported by the research questions.

To make gains from using think-alouds, as the Principal Investigator, I plan to provide informational materials and open-ended, research-supported protocols for contemplation and reaction by the host university leaders. One type of think-aloud is that of vignettes for illustrating regulated learning and mentoring in action, including peer mentoring (e.g., Austin, 2009; Mullen, 2011) and research apprenticeships (Cargill et al., 2012; Collins, 1991). Another tool for fostering dialogue and engagement are models (e.g., diagrams) of self-regulated learning and mentoring interactions, as well as instruments (surveys, interview protocols) from published studies. Additionally, I plan to conduct seminars with booster talks focused on the theory and research of learning and mentoring guided by question prompts derived from the research questions; her Virginia Tech (VT) program of speakers will be integrated into this approach. Professors and doctoral students will be teleconferenced to the university in China to discuss innovative program designs (e.g., research apprenticeships) and gains.

I plan to ascertain reactions of the host university (e.g., administrative leaders, faculty members, students) to the research materials and ideas provided. A spontaneous give-and-take of interchanges should build naturally upon observation and think-alouds. Conversational data collection will include ideas initiated by the host stakeholders that cannot be known in advance.

Data Analysis

Document analysis of relevant materials (e.g., policy statements) constitutes yet another source of data. The documents shared by personnel in China, including key statements, will be entered into QDA Miner v3.0.1, qualitative software that will be used for analyzing collected documents and transferring them to a text-mining tool (WordStat v5.1.8) to "extract" themes (Lewis & Maas, 2007). Transcriptions of conversations will also be analyzed as a key source of data. Key-word-in-context charts will be created, along with word frequency distributions; e.g., "learning" and "leadership" could have varied meanings. An application of this software to the relevant literature will also identify themes for analysis (Miles, Huberman, & Saldaña, 2013). A preliminary coding of observational notes, think-alouds, conversational jottings, and documents will occur onsite. Feedback from personnel will be solicited to enhance contextual knowledge.

This thematic analysis will aid in organizing the data collected. Transcriptions of conversations will also be analyzed using WordStat. Key-word-in-context charts will be created by this system, along with frequency distributions of certain words and phrases (in addition to code counts); e.g., "learning" could be used often and in different ways on site. This software will be applied to the relevant literature to extract themes for analysis and patterns. Detailed notes recorded by personal computers and digital voice recorders will support my daily debriefing sessions with my Research Assistant (RA), with text files edited to a format useful for data analysis; A preliminary coding of data (observational notes, think-alouds, conversational jottings, documents) will be sampled onsite. Feedback from designated personnel will be solicited to correct deficiencies in understanding and enhance contextual knowledge (Schunk, 2012). Data analysis will be further developed and refined in 2016.

Using an exemplary model for coding data (i.e., Miles et al., 2013), I will train my Research Assistant (a Chinese-speaking graduate assistant in his first year of study at Virginia Tech) on the various

components of data collection and analysis (e.g., note taking, field record management, and independent data coding). Data verification checks will occur.

Participant Pool

The host university's stakeholders (mostly administrative leaders and faculty, including college students) participating in this study will be selected by the host (e.g., Fulbright sponsor). The data will be collected during the summer term when university students are mostly not around, so the data will largely consist of a subject pool of up to 70 participating administrative leaders and faculty, and up to 30 college students who are invited by the host to my group sessions geared towards the participatory engagement of administrative leaders and faculty.

Rationale for population selection. The university's stakeholders will be invited to dialogue about how leaders and educators in China envision learning in the 21st century and possibilities for a more creative, critical, and inclusive enterprise. It is hypothesized that to the extent that leaders and educators in China understand the need for adult students to be exposed to different learning opportunities and to feel confident about directing their learning with peers and mentors, they will want to generate more effective strategies for stimulating creativity and critical thinking.

Recruitment methods. Education leaders, faculty members, and college students will be welcomed by the host university's leaders to participate in a group sessions. Participants will receive an abbreviated version of the approved IRB protocol, complete with a welcoming introductory letter. (The document will be cleared by the host university and circulated by the host.) Also, I will explain the study context at the first seminar I deliver at the Fulbright host university. (All guidelines provided by the IRB office will be followed.) My explanation in English will be translated into Chinese; the translation will be provided onsite by my accompanying Chinese-speaking Research Assistant (RA).

Translation services. I do not speak Chinese and this will be my first trip to Asia. (I have read many books about China in preparation of the Fulbright visit.) Given the nature of the study, which relies on written and spoken communication as well as observations of interpersonal exchanges as data sources, it is particularly important to have access to an interpreter and translator. The ISCE-GII funding of this project has extended the support of the Fulbright. Besides performing duties as an interpreter and translator, my RA will provide onsite research assistance and technology support at the university in China. My RA will translate the IRB protocol document to be circulated and reinforce its key points in Chinese (e.g., about how the data will be collected and recorded) at the onsite introductory session. He will also take notes on various exchanges that take place; engage in daily briefings; facilitate technology use; collect data using the researcher's protocols, translate content conveyed by individual and groups, and identify nuances otherwise lost in translation.

Anticipated Findings

The field research will be carried out from May to July 2015 in a total of seven universities, plus PK-12 schools, located in Chongqing, Shanghai, Nanjing, and Beijing. The results will reflect engagement with campus leaders, government officials, faculty members, and, to a lesser extent because of their reduced availability during the summer, university students in education. The data analysis will likely reveal processes of thinking about learning in ways that are more creative, critical, and inclusive for the global age. Issues of educator and leadership preparation will identify perspectives on agency and activism. Exchanges with leaders and professors could lend insight into (1) challenges and breakthroughs for learning more creatively and critically; (2) ideas for educating with respect to a global citizenship, and (3) producing mutually beneficial strategies that could lead to enhanced cooperative US-China relations.

Significance and Implications for Change

Mutual gains in learning and leading could yield productive knowledge for the U.S. and China where researchers have a stake in drawing upon intellectual capital from the human sciences and in monitoring public policies and the impact of standardized testing on stakeholders (Wang, 2010). An area of strength in America is research on academic learning and mentoring in both theory development and educational practice (Allen & Eby, 2007; Zimmerman & Schunk, 2011). Researchers can use evidence from educational interventions to stimulate thinking about student development and civic learning. Change could occur as educational sectors support structures and processes embracing inventiveness, a

diversity of talents, confidence, creativity, and critical-analytic thinking. At odds with these directions for civic societies are entrenched U.S. education policies that, like China's, want "globally competitive citizens" for the workforce (Eadens et al., 2014, p. 208; also, Tienken & Orlich, 2013; Zha, 2013; Zhao, 2014).

At odds with these research directions are entrenched American education policies that, like China's, want "'globally competitive citizens' who can compete in the "'global economy'" (Eadens et al., 2014, p. 208). Race to the Top and other U.S. education policies stem from this construct, and sweeping cause-and-effect conclusions are drawn between rankings on international tests and readiness to compete in the innovation economy (Tienken & Mullen, 2014). Clearly, investment in research and knowledge generation is a pressing global issue.

Notes and Acknowledgements

The research protocol and supporting documents for this study were approved by Virginia Tech's Institutional Review Board, Office of Research Compliance, 01/12/15 (protocol #15-018). Kathleen Faye Cicora Smith, IRB Protocol Reviewer, proved exceptionally helpful with this process. My study does not fit the traditional mold expected by an IRB process. Yet, I was accommodated relative to the complexity of articulating the various components of my study to ensure its compliance with the IRB process while allowing for creative thinking (e.g., the use of seminars/workshops and conversations as sources of data, complete with original consent forms created for this context).

A special thanks to Dr. Karen Roberto, Director, Institute for Society, Culture and Environment (ISCE), Virginia Tech, and David Orden, Director, ISCE, Virginia Tech Research Center-Arlington, for facilitating a grant opportunity that is enabling me to bring a Chinese-speaking doctoral student to China, in my capacity as a Fulbright Scholar, and for covering his expenses and paying his wages (item #3 below).

The 2015 summer visit to China has been sponsored by these entities, making the work and study possible.

1. U.S. Department of Education, J. William Fulbright Foreign Scholarship Board (FSB), US Department of State's Bureau of Education & Cultural Affairs (ECA), & Council for International Exchange of Scholars (CIES) (2014-15 Fulbright Specialist Program)
2. A non-identified university in China that graciously sponsored my visit as the Fulbright host
3. Virginia Tech's Institute for Society, Culture and Environment (ISCE), Global Issues Initiative (GII), 2015-16 Research Support Program

References

Allen, T. D., & Eby, L. T. (Eds.). (2007). *The Blackwell handbook of mentoring: A multiple perspectives approach*. Malden, MA: Blackwell.

Austin, A. E. (2009). Cognitive apprenticeship theory and its implications for doctoral education: A case example from a doctoral program in higher and adult education. *International Journal for Academic Development, 14,* 173–183.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.

Brooks, J. S., & Witherspoon Arnold, N. (Eds). (2013). *Confronting racism in higher education: Problems and possibilities for fighting ignorance, bigotry and isolation.* Charlotte, NC: Information Age Publishing.

Burns, T. (2014). *The zen of Fulbright: The unofficial guide to making the most of your U.S. Fulbright scholarship*. Los Angeles, CA: Don Davis Press.

Cargill, M., O'Connor, P., & Li, Y. (2012). Educating Chinese scientists to write for international journals: Addressing the divide between science and technology education and English language teaching. *English for Specific Purposes,* 60–69.

Collins, A. (1991). Cognitive apprenticeship and instructional technology. In L. Idol & B. F. Jones (Eds.), *Educational values and cognitive instruction: Implications for reform* (pp. 121–138). Hillsdale, NJ: Erlbaum.

Eadens, D. W., Papa, R., & Eadens, D. M. (2014). What diverse perspectives educational leaders need to know to lend schools with a global focus. In S. Harris & J. Mixon (Eds.), *Building cultural community through global educational leadership* (pp. 197–211). Ypsilanti, MI: NCPEA Press.

Hadwin, A. F., Järvelä, S., & Miller, M. (2011). Self-regulated, co-regulated, and socially shared regulation of learning. In B. J. Zimmerman & D. H. Schunk (Eds.), *Handbook of self-regulation of learning and performance* (pp. 65–84). New York: Routledge.

Harris, S., & Mixon, J. (Eds.). (2014). *Building cultural community through global educational leadership*. Ypsilanti, MI: NCPEA Press.

Järvelä, S., & Hadwin, A. F. (2013). New frontiers: Regulating learning in CSCL. *Educational Psychology, 48*, 25–39.

Lavender, T. (2014, July 14). How Canada helped China rebuild universities after the cultural revolution. *U of T News* [news story]. Retrieved from http://news.utoronto.ca/how-canada-helped-china-rebuild-universities-after-cultural-revolution

Lewis, R. B., & Maas, S. M. (2007). QDA Miner 2.0: Mixed model qualitative data analysis software. *Field methods, 19*(1), 87–108.

Merriam-Webster. (2015). Retrieved from http://www.merriam-webster.com

Miles, M. B., Huberman, A. M., & Saldaña, J. **(**2013). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Thousand Oaks, CA: SAGE.

Mullen, C. A. (2011). Facilitating self-regulated learning using mentoring approaches with doctoral students. In B. Zimmerman & D. H. Schunk (Eds.), *Handbook of self-regulation of learning and performance* (pp. 137–152). New York: Routledge.

Mullen, C. A., & Tuten, E. M. (2010). Doctoral cohort mentoring: Interdependence, collaborative learning, and cultural change. *Scholar–Practitioner Quarterly, 4*(1), 11–32.

Papa, R., & English, F., Davidson, F, Culver, M. K., & Brown, R. (2013). *Contours of great leadership: The science, art, and wisdom of outstanding practice.* Lanham, MD: Rowman & Littlefield Education.

Schunk, D. H. (2012). *Learning theories: An educational perspective* (6th ed.). New York: Pearson.

Schunk, D. H., & Mullen, C. A. (2013). Toward a conceptual model of mentoring research: Integration with self-regulated learning. *Educational Psychology Review, 25*(3), 361–389.

Tienken, C. H., & Mullen, C. A. (2014). The curious case of international student assessment: Rankings and realities in the innovation economy. In S. Harris & J. Mixon (Eds.), *Building cultural community through global educational leadership* (pp. 146–164). Ypsilanti, MI: NCPEA Press.

Tienken, C. H., & Orlich, D. C. (2013). *The policy reform landscape: Fraud, myth, and lies.* Lanham, MD: Rowman & Littlefield Education.

Tsang, M. C. (2000). Education and national development in China since 1949: Oscillating policies and enduring dilemmas. *China Review*, 579–618.

Tucker, M. (Ed.). (2011). *Surpassing Shanghai: An agenda for American education built on the world's leading systems.* Cambridge, MA: Harvard Education Press.

Wang, C., Schwab, G., Fenn, P., & Chang, M. (2013). Self-efficacy and self-regulated learning strategies for English language learners: Comparison between Chinese and German college students. *Journal of Educational and Developmental Psychology, 3*(1), 173–191.

Wang, D. (2010). China's trade relations with the United States in perspective. *Journal of Current Chinese Affairs, 39*(3), 165–210.

Zha, Q. (Ed.) (2013). *Education in China: Educational history, models, and initiatives.* Great Barrington, MA: Berkshire.

Zhao, J. (2002). *Chinese conversation for foreigners (Vol. 1)*. Beijing: Beijing Language and Culture University Press (BLCUP).

Zhao, Y. (2014). *Who's afraid of the big bad dragon? Why China has the best (and worst) education in the world.* Thousand Oaks, CA: Jossey-Bass.

Zimmerman, B. J., & Schunk, D. H. (Eds.) (2011). *Handbook of self-regulation of learning and performance.* New York: Routledge.

Author Bio

Carol A. Mullen, PhD, is a full tenured professor of Educational Leadership at Virginia Tech. Hired through an external search, she served as Director of the School of Education and Associate Dean for Professional Education of the College of Liberal Arts and Human Sciences in Virginia. In this role, she generated funding for the School and positioned it as a resource generator and attractor for her constituents. She also led the School through a restructuring process that enhanced the School's visibility beyond its campus borders. Also hired externally years earlier, she served for 5 years as Department Chair of Educational Leadership and Cultural Foundations at The University of North Carolina at Greensboro. There she fostered a social justice vision of leadership while maximizing resources to propel as well as reward excellence. Dr. Mullen is an award-winning scholar and teacher who is Past President of National Council of Professors of Educational Administration. Currently, Dr. Mullen is a Fulbright Specialist Scholar (awarded by the J. William Fulbright Foreign Scholarship Board) for work in China in 2015 in mentoring, learning, and leadership. She is also a senior seminarian in the American Council on Education Women's Network. Her forthcoming coedited book, with Christopher Tienken, is *Education Policy Perils: Tackling the Tough Issue* (Routledge/Taylor & Francis Group). Her doctorate was awarded from The Ontario Institute for Studies in Education of the University of Toronto.