



## INTERNATIONAL & COMPARATIVE EDUCATION | RESEARCH ARTICLE

# Academic stress in Chinese schools and a proposed preventive intervention program

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**Abstract:** While American educators fret about the mediocre educational performance of American students in international contests (e.g. the Program for International Student Assessment) and wonder why the Chinese education system produces such high-achieving students, educators, journalists, and public officials in China want to know what causes and how to prevent the high levels of academic stress that Chinese students, their families, and their school systems experience. So far, much of the blame for these toxic levels of stress has been directed to the Gaokao, the Chinese national college entrance exam that takes place in June each year. But to date, top-down Chinese educational reforms have been ineffective in reducing the problem. In this article, we build a case for strengthening bottom-up efforts at the school level in China and propose an evidence-based approach for addressing the challenge of academic stress experienced by Chinese students.

**Subjects:** Area Studies; Development Studies, Environment, Social Work, Urban Studies; Education; Social Sciences

**Keywords:** Chinese education; PISA; stress; education policy; risk prevention; intervention



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### PUBLIC INTEREST STATEMENT

In recent years, articles about the success of Chinese education frequently grab headlines of major newspapers in the US. The present article aims to inform the general public of the other side of the story and its complexity. That is, Chinese educators' struggle to change the system and Chinese students' struggle to survive it. The challenge facing Chinese educators and students is toxic levels of exam-related stress, which has become a grave social problem in Chinese society. In this article, we introduce empirical research on the debilitating effects of academic stress on the psychological, social, moral, and civic development of school-aged Chinese youth; we propose an intervention program to help Chinese schools establish a thriving climate for students, both rigorous and humane. In the context of extreme pressures of global economic competition, achieving this balance is a challenge facing education both in the east and west.

In 2010 and 2013, Shanghai students twice topped the rankings for reading, math, and science in the OECD's international Program for International Student Assessment (PISA). In response, American journalists, educators, and academics debated the meaning of these PISA differences and searched frantically for factors that may explain the huge success of Chinese (really Shanghai) primary and secondary education (Dillon, 2010; Gumbel, 2010; Rich, 2013; Tucker, 2013). Even in their sophisticated discussions about pedagogy, a simple fact was largely neglected. That is, the Chinese education system is widely criticized by its own educators, scholars, and parents for generating toxic levels of stress and producing graduates with high scores, low ability, and poor health (Zhao, 2009, 2013a, 2014; Zhao, Haste, & Selman, 2014). In this article, we present research findings on the debilitating effects of academic stress on school-aged Chinese youth, and discuss the social and cultural barriers to effective implementation of policies aimed at reducing stress. We then propose a school-based intervention program for countervailing the pernicious and profound effects of academic stress on Chinese students. Finally, we briefly discuss the implications of the Chinese problem for the direction of educational policies in the United States.

### 1. Exam-related stress and its debilitating effects on Chinese youth

I had the darkest and blandest time of my life of 17 years when preparing for the gaokao ... I tried to escape from it. I rebelled against it. I was at times depressed and at times over-confident. I had conflicting feelings and inhibited struggles ... It was an experience of purgatory ... I was helpless, because of the stress of the exam, the sense of inferiority, the feeling of uncertainty about the future, and all the care and high expectations that only made me more stressed ... I was tired and bored. The battle lasted for 10 months and is now over forever. I don't even want to remember it. The memory makes me unhappy ... During the time there was no friendship among classmates and no care from teachers. There were only fierce and cruel competition, betrayal of friends, endless verbal violence and emotional abuse. We vented stress by hurting one another. It was pathological. But it made us feel better, so we couldn't stop it. Honestly, I became 10 years older. (Anonymous, 2009)

The excerpt comes from an online blog published by an anonymous Chinese student on 7 August 2009, after taking the gaokao, the annual Chinese college entrance exam. The extremely stressful experience and strong feelings expressed in it are not uncommon among Chinese students. They exemplify the social and emotional toll on adolescents of a test-oriented education system that generates high levels of stress.

Research confirms the debilitating effects of academic stress on Chinese students. In a study with 2,191 Chinese children of 9–12 years old from urban and rural areas, Therese Hesketh and her colleagues (2010) found that 81% of the children worried “a lot” about exams, 63% of them were afraid of punishment by teachers, and 73% of them were physically punished by their parents for lax academic effort. Over one-third of the children reported having psychosomatic symptoms at least once a week. In a study by the Beijing-based China Youth and Children Research Center (Fear and anxiety among children, 2005), researchers investigated 2,400 students of different ages in six cities and provinces. Their survey found that 76.2% of the students reported being in a bad mood because of academic pressure and high parental expectation, and 9.1% of them reported feelings of despair. Multiple large-scale studies have reported higher risk of suicide ideation and attempts among older Chinese adolescents partly due to increased academic pressure from middle school to high school (Cheng et al., 2009; Cui, Cheng, Xu, Chen, & Wang, 2011; Liu et al., 2000; Unger et al., 2001).

The negative impact of academic stress is not limited to individual psychological health, but extends to social relationships with peers and to attitudes toward authorities and society at large. A study in Shanghai (Zhao, 2011) showed that, as a result of intense academic competition, feelings of jealousy, distrust, and animosity were common in peer relationships. Close friends were also often seen as rivals or enemies in academic competition. During interview, an 11th-grade girl recalled an experience that she described as rather common among younger adolescents in

middle school, “I had a friend whose ranking position was similar to mine. At school our desks were close. When I wrote my homework, she would secretly watch what I was doing. I would give her an angry stare.”

Older adolescents seem to have internalized a set of social or cultural rules related to academic competition. Another 11th-grade girl in the same study stated:

I don't think I trust anybody completely and anybody trusts me completely. Trusting another person is very difficult. I trust others in small things. But to be honest, when it is related to self-interest, I will hesitate and won't be too trusting ... [what issues involve self-interest?] Academic competition is the most important issue. When you know some important mathematic problems, you wonder if you should share them with your friends, and to what extent you help them. (Zhao, 2011, p. 109)

In another study, this one with youth in Shanghai and Nantong of Jiangsu province from both urban and rural schools, researchers used multiple methods to investigate the social and civic attitudes of 542 adolescents in 8th and 11th grades. Their survey study found that, compared with 8th graders, 11th graders reported significantly less interest in almost all social issues including rising pollution, controlling crime, nuclear energy, and providing better facility for young people (Zhao, Haste, Selman, & Sang, 2012). Consistently, interviews with individual students as well as focus group discussions with both boys and girls revealed that choosing to mind one's own business (rather than coming to the aid of others in distress or protesting against unfair practices in school and society) was associated with a deep cynicism and a sense of civic powerlessness (Li, Zhao, & Selman, 2013; Zhao, Haste, Selman, & Luan, 2014). Although these emergent themes were present among all age and school groups, they strongly dominated the moral reasoning and civic attitudes of the urban 11th graders who experience higher levels of academic stress (Zhao, Selman, Chopra, & Chen, 2013).

## **2. How has academic stress become a serious social problem? Educational reforms of the past 50 years**

Although concerns about academic stress in Chinese schools can be traced to the 1930s and 1950s, when China reopened its doors to the outside world in the mid-1970s, Chinese education was lauded internationally for its achievements in promoting universal schooling, minimizing discrimination against the poor, and providing an antidote for the diploma disease that besets education generally (Pepper, 2000). Starting from the mid-1980s, however, the Chinese government initiated massive educational reforms to make secondary schools more efficient and more responsive to economic development. Introducing “competition mechanisms” into secondary education and promoting “competition consciousness” among teachers and students were the major themes of educational discourses during the time (Zhao, 2011). While the central government maintained its control over the purposes of education, system reforms, textbooks, and teaching guidelines, a series of policies were implemented to shift the responsibility of funding and managing schools to lower levels of government and to open schools to competitive market forces (Chan & Ngok, 2001; Ngok, 2007).

This financial quasi-decentralization of education led to systematic inequality and stratification (Lin, 2006; Paine, 1998). To compete for resources, Chinese schools have to do all they can to outperform their competitors in average student test scores. Schools keep students in classes for long hours, assign large amounts of homework, and organize countless mock exams. Schools rank students by their test scores and rank teachers by the scores of their students. Administrative districts in the same city are ranked and compared based on test scores. After the yearly results of the gaokao are released, cities and provinces are ranked and compared based on students' average scores. These test scores are used to evaluate the job performances of teachers, school principals, education administrators, and local government officials. The pressure to outperform competitors exists at each level of the education system and is passed on to the lower levels and ultimately to individual students. Does this sound familiar to the direction educational policy began to take in the last decade in the United States?

Facing mounting criticism of the education system, at the turn of the twenty-first century, the Chinese central government began to issue new policies on a regular basis for the purposes of narrowing gaps among schools and reducing academic competition among students based solely on test scores. In 2000, the Chinese Ministry of Education issued the “Urgent Regulations for Alleviating the Academic Burden of Primary School Students.” The document set strict limits to the number of required textbooks, the amount of homework, and the time students spent in school. Later, similar regulations were also released on secondary education. The Ministry of Education called for parents to help supervise the enforcement of these regulations. Alas, after six years, the regulations proved to be ineffective. Not only did schools find ways to go around the rules, parents also sent their children to tutorial schools or brought tutors home when their children had some free time (Tang, 2006).

The situation has only become worse. In 2010, Premier Wen Jiabao stated that the most important goal for future education reforms was to reduce the academic burden on students, foster the development of intellect and abilities, and teach Chinese youth how to use their minds and hands and how to be a good person (Wen, 2010). An “Outline for National Mid-Term and Long-Term Educational Reform and Development Planning (2010–2020)” was released in 2011. It still set the goal of education as serving national interests by increasing China’s competitiveness in the world. However, “competition mechanism” and “competition consciousness” were no longer mentioned in the sections on secondary education. Instead, it extolled the virtues of a well-rounded education and education for the purpose of enhancing abilities. Moreover, it emphasized that education should be individual-based, aiming to meet the developmental need of each student (Ministry of Education, 2010).

Flying in the face of practice in other parts of the world, the new policies prohibited the practice of ranking schools based on student test scores. At the levels of primary and lower secondary education, the policies tried to reduce the pressure on students and parents to compete for the limited seats in the high-achieving schools by narrowing the resource gaps among schools and prohibiting schools from selecting students based on test scores. The policies also called on schools to reduce class hours, decrease the amount of homework, and increase the time students spend on extracurricular activities. Teachers were no longer allowed to make students’ ranking positions publicly available, and parents were asked to work with schools in reducing students’ academic pressure. Again, even in the face of strong central government pressures, parents continued to send their children to tutorial classes, and schools continued to rank students based on test scores, assign large amount of homework, and leave little or no time for physical activities in school (Zhao, 2011).

Responding to the ineffectiveness of these policies in changing educational practices, in the spring of 2013, the Chinese government launched a national campaign called “Reduce academic burden: Ten-thousand-miles journey” to assure the effective implementation of its new policies (Ministry of Education, 2013). The Ministry of Education requested provincial governments, city and county governments, and schools to evaluate and improve their policies and practices about reducing academic burden. Different levels of government including the Ministry of Education set up email accounts and phone numbers to facilitate public tip-offs about “behaviors that undermine the policies aimed at reducing academic burden or further increase students’ levels of stress.” The Ministry of Education monitored the process using strategies such as “providing supervision, open examination and secret visit, and journalistic investigation.” As a result, six schools across different provinces and cities were found to have problems and their names and the punishments they received were reported in national media. The effects of the campaign, according to a report in the official newspaper of the Ministry of Education (Liu, 2013), have been increased business for tutorial schools, which are not subject to government monitoring, and increased burden for parents to find tutorial schools for their children so that they would not fall behind of peers during the campaign time when their own schools and teachers cannot offer tutorial classes.

### **3. What makes it so difficult to reduce academic stress?**

It is beyond the scope of the present article to fully unpack the complexity of this seemingly simple question. We briefly summarize the three most commonly held perspectives about the factors that resist the pressures to change the educational culture: parental anxiety over academic and job competition, teachers' resistance to curriculum reform, and the difficulty of reforming the gaokao system.

#### **3.1. Parental anxiety and the diploma disease**

Clearly, parental resistance is an important barrier to implementing the new regulations. In part, this is due to the Chinese tradition that emphasizes academic achievement. Both parents in China and Chinese parents in the United States endorse the idea of extensive parental (and grand-parental) involvement in promoting children's school success (Chao, 2001). However, what makes parents a powerful force in the problem of academic stress is high-level parental anxiety over their children's gaining edges in academic and future job competition. Chinese parents' anxiety, as we have pointed out elsewhere (Zhao & Gao, 2014), results from many social and economic factors, including unequal distributions of human and material resources in secondary and higher education (Lin, 2006; Paine, 1998), fierce competition for white-collar jobs among college graduates (Tschang, 2007), the lack of a functioning social security system (Social security, 2012), huge income gaps linked to educational credentials (Bian, 2002), and the high-stakes gaokao that will decide their children's fate.

Furthermore, China, rather than avoiding the trap of the diploma disease, as Dore (1976) had hoped, has not only caught the disease (Lewin, 1997) but its extreme manifestations in both social institutions and cultural values have turned it into a serious social illness. In a society in which the "quality" (*suzhi*) and value of individuals are often judged, in both the job market and daily social interactions, by what academic degrees they have obtained and from which universities, how can parents stint when it comes to making sure their children outperform others? Finally, China's one-child policy has been strictly enforced in cities since 1979. Urban youth are often the only child in the family to look after their elderly parents. Without the safety net of a social security system, these students' academic and future career success is their parents' only hope (Fong, 2004).

#### **3.2. The "new curriculum" and the new burden on teachers**

As part of the efforts to reduce academic stress, in 2001, the Chinese government initiated a comprehensive curriculum reform to change the old knowledge-based and test-oriented curriculum that was perceived as imposing heavy burdens on students and teachers. The reform turned out to be highly controversial (Wang, 2012). Designed by university-based scholars influenced by the form of American tradition of curriculum studies that emphasizes all-around development of students and promotes experience-based learning (versus mastery of factual knowledge and skills compiled in official curriculum syllabi and textbooks), the reform aimed to make three transformations: (1) from a discipline-centered curriculum to a social construction-centered curriculum, (2) from a transmission-oriented teaching centered approach to an inquiry-oriented child centered practice, and (3) from centralization to decentralization in curricular decision-making (Deng, 2011).

This new pedagogy carried high hopes of changing Chinese education. However, after its wide implementation, it quickly "took a nosedive," triggering bitter debates about its theoretical soundness (Wang, 2012, p. 65). Opponents criticized it for equating learning with accumulating direct experiences or ignoring systemic knowledge (Deng, 2011). Researchers found it irrelevant to the realities of rural schools, increasing the workload of teachers and students, and putting rural students at a further disadvantage in preparation for the gaokao (Lou, 2011). Similar problems occurred in urban schools. A study with teachers in Shanghai suggested that, under pressure to promote the new curriculum, schools required teachers to teach in new and "creative" ways so that they could foster students' independent thinking *at the same time* as they prepared them for test-taking. As a result, teachers felt confused, inadequate, over-burdened, and more stressed (Zhao, 2011).



What else might explain the cultural and institutional resistance to the new curriculum? Some researchers argue that, without reforming the test-based assessment system, the new curriculum is old wine in new bottles and only confuses already stressed teachers and students (Lou, 2011). Others point to tension between a universally designed “top down” curriculum and its local implementations, suggesting the need for thorough research on how to motivate teachers and improve their quality (Li & Ni, 2012). From a theoretical perspective, Deng (2011) argues that controversies around the new curriculum reflect a “paradigmatic war” between the pedagogic tradition of the former Soviet Union that has shaped Chinese education in theory, classroom practice, and institutional power structure since the 1950s and the American tradition of curriculum studies that has guided the design of the new curriculum (Deng, 2011).

In his 2011 paper, Deng claims that the pedagogic approach operates most effectively in the context of a centralized school system, with a centrally designed curriculum and a centrally issued set of guideline for pedagogical practices in classrooms. Deng points out that, despite a resurgence of curriculum studies, teacher colleges in China have continued to teach Soviet pedagogical theory to pre-service teachers as in the 1970s, which may explain teacher resistance to the new curriculum. In contrast, Deng argues that contemporary American curriculum studies have been developed in the context of a decentralized education system. Traditionally, local school districts and individual schools in the United States, relatively speaking, have had more authority over curriculum decision-making, and individual teachers have more freedom to decide pedagogical practices in classrooms. Ironically, Deng’s analysis may be behind the times with respect to strong shifts in the currents of educational policy in the American system. In the United States, federal policies now promote a common core of educational standards that emphasize the universal standards, if not features, of deep comprehensions (PARCC, 2012). In many other respects, however, the most current officially sanctioned educational policies in the United States are moving much closer to the Chinese policies of the last 40 years, a claim we will elaborate on later in this paper.

### **3.3. Difficulty of changing the gaokao system**

Some Chinese scholars (e.g. Zhang, 2013; Zhao, 2013b) argue that the problem of contemporary Chinese education lies in the loss of the tradition of self-cultivation as the goal of education and the dominance of an instrumental mode of thinking that sees education as serving the purposes of realizing individual upward social mobility and increasing the nation’s wealth and power. They suggest that Chinese education should be completely transformed and restructured based on a notion of subjectivity that synthesizes modern western Judeo-Christian thought and traditional Confucian and Daoist philosophies (Zhao, 2013b). Others (e.g. Zhao, 2009), however, contend that, regardless of top-down policy directives, as long as the gaokao is used as the single criterion for college admission, the Chinese education system will continue to define academic success by external indicators that impose high pressure on school, parents, and students to focus on increasing test scores, and produce students with low levels of self-confidence and creativity.

On the other hand, it is important not to totally demonize the Gaokao. As China wrestles with an educational system that is still highly vulnerable to institutional corruption, the gaokao is considered by most people in China to be a relatively objective and fair selection system. In fact, for students in poor rural areas, the gaokao is almost their only opportunity to obtain college education, gain city residency, find a white-collar job, and realize upward social mobility (Wang & Ross, 2010).

So far, in this context, it is not surprising that all recent efforts to change the gaokao system have faltered. For example, starting from 2007, some of the top universities were given the autonomy to design their own “university-based assessments” for independent enrollment. The policy was highly controversial. University-based selection was criticized for lacking transparency, favoring urban residents, and also intensifying academic pressure for urban students who have to prepare for the university-based standardized tests as well as the gaokao. Moreover, even if this reform were successful, it would not speak to the draconian issue that is of greatest concern to the majority of Chinese adolescents who perceive the road of life to diverge in two directions on the basis of a test taken at the

age of 17 or 18, no matter who gives the test and what form it takes. Passing the gaokao or its facsimiles and getting into a good college is the assured paved road, not the steep, bumpy and uncertain one—if there even is a bumpy one rather than a dead end—that awaits those who fail to slay the Gaokao.

In the end of 2013, the Third Plenary Session of the 18th Central Committee of the Communist Party of China released a new wave of reform (CCTV, 2013). These new reforms aim to address the issue of academic stress by reducing inequality in the distribution of educational resources and eliminating inter-school competition. Local governments will no longer be allowed to classify schools into “keypoint (elite) and non-keypoint” based on student test scores. Public schools will be built in standardized ways, and administrators and teachers will move around to different schools. Some subjects will be removed from the list assessed by the gaokao. A multi-dimensional evaluation system that combines the gaokao and students’ high-school grades will be built. What then might these policies look like when translated into educational practices?

#### **4. Loyalty, voice, or exit the system? Limitations of two alternative approaches**

Each year in the past five years about one million Chinese 12th graders gave up on the gaokao, either to take jobs or go to overseas colleges (Wang, 2013). The vast majority of Chinese students, however, have to prepare for the gaokao in order to go to college in China. As the gaokao is likely to remain, at least for some time, the only criterion for college admission, what can be done to bring change to schooling in China and reduce the harm of academic stress? Two alternative approaches are evident in China today. First is what we call “the sub-system approach,” building private (independent) schools and universities that allow for different models of education. Teaching and learning in these schools are not singularly oriented toward preparing for the gaokao or its facsimiles, but aim at providing the knowledge and skills that educators consider important for their students’ life. However, often run by commercial businesses that span non-educational sectors, these private schools charge relatively high fees, with few “scholarships” available for students from less well-off backgrounds.

Furthermore, there may be problems for students graduating from such schools to access quality higher education. No commercial education business can afford to build a pipe line to a comprehensive private research university in China today. Even if they could, these universities would have difficulty recruiting the most talented students until the time, if it were to come, that they are widely acknowledged as top research universities. Yet attending public universities does not seem to be a realistic option for students unprepared to take standardized tests such as the gaokao. Currently, even the few Chinese universities that are given the autonomy to select candidates with “special talents” (as a substitute for high test scores), still rely on test scores as the most important selection criterion. As a consequence, high-school graduates from private schools probably would have no choice but to continue their education in overseas colleges, as graduates from Chinese international schools currently do.

We call a second possible social strategy “the cultural approach.” This approach aims to reduce the impact of a test-oriented system on teaching and learning through promoting a school culture that respects students’ individuality and supports their well-rounded development. Since the 1980s, several models have been developed by Chinese educators, and small-scale experiments have been conducted in small numbers of public schools. Among the most influential is the “New Basic Education” (*xin ji chu jiao yu*) program led by Ye Lan, a professor at the East China Normal University (Bu & Li, 2013). The program is designed to promote students’ rounded development by reforming the ways the basic curriculum is taught in the classroom. It advocates for decentralizing schools, changing teachers’ values, giving teachers and students more autonomy in classroom activities, and building a more democratic relationship between teachers and students. It also provides guidelines for schools to restructure academic activities and professional training for teachers in classroom teaching.

Other educators rely on promoting extracurricular reading and writing. In the late 1990s, a small number of school principals and teachers began to build Internet networks to instigate discussions on how to change the culture of education. One such network is the “New Education” (*xin jiao yu*) group led by Zhou Yongxin, a former professor of the Suzhou University and former vice mayor of the city of Suzhou. Another is the “Education for Life” (*sheng ming hua jiao yu*) group led by Zhang Wenzhi, a journalist and educationalist. Zhang argues that, having been used to serve the purposes of nation-building and economic modernization, education in China should now return to the traditional goal of helping students deal with the basic human concerns, namely, learning, growth, love and respect (Zhang, 2006). The two groups focus on engaging teachers in reading and writing activities to broaden teachers’ views about educational, social and philosophical issues, and promote their personal and professional development. Through changing the beliefs and practices of principals and teachers, the programs aim to build a humanistic school culture to foster students’ all-around development even within the context of a test-oriented system.

In our view, this cultural approach has real potential to alleviate the problem of academic stress; once the culture moves in this direction, the conditions for system change will be realized. However, none of these programs directly address the problem of high levels of stress experienced by Chinese students. Furthermore, similar to the national new curriculum reform, Ye Lan’s multi-dimensional reform program faces the challenges of a lack of teacher motivation, a lack of fidelity in implementation, and a lack of appropriate resources in some schools (Bu & Li, 2013; Ye, 2009). Having a broad agenda of cultural reconstruction, the “New Education” and “Education for Life” programs still fall short at the systems level because they largely rely on individual principals and teachers to decide how to translate new concepts and ideas into day-to-day practice. Our observation and interviews in one of the schools participating in the “Education for Life” program suggest that there are no clearly defined goals and strategies for preventive intervention, nor are the humanistic values promoted in these programs well-integrated with rigorous academic learning.

### **5. The prevention of high stress and the promotion of integrative skills: potentials of an intervention program**

From our perspectives as social scientists, some with practical leadership roles in schools, using developmental, cultural, and educational lenses, we propose a direct, focused, research-based, and culturally appropriate approach for addressing the challenge of academic stress in Chinese schools. Currently, there is no good educational program tailored to the psychological, social, and cultural needs of Chinese students, one that attends to the fundamental human needs for a sense of safety, self-efficacy, and social connection to both peers and adults. One evidence-based approach, now finding more acceptance in the United States, involves developing school-based academic programs to promote deep comprehension of the social and physical world. This is achieved through an emphasis on the promotion of reading and writing in subject matter areas such as science and social studies (disciplinary literacy). This approach advocates the increased emphasis on the promotion of language-based and student-centered discussion and debate skills, as applied to the academic subject matter areas, e.g. math, science, and social studies/history (Beck & McKeown, 2006; Brown & Palincsar, 1982; Michaels, O’Connor, & Resnick, 2008; Selman & Kwok, 2010; Snow, 2010; Snow & Lawrence, 2011). The academic skills associated with this approach have many names—twenty-first century skills, critical thinking, deep-comprehension, and learning for understanding. The associated social skills may be called perspective-taking, self- and social-reflection, conflicting resolution, and civic participation. Whatever they are called, they involve as key processes the active discussion and debate of both facts and ideas, both among students and with teacher facilitation.

This intervention approach has been developed and become more accepted by educators in the United States in the context of a rising tide of alarming indices of social disorder such as bullying, school-wide violence, destructive community behavior, and student suicides in the last 10 years. They have prompted the social aspect of child and adolescent development to reemerge as an important topic for educators. Largely the focus has been on the prevention of student misbehavior and maladjustment in schools. Yet, in an era where educators are unsure of the best direction to



take, an integrative curriculum that simultaneously prevents school failure while it promotes social understanding in a pro-social school climate along with academic content is a promising “balanced” strategy.

We believe the principles upon which this integrative approach is built, if implemented at and across different school levels, can effectively reduce the debilitating effects of high-level stress on Chinese students’ academic learning and psychosocial development. Research shows that the teaching of social skills has a snowball effect on students’ school life (Diazgranados & Selman, 2014; Dray & Selman, 2010; Dray, Selman, & Schultz, 2009; Selman & Barr, 2010). Social skills such as perspective taking, empathy, and responsible decision-making enable students to develop healthy relationships with their peers and teachers, which in turn have positive effects on students’ psychological health and promote their academic success. Students who trust each other are more likely to help one another muddle through difficult or confusing content. Students who develop meaningful relationships with their teachers tend to be more motivated to strive for success (Miles & Stipek, 2006). Furthermore, a pro-social classroom atmosphere is more conducive to learning because students feel less inhibited to ask questions, disrupting behaviors are minimized, small group and team projects are more likely to stay on task, and students’ overall engagement is amplified. Researchers have found that students in emotionally supportive classrooms report greater interest, enjoyment, and engagement in school (Reyes et al., 2012).

### **5.1. How can teachers integrate social development into existing curricula?**

There are three major points to consider when integrating social development into an academic curriculum in the classroom: classroom climate, academic content knowledge, and discussion activities. First, it is the responsibility of the entire school’s staff to establish a thriving climate for students, both rigorous and humane. Beyond rules and expectations, the adults in the school need to model pro-social behaviors such as respect and trust as they teach for social understanding. In this regard, the program we propose here shares the same emphasis on improving school climate and promoting teacher development as the aforementioned programs that fall within the cultural approach.

Second, academic content is delivered by using purposefully selected materials that integrate themes on social understanding. High-quality literature rich with challenging social topics—from picture books to chapter books and from biography to history—is a powerful way to broaden students’ content understanding and promote their social and academic learning, much more so than basal readers or leveled books (Selman, 2007). In addition to realistic fiction, non-fiction texts (e.g. magazine articles, newspapers, historical works, and biographies) introduce opportunities that challenge students to consider multiple perspectives, contemplate their own and others’ motives, and explore diverse solutions.

Ultimately, children need to talk seriously and meaningfully with each other, as well as the teacher, about what they are learning. Discussion activities help students process their thoughts, synthesize academic content, and draw inferences from complex material. Teachers can capitalize on classroom dialog as a way to assess and promote students’ comprehension of the text and to nurture social understanding (Elizabeth, Ross-Anderson, Snow, & Selman, 2012). Discussions can move students beyond simple comprehension of what is on the page to more complex, deep comprehension of the overarching message and author’s purpose (Duhaylongsod, Snow, Selman, & Donovan, *in press*; Snow & Lawrence, 2011). Teachers can use carefully crafted open-ended questions to push students to deeper understanding; they can help students articulate their thoughts by rephrasing students’ words. Furthermore, teachers can hold students accountable to content knowledge by asking them to provide reason and evidence for their claims to each other as well as to the teacher.

### **5.2. Is the prevention program culturally appropriate?**

Theoretically, the renewed emphasis on the importance of discussion and debate in education reflects a conceptual shift in western social philosophy from promoting the development of individual consciousness to cultivating human agency in communicative actions (Habermas, 1992). Empirically, it is based on research that suggests that learning how to build argumentation skills

based on the “reading of evidence” (e.g. from texts) is a fundamental twenty-first century skill (Common core state standards, 2010). However, this deep-comprehension approach is not only an “American” or “western” approach. It is also the core of the neo-Confucian tradition of pre-modern East Asian countries. As described by de Bary (2007), the prominent scholar of East Asian Studies, neo-Confucian philosophy of education was one of intellectual and moral learning for the whole man or person, almost from the elementary learning (*xiao xue*) to the maturity of the Great Man (*da xue*) as the truly Noble Person (*jun zi*) (p. 14). To achieve this goal, special emphasis was put on the serious reading of classical texts, and a reading program was widely followed in pre-modern East Asia. Learning followed two steps: first reading the original texts for their direct meaning to one self, and second discussing with others (peers, scholars, and commentators).

Neo-Confucian scholars have tried to strike three balances: between preserving the record of the past and meeting the need of the present; between learning for self and learning for society; and between a central focus on key issues and a broader exposure to literacy, history, philosophy, and current affairs. This emphasis of “learning by discussion” or “discursive learning,” as pointed out by de Bary, is the joining point between the new liberal education in America and the classical education of pre-modern East Asia. To de Bary, this joining point opens the possibility for a global core curriculum that draws on traditional resources both East and West.

To the three balances emphasized by Confucian scholars, we add a fourth balance, a curriculum that is both rigorous and humane. The intervention program we propose here aims to integrate time-tested traditional wisdoms and empirically tested contemporary methods. It differs in two fundamental ways from the reforms adopted by contemporary Chinese educators and those theories promoted by American educators in the early years of the twenty-first century. First, core to the curriculum and instruction is the promotion of a climate in the classroom and school that fosters the development of engaged civic and social competencies. Such programs explicitly target stress by balancing academic achievement with the prevention of threats to physical and mental health. This kind of holistic approach builds on the familiarity students will have with those expressive, discursive, interpretive, and communication skills they apply in their disciplinary (subject matter) studies, for example, in language arts and history (and even math and science).

Second, and most importantly, due to political, social, cultural, and historical complexities of contemporary Chinese society, such an intervention program must have Chinese characteristics and cannot be developed externally, for example, at an American university and then exported. It has to be done through building an international and interdisciplinary community of scholarship and research to gain a deep understanding of the organizational and cultural context of the Chinese education system, the social and cultural changes in recent Chinese history, and the real-life struggles that are particular to Chinese students, teachers and parents within and outside school (Liu & Fang, 2009; Ryan, Kang, Mitchell, & Erickson, 2009). Similar to the intervention strategies adopted by Chinese educators, it faces the challenge of motivating and training teachers. This challenge can only be addressed by empirical research that takes into consideration the huge differences in the social, cultural, and economic circumstances under which urban and rural students, families, and school function in contemporary China.

The program also needs to incorporate new research findings on the differences and connections between Chinese and Western cultures of learning (Li, 2012; Wang & Byram, 2011). We believe that beliefs and practices about learning are culturally transmitted, but also individually or institutionally interpreted and practiced; they are thus open to change and development (Wang, 2010). Based on an ethnographic study of how a group of first-year Chinese students in a British university adapt to their new learning environment, Wang and Byram (2011) argue that “Chinese sojourning students may initially be teacher-dependent, deferential to authority, lacking critical thinking skills, dependent on memorization, they are nonetheless aware of this and can and do change” (p. 420). Therefore, differences in cultures of learning should not prevent Chinese students from actively engaging

in critical thinking and group discussion; how to help Chinese students develop these skills in an education system that encourages memorization and deference to authority is an important empirical question.

## **6. Conclusion: lessons to be learned across the Pacific**

Chinese leaders today have been forced to address the scars that an excessive emphasis of gaining wealth and power at both the individual and national levels has left on the psychosocial development of Chinese youth, and on the country's identity as a culture that is built on the Confucian values of kindness, justice, courtesy, wisdom, and trustworthiness. The officially espoused initial step in this contemporary Chinese “keep up” but “lighten up” approach is to close the gap in resources and competition-based achievement among schools, and continue to promote the western inspired curriculum of common core competencies toward inquiry in all schools.

We argue here that more than structural rearrangements will be needed by China to achieve its goal of providing universal, holistic, student centered “quality education.” Educational reforms and school intervention must be accompanied by targeted empirical research to accumulate evidence and gain insights into ways to ameliorate the negative effects that long-standing educational policies have had by placing their students in vulnerable and risky positions, psychologically, socially, morally, and civically. Attention also must be given to the developmental assets and the protective factors native in the cultural tradition and social environment of China [e.g. those mentioned in Wang and Byram (2011)]. Such research-based knowledge and understanding are crucial for the development of culturally appropriate programs for youth to reduce the risk factors in their social environment, prevent commonly occurring psychosocial problems, promote positive youth development, and build skills for global citizenship.

Paradoxically, today, educational policies in China and the United States are as remarkably convergent as they may seem at first glance as divergent. Each rests on the bedrock assumption, at least rhetorically, of the need to promote individual educational achievement primarily for the purpose of enhancing national competitiveness in the global economic marketplace. At the current time, these policies appear to merge on the need for national standards of evaluation for schools and educators, although here, the two nations seem to be thinking of going about this with opposite priorities and in opposite ways. In the east, the primary aim is to ameliorate or reduce the “high levels” of stress in their youth through decentralization and sensitivity to the need for humanization.

In parallel, the federal policies in the United States aim to close the academic achievement gap among its students who come from different economic and ethnic backgrounds at the same time as these policies aim to raise achievement for all, the privileged as well as the underprivileged. The strategy to achieve both goals requires US educational policies to define what counts as achievement almost gaokao like, that is, very narrowly. This American desire to play “equity catch up” intranationally while playing economic keep up/get ahead internationally is admirable, but it obscures the question of what it is that is important to be caught up on and kept up on. Aren't these the same educational standards the Chinese are now considering letting go? In this respect, common to the two superpowers that actually have the resources to do so, China and the United States, is how to face the same challenge of building an education system for all their youth that manages to be both humane and rigorous. In neither country should standardized tests narrowly defined be the only long-term path to increased standards of education for all.

In other words, in the context of extreme pressures of global economic competition, education both in the east and west faces the same challenge of sustaining the kind of humanistic learning that is critical for promoting public reasoning or discourse; a deep comprehension program that addresses issues of central concern to human and societal development should be part of any contemporary education (de Bary, 2007; Hayhoe, 2000; Zhao, 2013b). Nevertheless, as in the United States, *we have argued here* that it makes no sense for China to try to make education reform without understanding the place where Chinese education policy stands on the road to the ever

continuing reform of its society: what social, economic, cultural, and developmental factors prevent students, teachers, and parents from or promote them to being what contemporary educational reformers in China want them to be.

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