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Teacher Leadership and Teaming: Creativity within Schools in China

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Abstract

Preparing today's children and youth to become active, responsive adults in transforming global societies requires that schools change dramatically. To work towards this goal is daunting in light of educational policies and school structures that hinder teamwork and creativity. Despite challenges due to education policies, traditional school structures, and teacher-culture expectations, teacher leadership and teamwork have nonetheless emerged in many countries. This article reports interesting and even surprising preliminary findings about education in China gathered through onsite school observations and interviews with teachers and principals. The popular belief that Chinese education is uniformly creatively impoverished and that schools are nothing but robotic learning environments are dispelled.

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Introduction

Throughout the world, pressures placed on schools to raise student achievement demand leadership by teachers (Curtis, 2013; Hairon, 2017; Harris, 2011). Although the term *teacher leadership* has no universally accepted definition, common assertions are that it emerges when teachers have time and opportunities to build collegial relationships, share resources and strategies that improve instruction, and engage together in ongoing professional development (Browne-Ferrigno, 2016; Poekert, Alexandrou, & Shannon, 2016; York-Barr & Duke, 2004). Metaphorically, the actualization of teacher leadership is "like an evolving thread that appears in widely diverse locations and in a variety of shapes and colors in the school reform tapestry" (Murphy, 2005, p. 11).

Teacher leadership engenders formation of communities of practice. In these, educators try out strategies that can transform their collective practice and enhance their collective efficacy (Donohoo, 2017; Frick & Browne-Ferrigno, 2016; Hord & Sommers, 2008). The greater autonomy afforded a teacher community, the more empowering are members' interdependence and active engagement (Bolam, McMahon, Stoll, Thomas, & Wallace, 2005; Hargreaves et al., 2013). Synergistic teamwork has resulted in teachers' curricular integration of "creativity-enhancing activities" (Hartley & Plucker, 2014, p. 389). Although a creative teacher tolerates ambiguity and "encourages reasonable risk and unpredictable situations" (Morais & Azevedo, 2010, p. 331), creativity is not universally evident in schools because people perceive creativity differently (Kettler, Lamb, Willerson & Mullet, 2018; Robinson & Aronica, 2015; Sarsani, 2007). For creativity to thrive, leaders who are "courageous,

transformational, and engaged" must redesign schools (Jefferson & Anderson, 2017, p. 150).

Paradoxically, teacher leadership supporting creativity and innovation integration was apparent in Chinese schools studied by Mullen (2017, 2018)—despite reported systemic "disparity and inequality of education in China" (Cheng, 2009, p. 2) and change-resistant teacher cultures. Kwo and Intrator (2004) issued a call for rethinking teacher leadership in support of greater autonomy in students' learning," claiming that "the majority of teachers [is] not naturally inclined to change and renewal. This creates a gap between the discourse on the desirable, as [stated] in policy documents, and routine practices in authentic settings not conducive to learning and development" (p. 284).

The general reform mindset, described later, is consistent with policy shifts that Hong Kong has long initiated. The changes favor developing students holistically and supporting lifelong learning beyond classrooms within the wider global community. While problematical and challenging, given the linearity implied in such reform measures and the constraints teachers face in their daily lives, a question emerges: *Is teacher leadership occurring around creative teaching and learning in support of creativity and innovation integration into Chinese primary and secondary schools?* The response to this complex question is presented below.

First, we offer a multifaceted working definition of *creativity* that transcends popular associations with arts and crafts. While making and producing of one's own works is commonly understood as creative (Mumford, 2003), thoughtfully appraising knowledge is a less familiar view of creativity (Robinson & Aronica, 2015) as is wrestling

with open-ended questions that defy a single answer or solution (Eisner, 2004). A distinguishing quality of creative people is that they turn unrelated things into something new or extraordinary. Producing new ideas and artifacts can be a mysterious process (Csikszentmihalyi, 1996; Goldberg, 2018), thus dispelling the notion that creativity is knowable to the point of being formulaic and replicable.

Dynamics Burdening Teacher Leadership and Creativity in China

Education scholars from different countries have repeatedly claimed that test-centric policy and curricular mandates compromise teacher and student creativity and creative education more generally. These diverse scholars who are American (Li & Gerstl-Pepin, 2014), British (Ball, 2012), and Chinese (Zhao, 2014) are among the growing voices criticizing restrictive mandates that subvert equity, liberty, and socially just gains in the education enterprise. Unfortunately, studies of wealth disparity in China paint a picture of stark inequalities in opportunity for families and communities (Osnos, 2014).

Place-bound immobility, poverty-burdened households, and low-resourced communities affect many Chinese citizens. Rural-bound families endure fewer quality education opportunities, limited access to services, and inadequate support for disabilities (Jensen, 2009). In high-poverty rural districts, it is difficult to attract quality teachers (Cheng, 2009), let alone those prepared to handle a 21st century curriculum of creativity and entrepreneurship. All of this and more adds up to distressed schools lacking the quality teachers and resources needed to build and sustain creative learning environments.

Further, high-stakes testing cultures, and the proliferating markets that profit from these, have been "outed" for dominating schooling

with "a narrow means/ends orientation" (Eisner, 2004, p. 300). His argument is that these schooling trends interfere with creative mindsets, a growth-producing catalyst for human beings and the environments and societies they construct. Like Dewey (1934), Eisner sees as first-rate intellectual and creative dispositions to be "risk-taking, exploration, uncertainty, and speculation" and "curiosity and interest in engaging and challenging ideas" (p. 300). Evidence exists of a valuing within China's policymaking arena of these capabilities within actions implemented toward school improvement and renewal (Draper, 2012).

Contemporary political scientists describe China as a highly adaptive communist regime (Dimitrov, 2013). Notably, measurable economic recovery is most evident in the rapid construction of cities, schools, and universities (Osnos, 2014). But China also has a capacity for creatively adapting in different domains of life. As one example, the Chinese government's pursuit to modernize education has taken the form of democratic components being introduced in mandates for teaching creative curriculum (Draper, 2012).

Nonetheless, more changes are needed to diminish threats to Chinese students' dispositions and skills. One study found that China's exam-focused education system "stifles a student's imagination, creativity, and sense of self, qualities crucial for a child's ultimate success" (Kirkpatrick & Zang, 2011); consequently, the passive learner in China exhibits attitudes aligned with a view of education "as nothing more than merely passing examinations" (p. 36) rather than creativity and hopefulness. Zhao (2014), himself educated in China, describes the dreaded exam called *gaokao* that determines secondary students' university fate and future income. The all-consuming preparation for the exam comes at great cost, impeding

imaginations and creativities, perhaps indefinitely lost to the individual, the school community, and ultimately to China itself.

Flawed Frame: One-Dimensional Thinking

The country's strict education regimen leads to the assumption that Chinese students lack creativity—meaning that they cannot think flexibly and laterally. Much of the literature builds on this generalization, adopting it as a starting point for making international comparisons (Li & Gerstl-Pepin, 2014; Staats, 2011). However, such views fail to account for granular strides that some schools in China have made to reduce class size in primary grades (Draper, 2012). This change in numbers, albeit gradual, may be allowing for personalized attention and creative work. Problems accompanying this change include a lack of full support outside schools for such reforms, uneven teacher training across schools, and overloaded classrooms due to rapid population growth.

A policy argument is that China launched its suite of education reforms in response to the Programme for International Student Assessment (PISA) results. The PISA accountability benchmark, explains Sjøberg (2016), has severe consequences in exam-centric regimes wherein creativity, innovation, and entrepreneurship in schooling disappears. As stakes for measurable success increase, inequality worsens for under-resourced, low-income schools and populations. Low scores on competitive entrance exams and other tests have discouraged some Chinese students and their teachers. A deep sense of shame over having failed one's family and nation has escalated the suicide rates of students in China, exceeding other PISA-benchmarked countries (Cheng, 2014).

Global-Ready Frame: Creativity and Curriculum

Curriculum that welcomes the elusive, ambiguous, unmeasurable, and mysterious aspects of learning and life itself is needed in all schools. Linear thinking is conducive to a rote, fact-based style of instruction, whereas a focus on everyday creativity and innovation fosters experiential learning, abstract thinking, and problem solving (Csikszentmihalyi, 1996; Eisner, 2004; Kaufman & Beghetto, 2009; Robinson & Aronica, 2015).

Creative learning environments. Despite escalating pressures from external accountability demands, creative classroom educators worldwide find ways to personalize, enliven, and cross-pollinate their curriculum with other subjects (Mullen, 2017, 2018; Robinson & Aronica, 2015). Because global-ready graduates are skilled in creative thinking, critical thinking, and problem solving, the assumption is that innovative teaching pedagogies likely benefitted them (Johnson, Johnson, & Smith, 2006; Kurczek & Johnson, 2014; Robinson & Aronica, 2015). Enriching preparatory experiences serve graduates in forging their own paths while maximizing their creative expression, ingenuity, and freedom as responsible, ethical citizens improving the world community.

Curriculum and culture in China. Creativity has been an important component of education in China since 2001, and its development is a main concern, with varying effects across the country. Hong Kong has led the nation's work towards progressively implementing creativity in schools and colleges. Acting on the priority for transforming societal institutions through creativity, policies have changed; new practices are being implemented in preschool, primary, and secondary education (Draper, 2012).

Creative Methodologies Used for the School Visits

Puzzling over the world issues raised, Mullen (2017) wanted to see if any of China's primary and secondary schools exhibit signs of creativity. If so, she wondered whether she would be able to make sense of any such signs in environments unfamiliar to her and write about the experience.

Setting and Participants

In 2015, Mullen (2017) visited five preK–12 schools in China. Three were high-poverty rural locations (i.e., public kindergarten, public elementary school, public special education school) and two well-resourced urban schools (i.e., private primary Montessori school, public high school). The site selection is obviously not a representative sampling of China's schools.

Study participants included veteran teachers and one novice (n = 19); principals (n = 4), and officials including a dean, a director, and a teacher trainer–supervisor (n = 3). All were Han Chinese and mostly female (two of the principals were male). (All names are non-identifying, as per the terms of the Institutional Research Board approval.)

Bicultural Strategies

Research protocols were in Mandarin and English. A political gulf was likewise traversed—China and North America have different views of human and civil rights (Zhao, 2014). Learning that this difference also applies to research ethics, Mullen used various measures to help bridge the cultural gap. After distributing her printed packet to all participants in the meetings, she reviewed the key

documents (e.g., consent form), shared a study overview with procedures, and elicited questions while trying to build trust (utilizing her Chinese translator). Two-way communication was facilitated, and concerns were eased for gaining signatures on consent forms.

Conversational Analysis

At all schools, there were informal conversations and interviews with leaders and teachers, most taking place in a group fashion with some one-on-one (Mullen, 2017). Time had been permitted for observation of activities, which fostered more conversational interactions with the practitioners. She observed creative learning activity with students and engaged as a guest participant.

Data collected from these conversational exchanges with the practitioners revolved around contextual issues of creativity and accountability. Mullen's interpretations were grounded in making sense of naturally occurring, guided conversations (Marshall & Rossman, 2016), in addition to what she observed, perceived, and experienced within the diverse Chinese schools.

The practitioner teams were also given a list of creativity topics for guiding sessions, such as creativity and learning in participants' learning environments and the work being done. At all schools, this topic proved the most popular, eliciting discussions of creativity extending to evidences of creative processes and products.

Data Sources and Analyses

Field notes were independently generated by Mullen (2017) and her translator. In addition, a photographic archive constituting a data source served to spark recall and confirm details of creative work. Site

visits were high quality and productive, lasting three concentrated hours each.

Qualitative models (e.g., Miles, Huberman, & Saldaña, 2013) were used for coding and analyzing data. With two faculty experts, interrater reliability was established using sample selections from the data sets. Displays were created of key-word-in-context charts, along with frequency distributions of key words and phrases. Consulting an unconventional source encouraging transparency around areas of discomfort in data sets (i.e., Charmaz, 2005), Mullen made national comparisons of fundamental differences in sociopolitical systems, human and civil rights, and research ethics and expectations. Perspectives from the literature, the news, and her translator helped her to navigate this challenging analysis.

Field-based Thematic Results

Generalizations abound of China as creatively impoverished and of classrooms as machinelike learning environments. Yet, in the select sites where Mullen (2017) gathered data, Chinese teachers and leaders described and also showed an array of creativity in teaching and learning on their campuses. In the vignettes that follow, the main thematic outcome is revealed: *Creative expression was cognitively and vividly apparent in a multitude of ways within the younger grade levels and accountability-steeped advanced grade levels*.

Rural Schools Vignette

Creative teachers at the *rural public kindergarten* explained how they developed a monthly schoolwide curricular theme (e.g., friendship and sharing). The themes incorporated special days in China and the school's daily activities involving learning, games,

sports, and life. Creativity had a strong visual presence: As led by teachers' creative pedagogies, artwork, arising from lessons, was thematically arranged in many building spaces. Sources of inspiration included children's storybooks, celebrated occasions (e.g., Mother's Day), and festivities (e.g., Dragon Boat Festival).

A kids' gallery featured displays dangling from ceilings, some celebrating Father's Day. A cutout of miniature men's shirts hung from tiny pegs on strings across corridors (symbolizing an adult clothesline); on the flipside were personal notes to fathers. Red dragons dominated another display and children's hand drawings of fathers decorated with images of nature, animals, and family. The dragon, traditionally associated with masculine energy, hints at how Chinese children are socialized to accept the power and authority of patriarchal figures. Obedience is expected, as the hierarchical values of Confucianism convey.

Another display of paper cutouts was of mothers—hand-drawn with babies (symbolically, newborns are descendants of dragons) glued onto the stomachs. Included in their family photos were the young creators as babies. Family–self creativity was a subject of this display, just as it was throughout much of the school. While creativity is an aesthetic medium that celebrates life, it can inadvertently communicate gender stereotypes and expectations to children.

The beautification and personalization of garden and school spaces by students brought nature, family, and culture to this rural elementary school. As framed pictures showed, they enjoyed the locally grown foods and rituals of family feasts. Participating in the work as beginning gardeners and cooks, they were developing life skills while learning about food in its natural, healthy state.

A surprising finding in the *rural public elementary school* located in a remote mountainous region was that one-third of the children lived at the school. Such accommodations are made in China when families live too distant from schools. The other unique feature was an L-shape aquarium connected to many small fish tanks, which may have substituted for family members.

Students took care of the sheltered guppies throughout the aquatic lifespan as part of the arts-and-sciences curriculum. They learned about classifications of plants and animals, the circulatory system and brain unique to fish, and healthy environments for enabling fish to thrive. Children had fish friends and life-stage teams. The whole-child curriculum incorporated "A Tadpole Looks for Her Mum," a story from an English teacher's text. Adapting it for performance, students selected their role (e.g., tadpole, mother) and wrote a script. They were being introduced to life cycles and solutions for coping with such difficulties as isolation and homesickness. Caring for Earth and humans was taught through the topic of fish habitats and aquatic ecosystems.

Another unique element of this school was its adoption of a tradition of Chinese culture in its curriculum—the dragon bench dance. Like the care of fish, it was a potent embodiment of ancestral worship. The teaching staff innovated the school's dragon bench dance to benefit their young community. All children, extending to the wider community, could experience and even perform it. In 2012, the performance, enacted by kid teams, was broadcast live on TV. Prominently framed pictures chronicled the public dragon bench demonstrations—hundreds of red-and-gold costumed student performers moved in an orchestrated, undulating motion.

At a *rural public special education school*, the teachers and entrepreneurial principal and staff demonstrated artistry with their fund-raising ingenuity. They generated traditional Chinese arts and crafts, among these porcelain-engraved plates. School materials and supplies were purchased with the proceeds to help support low-income families. This popular cultural art form was also curricular: Students did porcelain engraving under close teacher supervision. In the art course where they were engraving, nature was observed. Sometimes, they would go outside to sketch their ideas, then improve upon their paper sketches (without using technology). With their teacher's help, these artisan-like apprentices chiseled their designs (e.g., butterflies in motion) onto plates. One such engraving is a playful take on the almighty dragon in Chinese culture.

During the interview, the school director relayed another situation as the most impressive, motivational creative lesson she had observed to date. Occurring in a math class, concepts were conveyed as shapes formed by human bodies. A semicircle was used for student introductions. Delighted, the young people thought their teacher was doing magic by turning their semicircle (and bodies) into a circle and other shapes. This game of high involvement encouraged understanding of subject content by way of an interactive kinesthetic activity; through it, mathematical concepts were being taught. The director saw this teacher as exceptionally creative and attuned to children with special needs.

Urban Schools Vignette

At the *urban private primary Montessori school,* cultural examples of creativity were evident in the eco-friendly, specially constructed environment. Real-world student simulations of activities (e.g.,

cooking and building objects) were part of daily school life. Developmental creative learning activities involved teacher guidance, including reading, play, cooperation, and negotiation. Each classroom had three teachers, and the lead was Association Montessori International certified with three years training in Europe. Another educator was a native English speaker who fostered a bilingual environment. Inventing to scale, the teachers made some of the tools and materials themselves.

A discovery model was used to teach students from China, America, and Europe by doing rather than direct instruction. Children, some of whose parents were foreigners working in the area, shuffled among the special stations, trying out new things. They were being prepared for life while having their childhood respected and preserved. The creativity advantage in learning allowed children to find their way in a safe but philosophical world of exploration. Rooftop gardens and open-air play areas enlarged the learning space. Vegetables and fruits were enjoyed and children clamored in the kitchen to learn culinary skills. Hands-on connections linked the table and planet with their food.

The *urban public high school* is a top-ranking PISA competitive high school. The teachers creatively adapted their curriculum beyond the core of internationally tested subjects. Arts and technologies were brought to life throughout the campus, capitalizing on student–student and student–teacher synergies. Productive and affirming relationships between the adults and students was encouraged by the teachers' original designs of numerous displays and renovated spaces that housed—and indeed highlighted—student projects. A sense of pride shone through.

Nonetheless, this stellar, award-winning multimedia arts site, which participated in gallery showings and competed in contests, adhered to the national curriculum standards. The curricular testing requirements of reading, mathematics, and science are key subjects, but this school also excelled at the arts and technology. Creativity was cultivated through an interdisciplinary approach to coursework and student-driven elective courses. Real-world components in the curriculum allowed for activities (e.g., taking measurements outside math class and interviewing family members who had left their rural communities). A few youth had earned patents for their robotic and computer-assisted design projects. Entire spaces—made into student galleys—showcased theme-based science and arts projects, some featuring sprawling cityscapes and landscapes.

Educational leaders at the *urban teaching training institute* whom Mullen (2017) interviewed after the school visits confirmed that creative education is alive within some preK–12 schools in their region. A powerful spoken message was that "creativity is manifesting in China's schools at tiers lower than the government, given its tightly controlled structure." Despite the Chinese government's apparent lack of direction and interest, creativity was occurring.

Discussion

The teacher leaders at the institute asserted that creativity is evident in many Chinese schools. Their critique of authoritarian governmental control and apparent disinterest in what happens within schools outside of the competitive international testing arena left a lasting impression. While it proved challenging to elicit criticism during the school visits, with the exception of the special education

school, the leaders at the teacher training institute openly offered their opinions and pushed against the status quo.

Study results suggest that the Chinese teachers and principals participating in Mullen's (2017) study were open to discussing creative work, processes, and successes at their schools. In fact, they seemed eager to point out the creative activity, shining the light on student works, some impressively displayed, others tenderly.

Images of family, dragon festivity, and ancient symbolism prevailed. Communal celebrations of ancestry came across as highly prized by the schools. Moreover, expressions of creative teaching and learning seemed remarkable at times as did the conscientiousness of staff members in their efforts to design meaningful and engaging learning on behalf of their pupils. All of the creativity observed, then, seemed highly attuned to Chinese culture, myth, and ancestry. Yet, there were many different examples of creative sense-making and different topics. These encompassed subject matter and global themes, much of it supportive to some extent of students' development as well-rounded, culturally attuned citizens. However, gender-based roles and expectations, as well as critical thinking about such phenomena as societal inequities and masculinist–authoritative paradigms, and so forth, seemed outside the creative curriculum.

Specifically, it was in the primary schools that Mullen (2017) noticed creative work that fed stereotypical gender-based images, such as of males (fathers) as powerful and females (mothers) as nurturing. When asked about the socialization of girls and boys, a few study participants reported efforts taken to debunk gender stereotypes in some places. For example, in the Montessori school, there were stark differences in the dress of boys (informal) and girls (formal), except for

the youngest children. The director explained that the Montessori administration was persuading parents to dress their daughters for comfort in the high activity environment, not in expensive dresses and formal shoes; however, progress toward change was slow. This expectation befitting Montessori schooling was being thwarted by some of the elite Chinese parents whom he thought might adjust to the wealthy Americans' relaxed style.

Overall, creativity came across as a natural, integrated part of the curriculum within the school sites. Teachers and leaders, presenting themselves as tightly knit teams, were expressive about the creativity within their buildings and its impact on the community. For example, invitations from the rural public elementary school leaders were sent to the local residents to participate in the dragon bench celebrations and join in the live performances.

School teams invited Mullen (2017) to explore by asking questions and, except for policy restrictions in the Montessori and special education schools, by freely roaming around during the guided tours. She witnessed creativity as process and product in varied forms at all of the schools, especially the more permissive ones. Despite the packed classrooms dominated by direct instruction, there was creative work occurring at all grade levels and across subject areas. At times, creativity was blatant; at other times, she inferred it. She also searched for what was absent and omitted from what was being (re)represented.

China seemed accustomed to handling substantial populations of students. Its top-rated schools have "high student/teacher ratios and enrollments that grow to the capacity of the building" (Tobin, Hsueh, & Karasawa, 2009, p. 34). These researchers exhibit a deep understanding of primary schools in China (extending to Japan and

the United States), although their fieldwork concluded in 2005 and much has been changing since then.

Classical and contemporary life themes were expressed in all the Chinese schools visited, often through myth and metaphor. Science and art had a seamless quality, as in the way that fish were the object of care within one school's living laboratory and anthropomorphized in child-centered, fish-like dramas. Innovative use of space and quiet time reserved for creative engagement was apparent across a spectrum of grades and ages. Additionally, creative performances were planned and then executed, sometimes in a particular subject, such as English, and at other times across the curriculum with the full strength of the student body and teaching staff.

Conclusion

The creativity paradox comes to mind as a way to describe contradictory messages arising from Mullen's (2017) study. For example, China's political leadership and people, worldwide, believe that Chinese citizens have a creativity deficit. Yet, the region-wide teacher training institute's leaders confirmed that some of the primary schools are active places of creativity and innovation. This testimony and research results at least question the veracity of the creativity deficit belief that plays into global mindsets about China and its schools.

Further, China's government has often been reported by journalists as wanting China to become a world-class innovator. Paradoxically, it clings to control and the one-party political system. Something important has to happen: The Chinese government needs to dispel myths that its nation cannot innovate if it wants robust

creative innovation to transpire (Abrami, Kirby, & McFarlan, 2014). Creative innovation is a springboard for nurturing collaboration and cooperation beyond schools and across nations. At minimum, all Chinese educators keen on generating 21st-century opportunities for students need encouragement within a bounded structure that is transforming in the global era.

Innovation and control—this is the very paradox that has been described as at the core of China's future (Gracie, 2014). Just how attuned are education policy officials to teacher teams' creative work within Chinese schools, particularly in distressed parts of the vast country? While the rote mechanization tactics used in education are surely oppressive, it cannot stamp out creativity and individuality altogether. Hinted at is the resiliency of these schools.

Transformation of Chinese society could come from a vigorous generation that pushes boundaries, asks questions, and interrogates authority in the process of becoming creative. Looking forward, our hope is that the creative work already occurring in China's schools is recognized—not missed or ignored. In general, teacher leadership and teaming can be described as a situated learning process that varies from one context to another. As such, what teachers do together involves artistry because it is "embodied, delicate, active, social, negotiated, complex process of participation" (Wenger, 1998 p. 49). Participation in teacher-led professional learning communities demands creative collaborative synergy. One could even say that creative participation and leadership is necessary for developing and sustaining teacher leadership and teaming in contemporary times.

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