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INTEGRATING CROSS-CULTURAL ELEMENTS
INTO WORKFORCE EDUCATION CURRICULUM DESIGN

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INTEGRATING CROSS-CULTURAL ELEMENTS INTO WORKFORCE EDUCATION CURRICULUM DESIGN

Abstract

Enrollment in U.S. universities and colleges is reflecting a more diverse student body. This diversity requires that academic departments revisit their curricula for adequately addressing the needs of students from different cultures within their programs. One such academic department is Workforce Education and Development (WED), which prepares students for highly technological and knowledge-based occupations of the diverse 21st Century workforce. A main mechanism for partly meeting such diversification is to modify an existing curriculum to accommodate the multicultural backgrounds of students. In this theoretical article, the authors reviewed research and literature on instructional systems design as well as cross-cultural issues for international students in higher education. The article presents the authors' conclusion that there is scope for integrating cross-cultural elements into general workforce education curriculum design and proposes a theoretical framework based on social cognitive theory and the instructional design model for effecting this integration.

Introduction

Adult educators and trainers in Workforce Education and Development (WED) should be equipped to handle the growing diversity among the U.S. student body. In a report entitled *Educating for Global Competence: America's Passport to the Future*, published by American Council on Education in 1998, the author emphasized the importance of diversifying American higher education curricula, exchange, and cooperation programs for internationalization. A diversified curriculum can expand students' knowledge base of the world beyond borders, improve foreign awareness of American institutions and values, and help develop a globally literate citizenry and workforce for today's global economy. According to Gray and Herr (1998), workforce education is offered at the prebaccalaureate level and has two missions: "to promote individual opportunity by making students more competitive in the labor force ... to make a nation economically strong and firms internationally competitive by solving human performance problems...." (p. 4). Further, one of the important goals of higher education is "to prepare

culturally competent individuals to work effectively with people from different background” (Zhao, Kuh, & Carini, 2005, p. 209). As such, workforce education must respond to the knowledge revolution of the 21st Century, which demands highly skilled professionals who can adapt to the changing pace of technology in a diverse workforce (Grubb & Lazerson, 2005; Merriam & Brockett, 1997).

A study by Zhao, Kuh, and Carini (2005) reported that U. S. international student enrollment, the largest worldwide, was approximately 550, 000 in 2001, an increase of 6.4% over 2000. This figure represented the greatest increase in any one year over the last two decades. However, after the 2001 terrorist attacks (see Figure 1), international student enrollment increased by only 0.6 percent in the academic year 2002-2003 due to tightened visa procedures (CNN, 2003). More recently, U.S. international student enrollment slowly decreased by 2.4 percent in the academic year 2003-2004 and 1.3 percent in 2004-2005, according to the annual report of *Open Doors 2005* published by the Institute of International Education, with support from the State Department’s Bureau of Educational and Cultural Affairs. Recent statistics showed the breakdown of the total 565,039 international students in the U.S. as follows: Asian students represented 58.0%, followed by Europeans (12.7%), Latin Americans (12.0%), Africans (6.4%), Middle Eastern students (5.5%), and North American and Oceania students (5.1%) (Institute of International Education, 2005).

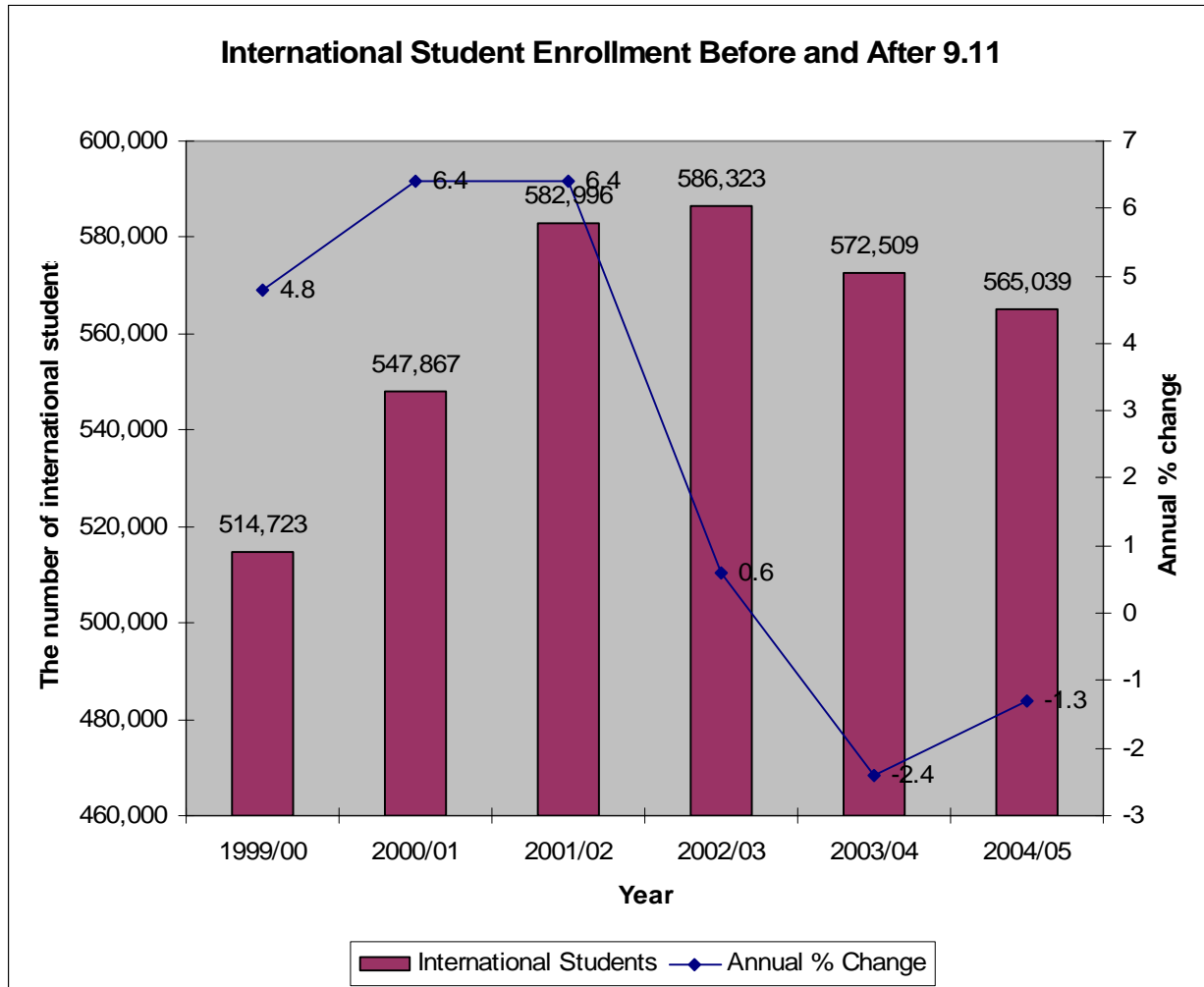


Figure 1. International Student Enrollment Before and After 9/11

SOURCE: Institute of International Education (2005). *Open Doors 2005-Report on International Educational Exchange: International student and total U.S. enrollment*. Retrieved on Feb. 23, 2006, from <http://opendoors.iienetwork.org/?p=69692>

Khafagi (1990) reported that foreign student enrollment provided a vital source of revenue for many U.S. universities and colleges. Through their spending on tuition and various living expenses, international students contributed approximately \$13.3 billion dollars to the U.S. economy, and thus, U.S higher education was described by the Department of Commerce as the country's fifth largest service sector export (Institute of International Education, 2005). Though the number of international students decreased slightly, the United States continues to be the host

nation for the largest body of international students. However, tough immigration rules and increasing higher education quality of other countries present a challenge for the United States is now attract more international students and remain the best place in the world to pursue higher education.

There were approximately 1,200 international students at Southern Illinois University Carbondale (SIUC) in 2005, which represents 5.6 percent of the total student population (Institutional Research & Studies SIUC, 2006). Harre (1995) surveyed 250 international students at SIUC to determine the causes and effects of the problems encountered by international students in orientations, social/ personal relations, living/dinning, health services, student activities, financial aid, placement, and international students administration and services. A key finding of the study revealed that more efforts should be contributed to research associated with the relationship between international students' academic achievement and curriculum design.

In this light, the authors of this article, who are workforce education doctoral students (from the developing countries of China and Trinidad and Tobago), were prompted to revisit the adequacy of workforce education curriculum design for meeting the educational needs of international students. Currently, there are 15 graduate-level international students, which represent 5.3 percent of total graduate students, in the Department of WED at SIUC. A reputable course text on workforce education explained that workforce education curriculum design should initially identify “who will be served, in what manner, and for what purpose” (Gray & Herr, 1998, p. 143). This first step provides a platform for taking further critical decisions on subject matter content and instructional design for the curriculum. This approach to curriculum design is also taught in the WED department at Southern Illinois University, the largest among academic

departments for training, education, and development in U.S. higher education institutions (Southern Illinois University, 2004).

The researchers believe that the provision of a workforce education curriculum design that accommodates for the diverse backgrounds of international students will be a critical success factor in meeting their needs as future adult educators and trainers of the 21st century. A proven strategy for making such a provision is the integration of cross-cultural elements into the training design, as recommended by Kim (1999). Kim refers to cross cultural as

The intellectual process by which two or more cultural groups are compared (Motorola, 1993) as well as an incorporation of information and values of a second culture on an equal basis with the original culture (Marquardt & Reynolds, 1994). (p. 8)

The cross-cultural elements suggested in this paper for integration into general workforce education curriculum design are language competence, value differences, student expectations, cultural adjustment, and motivation. These key elements were selected from Kim's recommendations for designing instruction for learners with different cultural backgrounds. Kim argued that these were among the essential elements in analyzing learner characteristics and cultural context for teaching across cultures. Shunk (2004) supported a similar view that such elements helped teachers to choose the best strategies for delivering instruction. The purpose of this article is to examine cross-cultural factors in the teaching and learning process for international students and proposes two models for integrating cross-cultural elements into workforce education curriculum design and instructional delivery.

Method

In developing this paper, the authors analyzed existing theories on Instructional System Design (ISD) models and Social Learning Theory (SLT). This analysis provided the theoretical foundation for proposing the two following models: (1) Integrating cross-cultural elements into

WED curricula and (2) Ensuring learning effectiveness for integrating cross-cultural elements.

The authors used a theoretical approach in drawing on existing literature to advance theory in the areas of instruction and curriculum design for WED. Reference sources included peer-reviewed journals (print and electronic), professional websites, brochures, and books.

Cross-Cultural Factors Impacting on Learning

Language competence is a major factor in teaching and learning for international students. This factor impacts on American students who are taught by international teaching assistants and international students who are taught by American instructors. Khafagi (1990) pointed out that while some international students are required to pass the Test of English as a Foreign Language (TOEFL), it does not test their ability to speak the English language. Subsequently, they may have difficulty understanding American instructors as well as developing a rapport with their American students, which can act as a barrier to teaching and learning. International students who come with a British schooling and speak English as a first language also have difficulty making the transition from British to American English. There is an initial shock to find English words like “behaviour,” “programme,” and “organisation” marked off on written assignments, which in American are spelled “behavior,” “program” and “organization.”

Another key consideration in learning for international students is the awareness of value differences among cultures. In a case study conducted by Motorola University, renowned for its global approach to training and education, Kim (1999) noted that Americans value highly the sports of football and baseball. Such examples are sometimes used in teaching and create learning barriers because they are not always familiar to international students (e.g., Chinese and Latin American). Further, Kim pointed out that the role of the instructor is highly respected in Asian cultures (e.g., Chinese and Korean). Consequently, these students would not challenge an

instructor to use varied examples in teaching. Cushner and Brislin (1997) contended that engaging students in learning activities which required them to have experiences outside of their own cultures makes it difficult for them to grasp the meaning in such activities. Moreover, Asian students, who represent over 50% of the foreign students on U.S. campuses, prefer more structured lecture-type instruction with less class discussion and peer group interaction (Kim, 1999). Again, the latter is very important in the American culture for building self-efficacy but can be taken as a digression in learning for students from different cultures. American instructors should be aware of these value differences and give international students more time, opportunities, tolerance, and illustrations to help them overcome these barriers and achieve stated learning outcomes.

Many international students come with high expectations of receiving quality education as high-paying customers in U.S. universities and colleges. However, the authors have heard many international students complained of the low teaching quality of some classes they had taken. These complaints mainly focus on how they couldn't follow instruction and often feel lost in classes. Besides the teachers' qualifications and international students' language proficiency level, Poyrazli (2005), and Chang (2004) found evidence to suggest that international students also have difficulties in understanding classroom instruction, participating in classroom discussions, or figuring out the professor's expectations.

Cultural adjustment and motivation are two other important factors impacting on the success of the teaching and learning experience for learners from different cultures (Kim, 1999). When faced with the reality of an "all American" education, feelings of alienation and disenchantment surface, causing some demotivation toward learning. Zhao, Kuh, and Carini (2005) suggested that such conflicting feelings could deter students from participating in learning

activities that contribute to their successful completion of college. Likewise, overcoming the initial culture shock of adjusting to a new learning environment could also be challenging (Cushner & Brislin, 1997). In a related instance, one author observed an instructor in a computer lab frequently placing his foot on top of his work table in front of the classroom and propping his elbow on his knee during classroom delivery. While this was quite acceptable in the American culture, as the posture connotes friendliness and informality, it would be considered impolite and distracting for some international students.

Therefore, for the classes with international student enrollment, using examples and case studies in international contexts would be appropriate coupled with required training in multicultural communication and cross-cultural sensitivity for faculty. Khafagi (1990) conducted an informal survey of graduate engineering faculty proposing to restructure a university's engineering curriculum to facilitate the needs of the large number of foreign students, who filled the engineering program. He argued that while engineering principles were universal, engineering practice was influenced by the cultural and social norms of a country. Though 86% of the faculty members disagreed with the idea of revising the curriculum content, they agreed on integrating case studies and examples specific to developing countries represented by the international students in the program. In addition, the gender, age of the instructor, and instructional design significantly influenced cultural sensitivity changes (Brown, 1998). Therefore, to successfully accommodate international students in the American classroom, the cross-cultural element should be considered when designing WED curricula, choosing diverse teaching and learning pedagogies and learning materials. However, such cross-cultural elements neither mean that instructors should change their way of teaching totally nor need to modify curricula completely.

Integrating Cross-Cultural Elements in WED Curriculum Design

The administrators and teachers in higher education need to put more effort and resources into integrating cross-cultural elements in curriculum design. There are several reasons contributing to their limited support for such integration, according to Li (1992). Some administrators or instructors do not perceive a need for integrating cross-cultural elements into curriculum design, as they lack the know-how to do so and unsure of the effectiveness of such integration. Poon's (1996) research in training also supported Li's view and pointed out that there was no agreement on the most effective cross-cultural training methods because the element of individual trainee was not considered in instruction design. In addition, there is a perception that cultural issues are not consistent from one semester to another, since international students come from different countries and change every semester. Furthermore, Li (1992) identified the lack of funds and time for learning how to combine and actually integrating cross-cultural elements with curriculum design as other major constraints. As a result, few research studies have been done to address the needs of non-American students in curriculum design in the U.S.

Curriculum Design and Instructional Design Models

The integration of cross cultural elements into curriculum design is an imperative with the increasing concerns on educational quality of international students and by extension, cross-cultural issues. Curriculum design addresses what learning materials and contents should be included in learning activities, while instructional design emphasizes how to deliver the curriculum to students effectively. Applying instructional design models to analyze, design, create, and evaluate guided learning can serve as conceptual, management, and communication tools for curriculum delivery (Gustafson & Branch, 2002). In this research, the authors will

explain which cross-cultural elements should be considered and how to integrate them into curriculum design by using a modified instructional design model.

According to Gustafson and Branch (2002), all instructional development processes should include five core elements: analyze, design, develop, implement, and evaluate (ADDIE) (see Figure 2), but "there remains a need to indicate how to practice particular elements of instructional development process in specific contexts" (p. 22).

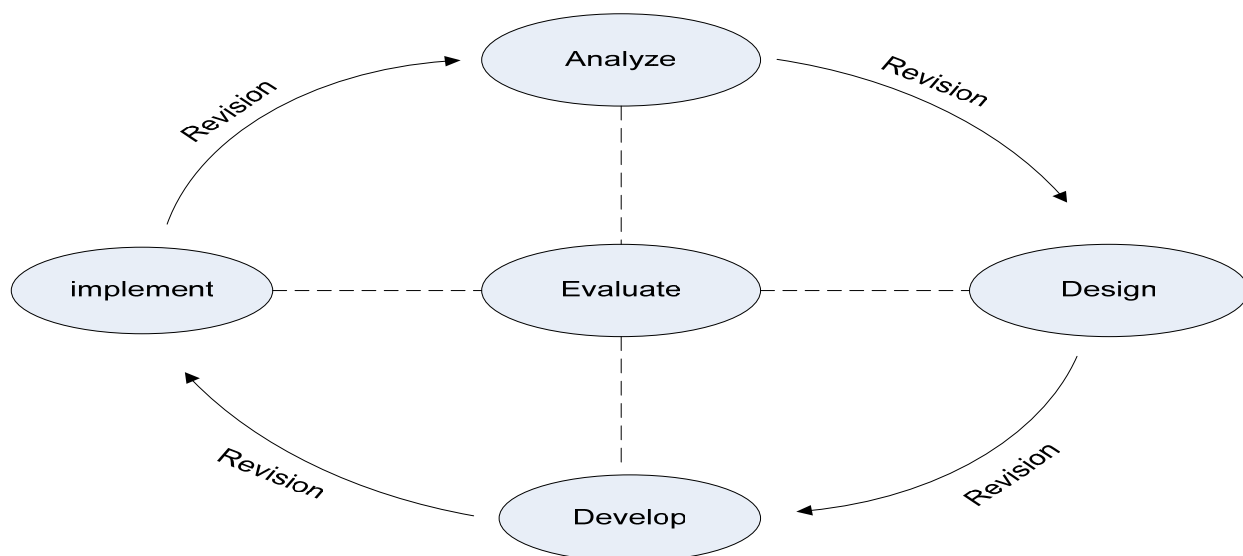


Figure 2. The Core Elements of Instructional Design Models

Source: Gustafson, K. L., & Branch, R. M. (2002). Survey of instructional development models (4th ed.). Syracuse, NY: ERIC Clearinghouse on Information and Technology. p. 23

Schunk (2004) supported the view that motivation is influenced by cognitive activity and that context is an inherent part of learning. Integrating cross cultural elements into curriculum focuses mainly on situated learning and motivation of learners for improving learning effectiveness within a diverse cultural context. Therefore, to integrate cross-cultural issues into curriculum design, the five core elements of the instructional process, the particular cross-

cultural elements, and contextual issues should be included in our proposed instructional design model.

Many instructional design models appear somewhat complicated and time consuming for modifying an existing course or curriculum for integrating cross-cultural elements. For example, Gray and Herr (1998) stated that there were two models that can be used for curriculum design. One is competency-based education (CBE) and another is instructional system design (ISD). Gray and Herr further stated that the CBE model related more to job task analysis and outcomes while the ISD model addressed more performance gaps in the workplace and was also frequently used by instructors in higher education for curriculum design. However, since both CBE and ISD models are used for designing, developing, and implementing new instruction rather than modifying or changing an existing instruction, these two models are too complicated and harder to implement for integrating cross-cultural elements into a workforce education and development curriculum.

Kim's studies of using ISD model to develop a new cross-cultural training program are inspiring for this research. According to Kim (1999), an instructional systematic design model used in integrating cross-cultural elements in curriculum design served four purposes: (a) To improve learning and instruction using a systematic method, (b) to enhance the management and instructional design and development, (c) to evaluate the process of curriculum design and ensure the quality of curriculum, and (d) to examine learning theory. When searching or creating an instructional development model to integrate cross-cultural elements into an existing curriculum, the above goals can also be applied to examine the effectiveness and usefulness of the instruction model.

A Proposed Model for Integrating Cross-Cultural Elements

Gustafson & Branch (2002) used a taxonomy to classify instructional models into three categories: (a) Classroom oriented models for developing one or a few hours of individual classroom instruction, (b) product oriented models for developing self-instructional or instructor-delivered package, and (c) system-oriented models for developing a course or entire curriculum. This classification gives researchers a clear direction to search well-matched models for integrating cross-cultural issues into an existing curriculum.

Instructional design professionals should be able to employ a variety of instructional design models to fit specific situations. Gustafson and Branch (2002) believed that “no single instructional design model is well matched to the many and varied design and development environments in which ID personnel work” (p. 16). Among the models summarized by Gustafson and Branch, classroom oriented models fit integrating cross-cultural elements into an existing curriculum most, since instructors can select instead of develop appropriate cross-cultural materials and integrate them into the existing curriculum easily. In addition, integrating cross-cultural elements requires low level needs assessment since the nationalities of international students are obvious.

In this case, one classroom oriented instructional models called ASSURE was developed by Heinich, Molenda, Russell, and Smaldino and is widely used to adapt college text on instruction media and technology by teachers. ASSURE is the acronym for Analyze learners, State objectives, Select media and materials, Utilize media and materials, Require learner participation, and Evaluate and revise (Gustafson & Branch, 2002). It will be used as one of the basic models to integrate cross-cultural elements into an existing curriculum. However, since most instructors are not subject matter experts in cross-cultural issues, much team effort and communication between instructors and subject matter experts are necessary when integrating

cross-cultural elements into curriculum. As such, a system-oriented model called the Gentry Instruction Product Development and Management (IPDM) model is combined with ASSURE.

For integrating cross-cultural elements into an existing curriculum, the ASSURE model is very convenient, feasible, and efficient due to its simplicity and flexibility. ASSURE, it is argued, is not a complete and formal instructional model (Gustafson & Branch, 2002), but by combining it with IPDM model, cross-cultural elements can be integrated into an existing curriculum thoroughly and systematically.

Therefore, the ASSURE model and IPDM model are modified and integrated to fit the redesigning of existing WED curricula for integrating cross-cultural elements. The model in Figure 3 shows how cross-cultural elements can be integrated into curriculum and instruction design by using a modified model.

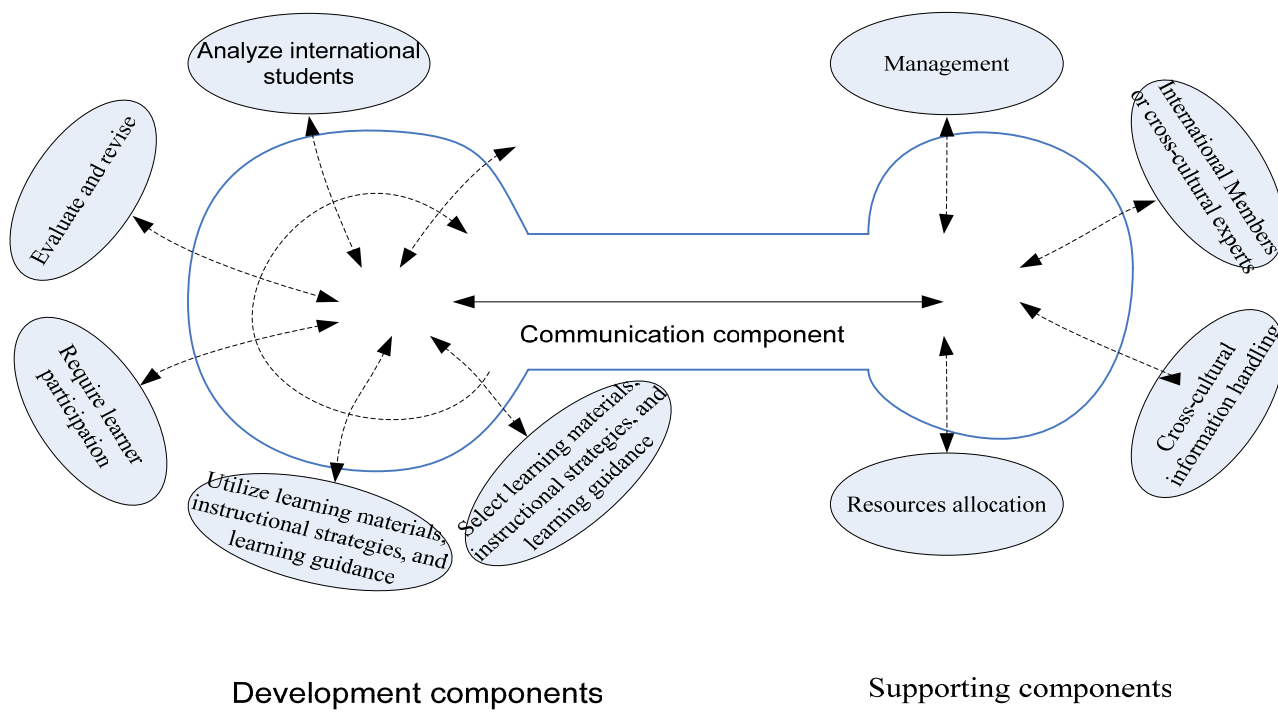


Figure 3. The Modified Model for Integrating Cross-Cultural Elements

The model in Figure 3 includes development components and supporting components. By using a communication component, these clusters of components are connected. The development components include: (a) Analyze international students, (b) state objectives, (c) select learning materials, instructional strategies, and learning guidance, (d) utilize learning materials, instructional strategies, and learning guidance, (e) require learner participation, and (f) evaluate and revise. The five core elements of instructional design, analyze, design, develop, implement, and evaluate are modified and represented by those development components.

Analyze international students. In this phase, the entry characteristics of international students should be analyzed (Gustafson & Branch, 2002). The following specific factors related to international students should be considered: country background information (history, language, and religion), cultural orientation (cognitive styles, value system (locus of decision making, sources of anxiety reduction, issues or equality/inequality), punctuality, and protocol (greeting, titles, gestures, dress) (Morrison, Conaway, & Borden, 1994). In addition, international students' learning styles (anxiety, aptitude, visual and auditory preference, etc.) and learning processes should be considered. In the supporting components, international faculty members and senior international students can serve as subject matter experts, and they usually can provide some help when analyzing learners' needs. The instructor can also accumulate some cross-cultural related information by themselves or from external resources.

State objectives. In this step, the designer should specify desired outcomes related to cross-cultural issues in clear and measurable terms. However, a rationale for the objective should be included. Each objective should include the task or observable action, standard/criterion, and

conditions or environment. The instructor should also communicate with learners the intent of the instruction.

Select learning materials, instructional strategies, and learning guidance. The designer should select relevant culture-related learning events and activities. For example, some internationally recognized examples, case studies, and images can be selected to address cross-cultural factors. In addition, some specific instructional strategies (e.g., demonstrating a video clip of a cross-cultural example) and learning guidance associated with those learning materials should be selected to motivate students and attract their attention. Learning guidance including repetition of key concepts, review, summary, practices, glossary building, and eliciting performance should be designed to improve cross-cultural retentions and productions.

Utilize learning materials, instructional strategies, and learning guidance. An instructional plan should be developed and instructional materials, classroom setting, instructor, and staff should be ready. Since the instructor plays a central role in delivering most instruction, the instructor will teach, coach, and facilitate all students in addressing cross-cultural related factors for the existing curriculum.

Require learner participation. For actively involving learners, the instructor should require all students to participate in cross-cultural related learning activities. This will allow for application and transfer of knowledge, skills, and attitudes to diverse settings.

Evaluate and revise. The evaluation can be used as feedback, control, promotion, and so on. During the whole process of integrating cross-cultural elements into an existing WED curriculum, every stage will be evaluated to make sure that cultural integration actually occurred and the learning objectives were met. Revision should be planned when a discrepancy exists

between intended and actual outcomes. Informal formative evaluations should be used to evaluate the improvement of cognitive skills, affective adjustment, and learning performance.

Supporting components. It is recommended that international members or cultural issues experts should be included in the design team (Kim, 1999; Clark, 1995). The support components are composed of management, international members or cross-cultural issues experts, cross-cultural information handling, and cultural-related resources allocation.

Management is responsible for controlling, coordinating, integrating, and allocating resources to achieve cultural integration goals. International members or cross-cultural issues experts will be hired, trained, assessed, motivated, and counseled depending on the needs of curriculum design. Information handling is a process by which the curriculum developer selects, collects, generates, organizes stores, retrieves, distributes, and evaluates information required for the curriculum design with cross-cultural integration. Resource allocation is a process for determining resource needs, allocating and distributing cross-cultural resources among curriculum developers (instructors), international members and cross-cultural issues experts (Gustafson & Branch, 2002).

The following is an example indicating how to apply this model to workforce education curriculum design with cultural integration: Perkins legislation is an important legislation which is often mentioned or discussed in the classes of workforce education. However, it is difficult for most international students to understand it, since Perkins legislation reflects particular American values such as efforts to integrate academic curricula into vocational education and reduce gender equity. If an existing curriculum includes the discussion of Perkins Act III in a class with diverse students, the instructor should be sensitive in integrating cultural background information and values represented by Perkins Act into curriculum and instruction design.

The instructor has to conduct an analysis for the target audience if international students are enrolled into this class. The senior international students and cross-cultural faculty can be very helpful for understanding cultural differences. The book titled *Kiss, Bow, or Shake Hands: How to do Business in Sixty Countries* can be a great resource to identify language, value differences, expectations, cultural adjustment problems, learning styles and motivation of international students toward this legislation. To address these cross-cultural learning issues, learning materials, instructional strategies, and learning guidance activities should be selected. It is better if cross cultural expert(s) can be involved in the curriculum development project. Based on the analysis of international students, the instructor may change or redesign the learning objectives for Perkins legislation. New instructional strategies or teaching tools and materials such as video tapes and handouts on background knowledge of the legislation can be selected to enhance international students' understanding of the Perkins legislation. After implementation, based on the evaluation of students' comprehension in the knowledge content, critical thinking skills, and affective adjustment, the instructor can improve the curriculum for later use.

The modified model can be used to redesign every individual class for an existing curriculum or entire course. However, when integrating cross-cultural elements into an existing WED curriculum, one should keep in mind that the learning activities of WED courses will still mainly focus on the existing curriculum itself.

Ensuring Learning Effectiveness for Integrating Cross-Cultural Elements

In order to ensure that learning is effective in integrating cross-cultural elements into curriculum design, another model is proposed based on Black's cross-cultural training model and Bandura's Social Learning Theory (SLT) (Schunk, 2004; Gredler, 1997). In the article entitled *Cross-cultural training effectiveness: A review and a theoretical framework for future research*,

Black and Mendenhall (1990) conducted a comprehensive literature review and established a theoretical framework for cross-cultural training. Based on empirical researches with rigorous research designs, Black stated that three dependent variables in a cross-cultural setting: cross-cultural skill development, cross-cultural adjustment, and performance have positive relationships with the effectiveness of cross-cultural training. Therefore, Black and Mendenhall implied that social learning theory is generally accepted by educational theorists on most aspects of learning. They concluded that social learning theory already became a leading theory framework for management training in the U.S. and could also be used as a fundamental theory to understand cross-cultural learning and teaching.

According to Bandura (1977), "Social learning theory approaches the explanation of human behavior in terms of a continuous reciprocal interaction between cognitive, behavioral, and environmental determinants" (p. vii). Integrating cross-cultural learning involves the changes of cognitive knowledge, behaviors, and attitudes in diverse cultural settings. Schunk (2004) emphasized that in Bandura's SLT, individuals' learning is shaped by the interaction of their behavior, cognition, personal factors, and environmental events. The model in Figure 4 is an adaptation of the SLT process for effecting learning in a curriculum with cross-cultural elements.

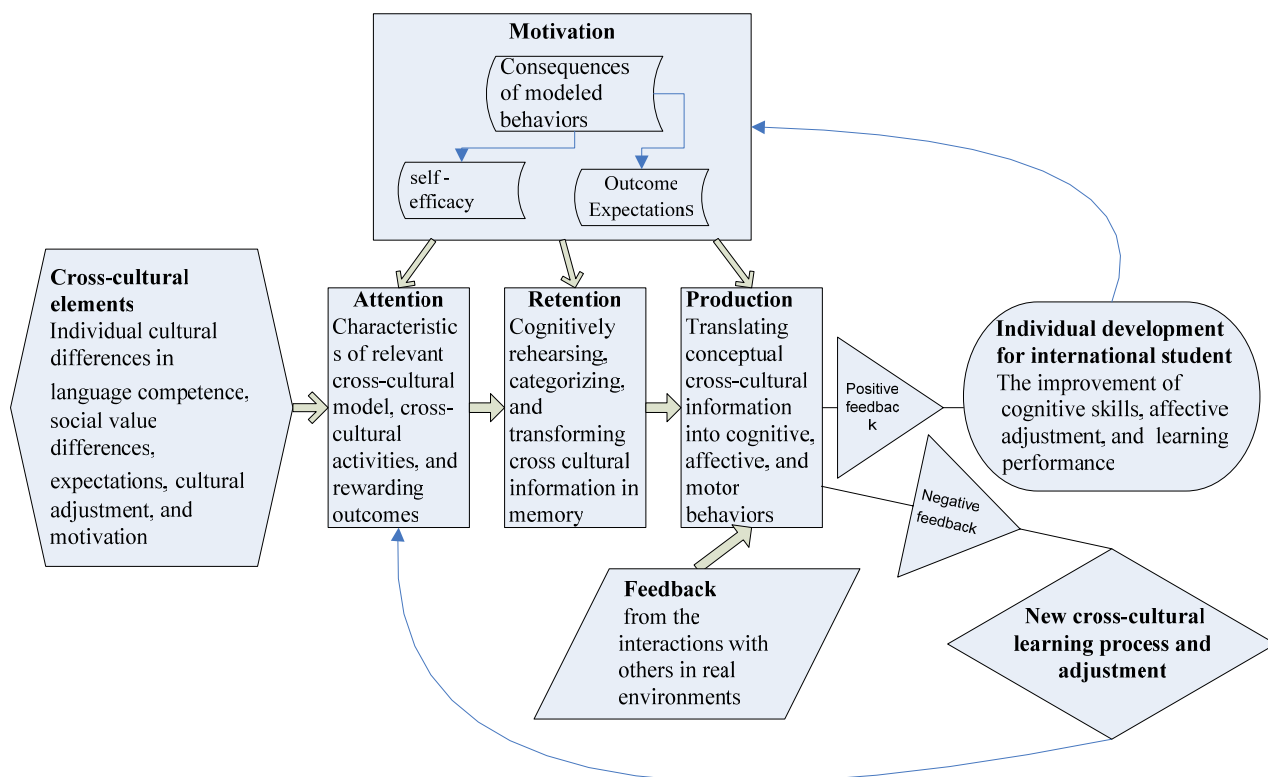


Figure 4. An Adaptation of SLT for Effecting Learning

Using Integrated Cross-Cultural Elements in Curriculum

This model takes into account the individual differences in language competence, social value differences, expectations, cultural adjustment, and motivation. During implementation, the instructor starts the model when he/she encounters or becomes aware of cross-cultural factors which influence learning effectiveness for international students. The interest of American students could also be aroused by exposing cross-cultural issues embedded in WED curriculum. According to this model, attention, retention, production, and motivation are four subprocesses of cognitive learning to ensure the effectiveness of implementing the curriculum integrated with cross-cultural elements. In social learning theory, modeling is an important concept which

“refers to behavior, cognitive, and affective changes deriving from observing one or more models” (Schunk, 2004, p. 88). Gredler (1997) and Schunk (2004) also confirmed that the cognitive learning process is one of most important functions of modeling and play a central role in learning. The subprocesses of learning through modeling include attention, retention, motor reproduction, and motivation (Bandura, 1977; Schunk, 2004).

The subprocess of attention helps learners notice the cross-cultural issues. Several factors influence the attention process. These include cross-cultural model, the attractiveness of cross-cultural activities, the similarity of cross-cultural examples/models with individual’s background, and the potential rewarding outcome (Black & Mendenhall 1990; Kim, 1999). If the learner is interested in cross-cultural activities, or finds that the cross-cultural examples are similar to his/her cultural background, or realizes that the learning can raise self-efficacy and provide other rewarding outcomes, he/she will pay enough attention to the cross-cultural activities. This aspect of learning is of paramount importance to WED instructors so as to avoid them losing their international students’ interest in course content.

In retention subprocesses, the modeled behavior becomes encoded as a memory (Black & Mendenhall, 1990). In this process, learners cognitively rehearse, categorize, and transform cultural information in memory. Once in memory, the images of cross-cultural models will enable the learner to store them into concept maps. The learner will also imitate the real situation cognitively and rehearse the learning in his/her mind. Finally, the learner will categorize or organize what he/she learned and transform it into verbal system and store in memory.

Production is the process by which the learners translate conceptual cross-cultural information into cognitive, affective, and motor behaviors. In this process, the learners imitate the behavior models/examples against the conceptual cross cultural information stored in their

memory. When learners experience cross-cultural interactions in the real setting based on what they have learned, others in the environment will provide some feedback to them. If the feedback is positive, it will enhance the learners' behaviors and transform the behaviors into cognitive skills, affective adjustment, and learning performance. However, if the feedback is negative, the learners have to go through the next cognitive learning circle to check what they have learned and adjust their behaviors to fit the new situation and environment (Black & Mendenhall, 1990).

After interaction in the environment, if the learners are capable of performing cultural behaviors correctly, they will be able to improve their language competences, enhance adjustments of expectations, tolerate different social values, and accommodate cultural environment given that cross-cultural elements are integrated into the curriculum correctly. That is, the progress in cognitive skills, affective adjustment, and learning performance will occur. In SLT, learning and performance are two separate events as professed by Bandura, who stated that "individuals acquire internal codes of behavior that may or may not be performed later" (Gredler, 1997, p. 279).

Individual development in cognitive skills, affective adjustment, and learning performance can create better self-efficacy and increase outcome expectations and thus further motivate the individual to learn more. Bandura (1977) defined self-efficacy as "the conviction that one can successfully execute the behavior required to produce the outcomes" (p. 79). According to Bandura (1977), self-efficacy can come from four resources: mastery experiences, vicarious experiences, social persuasion, and physiological and emotional states. Among these resources, mastery experiences can provide the most accurate predications about an individual's possible successes for completing tasks (Gredler, 1997). Therefore, the individual's improvement in cognitive skills, affective adjustment, and learning performance can be a

valuable experience to create new motivation. Thus, motivation has a huge impact through the whole cognitive learning process. The motivation comes from the consequences of behaviors which include vicarious consequences, and self-imposed consequences and interaction of vicarious consequences. Vicarious consequences refer to “those that are associated with the observed behaviors of others” (Gredler, 1997, p. 282). However, self-imposed consequences and interaction of vicarious consequences are related to the direct consequences the environment contributes to performance. The research conducted by Poon (1996) proved that trainees' cross-cultural attitudes, self-efficacy, and reaction are more positive if the selected training method can match trainees' learning styles than when it does not. In addition, after receiving training, trainees demonstrated more positive cross-cultural attitudes (Poon, 1996).

The teaching and learning of Perkins legislation can apply this model to enhance the learner performance. In a class with several international students, the instructor should be aware of culture-related issues or differences with the legislation for students from the countries other than the United States. A discussion of educational legislations in their home countries can arouse international students' interest and attention to the cultural differences. In addition to the instructor's presentation, some background information presented in videos and handouts can be the powerful supplement to retain the information delivered. Technology integration, which is a must for today's highly technical business environment, can also be used effectively in capturing students' interest on this legislation. International students should be able to develop critical thinking skills and deep insight of Perkins legislation through the above activities. They may apply these cognitive skills and knowledge in their real projects or researches to have a good understanding the U.S. educational system.

According to Li (1992), a deep thorough cross-cultural training program should apply cognitive, affective, and experiential methods in its design. The above model starts with acquiring cognitive information then transfers conceptual information into behaviors, and finally helps individuals improve their performance (cross cultural cognitive skills, cultural adjustment, and learning performance). In effect, a WED instructor can apply this model to the teaching-learning situation by helping both American and international students experience learning activities in a cultural context. In this way, there is less chance of learning barriers for international, which will contribute significantly to them achieving academic success.

Conclusions and Recommendations

The review of the research and literature suggests that foreign student enrollment in U.S. colleges in universities would require a more “inclusive” curriculum to cater to the cultural differences among students. In addition, social learning theory and instructional system design are most effective in adapting models for integrating cross-cultural elements into workforce education curriculum design. The models presented can also be modified to suit other academic departments apart from WED within higher education institutions. An underlying principle in social learning theory is that learners are more motivated to learn and retain information when it is situated within their cultural context (Gray & Herr, 1998; Schunk, 2004). However, such curriculum modification would require administrators and faculty to commit time, effort, and resources for effective implementation.

Integrating cross cultural elements in workforce education curriculum design can be beneficial to international students, American students, and WED educators and trainers. For international students, the inclusive curriculum would provide equity and allow for an enhanced transfer of knowledge and skills to diverse settings. Such inclusiveness can also motivate them to

be more actively involved in learning activities. As a result, international students would be better accommodated in the American higher education system. A diversified curriculum would provide both American and international students with a competitive edge for working in today's diverse global marketplace. Senyshyn (2002) stated that institutions of higher education are a major resource in helping students to acquire international perspectives and intercultural understanding of other countries. The exposure also improves intercultural and language skills by teaching international curriculum in different cross-cultural and multicultural settings. Adult educators and trainers would become more adept at creating culture-friendly curricula and environments that promote learning for all students.

The researchers recommend several applications for the proposed models. The models can be beneficial in the training industry, since ISD models and SLT serve as the primary theoretical foundation for human resource training and development. The two new models presented were developed based on SLT and ISD models. Therefore, these two models can be applied to the training programs dealing with cross-cultural issues in today's diverse workplace.

The researchers also recommend that adult educators and trainers do further research on the merits of different educational and training systems worldwide. For example, WED educators can explore best practices of cross-cultural programs in providing students with broader perspectives for WED curricula, so students do not graduate from their academic program with only an "American" perspective on workforce education.

Diversifying the instructional staff would also help in creating flexibility in content material and instructional delivery for WED courses. According to the model for integrating cross cultural elements into curriculum design, the faculty and staff with international background can serve as cross-cultural experts in developing cross-cultural components for

teaching and learning. They can also separately review cross-cultural curriculum in the curriculum validation process.

Educators should also integrate more technology into learning activities, since the knowledge revolution requires that workers are technically competent to handle the somewhat faceless, paperless, and instant communication of the 21st century workforce. These recommendations should be seen as a sense of urgency in the face of the growing diversity in U.S. workforce and rapid advancement in technology globally.

References

- American Council on Education. (1998). *Educating for global competence: America's passport to the future*. Washington, DC. (ERIC Document Reproduction Service No. ED421940).
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Black, J. S., & Mendenhall, M. (1990). Cross-cultural training effectiveness: A review and a theoretical framework for future research. *Academy of Management. The Academy of Management Review*, 15(1), 113-136.
- Brown, E. L. (1998). *The relevance of self-concept and instructional design in transforming Caucasian preservice teachers' monocultured worldviews to multicultural perceptions and behaviors*. (Doctoral dissertation, The University of Akron, 1998). Proquest: Dissertations and Theses Database.
- Chang, W. (2004). A cross-cultural case study of a multinational training program in the United States and Taiwan. *Adult Education Quarterly*, 54(3), 174-192.
- Clark, D. (1995). *Introduction to instructional system design*. Retrieved February 23, 2005, from <http://www.nwlink.com/~donclark/hrd/sat1.html#why>
- CNN. (2003, November 3). *International student enrollment slows in U.S.* Retrieved February 20, 2006, from <http://www.cnn.com/2003/EDUCATION/11/03/foreign.students.ap/index.html>
- Cushner, K., & Brislin, R. W. (Eds). (1997). *Improving intercultural interactions: Modules for cross-cultural training programs Volume 2*. California: Sage Publications.
- Gray, K.C., & Herr, E. L. (1998). *Workforce education: The basics*. Boston: Allyn and Bacon.

- Gredler, M. E. (1997). *Learning and instruction: Theory into practice* (2nd ed.). New York: MacMillan.
- Grubb, W. N., & Lazerson, L. (2005). Vocationalism in higher education: The triumph of the education gospel. *The Journal of Higher Education*, 76(1), 2-20.
- Gustafson, K. L., & Branch, R. M. (2002). *Survey of instructional development models* (4th ed.). Syracuse, NY: ERIC Clearinghouse on Information and Technology.
- Harre, P. (1995). *Problems perceived by international students attending Southern Illinois University at Carbondale*. Doctoral dissertation, Southern Illinois University Carbondale, 1995.
- Institute of International Education (2005). *Open Doors 2005-report on international educational exchange: International student and total U.S. enrollment*. Retrieved February 23, 2006, from <http://opendoors.iienetwork.org/?p=69692>
- Institutional Research & Studies, Southern Illinois University Carbondale. (2006). *Quick facts: Students*. Retrieved May 25, 2006, from <http://www.irs.siu.edu/webRoot/factsonline/factsonline1.htm>
- Khafagi, B. (1990). Influence of international students on the U.S. educational system and professional practice. *Civil Engineering*, 60(11), 67-69.
- Kim, H. (1999). *Transcultural customization of international training program*. New York: Garland Publishing.
- Li, L. C. (1992). The strategic design of cross-cultural training programmes. *The Journal of Management Development*, 11(7), 22-29.
- Merriam, S. B., & Brockett, R. G. (1997). *The profession and practice of adult education: An introduction*. San Francisco: Jossey-Bass.
- Morrison, T., Conaway, W., & Borden, G. (1994). *Kiss, bow, or shake hands: How to do business in sixty countries*. Holbrook, MA: B. Adams.
- Open Doors On Line (2004). *Report on international students in the U.S.* Retrieved March 16, 2005, from <http://opendoors.iienetwork.org/?p=50137>
- Poon, J. M. (1996). *Effects of matching learning style and training method on cross-cultural attitudes, self-efficacy, and trainee reaction*. (Doctoral dissertation, University of Maryland College Park, 1996). Proquest: Dissertations and Theses Database.
- Poyrazli, S. (2005). *International students at U.S. universities*. Retrieved February 26, 2006, from http://www.psichi.org/pubs/articles/article_472.asp

- Southern Illinois University Carbondale. (2004). *The competitive advantage in training: Training specialist certificate* [Brochure]. Carbondale, IL: Author
- Schunk, D. H. (2004). *Learning theories: An educational perspective* (4th ed.). New Jersey: Pearson Merrill Prentice Hall.
- Senyshyn, R. M. (2002). *Cross-cultural competencies in international management curricula: A Delphi study of faculty perspectives*. (Doctoral dissertation, University of Tennessee, Knoxville, 2002). Proquest: Dissertations and Theses Database.
- Zhao, C., Kuh, G., & Carini, R. (2005). A comparison of international student and American student engagement in effective education practices. *The Journal of Higher Education*, 76(2), 209-231.