

*Teaching & Learning in American  
& Chinese Universities: Lessons  
from A Comparative Study*  
中美大学教学比较研究



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### Introduction: Previous Studies

- In the past two decades, comparative education scholars have conducted thoughtful studies on the similarities and differences in teaching and learning in elementary and secondary schools between American and Asian countries.
- Few studies have been implemented to investigate the effectiveness of teaching and learning in higher education from a comparative perspective.

### Self complacency in higher education

- University professors are in general considered experts in their fields of specialization, thus knowing how to teach and guide their students.
- They tend to be self complacent, and lack motivation and information to improve their teaching even though most would hope to generate more effective learning for their students.

### What's needed

- What they need is a mirror or a comparative perspective to see the strengths and weaknesses in their current practices, in order to improve teaching and learning in their classrooms.



### Major purpose of the current study

- The major purpose of this study is to examine and compare the instructional practices and outcomes in American and Chinese university classrooms, thus providing a reflective mirror to higher education faculty in the U.S. and China.



### Sample – visiting scholars

- In the fall semester of 2012, the China Institute at California State University, Northridge (CSUN) hosted a large group of university professors from China as visiting scholars in various fields of studies, including engineering, education, business administration & law, film & TV studies, English and cross-cultural communication.

## Scholars at CSUN: classroom activities

- The Chinese scholars audited classes in their respective disciplines at CSUN, with each scholar spending an average of 15 to 20 hours a week in the classroom with American faculty and students, for a total of 15 weeks in the fall semester of 2012. They made careful observations, participated in various instructional activities, joined interactive discussions, and worked on experiments and projects with American students.

## Scholar activities

- Some scholars also developed collaborative research projects with their faculty mentors at CSUN, presented papers at scholarly meetings, and even created long-term plans of collaboration.
- All scholars participated in special workshops to improve their teaching strategies and cross-cultural communication skills, and visited many social, cultural, political, and educational institutions in the Los Angeles area.

## CSUN scholars featured in World Journal



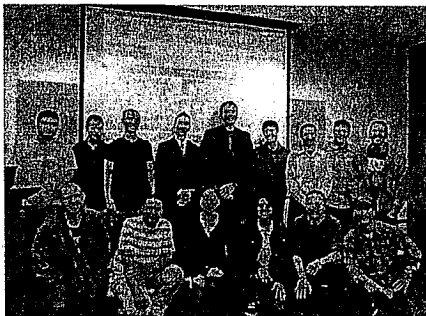
美國加州中央研究院與加州理工大學於2012年11月15日聯合舉辦「2012年美國加州中央研究院與加州理工大學學術交流會」，中國學者及加州理工大學教授《世界日報》負責採訪報導。

【洛杉磯訊】加州理工大學中國學者與加州理工大學教授在洛杉磯舉行的學術交流會中，與加州理工大學教授進行了廣泛的交流與合作。中國學者表示，他們對加州理工大學的先進技術和研究成果表示欽佩，並希望與加州理工大學的教授建立長期的合作關係。加州理工大學教授表示，他們對中國學者的專業背景和學術造詣表示讚賞，並表示歡迎中國學者來加州理工大學進行訪問和學習。

## New scholars meeting with University President Harrison



## Visiting scholar making presentations in CSUN class



## Scholars visit Jet Propulsion Lab



Chinese scholars visit Getty Center



At Suzhou Garden in Huntington



Chinese scholars warmly welcomed  
by CSUN faculty in their homes



Scholars cook Chinese food in  
local American home party



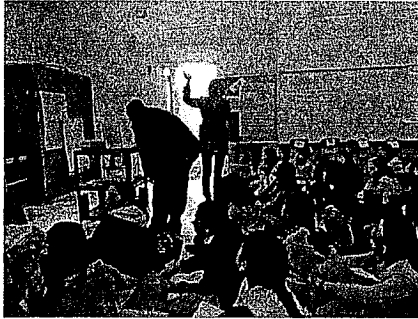
Visit to CSUN Radio Station



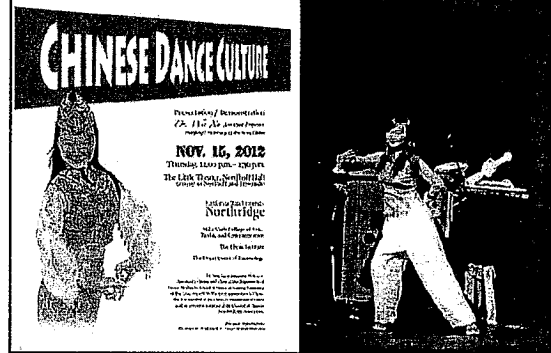
Visit to Vaughn Charter School



Scholars present motivational talks to minority girls in local elementary school



Present Chinese dance culture at CSUN



Teaching American students to dance



Teaching local high school students



Chinese scholars visit City Hall



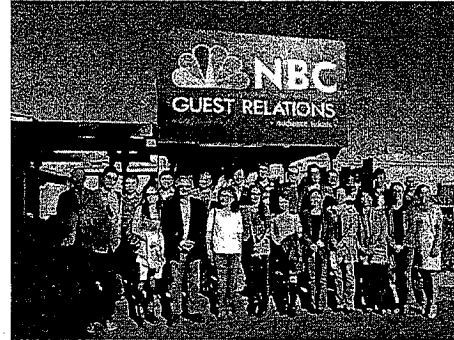
Scholars receive recognition certificate from City Hall



CSUN Chinese scholars presented at City Council by Councilman Englander



Visit to NBC Studio



Attending "Tonight Show" with Jay Leno and President Obama



Scholars at Comparative Education Forum



Happy Gathering at Graduation



Comparative study

- The scholars' presence at CSUN presented an excellent opportunity for a comparative study of higher learning in the U.S. and China.
- Towards the end of their study programs, all visiting scholars participate in a survey and interview study comparing teaching and learning in American and Chinese university classrooms.

### Survey and interview with scholars

- The survey instruments were adapted from the author's previous comparative studies on teaching and learning in lower level schools and cover questions on education goals and emphases, curriculum and course design, teaching strategies, technology and learning resources, student learning and interaction with faculty, connection between theory and practice or hands-on experiences, student assignment and assessment, and extracurricular activities.

### Survey and observation data

- In addition, all scholars wrote and presented comparative study papers on certain aspects of teaching and learning based on their careful and detailed observations in American university classrooms. Therefore, the current study has the benefit of both survey and observation data gathered from the visiting scholars.

### Major goals and emphases in higher education

- The Chinese scholars in our study recognize that American and Chinese higher education institutions share the same long-term goals of cultivating talents and training productive citizens.



### American emphases

- In reality, Chinese and American universities have demonstrated quite different emphases in their practices.
- American universities aim at the development of independent, critical and analytical thinking, cultivation of hands-on and problem-solving abilities, a spirit of collaboration with others in group work, and a commitment to lifelong learning.



### Chinese emphases

- In contrast, Chinese universities emphasize the systematic transmission of structured content knowledge in specialized areas and the mastery of large amount and in-depth information, which require students to depend on teachers to memorize book-learning and to pass tests and exams, rather than to develop their own thinking skills and problem-solving abilities.

### ***1. Large vs. small classes***

- The scholars are very impressed by the small class approach in undergraduate education at CSUN, where professors can have more contacts and interaction with students, usually about 30 in one class, and facilitate more student group discussion and hands-on activities.
- Desks and chairs are mobile and can be arranged for different teaching and learning activities. American professors can easily walk around the classroom and among the students.

### Large class in China

- In contrast, most Chinese universities resort to large class teaching for undergraduate education, with 150 to 200 in one class, therefore the classrooms tend to be huge with fixed desks and chairs, making it impossible for professors to have close contacts with students or for students to have any small group discussions and activities.

### Advantages of large classes

- A benefit of teaching large classes in China is that Chinese faculty have a lighter teaching load – they only need to teach one or two courses per semester, but their American counterparts at CSUN have to teach four courses each semester.

### ***2. Teacher Centered vs. Student-Centered Classrooms***

- The emphases in Chinese higher education, as well as the structure and constructs of Chinese universities, determine that Chinese university teaching is highly teacher-centered, just as it is in lower level schools.
- Chinese professors are considered as owners of knowledge. They lecture most of the time to try to cover all major knowledge points in classes.

### Teacher-Centered Classroom

- Chinese students are not encouraged to question or doubt professors or textbooks, not invited to participate in class discussions with other students or faculty.
- The most common scenario in Chinese university classroom is professor lecturing without interruption on the front and upper level platform and students listening, taking notes, and dozing off with boredom in their seats on the lower level.

### **“Peking Duck” Mode of Teaching** 教师为中心：填鸭式，说教式教育

- Chinese students are fed knowledge passively like “Peking ducks,” one way stuffing. Teachers lecture non-stop, regardless of how much students can understand and digest. There is very little interaction and discussion in class.
- Some Chinese faculty complain that if they ask any questions, they get no responses from students. Who should be blamed?

### **Student-Centered Approach** 学生为中心：启发式，互动式教育

- American university teaching is highly student-centered with frequent and fluid faculty-student interaction. Faculty are facilitators of student learning and equal partners in academic discussion.
- Students are required to do large amount of reading and preparation before the classes, bring questions and contribute to class discussions. They are encouraged to doubt textbooks and even professors.

### Student-Centered Approach

- American students take initiatives in learning before, in and after classes. All are required to participate in interactive discussions, discovery learning, group work, research or inquiry projects.
- Thus American faculty try hard to inspire and encourage students' curiosity and interests in learning, and cultivate their abilities for self study, critical thinking, and problem solving.

### ***3. Collective vs. individualistic approach***

- For teaching different sessions of the same course, Chinese university faculty prepare their lesson plans together, cover the same materials, give the same assignments and exams, progress at the same pace, and even use the same power point presentations in their lectures, which have to be reviewed and approved their authorities.
- Just like teaching in elementary and secondary schools, teaching in Chinese university adopts a collective approach (Su, 1994; 2005).

### Individualistic approach in American university

- American university professors embrace highly individualized approach in their teaching and teaching preparation.
- They prepare their lessons individually, isolated in their own offices without consultation with other faculty. They choose their own textbooks, arranging teaching schedules, giving assignments, and evaluating students in their individual ways, different from other faculty.

- Students with a strong sense of independence and inquiring minds can succeed and blossom in the American classrooms, but the students who lack initiatives, self study abilities, and social support would have been left behind by the American method.
- The Chinese collective approach would guarantee success for all or most of its students.

### ***4. Developing abilities vs. memorizing information***

- In many ways, faculty teaching in university classrooms reflects the different emphases in higher education in the U.S. and China. American professors create teaching and learning activities to cultivate self confidence, autonomy, independence, a genuine interest in learning, a spirit of critical inquiry and innovation, and abilities to solve real problems in their students.

- Chinese professors pay attention to the development of strict, serious, and sincere attitudes in their students towards learning and the existing knowledge.
- In fact, Chinese professors admit that they are the role models for upholding such attitudes as they all follow strictly the established rules and regulations in their teaching, including what to teach, how to teach, what to use, and how to handwrite on the boards in the classrooms.



- They recognize that such standardized teaching supports teacher-centered classroom and guarantees certain types of uniform outcomes by exams, but it kills the spirit of innovation and presents obstacles to effective faculty-student interaction and communication.

- After sitting in hours in teacher-centered classrooms, Chinese students have little or no motivation or interests for further learning but to memorize book information and professors' lecture notes and prepare for texts and exams.

- In contrast, American students are often left with questions (not answers) and interests (not boredom) to learn more after classes, and they have to take the initiatives to make inquiries and conduct research on their own or with other students in small groups to complete course requirements.
- In this process, they can effectively develop critical thinking skills and problem-solving abilities.

### 5: Deductive vs. Inductive Reasoning in Teaching

- Chinese faculty use deductive reasoning in teaching. They start with theory and concepts step by step, then proceed in an orderly way with specific examples, usually from textbooks to explain the concepts and students are given assignments to become familiar with these concepts or learn to use the formulas.
- This approach requires the faculty to be accurate, precise, and detailed.

### Inductive Reasoning

- In contrast, American faculty tend to employ inductive reasoning in teaching.
- They start with observations and examples or hands-on experiences, then proceed toward theories and concepts. They encourage students to think about solutions before presenting them with answers. Often they would leave it to the students to do theory/book learning, which could be confusing for students with weak abilities for self study.

### Teaching 教学方法

- | <u>U.S. 美国</u>                                | <u>China 中国</u>   |
|---|---|
| • Plan and teach individually<br>个人备课, 个人特色教学 | • Collective planning,<br>uniform teaching<br>集体备课, 统一式教学 |
| • Student-centered<br>以学生为中心, 启发式教学           | • Teacher-centered<br>以教师为中心, 灌输式教学                       |
| • Flexible materials<br>灵活应用教材                | • Textbook-dependent<br>依赖教科书                             |
| • Focus on practice<br>重实践                    | • Focus on theory<br>重理论                                  |
| • Rely on induction 归纳法                       | • Rely on deduction 演绎法                                   |
| • Focus on process 注重过程                       | • Focus on content 注重内容                                   |
| • Lively and interesting<br>注重生动和有趣           | • Detailed and correct<br>注重详细和正确                         |
| • Emphasis on creativity<br>强调创造性和个性          | • Emphasis on conformity<br>强调服从和统一                       |
| • Driven by student interests<br>学生兴趣为主要驱动力   | • Driven by final exams 考试<br>为主要驱动力                      |

## Learning 学习方法

### U.S. 美国

- *Active* 主动式学习
- *Independent* 依靠自己
- *Diversified* 学生多元化
- *Rebellious* 反抗不从
- *Dare to question and challenge professors*
- *Learning by inquiry* 发挥想象力, 独立开拓
- *Individual work and self study* 注重个人功课, 各自为阵
- *Driven by curiosity and interests* 为好奇而求知

### China 中国

- *Passive* 被动式学习
- *Teacher-dependent* 依赖教师
- *Homogeneous* 学生一元化
- *Obedient* 服从听话
- *No questions for professors*
- *Learning by rote* 勤奋刻苦, 死记硬背
- *Collective work and peer tutoring* 注重集体, 互相帮助
- *Driven by final exams* 为考试而学习

## Higher learning in comparison

### Chinese students

- Less motivated
- Low pressure with course work
- Final exam count for 80% of grade
- Little interaction in class
- Less group work
- Less hands-on experiences

### American students

- More motivated
- High pressures with course work
- Tests and exams throughout the semester
- Highly interactive in class
- More group work
- More hands-on

## University classroom set-up and atmosphere

### 课堂气氛

#### U.S. 美国

- *Small class* 小班教学
- *Teacher and students are on more equal footing* 教师与学生平等地位
- *Relaxed and informal* 放松, 随便
- *Fluid and frequent communication* 流畅, 经常性的师生交流
- *Lively and easy-going* 轻松, 愉快

#### China 中国

- *Large class* 大班教学
- *Teacher as unquestioned authority* 教师是无可置疑的权威
- *Tense and formal* 紧张, 正规
- *Stuffy and monotonous communication* 沉闷, 一言堂
- *Serious and hard* 严肃, 艰苦



## Student Outcome 学习效果

#### U.S. 美国

- *Low test-scores* 考试分数低
- *Self confident and independent* 有信心和独立性
- *High creativity* 创造能力强
- *Weak in theory* 理论基础弱
- *Strong in practice and hands-on activity* 动手能力强

#### China 中国

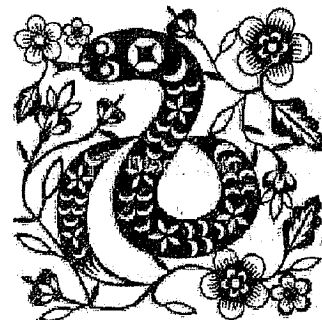
- *High test-scores* 考试分数高
- *Lack of self confidence and independence* 缺乏自信心和独立性
- *Low creativity* 自学能力弱
- *Strong in theory* 创造能力差
- *Weak in practice and hands-on activity* 动手能力弱

## Resulting outcomes

- As a result, American students are more likely to become innovators while Chinese students are more likely to become specialized mechanics without creative thinking and problem-solving abilities.



Thank You and Happy  
New Year of the Snake!



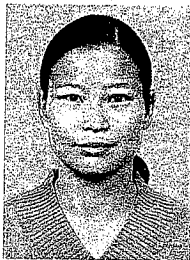
In recent years, comparative education scholars have identified a significant "learning gap" between American students and their peers in other parts of the world.

# THE ISOLATED TEACHER: What We Can LEARN from the Chinese

By Zhixin Su, Ph.D., Haihua Qin, and Tao Huang



Zhixin Su, Ph.D.



Haihua Qin



Tao Huang

By fifth grade, U.S. students lag far behind their counterparts in most Asian and many European countries. For example, in their book *The Learning Gap*, Harold Stevenson and James Stigler<sup>1</sup> reported that fifth-grade students scoring highest on a math test in a U.S. sample (Chicago area), did not perform as well as the lowest-scoring classroom in a Japanese sample. In Los Angeles, fourth- and fifth-grade students who have emigrated from China commonly find themselves almost two levels higher in math than their American peers. Once they learn the language, Chinese students also demonstrate more proficiency in language skills, especially in writing, than their American peers.

## Cross-Cultural Differences in Teaching

In this paper, we share our findings from a case study of teaching and learning in American and Chinese elementary schools. The focus is on two critical differences in teaching between the U.S. and China:

- Team teaching in China versus teaching in isolation in the U.S. and
- The single-subject approach in China versus the multiple-subject approach in the U.S.

We agree with other comparative education scholars that teaching, not teachers, largely explains the learning gap between American and Chinese students. Students' experiences are primarily determined by how teaching is organized and conducted within a culture. We believe there is a "teaching gap,"<sup>2</sup> and therefore a learning gap, between American and Chinese elementary schools. This study examines and compares the nature, structure, and approaches in teaching, and makes recommendations for change.

## Teaching as a Collective Versus an Isolated Activity

In Chinese as well as many other Asian schools, teaching is a collective, team activity. Teachers follow the same national curriculum and textbooks, and always prepare their lessons together so their students obtain the same curriculum and instruction. Senior and junior teachers work together so junior teachers learn from the collective wisdom and experiences of senior teachers.<sup>1, 2, 3, 4</sup>

In addition, Chinese teachers frequently observe other teachers, and attend regular (often weekly) professional development meetings with other teachers. A downside of this collective approach is that teaching has become too uniform, and not diversified or individualized. Teachers also lack the autonomy to use their own materials and approaches.

In contrast, American teachers are isolated in their classrooms, a condition sometimes justified on grounds of freedom, independence, and professionalism. Although American teachers enjoy more autonomy and freedom in choosing curriculum and procedures, they have no time to meet with other teachers, rarely observe teaching in other classrooms, and have no means of improving teaching methods or their own skills. Teaching and learning in American schools depends largely on each teacher's qualifications, choices, and work style. It can be difficult for isolated American teachers to organize lively, vivid, coherent lessons. In some ways, the difference in teaching reflects the different values embedded in the two cultures – China embraces collectivism and the U.S. embraces individualism.<sup>3</sup>

#### Single- Versus Multiple-Subject Approach

Apart from cultural differences, a major reason for the lack of collaboration among American elementary teachers is that they teach many subjects. They are tied to their own classrooms for almost the whole school day and unable to visit with other teachers. Burdened with teaching multiple subjects, American teachers have difficulty thoroughly teaching all content to all students. Sometimes they have to skip important topics in core subjects. Many students, including the most talented, are left behind if their parents do not intervene and seek after-school learning opportunities to mend the “holes.”<sup>5</sup>

In contrast, the Chinese elementary schools employ the single-subject approach. A single teacher teaches a core subject, such as language or math, and teaches only one or two class periods a day. Chinese teachers can therefore spend more time planning and collaborating with fellow teachers, correcting student work, and providing immediate feedback to students both individually and in class, effectively strengthening the learning of core subjects and basic skills.<sup>3</sup>

Some say that as long as American teachers are in front of a classroom for seven to eight hours a day in elementary schools, often moonlighting on other jobs after school (up to 20 hours a week), we will not find the versatility, energy, and inventiveness needed to rejuvenate American education or to close the learning gap between American students and their counterparts in other countries.<sup>2</sup> However, this warning has not been well heeded. We have therefore collected comparative data about Chinese and American teaching to better inform policy-makers, education scholars, and school teachers about this serious impediment to educating American children.

#### Comparative Case Study

For our comparative study, we selected two American fifth-grade classrooms in one of the best elementary schools in Los Angeles, and two Chinese fifth-grade classrooms in one of the best elementary schools in Nanjing, China. Our research included classroom observation, in-depth interviews of teachers and surveys of students, and examination of relevant curriculum and instructional materials. In addition, we followed each of the four teachers for a full school day and video-taped all of their major activities. We collected all basic data at the end of the spring semester in 2002.

During the summer of 2002 and throughout the 2002-2003 academic year, we showed the video-taped teaching activities – a typical day in the life of a classroom teacher in the U.S. and China – to more than 100 American and



*Tracy Gansenberg, student,  
Salem High School*

National High School Civic  
Engagement Project

“Apart from cultural differences, a major reason for the lack of collaboration among American elementary teachers is that they teach many subjects and are thereby tied to their own classrooms for almost the whole school day and unable to visit with other teachers.”

Chinese school teachers, including the teachers in the study. We asked all viewers to comment on the strengths and weaknesses in the American and Chinese classrooms. This generated multiple perspectives and created a second layer of data.

### Findings and Discussions

In the Chinese sample school, most teachers are only high-school level graduates. In the American school, all teachers are at least college graduates, and both American teachers in our sample have a master's degree. The American teachers' average monthly salary in the Los Angeles area is about \$4,000 per month, whereas the Chinese teachers' average monthly income is \$112. There are 33 students in the American fifth-grade classrooms, but more than double that number (70) in the Chinese classrooms. Annual per student expenditure is \$4,563 in California, but only \$81 in Nanjing, China.

Parents in the American sample spend an average of six to 10 hours each week helping their children with homework and class projects. Chinese parents, in general, do not need to spend any time on their children's schoolwork.



## Distribution of Time for Elementary School Teachers

Activity	American Teachers	Chinese Teachers (language and math)
Teaching in front of a classroom	Six to seven hours a day on all subject areas	One to two hours a day on one core subject area
Lesson planning in schools	30 minutes a day on all subject areas	Formally two hours a week with colleagues on one core subject; Informally two hours a day with colleagues on one core subject
Correcting student homework/classwork in school	Almost no time	One to two hours a day on one core subject area
Feedback on homework/classwork with whole class	Whenever there is time on different subject areas	About 30 minutes daily for each of the two core subject areas (language and math)
Feedback on homework/classwork with individual students	Whenever there is time on different subject areas	At least 30 minutes daily on each of the two core subject areas (language and math)
Lunch break in school	Half an hour, often in his/her own classroom	40 minutes daily with colleagues plus 40 to 60 minutes rest/nap time
Social and recreational activities with other teachers in school	Almost none	30 minutes daily
Professional development activities in school	Two hours a week (discussing standards)	Every Friday afternoon (workshop on improving teaching and learning in core subject areas)
Political studies in school with colleagues	None	One and one-half hours a week

Under these different circumstances, which seem to favor the Americans, how can the students in Nanjing perform at much higher levels than their American counterparts? The data suggests the answer lies in the differences in the structure of teaching.

#### Time Spent Teaching

The first major difference is the time spent teaching in front of a classroom. Because the Chinese teachers spend only one to two hours a day teaching one core subject, they are very focused and offer more in-depth teaching. An earlier study found that American teachers spend a higher proportion of total required work time (85 percent) on instruction than do teachers in many other countries, including Japan and Germany.<sup>6</sup>

A second difference lies in lesson planning. American teachers have only 30 minutes a day to prepare lessons on all subject areas, often by themselves in their own classrooms. But the Chinese teachers spend nearly two hours each day in the faculty office, preparing and discussing lesson plans and instructional issues with other teachers on one core subject area. They also spend two hours a week with colleagues in formal lesson planning on one core subject area. In contrast, American teachers simply do not have time to meet with their colleagues for lesson planning.

#### Time with Students

Another major difference is that American teachers have very little time to correct student work in school, or to provide immediate feedback, which American school research identifies as a key to student success at school.<sup>7</sup> Often, students' homework and classwork go unchecked for days, weeks, and even months. We frequently hear American teachers say to students, "Ask me, if you don't understand." Unfortunately, many young students are too intimidated or shy to ask questions. The multiple-subject approach also leaves most teachers little time to work with individual students who have special needs and questions. Not surprisingly, as such unchecked learning continues, holes and misunderstandings emerge, and if not corrected, the students are left behind in one or more areas of academic learning.

Since Chinese teachers do not have to teach in front of the classroom all day, they can spend one to two hours per day correcting student work. They also spend about one hour each day providing immediate feedback to their students on classwork and homework, both individually and in class. It is their firm belief that teachers, not students, need to take the initiative in this area. One Chinese math teacher said no student of hers would go home without understanding what went wrong in his/her homework from the previous day. For American teachers, this is often "homework" for the parents, if they have the time. If not, their children may be left behind.

#### Time for Professional Development

Continuous professional development is another key to successful teaching in Chinese schools. The Chinese teachers spend half a day each week attending workshops on improving teaching, and learning more about their core subjects. They are also given time to participate in research, make presentations at professional conferences, and collaborate with university scholars.

"The single-subject approach gives Chinese teachers more time to spend planning and collaborating with fellow teachers, to correct student work, and to provide immediate feedback to students both individually and in class, effectively strengthening the learning of core subjects and basic skills."



*Aleta Hong, student, Walden III High School*

National High School Civic Engagement Project



Cheryl Johnson, site coordinator, Alameda County Office of Education  
National High School Civic Engagement Project

“American teachers have very little time to correct student work in school, or to provide immediate feedback, which American school research identifies as a key to student success at school.”

In contrast, American teachers, fully occupied with teaching multiple subjects, have no time for professional development activities in school. Although they spend two hours a week in group meetings, they discuss standards, not work on lesson plans and student problems. Even when a school hires specialized teachers (e.g., P.E., music, and theater), the regular teacher still must be with the students, rather than using that time to plan lessons or observe in other classrooms.

#### Time for Social Activities

Lunchtime is the one opportunity teachers have to get out of the classroom, and to socialize and collaborate. Chinese teachers have about 40 minutes to socialize with colleagues over lunch, plus a 40 to 60 minute rest/nap time during the summer. American teachers have only 30 minutes for lunch, often eating at their desks in their classrooms. Unfortunately, as Goodlad<sup>8</sup> observed two decades ago, lunchtime in American schools falls far short of providing the freedom, relaxed ambience, and refreshment experienced by most workers outside of schools. Consequently, it falls short of providing teachers with the opportunity to establish personal relationships with each other. Chinese teachers, however, do establish personal relationships because of their lunchtime structure and other social activities in school.

#### Conclusion and Implications

Asian and American teachers are equally competent, just as Asian and American students are equally intelligent and motivated to learn. Findings from comparative and international education studies, however, repeatedly show superior performance of Asian students in core subjects and basic skills, even though American schools have far more resources and smaller class sizes, and American teachers have more years of education.

Clearly, the learning gap cannot be closed until teaching in American classrooms is restructured to make it possible for teachers to provide high-quality instruction in core subject areas to all students. More than two decades ago, Stevenson and Stigler<sup>1</sup> insightfully pointed out, “Freeing teachers from some of the hours they spend in the classroom will allow them time for professional development and help reduce the isolation that pervades the lives of too many of them. With more time to prepare lessons, to correct children’s work, and to plan activities, both by themselves and with their colleagues, teachers’ classroom performance – and in turn, the performance of the children – could be more consistent, thorough, and dynamic.”

Freedom and collaboration cannot happen when teachers are burdened with multiple subjects and isolated in the classroom of the American elementary school. We must make radical changes. We can replace the existing multiple-subject approach with the single-subject approach and teamwork strategies. Only then will American teachers spend less time in front of a classroom and more time on students’ work, preparing lessons with colleagues, and providing more help to individual students and their families. They will have time to observe teachers in other classrooms, do research, and further develop themselves professionally.

But, the Chinese system of education is not perfect. For decades, Chinese schools have been driven by national standards and national exams for university entrance, putting enormous pressures on students and teachers. In fact, most of the teaching and learning activities in Chinese schools are aimed at preparing

students for tests and exams. There is a strong call in China for a new education, which moves away from the pressures of national standards and tests, and focuses on cultivating student character, interests, individual potential and abilities, and all-round development.<sup>9</sup>

American teachers do not need more lessons and workshops on standards and No Child Left Behind.<sup>10</sup> They know the strategies to teach the basics as well as Asian teachers. Since the 1990s, virtually every state has developed high standards for what students should learn in school, along with a way to assess student progress. "Standards" has become the buzz-word in promoting the cause of school reform nationwide. Many states have implemented reform measures in the past decade in order to meet the standards. They include:

- Reducing class size,
- Making vouchers and school choice a central part of the educational system,
- Creating charter schools,
- Outfitting schools with new technologies, and
- New forms of school management.

What is missing from these highly visible school reform efforts is the one ingredient most likely to make a difference in student learning: the quality of teaching. All school reform efforts will end in disappointment if they do not fundamentally improve what happens inside the classroom. To meet the high standards, we must provide students with the learning opportunities they need to reach them. Teaching must be dramatically changed and improved to push us along the path to success.

Finally, our study reveals that *American teachers are more prepared and have more resources to obtain high student achievement than Chinese teachers. We can stop complaining about the lack of resources or large class size. What we need is a fundamental rethinking and restructuring of the American classroom.* Once we understand why our students are not achieving at the same level as Asian students, we can begin to draw some useful lessons from Chinese and Japanese classrooms.

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National High School Civic Engagement Project



# What Really Works in Chinese Science Education in Elementary Schools

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Science Education has become more and more important for modern economy. It is extremely helpful to lay the foundation of science in elementary schools. In the opinion of the Chinese educators, America is the most creative country in the world and has a superior science education system. Therefore, my school principal decided to send me to study at CSUN as a visiting scholar to learn the advanced science education concepts and strategies. The major purpose of my study is to develop competences to improve science education in China through communication with American science teachers, and in comparing science education practices between the two countries.

In this presentation, I will share what really works in science education in my school, which is considered as one of the best elementary schools in China. It has put special emphasis on science education, and over the years, it has developed effective strategies that have produced superior science learning outcomes for our students.

## **Strategy 1: Single-Subject Science Teachers for Elementary Schools.**

Science teachers in elementary schools in China only teach sciences.

1. Teachers focus on one subject
2. Master teacher for new teacher

## **Strategy 2: Collective Lesson Planning.**

Sufficient time for design planning. Lesson plan together, 3-4 hours a week, 1 hour everyday.

## **Strategy 3: Observing classes in other teachers room, in & out of our own school.**

## **Strategy 4: Project-Expo Week.**

In the second week of the second month each semester, every student will develop a project (like science fair) in whole week. (No regular class) and will conduct the projects under teachers' guidance.

## **Strategy 5: Super cool summer/winter break homework.**

Students can select research projects to replace the normal homework for the break, even in 1<sup>st</sup> grade in my school. The best project can win the "Little Noble Prize".

## **Strategy 6: Science Competition.**

School encourage students participation in all kinds of science competitions, national and international. The competition can prompt students' creation, innovation, teamwork, time management, motion control, hands-on ability and specific knowledge

## What the U.S.A. Can Learn from China in Art Education?

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3/21/2013

I'm a visiting scholar at CSUN. Through my observation in the classroom, I think China and the USA have their own advantages respectively in art education. Today, I'd like to talk something for reference to the peers in the USA.

**1. To emphasize basic skills.** Chinese art colleges put more stress on the skills of production, such as the color, model, texture, etc. Chinese art circle believes that if the students learn the skills well, in their future lives, they can create anything, without worrying about the skills needed. If the basic skill is wretched, who can reach to the extent desirable. A solid foundation of skills is the most important. In the contrast, the USA put emphasis on the side of creativity, students get no qualified skills. Take the same grade students' oil paintings from the two countries, generally, the students' from the USA can't match.

**2. To be close to nature.** Chinese university students use the plaster model, human body and natural scenery as the reference to practice the creative skills. And in the vocation or the regular time, teachers lead the students to specific places such as historical sites or scenery spots to train their sketch, pencil sketch, oil painting or Chinese water-ink painting, etc. Meanwhile, the teachers here lead students to look for pictures in textbooks, journals or websites to imitate or create other forms accordingly, seldom to go out to the nature or faced to the human bodies.

**3. To maintain and implement consistent policies on art education.** Chinese educational administration demands all the schools to set up the curriculum of art. Though in reality, the time is always occupied by the teachers from the core subjects, but most of the time, the art courses are carried out regularly. Because the education administration is accompanied with the political system, the policy is continuous, which cannot be changed with the former leader's departure. On the contrary, the art education policy is unstable with the new president coming to power in the USA. For example, president Obama pays no attention to art education as Clinton and Bush.

**4. To take art as art.** Art is art, not science. In my observation, Chinese artists learn and teach art as art, not as science in the USA. Art is the instinctive or rational response, which cannot be analyzed all the time. Though the science promotes the development of the arts in various ways, and the creativity of arts depends on the development of science in some way, science cannot solve all the problem appearing in art yet. Anatomy, perspective, color layering, etc are helpful to the analysis and teaching of art, but when we paint something, we cannot measure first and then paint every bit of them. Sometimes, obscurity is necessary.

# **An Introduction to the Teaching Supervision System for K-12 Schools in China**

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The teaching quality of K-12 in China heavily relies on a unique supervising system, teaching supervision system. Teaching Supervisors are full time professional staff in governmental research organizations recruited from experienced teachers. Teaching Supervisors provide well-planned, consistent support to teachers to improve their classroom teaching on a continuing basis. They directly influence the quality of teaching and research at basic level. Never before has China been so interested in English teaching quality and given it so much attention, therefore English teaching supervisors (ETS) shoulder more responsibilities. In this presentation, the author will introduce the definition, roles and quality of Chinese teaching supervisors, especially English teaching supervisors, and describe the teaching supervision system in China. The author will raise three major questions, "Who is a teaching supervisor?" "What does a teaching supervisor do?" "What kind of qualities should a teaching supervisor have?"

## **Practical Advice for American Educators:**

- ❖ Recruit experienced teachers in the district to serve as teaching supervisors in order to provide consistent support and timely feedback to teachers in everyday classrooms.
- ❖ Create standards for teaching supervisors before recruitment.
- ❖ Provide training courses to selected candidates and help them make the transition from teachers to teaching supervisors.
- ❖ Teaching supervisors should adopt a humanistic approach in their work - focus on providing positive feedback and encouragement rather than negative criticism to teachers.

## **What Really Works for Graduate Students in Education: Comparison of SHNU and CSUN Learning Experiences**

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### **Abstract:**

The purpose of this research is to compare teaching and learning in American and Chinese university classroom from the perspective of a Chinese graduate student. As a cross cultural learner, the student tends to have a distinct and unique view of the comparative teaching in institution of higher learning based on the student's own learning experiences. Thus, the outcome of observation and conclusion in higher learning experiences serves as a valuable feedback for effective teaching reflection to the professors in higher institutions.

The study will basically focus on the graduate program of educational administration and make comparative analysis of teaching and learning between California University of Northridge and Shanghai Normal University.

### **The comparison of curriculum instruction:**

Lessons for SHNU professors:

- Apply diverse instructional strategies to students
- Create interactive learning activities in a real site classroom environment
- Involve different teaching resources to support academic instruction
- Provide directive and immediate feedback to students' performance

Lessons for CSUN professors:

- Link students to the academic knowledge out of a world-wide perspective
- Put more efforts on cultivating students' capacity on research
- Provide students enough academic instructions after the class
- Offer students choices for elective courses in the same area

### **The comparison of student learning:**

Lessons for SHNU students:

- Develop critical and reflective thinking instead of relying on academic professors or text books
- Participate in the classroom with active interaction and involvement

Lessons for CSUN students:

- Keep close connection with academic advisor after the class
- Need to improve the knowledge and application of research methodologies