Exploring Cultural Effects on Teaching Styles of Chinese and American Professors

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ABSTRACT

The current study examines cultural effects on college professors' teaching styles. Ninety-four Chinese university instructors participated in the study. A 40-item teaching style inventory was used in the study. The responses were compared with American professors' teaching styles reported by Grasha (2006). Results show that the Chinese participants are no more likely than their American counterparts to use the authority-based, top-down teaching style cluster. However, they are more likely to report using student-centered teaching styles. These findings suggest that with globalization and westernization, Chinese teaching styles in higher education continue to evolve, and Chinese professors may be employing both the traditional Confucian style and the Western democratic teaching styles.

Keywords: teaching styles, Confucius and Socrates, China and USA, college professors, globalization

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A considerable amount of research has been dedicated to understanding the educators' teaching styles. Past research has shown that teaching styles are associated with students' academic performance (Huang, 2009; Sternberg & Grigorenko, 1995) and may influence students' learning preferences (Lockette, 2006). To best serve today's diverse students with different learning styles, it is important to study professors' teaching styles and examine the types that may deliver the content in the most effective way and accommodate students' needs the best.

Many researchers have examined teaching styles from different conceptual frameworks and perspectives. In their excellent historical review of learning and teaching styles, Henson and Borthwick (1984) introduced six examples of different teaching styles: Task oriented, Cooperative planner, Student-centered, Subject-centered, Learning-centered, and Emotionally-centered. They also reiterated the importance of the significant impact a teacher's style may have on his/her students.

Sternbergh and Grigorenko (1995; 1997) discussed seven types of thinking styles for teachers: Legislative, Executive, Judicial, Global, Local, Liberal, and Conservative. They posited that studying teaching styles may help us understand better the variation in students' performance beyond differences in individual abilities. In other words, teaching styles may be directly related to the performance of students.

Others (Pratt & Collings, 2000) presented The Teaching Perspective Inventory that specifies five perspectives: Transmission, Apprenticeship, Developmental, Nurturing and Social Reform. They believed these perspectives on teaching facilitate reflection by college instructors on their teaching beliefs, their role as a teacher and student learning.

Recognizing that instructors may use more than one particular teaching styles, Grasha (2006) developed an integrated model of teaching styles intended to avoid placing teachers in one specific teaching category. Instead, this

model takes into account possible combinations of teaching styles that a single teacher might employ. Five teaching styles were developed in this model: Expert, Formal Authority, Personal Model, Facilitator, and Delegator (See Appendix for a detailed description and advantages and disadvantages of each style). Our general understanding of these five styles is that there are two large aspects within these five styles. The first three, namely Expert, Formal Authority, and Personal Model can be characterized as more of a teacher-centered, top-down style in which the teacher is the authority on the knowledge and information, and a teacher's job is to transfer the expertise knowledge to the students. The other two, namely Facilitator and Delegator, can be viewed as more of a student-centered, democratic style of teaching in which a teacher positions him/herself as the facilitator or consultant on the subject matter and lets students learn and master the information through discussions and hands-on activities.

Taking into consideration that most instructors are likely to employ more than one teaching styles, Grasha (2006) developed clusters of teaching styles through analysis of the data collected from studies of college instructors. The resulting cluster model grouped the participating teachers according to their reported primary and secondary styles. Four groups of teaching styles, or teaching clusters were reported in Grasha's (2006) study:

It seems clear to us that the first two clusters generally correspond to the first three individual teaching styles (authority, top-down), and the last two clusters correspond to the last two individual styles (student-centered, democratic).

How do professors form their teaching styles? Grasha (2006) asserts that instructors' teaching styles are usually formed based upon some philosophical underpinnings, the beliefs we have about how one teaches and how one learns in the society. In other words, there are underlying assumptions and values that tend to guide our teaching thoughts and behaviors (Pratt & Collins, 2000), and over time, we develop particular patterns of teaching which we call teaching style.

A professor's teaching style is reported to be influenced by a plethora of factors, some are general and common to most education settings, such as the student's learning style, the relationship between a professor and the students, and the demands of a specific situation (Grasha, 2002). Others point to more culturally specific factors, such as the instructors' own experiences as students, role models they were exposed to growing up, the general societal expectations, and their philosophical orientations (Grasha, 2006). All these factors are associated with a broad cultural context that has made important impact on an educator's teaching behavior and style.

The American educational system is heavily influenced by early European customs and philosophical thoughts. For example, Socrates, the famous philosopher from Ancient Greece, advocated critical thinking and skepticism (Shiraev & Levy, 2013). He reportedly encouraged students to question their teachers and common knowledge, and asked them to think independently. Socrates' scholarly thinking has contributed greatly to the American educational system. Teachers traditionally have used a more democratic approach to teaching and students are encouraged to engage in independent and critical thinking from an early age, and teachers tend to use a more creative and interactive approach in the classrooms (Dineen & Niu, 2008).

Likewise, the Chinese educational system is also heavily influenced by its early philosophy and ideology. Specifically, Confucius, the renowned philosopher and scholar from over 2000 years ago, is a major contributor to the features of Chinese education (Aguinis & Roth, 2003). The Confucian ideas of humility, hierarchy, effort, power distance, and respect have permeated the traditional Chinese teacher-student relationship and, historically, Chinese instructors have utilized a top-down, teacher-centered approach (Aguinis & Roth, 2003; Rao, 2001). Students are encouraged to learn from their teachers but not to challenge their teachers by asking questions (Shiraev & Levy, 2013).

With an education system long based on Confucian ideology, Chinese classrooms have placed emphasis on teacher and book-centered styles. Students in this culture do not consider knowledge to be a product of their own thought, but rather consider it to come directly from the expertise of their teacher (Rao, 2001). However, with the rapid speed of globalization in the past decades in which many cultural and educational exchanges have taken place between China and the Western world, these traditional teaching styles may not be as prevalent as before. There's indeed some sporadic evidence in the literature. For example, in a study by Zhang (2010), Chinese students reported their teachers using more collaborative teaching methods, as opposed to teacher-centered methods. Similarly, another study (He, 2005) concluded that Chinese teachers employed teaching styles that were both complex and creative, different from the traditional teacher-centered and book-centered approach.

The current study aimed to investigate cultural effects on teaching styles of Chinese professors and then compare them to their American counterparts, in order to seek the answer to the broad question: In this day and age of globalization, what types of teaching styles do Chinese college professors commonly employ in their teaching?

We decided to use Grasha's (2006) conceptual model in this study because this model considers combinations of a professor's teaching styles instead of focusing just on one. This seems to be a more realistic approach to investigating teaching styles because professors rarely fit perfectly into one category. Our study was exploratory in nature. We were interested to explore whether:

1. The traditional Confucian style of teaching was still prevalent among Chinese college instructors. If so, we would expect them to have higher means on three of the five teaching styles: Expert, Formal Authority and Personal Model than American professors, and are more likely to fall into clusters that are based on instructor-based teaching styles, namely Clusters 1 and 2.

2. Due to the rapid globalization and westernization taking place in China in all areas including higher education, professors commonly used a more democratic and westernized teaching style. If that's the case, we would expect them to have similar or higher means on two of the five teaching styles than American professors: Facilitator and Delegator, and are more likely to fall into clusters that are based on student-centered teaching styles, namely Clusters 3 and 4.

METHODS

Participants

Ninety-four Chinese professors (57 women, 37 men) from a comprehensive university in Northeast China participated in this study. Demographic information of the participants is presented in Table 1.

Materials

We utilized a teaching styles survey composed of 40 Likert scale statements (Grasha, 2006). These 40 items measure a professor's teaching style in five categories: Expert, Formal Authority, Personal Model, Facilitator and Delegator, with each category having eight items. The examples are provided in the following: "Sharing my knowledge and expertise with students is very important to me" (Expert). "I give students negative feedback when their performance is unsatisfactory" (Formal authority). "Students are encouraged to emulate the example I provide" (Personal Model). "I spend time consulting with students on how to improve their work on individual and/or group projects" (Facilitator). "Activities in this class encourage students to develop their own ideas about content issues" (Delegator). The Likert-typed responses range from 1 to 7 with 1 representing "totally disagree" to 7 representing "totally agree."

Information regarding gender, age, years of teaching, types of degree, academic ranks, graduate or undergraduate teaching status, and experience abroad was also collected.

Procedure

The Grasha teaching styles questionnaire (2006) was translated into Chinese language using back translation method. With permission and cooperation from the Chinese university, we sent out the survey to instructors in three colleges in the university through e-mail: College of Humanities and Social Sciences, College of Management, and College of Law. The decision to select these three colleges was due to convenience reasons. A cover letter attached to the survey explained in Chinese the purpose of the study and provided other details. The Chinese professors were informed that participation was voluntary and their responses would remain anonymous as first, the survey did not ask for any personally identifiable information, and second, our research assistant would print out the completed survey upon receipt via email and then immediately delete the email. The participants were also encouraged to email the primary researchers, who were not

Table 1
Participant Characteristics

Gender	Women 61%	Men 39%	Remaining Men and Women
Age	≤ 25 17%	26-45 62%	≥ 46 21%
Years teaching	≤ 5 30%	5-15 35%	≥ 16 35%
Degree	Bachelor 10%	Master 45%	Doctorate 45%
Academic rank	Lecturer 37%	Asso. Prof 37%	Full Prof 26%
Student/ class	Undergrad 37%	Grad 18%	Both 45%
Abroad	Yes 30%	No 50%	Unknown 20%
Discipline	H/SS 37%	Management 43%	Law 20%

affiliated with the university, if they had any questions regarding this research. Response rate was 35%.

RESULTS

First we compared the means and standard deviations on the five individual teaching styles from the current study with those of American professors reported in Grasha's (2006) study. The results are presented in Table 2.

In general, compared with American professors, the Chinese professors scored significantly higher on Expert, Facilitator and Delegator, and slightly lower on Formal Authority and Personal Model. Due to the conceptual similarities among the first three individual styles and between the last two respectively, we then reconfigured to examine two mean scores: the combined first three styles and the combined last two styles. The results showed that Chinese participants scored slightly higher than American instructors (M = 5.06 vs. M = 4.88) when the three teacher-centered teaching styles were combined. The combined result of the last two styles showed that the Chinese participants scored significantly higher than the American professors (M = 5.34 vs. M = 4.33) on the combined student-centered teaching style.

We then performed a cluster analysis using Minitab. A one-proportion test on each cluster was used to compare cluster percentages against Grasha's (2006) results. Table 3 presents the results.

As shown in Table 3, on the first two teaching clusters (top-down, authority-based), significantly fewer Chinese professors fell into Cluster 1 than American instructors as reported by Grasha in 2006 (p = .004). However, the proportion of Chinese participants who fell into Cluster 2 is significantly greater than that of the American professors (p = .003). On the last two teaching clusters (student-centered), the Chinese participants had similar proportion with their American counterparts on Cluster 3, but had significantly greater percentage on Cluster 4 than American professors (p = .014).

Due to conceptual similarities between Clusters 1 and 2, and Cluster 3 and 4 respectively, we then combined the percentages of the first two and last two clusters for both groups of participants. The results are presented in Table 3.1.

The combined results showed that the Chinese and American professors had similar proportions (29.5% vs. 30%) on the teacher-centered teaching style cluster but the Chinese participants had a significantly higher percentage than the American counterparts (20% vs. 16%) on the student-centered teaching style cluster (p < .01).

Table 2
Means and Standard Deviations on Five Teaching Styles

Type of Teaching Style	Chinese M (sd)	American M*
Expert	5.25 (.74)	4.35
Formal Authority	4.85 (.84)	5
Personal	5.09 (.84)	5.28
Facilitator	5.68 (.82)	4.9
Delegator	4.79 (.7)	3.77

*Standard deviations of the American participants in Grash's (2006) study were not reported.

Table 3
Percentages of Four Teaching Clusters

Teaching Clusters	Chinese %	American %
Cluster 1*	24%	38%
Cluster 2*	35%	22%
Cluster 3	15%	17%
Cluster 4**	25%	15%

*p<.01, **p<.05

Table 3.1
Percentages of Combined Teaching Clusters

Teaching Clusters	Chinese %	American %
Cluster 1 and Cluster 2	29.5%	30%
Cluster 3 and Cluster 4*	20%	16%

*p<.01

To examine possible gender differences, a one-way ANOVA test was performed. Results suggested that male Chinese instructors scored significantly higher on Formal Authority style than their female counterparts (M = 5.19, SD =.81 vs. M = 4.71, SD = .73, f (93) = 4.451, p = .014). No other significant gender differences were found on the other four teaching styles or teaching clusters. We also examined possible effects of demographic factors collected in this study. ANOVA tests showed no significant results among the descriptive factors of participants.

DISCUSSION

Our first inquiry was if the traditional teaching values of Confucian ideology still dominated in Chinese higher education, and if so the Chinese participants would be more likely than American professors to have higher means on Expert, Formal Authority and Personal Model

and fall into clusters that are based on instructor-centered teaching styles, namely Clusters 1 and 2. The results provide partial affirmative answers. Compared with American professors as reported in Grasha's (2006) study, the Chinese participants do have significantly higher mean score on Expert category, but not on Formal Authority or Personal Model. Likewise, they are more likely to fall into Cluster 2, but not Cluster 1. Taken together these results, we believe that though the answer is far from conclusive, the evidence shows that many Chinese college instructors still use teacher-centered, top-down teaching styles that are consistent with the Confucian hierarchical ideology. The traditional cultural values may still provide guidance in professors' teaching patterns, as reported by previous study (Rao, 2001). However, the results also suggest that the magnitude of using this teaching style by Chinese professors is not huge compared with their American counterparts who also commonly use this teaching style. The prevalence rate (around 30%) is fairly low considering the long history of Confucian dominance in Chinese education.

Our second inquiry was that due to globalization and westernization, today's Chinese college professors have adopted a more democratic and student-centered approach in teaching, and if so the Chinese participants would have similar or higher means than American professors on Facilitator and Delegator and fall into clusters that are based on student-centered teaching styles, namely Clusters 3 and 4. Our results provide affirmative answers to this inquiry. Indeed, the Chinese participants are more likely to report using Facilitator or Delegator teaching styles which are based on student learning and democratic principles. They are also more likely to fall into Clusters 3 and 4 that are consistent with student-centered teaching styles. In fact, the current findings suggest the Chinese participants are more likely than American instructors to engage in student-centered teaching styles. These results may indicate that globalization and westernization has impacted on Chinese educators' teaching styles. They are starting to depart from the traditional top-down patterns in teacher-student relationships in the classrooms and in their teaching styles. These results are consistent with previous findings (He, 2005; Zhang, 2010).

Overall, the current results suggest that teaching styles of Chinese professors might not be as conservative as previously thought. At least, the results indicate that overall, the Chinese participants are no more likely to use the authority-based teaching styles than American instructors. On the other hand, they are more likely to use the student-centered teaching styles.

In retrospect, our inquiries were focused on an "either or" premise that might have been too simplistic. In light of the current findings, we can venture to assert that the Chinese college instructors are employing both traditional top-down and modern democratic student-centered teaching styles. This is clearly an indication that Chinese teaching styles in higher education are still evolving but can no longer be stereotyped as employing strictly Confucian hierarchical top-down teaching styles; rather, the contemporary situation may be a reflection of a transitional period where these two teaching styles co-exist.

Previous study (Grasha, 2006) found that women scored lower on Expert and Formal Authority but higher on Facilitator and Delegator than men. Partially consistent with their results, we also found that the Chinese male instructors scored significantly higher on Formal Authority style than their female counterparts. This finding is consistent with the general leadership literature that men tend to engage in a more authoritarian style than women (Patel, 2013). China is traditionally a patriarchal society where men tended to dominate all areas of governance and it's not surprising such ideas and values may reflect in instructors' teaching styles.

Sternberg and Grigorenko (1997) posited that academic disciplines may influence instructors' teaching styles. For example, humanities teachers may use a somewhat different teaching style from science faculty. In our study, we did not find any associations between subject matters and teaching styles. It may have been due to the limited academic disciplines represented in the current study and the small sample size.

There are several limitations that we would like to discuss. First, sample size of the Chinese participants is not large, and is limited to humanities and social sciences. This creates challenges in comparing the data from Grasha's (2006) study in which the sample size is much larger and more diverse that consisted of instructors from a wider range of academic disciplines. Second, the data from American instructors were from the studies conducted in the 1990s whereas the Chinese data were collected more recently. This discrepancy poses challenges for compatibility.

These weaknesses need to be rectified in future investigations of Chinese teaching styles. Additionally, we suggest that several other factors to be considered. First, to make the findings more meaningful in a practical sense, the researchers should include the idea of matching. In other words, it would be more helpful to try to examine the benefits of matching professors' teaching styles with students' learning styles. This would shed useful lights on the learning process and may contribute to students' academic success. Second, in order to understand better what determine or guide instructors' teaching styles, researchers should include an examination of their attitudes/

views about learning and teaching in general, and about their particular subject matter specifically. This would enhance our understanding of the relationship between instructors' philosophical views and their teaching styles. Third, it would be beneficial to examine possible relationships between a teacher's stress level and his/her teaching styles (Zhang, 2007) to understand what types of teaching styles would be conducive to the instructors' mental health. Other factors that are related to the instructors' effectiveness also need to be included, such as the instructor's confidence level, self-esteem and overall wellbeing.

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Appendix
Advantages and Disadvantages of Five Teaching Styles (Grasha, 2002)

EXPERT

Possesses knowledge and expertise that students need. Strives to maintain status as an expert among students by displaying detailed knowledge and by challenging students to enhance their competence. Concerned with transmitting information and insuring that students are well prepared.

Advantages

The information, knowledge, and skills possessed

Disadvantage

If overused, the amount of information, knowledge, and skill can be intimidating to less experienced students. May not always explain the underlying thought processes that produced the answers.

FORMAL AUTHORITY

Possesses status among students because of knowledge and role as a faculty member. Concerned with providing positive and negative feedback, establishing learning goals, expectations, and rules of conduct for students. Concerned with the correct, acceptable, and standard ways to do things and with providing students with the structure they need to learn.

Advantages

The focus on clear expectations and acceptable ways of doing things

Disadvantages

A strong investment in this style can lead to rigid, standardized, and less flexible ways of learning. May overlook individual differences in student needs and goals as learners.

PERSONAL MODEL

Believes in "teaching by personal example" and establishes a prototype for how to think and behave. Oversees, guides, and directs by showing how to do things, and encouraging students to observe and then to emulate the instructor's approach.

Advantages

The hands-on nature of the approach; an emphasis on direct observation and showing people how to follow a role model

Disadvantages

Some teachers may believe their way is the best or only way to do things. Attempts are made to "clone" students into their own image or to avoid showing students the range of options available to them. Some students may feel inadequate if they cannot live up to the expectations and standards of the model.

FACILITATOR

Emphasizes the personal nature of teacher-student interations. Guides and directs students by asking questions, exploring options, suggesting alternatives, and encouraging them to develop criteria to make informed choices. Overall goal is to develop in students the capacity for independent action, initiative, and responsibility. Works with students on projects in a consultative fashion and tries to provide as much support and encouragement as possible.

Advantages:

The personal flexibility, focus on student needs and goals, and the willingness to explore options and alternative courses of action

Disadvantages

This style is time consuming and is sometimes employed when a more direct approach is needed. It can make learners uncomfortable if it is not employed in a positive and affirming manner.

DELEGATOR

Concerned with developing students' capacity to function in an autonomous fashion. Students work independently on projects or as part of autonomous teams. The teacher is available at the request of students as a resource person.

Advantages

Contributes to students' learning that they have skills and knowledge that they can independently employ. The knowledge that students gain about their skills, and that someone in authority trusts them to think and act competently with a minimum level of supervision contributes to their vision of themselves as becoming professionals in the field.

Disadvantages

The level and ability of learners may be misjudged and students may not possess the ability to think and behave in a more autonomous manner. Some learners may become anxious about not having closer supervision or may not know how to interact with a faculty member who functions as a consultant and resource person.