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CHAPTER 9

WHERE CHINESE AMERICAN STUDENTS MIGHT FALL SHORT

What the "Model Minority" Debate Might Have Missed

David Yun Dai

It is a common perception that Asian American students as a group have been doing well in academics. Indeed, they compare favorably with other ethnic minority students, and even with White students in some categories (see Maxwell, 2007). Questions have been raised, however, as to whether Asian American students can do equally well in areas where knowledge has to be put to use in real world contexts instead of traditional classroom settings and testing conditions. This concern has to do with the myth of "model minority" in several ways. First, portrayal of Asian American students as a model minority tends to mask hidden problems that Asian American students might have in their education. Second, the image of Asian American students as a "model minority" is partly based on performance on standard-

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ized tests, which can be limited in their scope and purpose. Third, as odd as it may sound, it is important to know whether there are hidden costs of doing well in school. And finally, depiction of the "model minority" as docile and obedient, real or fabricated, idealizes these characteristics to the benefits of social control, not social progress.

In this chapter, my general argument is that the fact that Chinese and, more broadly, Asian-American students compared favorably with other ethnic groups in school achievement indices should be put in perspective. For all the good learning outcomes they have obtained from schooling, there are other skills, such as self-directed learning, creativity, critical thinking, essential for living productively and effectively in the contemporary society that may not be reflected in the test scores or school grades. To substantiate my concerns, I make three interrelated arguments specifically addressing the issues related to Chinese American students.

The basic assumption for my arguments is relatively a simple one: people should be allowed to be different, to pursue and explore their own interests, ideas, strengths, talents, and value orientations. However, in the socialization process, people also feel pressure to fit in, to conform to the social and cultural norms and role expectations, and to follow the conventions. If the social and cultural norms and expectations become a predominant force in children's lives, it can stifle the person's individuality developmentally. Admittedly, this is a very Western or individualistic notion. However, individuality or self-directedness in feeling, thinking, and striving is a main source of creativity and critical thinking. Based on this premise, I argue that (1) Chinese American students tend to excel in well-structured learning environments, which is characteristic of most schools in any country, China or US, where guidance is mainly externally provided. (2) The way school achievement is assessed might mask deficits of Chinese American students in terms of productive thinking skills. (3) Self-directed learning and productive use of knowledge are often underdeveloped in the regular school environment. The first two arguments pertain to Chinese American students, and third argument pertains to all students, Chinese, Chinese American, or American in general.

These arguments are admittedly broad generalizations, I mean them to be on the provocative side to stir up debates and stimulate thinking. The first two arguments only apply to Chinese American students brought up in a home environment that stresses values of the traditional Chinese culture. To the extent these values are no longer held for some Chinese American families, these arguments no longer apply. Unless otherwise indicated, the term school is used to refer to K–12 formal educational settings, although my focus is on middle and high schools.

CHINESE AMERICAN STUDENTS TEND TO EXCEL IN WELL-STRUCTURED LEARNING ENVIRONMENTS, WHICH IS CHARACTERISTIC OF MOST SCHOOLS IN ANY COUNTRY, CHINA OR THE UNITED STATES

By well-structured learning environment, I mean that there is a clear structure of what is to be learned (explicit goals and objectives), and how it can be learned (good instructional guidance). Evidence from TIMSS and other international studies show a solid advantage of Asian students, particularly in countries like Singapore and Japan (IES, 2007). There may be some truth that these Asian countries have more rigorous curricula, especially in mathematics and science. However, this argument cannot explain the fact that Asian American students in the United States also compare favorably with other ethnic minority groups in these subjects. Indeed, they do better than Caucasian-Americans as well (Maxwell, 2007). Sue and Okazaki (1990) provided an explanation for the superior Asian Americans academic achievement. They argued that academic success is a more viable option for upward mobility for Asian Americans in the United States. While such an argument may be true with respect to the early history of Asian Americans who have been discriminated against in the mainstream society, it is increasingly difficult to maintain that there are more barriers to success through other avenues than academic ones for Asian Americans. My argument is that while channeling energy into academics as a career strategy may be responsible for Asian American students' success in school in the United States, there are deeper cultural roots for such a success. There are at least three possible underlying Chinese value orientations that support Chinese American students' school success.

Authority Orientation

This orientation may have to do with Confucian teachings about the teacher as an authority, expert or a person of wisdom, who are charged with the task of teaching the right ways of doing things, inculcating expert knowledge, and resolving bewilderments (传道, 授业, 解惑). Students' task is to listen and absorb whatever is presented or inculcated, not to question or challenge the presented ideas. On the positive side, this orientation enhances students' motivation to acquire the knowledge they deem authoritative and important. On the negative side, it mainly relies on external authorities in gaining knowledge. One can argue that a very important function of education to help students raise important questions, sometimes challenge entrenched views, and envision new possibilities (Bruner, 1986). The authority orientation tends to thwart the propensity to do so. One may

argue that American classrooms encourage the freedom to express different opinions. However, it soon becomes irrelevant when curriculum standards and evaluation standards reign supreme.

Social Orientation

This is an attitude that doing well in school is to gain socially acceptable ways of life. Students' motivation is regulated by social expectations, rather than intellectual curiosity and interests. In the Chinese tradition, school success itself is a family mandate, a virtue that all children need to pursue. Otherwise, parents and the whole family would feel ashamed. This orientation stems from the age-old tradition of getting ahead in the society with outstanding academic achievement (学而优则仕). Even today, many officials and businesspeople in China would covet advanced degrees even though they already have a successful career, not for learning's sake, but for the glamour of academic accolades. School as a social institution reinforces this kind of social orientation by encouraging students to follow whatever agenda or curriculum is set up for them. This orientation is the opposite of individualism, which argues that each individual should pursue his or her own personal agendas and listen to one's own calling. Yang and Yu (1988) distinguished this tendency to pursue goals and standards of excellence mainly defined by others in a social group from an individualistic tendency to pursue goals and standards of excellence mainly defined by the self (see also Yu, 1996). They argued that the social-oriented achievement motivation is a predominant force in the Chinese culture, though in transition to the modern world, an individual-oriented achievement motivation, which is the focus in Western researchers (McClelland et al., 1953), has also become a competing alternative, as more options are available to individuals (Triandis, 1989). Likewise, for Chinese American students who are influenced by the mainstream American culture, both tendencies may coexist. But the point is that a social-oriented achievement motivation is more compatible even with American schools as they are currently structured than an individual-oriented achievement motivation.

Conservative Orientation

This orientation is not necessarily confined to learning but can be seen in a wide range of behaviors, from saving money to prepare for "rainy days" (未雨绸缪), choosing careers that ensure a predictable good life, to working hard to preempt failures in school. Taking risks or trying out something new is discouraged in Chinese child-rearing practice, because a socially

prescribed good life, as envisioned by Confucius, is not to stick out, but to fit in. Eaton and Dembo (1997) studied Asian American and non-Asian Americans' motivational beliefs. Based on their findings, they concluded that Asian American students' fear of the consequence of academic failure best explained their performance. However, this variable least explained the results for non-Asian students. Asian American students reported lower levels of self-efficacy beliefs, yet significantly outperformed their non-Asian counterparts on the task. The fear of academic failure better explained achievement motivation for Asian Americans than did self-efficacy beliefs. I view this fear of failure as a conservative strategy to gear up efforts to ensure success and preempt failure, a strategy also called *defensive pessimism* (Cantor & Norem, 1989). The conservative orientation is also reflected in career choices. In higher education, Chinese Americans prefer technical fields to those involving language and social skills (Hune & Chan, 1997), precisely because success in the latter is less certain. Upon a close look, the conservative orientation goes hand-in-hand with the authority and social orientations, as there is no reason why one has to take risks and explore alternative possibilities if the standards and boundaries are socially defined and failure to meet the standards can have serious consequences.

Using these orientations as possible explanations for the academic success of the "model minority" can immediately trigger objection, as it is predicated on the assumption that Chinese American students brought up in the United States are still deeply influenced by the Chinese culture through parenting and parental expectations. Is there any evidence supporting such an assumption? Although there is a dearth of research in that regard, there is some evidence for the presence of such cultural influences, mainly through parenting and parental expectation. Chao (1994), for example, found that Chinese American parents tend to emphasize the concept of control and training (管教), which demands a level of conformity and self-discipline rarely seen in the American culture. More important, such training is often perceived by children as a way of parental caring rather than a threat to autonomy (see also Chao, 2001). It is almost a truism that, like Chinese parents everywhere, Chinese American parents hold higher expectations for their children's academic achievement in school than other ethnic groups in the United States (Li, 2003). In a recent study, Pearce (2006) compared Chinese American parents and White American parents and concluded that both social-structural and cultural factors influence Chinese American students' high academic attainment. When effects of social structural factors such socioeconomic status, family composition, and parent education level are controlled, cultural factors such as parental expectations and involvement significantly predict variations in Chinese American students' achievement in critical transition points compared to their White American counterparts. A more telling finding is from Kao's (1995) study, indicating that Chinese

American university students perceived their parents as having greater ambivalence toward success in non-academic realms because they fear that their children can become "distracted from school work or later choose a career deemed unsafe" (p. 151). These findings, taken together, provide good circumstantial, though not direct, evidence that children and adolescents, even young adults growing up in Chinese American families are influenced by the Chinese culture in their upbringing and personal development.

To be sure, these orientations are not necessarily good or bad, and have both pluses and minuses, depending on situational circumstances. But in school, these characteristics, once developmentally internalized, tend to make "good students." School is a place where conformity and industriousness are rewarded, and Chinese American students are rewarded for these qualities. Chinese students tend to do well in that category. I am not saying that other American students necessarily would not benefit from a well-structured, well-guided learning environment. What I argue is that there is a better match between social institutions like school and students from Chinese backgrounds. If this is the case, then the key question is: what is missing in these orientations and a good fit with the structure of school as a social institution? It is personalization of knowledge, quest for knowledge or intellectual curiosity, cognitive flexibility, critical thinking, among others. More broadly speaking, it is the individuality that may suffer. While Chinese students seem to have gained large amounts of knowledge, my fear is that the knowledge is not their own, for knowledge is never perceived as an end in itself, but a means to achieving a social and personal end. This leads to my second argument.

THE WAY SCHOOL ACHIEVEMENT IS ASSESSED MIGHT MASK DEFICITS OF CHINESE AMERICAN STUDENTS IN TERMS OF PRODUCTIVE THINKING SKILLS

School achievement, whether in the form of grades or standardized achievement tests, reflect knowledge and skills learned in well-structured learning environment, not what can be learned in less-structured environments, such as how to deal with novelty in problem solving, how to resolve conflicts, how to integrate resources to maximize chances of success, and how to envision new possibilities, and how to evaluate a piece of information, evidence, or argument in the real world. I broadly categorize this group of enactive capabilities and sensibilities as productive thinking skills. In other words, extended curricular goals for advanced skills are not well covered in these types of assessment. The result? Our report cards may tell a rosy story of how well Chinese American students have learned and achieved (of course, good things indeed happened and they deserve credit). But it is uncertain as to whether their achievement reflects truly functional knowledge that permits transfer and productive use.

Joseph Renzulli (1986) makes a distinction between schoolhouse giftedness, which is featured prominently in school and giftedness in terms of creative productivity, which is a long-term proposition, and goes way beyond "testing well" or "doing well in school," to be able to utilize knowledge for solving novel problems and produce new knowledge. Likewise, Howard Gardner (1997) also distinguishes between masters and makers. Masters achieve great proficiency in performance within the boundary of an existing body of knowledge and practices. Makers, in contrast, challenge and modify old systems and/or build new systems. I submit that the three orientations (authority, social, and conservative) in the Chinese culture, which I describe earlier, tend to produce more masters, but not many independent thinkers and creators, as these orientations suppress and inhibit novel ideas and deviations from the norms. An anecdotal account made by Gardner (1989) is instructive in that regard. When Gardner visited China and brought his preschool-aged son with him in the 1980s, he observed that while he and his wife would allow their son to try to open the door of their room with the key, even when he fumbled a bit, several Chinese passers-by went ahead without hesitation to help him out. Gardner speculated that this cultural difference in adult-child interaction might eventually lead to different developmental outcomes in terms of creative potential.

This argument by no means implies that the educational assessment is invalid or the strengths that East Asian students demonstrated in various achievement tests are only a measurement artifact. Indeed, Asian students have shown distinct strengths in mathematics and science in that they take harder classes, more AP tests, and score highest on the SAT in mathematics compared to other racial and ethnic groups in the United States (Maxwell, 2007). I do argue, however, that the flip side of the story is rarely mentioned; in other words, Chinese American students might fall short on productive and creative use of knowledge in problem solving situations in real world contexts. This hypothesis needs some elaboration. There are two possibilities. One hypothesis is that Chinese American students, due to the orientations discussed earlier, tend to be less capable of productive thinking than American students in general. An alternative hypothesis is that Chinese American students do not differ from other American students in this regard, but they both show deficits in this area. However, research is scarce on this issue. A search of the PsycInfo using "Chinese Americans and Creativity," for example, found virtually no research done comparing Chinese American students with other ethnic groups on measures of productive thinking. Limited evidence exists regarding Chinese students' creativity and critical thinking as compared to their American and European counterparts. Since our focus is on influences of Chinese culture, such studies

can provide insights and heuristics regarding the current issue, albeit no direct evidence. In a study comparing Hong Kong and American college students, Niu, Zhang, and Yang (2007) found that while the two groups did not differ in terms of deductive reasoning, the American students did better on creative writing and insight problems. Although the sample sizes were too small to warrant generalization, it is suggestive of cultural influences. Hu et al. (2004) also found that, overall, British adolescents did better on a scientific creativity test than their Chinese counterparts. There is a common perception that Chinese students are diligent in what they do but not as assertive, rarely asking questions that challenge teachers and established viewpoints. One way of assessing high-order thinking is to let students ask questions that demonstrate their critical reading or thinking about a passage they read. Using two Russian fables as texts, Yang and Shen (2005) found that the numbers of high-level questions peaked at 10th grade and showed a remarkable decline at 11th grade for a large sample of Chinese adolescents. Hu et al. (2004) found similar developmental differences across Chinese and English adolescent populations, though in their study, performance on the measures of scientific creativity peaked at 14 years of age and then decrease. Although we cannot exclude the possibility that the observed developmental differences based on cross-sectional data may be methodological artifacts, these results are consistent with the developmental literature suggesting that while adolescents are gaining knowledge over time, their creative inclinations are declining (e.g., Runco, 1996). Zha, Walczyk, Griffith, Tobacyk, and Walczyk (2006) conducted a study comparing American and Chinese doctoral students studying at several U.S. research universities on both self-report and test measures of creative potentials. They found that Americans received higher scores than the Chinese on creativity measures; the Americans seemed to be able to brainstorm more options and more original ideas than their Chinese counterparts. These researchers also found that the Americans scored higher than the Chinese doctoral students on an individulism-collectivitstm scale, suggesting that Americans are more individualistic and the Chinese are more collectivistic. Although the sample sizes were relatively small and the findings are not conclusive, the results are nevertheless highly consistent with the theoretical speculation that individualistic cultures are more conducive to creativity (Gardner, 1989), and to the extent Chinese students are less inclined to develop their unique individuality, they will show less creative potential.

A more instructive case comes from Singapore. Singaporean students are revered as top performers and exemplary students in the world in TIMSS and other international studies. They are performing equally well in work places. Yet when they were asked to be creative and generate new ideas for a firm, many of them were simply lost, to the point that the leadership of the firm had to open up a new sector in the United States to take care of more innovative endeavor for the firm (see Zhao, 2006). In short, Asian students are trained from very early on, in school as well as at home, to be good followers and executives, not good leaders and creators. For example, McBride et al. (2002) compared Chinese and American pre-service teachers' attitudes and dispositions toward critical thinking, and found that while the American teachers more likely endorse critical thinking, the Chinese teachers show slight resistance. The author suggested the differences stem from individualism-collectivism represented in the two cultures.

The question can be asked as to whether it is necessarily the case for Chinese American students. After all, they live in a culture that is distinctly individualistic. To address this question and further advance the hypothesis about Chinese American students, consider a thought experiment: If we compare newly immigrated, second- and third-generation (or even fourth-generation) Chinese American students in terms of individualistic versus collectivist orientation, social-oriented versus individual-oriented achievement motivation, self-directed learning, productive use of knowledge in school and beyond, will we observe significant differences, assuming here that the only difference between the two groups is levels of acculturation? One theoretical prediction is that the later generations of Chinese Americans will show much diverse career trajectories than early generations because of more individualistic orientations. Alternatively, one may predict the Chinese cultural heritage is alive and well in most Chinese American families, and the social-structural constraints on Chinese Americans' career paths remain largely unchanged over the past several decades, and therefore later generations of Chinese Americans should show the same strengths and weaknesses as we saw decades ago. Limited evidence suggests that influences of Chinese culture on students' school attitude and motivation diminish over time in a process of acculturation. Kaufman (2004), for example, compared immigrant Chinese and second-generation Chinese American students' perceptions toward school, and found that the former placed more value on hard work, demanding teachers, challenging curriculum, and discipline. In a longitudinal study, Huntsinger and Jose (2006) followed 60 European American and 60 second-generation Chinese American adolescents, ages 12–17, and found that over time the two groups became more similar to each other in terms of self-reported school grades, self-esteem, and personality traits, though Chinese American adolescents continued to report lower levels of extraversion than European Americans.

To be sure, the reality is much more complex than any theoretical simplification. While some studies may find that Asian American whiz kids entered college, they did not do as well as expected (e.g., Dmitrieva, Chen, & Greenberger, this volume), other studies may find more positive stories (e.g., Paton, 2005). It is safe to assume that within Chinese American students and their families, vast variations exist in terms of whether parents

encourage autonomy and self-direct learning. For example, the Confucian tradition accentuates the power differential and distance between the teacher and the students (Scott, 1999). This is rarely the case in the United States; yet in early upbringing and parenting, one cannot underestimate the influence of socialization efforts by parents (Chao, 1994; Niu & Sternberg, 2003) that stresses conformity to collective norms, rather than self-directed attempts to develop intellectual independence, personal knowledge, and an authentic life (Ng & Smith, 2004). Ultimately, development of self-directedness and productive thinking skills needs to be understood as modulated by culture through its value system (Rudowicz & Yue, 2002). To the extent that the cultural tradition is pluralistic as it is in US, developmental patterns may also be uniquely suited to accommodate the situation. The complex, bicultural (often bilingual) nature of intellectual and personal development of Chinese American students may be better captured not as "either-or" but a more subtle form of "Confucian familism" (Meyer, 2007). For example, Louie (2001) found that Chinese immigrant parents held high expectations and made high investment in their 1.5- and 2nd-generation children's college education. However, depending on social class, their strategies differ, and so do children responses to parental expectations. Buki et al. (2003) found that Chinese immigrant mothers perceived their adolescent children as more acculturated than themselves. Perceived acculturation gap was associated with more parenting difficulties. Thus, we might predict a historical pattern or trend from homogeneity toward heterogeneity in Chinese American students' cultural orientations and identities, and their educational development.

But what about the other possibility, that is, Chinese American students may not differ from other groups in productive and creative thinking? For example, Yoon (2006) compared forth- to sixth-grade academically talented Asian American and Caucasian American students on a measure of intelligence (*Standard Progressive Matrices*) and a measure of creativity (*Torrance Tests of Creative Thinking*), and found no evidence of any differences between the two groups. If, indeed, there is no difference between the two groups on productive thinking skills, does that mean that the "model minority" has everything that is worth celebrating but nothing that warrants concerns? The answer is no. This leads to my third argument.

SELF-DIRECTED LEARNING AND PRODUCTIVE USE OF KNOWLEDGE ARE OFTEN UNDERDEVELOPED IN THE REGULAR SCHOOL ENVIRONMENT

Despite the stereotypic assumption that schools in the United States are exemplary in promoting self-directed learning, creativity, and productive thinking, this is not always the case. Indeed, one may argue that U.S. schools have as much to be desired as schools in other countries in that regard. This is the flip side of the first argument I put forward: To the extent schools guide students on a marked path every step of the way, students can also be deprived of opportunities to engage in active exploration and find their own interests, passions, and calling. This is an issue not well addressed by the American educational system, particularly in the context of the accountability movement (Baker, 2007). In a way, the "model minority" myth and related debates distract us from a more critical issue facing education in the United States.

Sustainability as a Lifelong Learner for the 21st Century

In the current zeitgeist of school accountability, a legitimate concern is that while Chinese American students seem to make the grade and do well in school, what are the long-term prospects? Are they going to build up a meaningful, personally gratifying life that capitalizes on the foundation they established during school years? Are they aware of their own strengths and interests and developing their own lifelong passions? These are the questions that need to be answered, instead of focusing on some tangible assessment outcomes. We know from history that great people tend to structure their own development and lives in a way that suits their own individual needs and purposes. They actively seek out learning and developmental opportunities in their environments for that purposes instead of being structured by others and shaped by fortuitous circumstances. I believe this is where the "model minority" may not have much to offer, and may indeed have much to learn from other cultures. The 21st century demands a type of individual who are smart learners, and who are sensitive to new possibilities, and who are good at combining and integrating different sources of knowledge and resources to build an innovative way of work and life. In other words, to be successful in the 21st century, you need to be able to generate new ideas and follow through with the promising ones. Educators, both in the United States and across the world, have a long way to go to meet this challenge.

In general, the *No Child Left Behind* movement in the United States, for all its good intention, is too modest in its vision about how we help youths realize their potential and equip themselves with the kind of knowledge and skills needed for the 21st century. To some scholars, it puts a straitjacket on classroom teachers as to what they teach and how they teach, and is in a way a retreat to an old lecture-recitation system that China is attempting to shake off (Zhao, 2006). In the context of the "model minority" myth, it

might further perpetuate the myth by accentuating the standardized testing at which Chinese American students tend to excel. When schools start to restrict their mission to achieving those tangible outcomes such as standardized test scores, they are losing sight of a major goal of education as developing individual persons to their fullest potential.

Teachers are another critical factor in the quality of education. The preliminary findings are that while teachers can identify those personal characteristics such as adventurous and bold as conducive to creativity, they nevertheless prefer smart but obedient students who do well in school but never challenge teachers' authority (Wang, 2006). This finding is consistent across cultures, even in the United States where creative inclinations are presumably encouraged. Scott (1999), for example, found that elementary school teachers are more likely than college students to rate creative children as more disruptive than average children. I wonder whether teachers would create a classroom climate conducive to self-directed learning and productive thinking. One way is to investigate classroom climate in terms of openness and support. Openness is defined as the degree to which students are allowed opportunity to pursue their interests and participate in debates. Support is defined as the degree to which students feel psychologically safe to express different opinions and make non-conventional arguments. Openness and support are presumably expressed through (a) the teacher-student interaction and relationship, (b) instructional strategies and styles, and (c) evaluation and motivational practices. Although it is beyond the scope of this article to review the pertinent literature, it is worth mentioning that many pedagogical innovations, such as problem-based learning and inquiry-based learning, support this type of learning (Bruner, 1996). How well these instructional innovations will "trickle down" from experimental settings to classrooms in most schools remains to be seen.

Up to this point, I have proposed a perspective on how we look at Chinese American students' academic success, not as a case for celebration but as potentially carrying a hidden cost. In assuming this perspective, I take a much broader view of what education is about than simply looking at academic achievement, narrowly defined as test scores and grades. I argue that it is when school narrowly focuses on a set of tangible results measurable by standardized tests that we lose sight of the bigger picture of the mission of education in the 21st century. With this said, I would like to propose some general principles for instructional goals and designs. But before I do that, a few words on adolescent development are in order, for any educational interventions should be designed in light of developmental changes, possibilities, and constraints. I suggest that adolescents have to go through four aspects of developmental transition with two possible conflicting results, similar to those "crises" proposed by Erik Erikson (1963) when he delineated different stages of personal development. I suggest that because of the

bicultural nature of Chinese American adolescents social and educational environment, these conflicts may be particularly acute for them.

- The formation of personality (e.g., being inquisitive and adventurous) conducive to creative and critical thinking versus losing these inclinations.
- The formation of motivations (e.g., developing intellectual interests and being persistent in problem solving) leading to innovative efforts versus losing motivation to quest for the unknown and envision alternative possibilities.
- The formation of habits of mind and cognitive skills necessary for carrying out the productive tasks on hand versus falling into passive, conforming ways of thinking and mental set.
- Personalization of knowledge through self-directed learning, thinking, and knowing versus other-directed, mechanical (sometimes blind) accumulation of knowledge.

As educators, we need to be aware of the struggles that Chinese American adolescents go through. Especially pertinent to the topic of this article is the caveat that Chinese American students are so successful in school that what is lacking in their intellectual and academic development often gets obscured. To capitalize on the strengths of their cultural heritage while offset the potential negative effects of the authority, social, and conservative orientations I discuss earlier, I suggest the following as "remedies":

- Encourage the spirit of exploration and inquiry. We need to encourage different perspectives and approaches while holding students accountable for defending their perspectives and approaches.
- Provide experience of knowing rather than merely transmit knowledge as a product. This focus highlights knowing as a process and knowledge as created to solve practical problems and explain puzzling phenomena. This is a way to combat what Whitehead (1957) called inert knowledge.
- Treat theories as hypothetical models and use hypothetical situations to stimulate thinking and reasoning. This approach not only helps develop thinking skills but also conveys to students an epistemic stance that knowledge can be modified and students themselves are active agents of knowledge production and change rather than merely the consumer of knowledge created by others.
- Promote critical thinking. In other words, teachers need to inculcate an attitude that one should never easily accept a position or argument without carefully examining its basis and assumptions.

Likewise, one should always defend an upheld position based on evidence and sound logic, rather than impressions and gut feelings.

- Encourage reasonable risk taking and recognize failures as essential for new learning. It is important to protect students' self-confidence and willingness to try new approaches and taking a minority position.
- See individuality as source of creativity rather than a nuisance. Each student brings some idiosyncrasies and uniqueness to classroom life. What teachers should do, is to bring this wealth of individuality to productive use so that each student will find their own strengths and what they can cultivate in themselves. This is a good way of personalizing one's knowledge.

CONCLUDING COMMENTS

The myth of Asian Americans as a "model minority" has its unique social and historical origins, which are not the focus for this paper. Instead, I attempt to identify unique challenges the alleged "model minority" faces, particularly with respect to those growing up in the Chinese cultural tradition. The stereotype that Asian (including Chinese) American students are model students, perpetuated by news media and achievement test scores, requires careful scrutiny. The arguments I have advanced in this paper is admittedly tentative, some of which need empirical investigation and verification (or falsification). The general message is valid not only for Chinese American students, but for students across cultures; namely, adolescents have great potential for self-directed learning and productive thinking, but this potential is not well cultivated in regular schools that are teacher-centered, focusing on content coverage at the cost of the depth of understanding. Schools tend to put students in a learning environment tightly structured by adults, and reward them if they can fit in well. We need to see school not as a manufacture producing the same products but as a place where students can thrive as individuals and truly develop a passion for knowledge and high-order skills for leading a productive and fulfilling life (Goodlad, 2004).

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