Respecting the Complexity of Cultural Differences in Multicultural Horticulture Instruction

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Abstract

Information for improving instruction in universities represented by an assemblage of contrasting cultures may not be readily available to horticulture educators. We convey two factors important to defining cultural values, and discuss them within the context of multicultural horticulture instruction. First, the level of collectivism that defines one's culture is of critical importance in characterizing classroom interactions. Learners from collectivist cultures avoid activities that draw attention to the individual, and are eager to encourage the performance of peers. In contrast, learners from individualistic cultures are comfortable with pursuing self-interests and invest less into compliance with group demands. Second, the level of power distance instilled in one's values defines the student's initial view of classroom relationships and the sorts of changes that are required to alter those initial views. Students embracing low power distance values may address a teacher informally and disagree with their teacher without hesitation. Students embodying high power distance values avoid doing things that suggest a challenge to the teacher's authority. These students refrain from asking questions, and their behaviour is governed by a personal assessment of differences in socioeconomic and cultural status between themselves and their classmates. Collectivist and status-based issues should be integrated in the learning approach when horticulture classroom demographics are defined by a mix of cultures. The nature of assignments, the instructor's approach to building rapport with individual learners, and expectations of student-student relationships during class are some issues that must be modified in order to fully respect the complexity of a multi-cultural horticulture class. Teaching horticulture in a cross-cultural setting demands respect for these issues concerning cultural value systems, but also the pursuit of what special advantages each culture represented might contribute to the learning process.

INTRODUCTION

Horticulture educators have access to myriad resources for acquiring information to improve their methods. However, they must look to several disciplines to obtain relevant tutelage for improving teaching in a multicultural setting. For example, the literature that is specific to horticulture teaching methods is focused on mechanics of carrying out activities and how to take a contemporary development and insert it into the curriculum (see recent *HortTechnology* issues). We believe a discussion on inter-cultural issues in the horticulture classroom would be of interest to a wide audience. Second, the literature depicting the nuances of inter-cultural interactions in multicultural settings targets many applications such as self-improvement, international relations, and human resource management and development (e.g. Brislin and Yoshida, 1994). A few articles have taken these issues and applied them to education (Banks and Lynch, 1986; Gollnick and Chinn, 1990; Goodman, 1994; Sleeter and Grant, 1987; Smith et al., 1998). Multicultural education aimed at developing culturally pluralistic curricula and instructional strategies has become an important focus in curriculum development for psychologists in education since the 1990s (American Psychological Association, 2003). However, attempts to implement such multicultural pedagogies were faced with

institutional, instructor, and student resistance despite consensus about the importance of increasing students' awareness of diversity and different worldviews on racial and cultural differences (Byars-Winston et al., 2005). Enns and Sinacore (2005) review the challenges of multicultural education within psychology programs. Horticulture educators may not directly relate to the information imbedded within these examples from other disciplines. A third relevant category of the literature is comprised of the plethora of articles on general education and pedagogy. But much of this literature is infused with a Western bias. Learners from cultures that do not embrace values that are defining of Western cultures rarely benefit from courses in which instructors categorically adopt the approaches adduced in this literature.

The first author obtained graduate degrees from horticulture departments in Land-Grant Institutions in Mississippi and Florida, USA. The horticulture classrooms frequently included students who were reared predominantly in collectivist cultures. His formative years in Korea and Guam instilled an awareness of the characteristics of learning within a setting in which one is an ethnic minority. However, throughout six years of graduate classroom instruction, no example emerged where the educator respected the disparate learning styles of these minority students by modifying teaching methods. Our own research at the University of Guam has revealed a similar scenario in Guam's public school system. Although teachers acknowledge the multicultural demography of their classrooms and respect this character as a defining attribute of life on Guam, as a rule they are unwilling to modify teaching methods to meet the learning needs of the contrasting cultures represented in their classrooms (Schmitz and Smith, unpublished data).

We believe the multicultural character of horticulture classrooms at the University of Guam will become more commonplace throughout the world as universities become more ethnically heterogeneous (Smith et al., 2002). Therefore, horticulture educators may benefit from a discussion on the issues that bring together these various categories of literature. Our intent is to discuss important factors, such as collectivism and power distance, that distinguish cultural values and to convey how those issues have shaped horticulture education at the University of Guam.

BACKGROUND

Educators willing to immigrate to a culture unlike their own are generally willing to acculturate and adopt a teaching style that is relevant for the learners. This situation is fairly common, and the educator's need to conform to appropriate learning styles of the students is regularly recognized and pursued (Brislin and Yoshida, 1994; Xiao, 2006). Alternatively, university students willing to immigrate to a university in a country defined by cultural values unlike their own also make the move with a general willingness to adapt to the teaching style prevalent in their host country. They are typically willing to accept that ethnocentric instructors will not modify teaching methods just to suit their particular needs. The learning in these situations would certainly improve if each individual embraced a willingness to become more educated about the value systems of the other individuals involved. However, neither situation characterizes the unique complexity of a highly heterogeneous horticulture classroom in which teaching honours the right for every individual to maximize learning, even when there is a reluctance to abandon personal values just to learn more about horticulture. In discussing multicultural education, Goodman (1994) exposed the relevance of two characteristics that are useful for defining a sense of self within the context of one's culture, collectivism and power distance. He opined that college instructors should identify possible discrepancies between the levels of collectivism and power distance implicit in students' approaches to learning, and the levels assumed by their course materials.

Collectivism

The level of collectivism that defines one's culture is of critical importance in characterizing intercultural classroom interactions. This factor is used to describe the

dynamic relationship between individual goals versus group goals and the relative desire each member of a group reveals in complying with group demands (e.g. Hofstede, 1980; Hofstede and Hofstede, 2005; Kim et al., 1994; Markus and Kitayama, 1991). Most western cultures relegate collectivism by encouraging the pursuit of self-interests and minimizing the need for compliance with demands made by groups. The individual from a culture that minimizes collectivism is relatively insensitive to identifying issues that affect the entire group, and reveals little desire to adjust personal behaviour when a change in group dynamics occurs that reveals a shift in group goals. Cultures that maximize collectivism elevate the importance of group goals by assigning lesser importance to individual goals. Collectivism emphasizes the interdependence among members of a group and rewards attempts to fit in with the group. Individuals from collectivist cultures remain in tune with changes in group dynamics and are poised to modify personal behaviour in order to accommodate group demands. While actual student behaviours are complex, a general understanding of these independent behaviours rooted in individualistic cultures and interdependent behaviours rooted in collectivist cultures would benefit horticulture instructors.

Power Distance

Power distance refers to the degree to which a culture accepts the idea that power is distributed unequally (Brislin and Yoshida, 1994; Hofstede, 1980; Hofstede and Hofstede, 2005). Cultures with low power distance are common in the West and edify that hierarchies of status are relatively flexible and informal. An employee with low power distance beliefs may interact with a boss in a highly informal manner, for example, and may not hesitate to socialize with company administration. Low power distance provides fewer deterrents to subordinates openly challenging the misuse of power by a superior. Cultures with high power distance expect individuals to be sensitive to their roles in status-based hierarchies. Hierarchy of status is formalized and respected such that low status individuals are obliged to conform to expectations of superiors even in situations where power is misused. These subordinates will not challenge their superiors, and fostering informal friendships among individuals with contrasting status is more difficult or impossible to realize.

The University of Guam Classroom

Guam's resident population is highly diverse culturally and linguistically. About half of the University of Guam's students speak English as a second language, with more than 40 other languages representing the list of native languages on campus. Two events are responsible for generating the multicultural attributes of the island and the University. The first event was a reversal of the Executive Order in 1962 that required a United States Military Security Clearance in order to enter Guam. This event opened up opportunities for US citizens to immigrate to Guam and initiated the tourism industry that has become an integral part of the island's economy (Rogers, 1995). The second event was the compacts of free association between the US and the various states of Micronesia, initiated in 1986. These associations allowed citizens of the many Micronesian islands throughout the western Pacific to travel within the US without a visa requirement, and thousands of them promptly immigrated to Guam as a direct consequence (Rogers, 1995). Second generation Guam residents from these initial immigration events are old enough to enrol in the University.

Most Westerners in Guam come to the University with excitement for a period of self-development (personal observation). Many of them are exchange students who are enrolled for one or two semesters, others are committed to pursuit of a four year degree. They enter a horticulture class with a pre-determined expectation to learn the skills required becoming a proficient horticulturist, and they do not hesitate to convey the needs they identify for meeting those expectations. The Micronesian students do not share those characteristics. Many enrol in horticulture courses because it is one of a small number of upper division science courses they feel they can handle despite limited English skills.

Some show interest in the course, but few reveal a genuine inquisitiveness of the specific skills and knowledge base that is promised to them in the course descriptions and syllabi. Therefore, the University's horticulture classroom is comprised of learners with diverse ethnicities, diverse language skills, and highly contrasting expectations as defined by their cultural values.

Dynamics of This Setting

In the classroom, students with low power distance beliefs may address a teacher by their first name and disagree with their teacher without hesitation. Our Western students and some non-Western students who were reared exclusively on Guam contribute to classroom dynamics with these characteristics. In contrast, these actions are avoided by students from high power distance cultures. These students take care to evade anything that may suggest a challenge to the teacher's authority. In the classroom, high power distance students refrain from asking questions, and their behaviour is largely governed by their assessment of differences of socioeconomic and cultural status between themselves and their classmates. One of the hindrances to learning within the Western approach to teaching is the inability of individuals to view superiors as confidants. Thus, these students are unwilling to confide in teachers especially early in a semester because they have been socialized to obey a superior without asking any questions. Even when they have something of great importance to share, they will not contribute to a class conversation as a show of respect for the authority of the teacher by way of ingrained social rules.

Non-Western students will shy away from disclosing information to the instructor at the beginning of the relationship. However, if a level of trust is achieved by the initiative of the instructor, these students will self-disclose at levels deeper than are typical of Western students. One advantage in the horticulture program at the University of Guam is the fact that our core list of faculty is small, which means students have repeat classes from each instructor. Indeed, by the time a student reaches our specialty horticulture courses in the upper division listings, most of these students have taken a lower division course that was facilitated by the same horticulture professor. In the classroom setting of a Western culture, this may be viewed as a disadvantage because experiencing a diversity of instructors and exposure to each one's unique knowledge base and teaching style is valued. However, in classes comprised partly of students from collectivist and high power distance cultures, we consider this is a distinct advantage in that the closeness of the relationship developed in the first class increases the willingness of students to disclose and interact earlier in the semester during subsequent classes. This advantage is magnified by our campus dynamics that routinely lead to impromptu meetings between former students and professors. Opportunities to interact with students in the hallway and other venues occur due to the small campus size. The relationship that is initiated during the first course is therefore sustained and improved by the informal interactions thereafter. While all students benefit from this, it is more critical for the success of the students from collectivist and high power distance cultures.

How does an educator initiate the steps necessary to build a trusting individual relationship with each of the non-Western students? We have found a one-on-one meeting that allows time for each of the students to disclose information about their family lands is highly effective. This meeting is scheduled during the first few days of the semester in a manner that the remainder of the students is unaware. Asking questions about their home site's crop species is highly effective because these are issues of intrinsic interest to these students. As an example, a student from Pohnpei near the eastern limits of the islands comprising the Federated States of Micronesia may be asked about what plants their family grows intermingled among their breadfruit and coconut trees. This open-ended question is a safe question because these two tree species are ubiquitous among home sites in Pohnpei, and they are never planted in monocultures. Alternatively, a student from the independent Republic of Palau may be asked what system the women in their family use to grow their yams and dryland taro, as these are two staple crops and women

tend the home gardens in Palauan culture. While this approach allows the student to convey information that is of intrinsic interest to the student and relevant to a horticulture course, it also reveals the educator's level of personal knowledge about those issues from their home islands.

Our non-Western students do not perform well in highly structured lecture settings. The upper division horticulture courses at the University of Guam are extremely small, with class size of 5-10 students being typical. This small class size lends itself to a less formal approach to both lectures and laboratory exercises, which is a distinct advantage for teaching students with collectivist and high power distance beliefs. Large horticulture programs at other universities may help non-Western students by ensuring at least some classroom activities are conducted in smaller, informal groups.

In new situations, collectivism requires an individual to define the groups to which they belong in order to begin identifying group needs and demands. This manifests itself in the horticulture classroom by individual students assessing their peers using socioeconomic and cultural criteria. These students then typically contribute very little to open-ended classroom discussion, but invest heavily into the cluster they assess to be their socioeconomic peers. A general unease is evident whenever a student from a Western culture freely provides opinions to the entire class, especially if disagreements are expressed openly. Such unease emerges from a non-confrontational attitude that is characteristic of collectivist cultures, and if the students feel compelled to contribute they usually do so privately with the teacher after class (Liu, 2001).

Non-Western students prefer course materials and approaches that help them to fit in with the group. We honour this in the horticulture laboratory structure by allowing the class to democratically decide the types of semester activities that are suitable for achieving the fixed learning objectives. This approach allows these students to feel heavily invested into the goals of the class, and they tend to retain excitement about sustained involvement in those activities throughout the semester. A traditional formal listing of pre-determined laboratory exercises would disallow these initial activities that help non-Western students acquire that sense of supporting the group's goals.

CONCLUSIONS

Effective teaching within a multicultural horticulture classroom demands that the instructor become skilled at avoiding the tendency to adopt a one size fits all strategy in teaching style. Teacher-student and student-student interactions facilitated by the teacher must be fluid enough to respect the learning style that best fits each student, and that is defined by the family and culture that nurtured them. Two important characteristics that impact on learning styles are collectivism and power distance. Horticulture instructors cannot expect non-Western learners to abandon the rules that govern their desired classroom behaviour, as those rules are deeply ingrained into what defines them as an individual. As a result, non-Western students may learn in ways that are poorly accommodated by an approach that requires the oft-expected self-direction and a willingness to disclose. Useful strategies for improving the learning experience for non-Westerners include: instructors' familiarity with students' cultural background and differences in learning styles; a proactive attitude toward integrating such differences in building a positive classroom culture; reorganizing the classroom setting to include small clusters to generate brainstorming and to encourage individual contributions; a keen awareness of special advantages each culture represented might contribute to the learning process; and when necessary, private confrontations with students on issues related to instruction or personal issues.

Literature Cited

American Psychological Association. 2003. Guidelines on multicultural education, training, research, practice, and organizational change for Psychologists. American Psychologist 58:377-402.

Banks, J.A. and Lynch, J. (eds.). 1986. Multicultural education in western societies. Holt,

Rinehart and Winston, London.
Brislin, R.W. and Yoshida, T. (eds.). 1994. Improving intercultural interactions: modules for cross-cultural training programs. Sage, London.
Byars-Winston, A.M., Akcali, O., Tao, K.W., Nepomuceno, C.A., Anctil, T.M., Acevedo, V., Benally, N. and Wilton, G. 2005. The challenges, impact, and implementation of critical multicultural pedagogies. p.129-147. In: C.Z. Enns and A.L. Sinacore (eds.), Teaching and social justice: Integrating multicultural and feminist theories in the classroom. American Psychological Association, Washington, DC.
Enns, C.Z. and Sinacore, A.L. (eds.). 2005. Teaching and social justice: Integrating multicultural and feminist theories in the classroom. American Psychological Association, Washington, DC.
Gollnick, D.M. and Chinn, P.C. 1990. Multicultural education in a pluralistic society. 3rd ed. Macmillan, New York.
Goodman, N.R. 1994. Intercultural education at the University level: Teacher-student interaction. p.129-147. In: R.W. Brislin and T. Yoshida (eds.), Improving intercultural interactions: modules for cross-cultural training programs. Sage, London.
Hofstede, G. 1980. Culture's consequences: International differences in work-related values. Sage, Beverly Hills, Calif.
Hofstede, G. and Hofstede, G.J. 2005. Cultures and organizations: Software of the mind. McGraw-Hill, New York.
Kim, U., Triandis, H.C., Kagitcibasi, C., Choi, S. and Yoon, G. (eds.). 1994. Individualism and collectivism: Theory, method and applications. Sage, Thousand Oaks, Calif.
Liu, J. 2001. Asian students' communication patterns in U.S. universities: An emic perspective. Ablex Publishing, Westport, Connecticut.
Markus, H.R. and Kitayama, S. 1991. Culture and the self: Implications for cognition, emotion and motivation. Psychological Review 98:224-253.
Rogers, R.F. 1995. Destiny's Landfall: A History of Guam. University of Hawai'i Press, Honolulu.
Sleeter, C.E. and Grant, C.A. 1987. An analysis of multicultural education in the United States. Harvard Educational Review 57:421-444.
Smith, W.A. Altbach, P.G. and Lomotey, K. 2002. The racial crisis in American higher education. SUNY Press, NY.
Smith, K.D., Smith, S.T. and Twaddle, I.K.B. 1998. How Micronesian students learn skills for personal adjustment. p.203-221. In: J.J.F. Forest (ed.), University Teaching: International Perspectives. Garland Publishing, New York.
Xiao, L. 2006. Bridging the gap between teaching styles and learning styles: A Cross-cultural perspective. Teaching English as a Second Language Electronic J. 10(3) (http://tesl-ej.org/ej39/a2.pdf).