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# Brazilian And Nigerian International Students' Conceptions Of Learning

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## ACCEPTANCE

This dissertation, BRAZILIAN AND NIGERIAN INTERNATIONAL STUDENTS' CONCEPTIONS OF LEARNING, by CAROL ASHONG was prepared under the direction of the candidate's Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree, Doctor of Philosophy, in the College of Education, Georgia State University.

The Dissertation Advisory Committee and the student's Department Chairperson, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty. The Dean of the College of Education concurs.

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BRAZILIAN AND NIGERIAN INTERNATIONAL STUDENTS' CONCEPTIONS OF  
LEARNING

by

Carol Ashong

Under the Direction of Nannette Commander Ph.D.

ABSTRACT

The growth, benefits, and challenges of international students in higher education provide compelling reasons to closely examine the social, cultural, and introspective aspects of learning for this population. One area of research that provides insight into the learning experiences of international students is investigations on conceptions of learning. Previous research has found that conceptions of learning guide primary beliefs, experiences, interpretations, and outcomes of learning. Conceptions of learning also provide insight into the ways students choose to approach learning and influence how they interact with courses, classroom environment, teachers, and peers (Marshall et al., 1999). However, research on conceptions of learning has predominantly been with students from Europe, North America, Australia, and Asia with little attention on other geographical locations such as Africa and South America. The purpose of this study was to

examine Brazilian and Nigerian international students' conceptions of learning while enrolled in an American university. No study to date has investigated Brazilian and Nigerian students' conceptions of learning within the context of the United States, and no other research has examined both groups within the same study. Reflective diaries and interviews reveal an awareness of learning as a process not limited to inside the classroom. Clear themes emerged from both Brazilian and Nigerian students' regarding their conceptions of learning and what constitutes good teaching. Importantly, findings of this study indicate differences and similarities between Brazilian and Nigerian students' ideas about learning and actual learning experiences. Participants generally characterized their learning experiences as challenging and the process of adaptation as difficult. Findings of this study provide valuable information to instructors and international programs regarding academic support and assistance for two growing international populations on American campuses, Brazilian and Nigerian students.

**KEYWORDS:** Sociocultural theory, Higher education, International students, Learning conceptions



BRAZILIAN AND NIGERIAN INTERNATIONAL STUDENTS' CONCEPTIONS OF  
LEARNING

by

Carol Ashong

A Dissertation

Presented in Partial Fulfillment of Requirements for the

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Doctor of Philosophy

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in

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Education

in

the College of Education

Georgia State University

Atlanta, GA  
2014

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## **DEDICATION**

I dedicate this dissertation to my family. My parents; my role models who taught me the value of hard work, persistence, and integrity and whose unconditional love, encouragement, and prayers have been my anchor. My brothers, who have been my inspiration and examples of resilience. My sister-in-law turned sister who has kept me sane through this process with advice and much needed humor. Tymon James, whose smile gave me a reason to not give up when I wanted to. My extended family, who have supported and encouraged me through this process.

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# **1 SOCIOCULTURAL THEORY AND INTERNATIONAL STUDENT LEARNING: A REVIEW OF THE LITERATURE**

Over the years, many learning theories have been developed and examined in the field of psychology and education. Older theories have formed the basis on which contemporary theories have been built and continue to inform our understanding of how individuals learn. As learning theories have evolved, there has been overlap in some of their basic assumptions and distinct points of disagreement. Various theories bring insight to how learning occurs, identify important factors and aspects of learning, and influence how educators design instruction for possible outcomes of learning. Importantly, learning theories have had considerable impact on efforts to understand learning in higher education for specific groups of students. This chapter begins with a discussion on how cognitivism, constructivism, and social cognitivism provide the foundation for the development of sociocultural theory. The social sources of individual thinking, cultural tools in learning and development, especially the tool of language, and the zone of proximal development in sociocultural theory are reviewed (Wang, 2007). The significant role sociocultural theory plays in informing instructional strategies at all levels is also addressed with specific attention to higher education. The chapter then focuses on how sociocultural theory informs our understanding of learning for international students; an increasingly important population in higher education.

## **Foundation of Sociocultural Theory**

Cognitivism was born in the late 1950s and early 1960s as a response to behaviorism, the dominant learning paradigm at the time (Fosnot, 2005; Schunk, 2007). The focus of



behaviorism was observable behavior and the stimuli/response relationship. Many cognitivist theorists critique behaviorism by arguing that learning is not simply reactionary but rather involves complex processes of the human mind such as thinking, problem solving, and memory (Schunk, 2007). Cognitivism was founded on the main assumptions that human memory is an active organized system that processes information and prior knowledge is important in learning (Lilienfeld, Lynn, Namy, & Woolf, 2010). A cognitive perspective defines learning as an internal mental process that focuses on building intelligence and views the individual learner as more important than the environment (Lilienfeld et al., 2010; Schunk, 2007).

The constructivist position that appeared in the 1970s encourages that the cognitivist focus on the mind be taken a step further (Ertmer & Newbie, 2013). Constructivism views students as individuals who build their own knowledge as they engage in interpreting and making sense of their classroom experiences and asserts that no knowledge is independent of the meaning given to it by learners or a community of learners (Hein, 1991). Constructivism, a general term mainly used by educators, philosophers, and psychologists, represents a theory grounded in the research of Piaget and Vygotsky, as well as the philosopher John Dewey (Slavin, 2012). Woolfolk (2010) notes that there is no one distinctive constructivist theory of learning. However, all constructivist theories are built on two fundamental ideas: learners are active participants in constructing their own knowledge, and social interactions play an important role in the knowledge construction process. Piaget and Vygotsky also underlined the social nature of learning and the use of mixed ability learning groups to promote conceptual change (Slavin, 2012).

One main goal of the constructivist approach to learning is to stimulate and understand previous knowledge and help students construct new knowledge; new knowledge is then built on previous knowledge (Wang, 2007). This is based on the belief, which both Piaget and Vygotsky

emphasized, in the importance of previous knowledge that learners bring to new learning experiences. Cognitive change takes place only when previous conceptions and knowledge go through a process of disequilibrium in light of new information, causing students to weigh it against what they already know (Woolfolk, 2012). According to constructivist theory, learners must individually discover and transform complex information that they eventually make their own (Anderson, Greeno, Reder, & Simon, 2000; Fosnot, 2005). An emphasis on students as active learners creates a learning environment where the teacher guides students in discovering their own meaning and knowledge (Noddings, 2008; Zmuda, 2008). Some traditional beliefs about learning are that facts speak for themselves and knowledge is fixed. However, Larochelle and Bednarz (1998) argue that constructivism breaks from and challenges such traditional beliefs by maintaining that the properties and characteristics of both the learner and observer are important and affect how facts and knowledge are received and processed. This argument underscores the notion of responsibility for one's actions. Thus, constructivism pays more attention to what students bring to their learning experience and holds them more accountable for their learning.

In the 1980s social cognitive theory challenged both cognitivism and constructivism by emphasizing the importance of social interactions and the sociocultural context of learning in addition to cognition. Social cognitive theory focuses on a dynamic interactive process among environmental, behavioral, and personal factors to explain human functioning (Bandura 1986; 1997). This theory assigns a central role to cognitive processes in which the individual can observe others and the environment, reflect on that combination with their own thoughts and behaviors, and alter their own self-regulatory functions accordingly (Burney, 2008). Social cognitive theory involves elements of human agency and perceived self-efficacy that contribute to cognitive development and performance (Bandura 1986; 1997). Albert Bandura spearheaded

social cognitive theory with his views that individuals are agents actively involved in their own development. Thus, human learning and functioning is more proactive than reactive and allows the consideration of modifications to students' social environment in order to influence processes and competencies that improve performance (Burney, 2008). Furthermore, other individuals in the environment are influential through observation of their behavior, interactions with them, and reflections about these interactions (Bandura 1986; 1997).

Three important features of social cognitive theories are self-efficacy, vicarious learning, and self-regulation. Self-efficacy involves beliefs and confidence in one's ability to perform any given task. Because individuals are considered proactive agents in their learning, beliefs about their ability are important (Bandura 1986; 1997). Vicarious learning is learning through observing others to determine if a particular strategy being modeled is successful and desirable (Bandura 1986; 1997; Burney, 2008). Essentially, learning is a dynamic process involving the context, the student, and the learning process itself. Thus an individual's ability is not fixed but can be enhanced through cognitive strategies and the environment (Bandura 1986; 1997). Bandura's early social learning theory emphasized modeling and observing others being reinforced or punished for particular behaviors. Over time the theory evolved to include attention to cognitive factors such as expectations and beliefs in addition to the social influences of models (Burney, 2008). Social cognitive theory retains an emphasis on the social role of other people serving as models and teachers, but the theory also includes a cognitive part comprised of thinking, believing, expecting, anticipating, self-regulating, and making comparisons and judgments. Self-regulation is the process of activating and sustaining thoughts, behaviors, and emotions in order to reach a goal (Zimmerman & Schunk, 2011). This theory essentially addresses how social, emotional, cognitive, and behavioral capabilities evolve, how people

regulate their own lives, and what motivates them (Bandura & Locke, 2003).

### **Sociocultural Theory**

Sociocultural theory emerged during the same time as social cognitive theory but presented a theoretical perspective that emphasizes the importance of society and culture in promoting cognitive development. Drawing heavily on earlier work by Lev Vygotsky, sociocultural theory emphasizes that human activities take place in cultural settings and cannot be understood apart from these settings (Woolfolk, 2012). One key idea is that specific mental structures and processes can be traced to interactions with others. Social interactions go beyond simply influencing cognitive development and actually create cognitive structures and thinking processes. Vygotsky conceptualized development as the transformation of socially shared activities into internalized processes (Woolfolk, 2012). Sociocultural theory thus takes a learner-centered approach. Rather than focusing solely on individuals, sociocultural theory takes into account the important roles that social relations, community, and culture play in cognition and learning (Moore, 2004). Sociocultural theory claims learning, thinking, and knowing are relations among people in a socially and culturally structured world and as children mature they become part of other social networks, such as schools, that continue to shape their thinking, learning, and development through social interaction. (Moore, 2004). Three themes in Vygotsky's writings explain how social processes form learning and thinking: the social sources of individual thinking, the role of cultural tools in learning and development, especially the tool of language, and the zone of proximal development (Wang, 2007).

**Social sources of individual thinking.** Vygotsky (1987) emphasized the importance of social interactions because he believed cognitive development takes place first on a social level and subsequently on an individual level. For example, higher mental processes such as directing

one's attention and thinking through problems are first co-constructed through shared activities with other people and then internalized as part of an individual's cognitive development (Gredler, 2009). Social interaction is thus a source of individual thinking, and Vygotsky suggested that children's cognitive development is fostered by interactions with people who are more capable or advanced in their thinking, such as parents and teachers (Moshman, 1997; Vygotsky, 1987). Piaget, on the other hand, believed the interactions most important for cognitive development occur between peers on an equal developmental level who can challenge each other's thinking (Piaget, 1963).

**Role of cultural tools in learning and development.** Vygotsky (1987) believed that there are two kinds of cultural tools involved in children's cognitive development, technical and psychological. Technical tools include rulers, mobile devices, and computers and psychological tools include signs and symbol systems in the form of numbers and sign language. Psychological tools play a very important role because they mediate and help higher-order mental processes such as reasoning and problem solving evolve (Vygotsky, 1987). Thinking is transformed as children gain an increasing mastery of their own cognitive processes, thus children advance their own development as they use psychological tools (Gredler, 2009; Vygotsky, 1987). In fact, Vygotsky believed the essence of cognitive development is mastering the use of psychological tools to accomplish advanced thinking and problem solving (Gredler, 2009). For example, language is a critical psychological tool for cognitive development because it provides a way to express ideas and ask questions. Language also creates categories and concepts for thinking and links between the past and future (Vygotsky, 1987). Vygotsky placed more emphasis than Piaget on the role of language in cognitive development, and he believed that language in the form of private speech guides cognitive development (Vygotsky, 1987; Woolfolk, 2012).

**The zone of proximal development.** The zone of proximal development is a key concept in sociocultural theory. Vygotsky (1987) asserted that children learn very little from carrying out tasks that they can already do independently. Rather, children develop primarily by trying tasks they can be successful at only with assistance. These kind of tasks fall within what Vygotsky named the zone of proximal development. An individual's zone of proximal development includes learning and problem-solving skills that are in the beginning stages of development. Additionally, a person's zone of proximal development sets an upper limit on what they are cognitively capable of learning and changes over time as some tasks are mastered and newer more complex ones take their place (Ormrod, 2012). Vygotsky also pointed out that there are differences in the extent or size of students' zones of proximal development that influence what they can learn above their developmental level with assistance.

### **Instructional Implications of Sociocultural Theory**

For Vygotsky (1987) the main goal of instruction, beyond just giving facts, is the development of higher mental functions through cultural tools that are passed on from one person to another. Cultural tools are used with imitative, instructed, and collaborative learning. Imitative learning occurs when students try and imitate instructors or teachers, instructed learning happens when students internalize the instructions provided by teachers and use this to self-regulate, and collaborative learning occurs when a group of peers endeavor to understand each other and learn in the process (Tomasello, Kruger, & Ratner, 1993). Instructed learning was of great importance to Vygotsky, who believed in direct teaching and constructing experiences and occasions that encourage learning (Woolfolk, 2012).

Additionally, Vygotsky believed adults and peers play a vital role in students' learning processes by providing guidance. A majority of the guidance is communicated through

language but can also be transferred through observation (Schunk, 2008). The idea of scaffolding or assisted learning was borne out of this belief; learners use the help for support while they develop an understanding and grasp a skill or concept that allows them to eventually solve the problem on their own (Schunk, 2008). Scaffolding requires teachers to find out from students what they need, then provide information, prompts, reminders and encouragement in order to allow students to do increasingly more on their own (Schunk, 2008). Vygotsky (1987) advocated that teachers do more than provide and organize an environment for students to learn and discover on their own; rather, teachers should guide and assist students to learn. Vygotsky believed that in basically all cultures children are expected to be involved in some aspect of adult activity to differing degrees, and this involvement is mediated or scaffolded, and supervised through guided participation. Gradual entry into adult activities enables children to participate in behaviors and thinking skills within their zone of proximal development. Furthermore, children tie newly attained skills and thinking abilities to specific contexts that guide them in future contexts where those skills might be useful. As children become more competent they slowly take on a more central role in a specific activity until they are fully independent (Gaskins, 1999; Ormrod, 2012). In the classroom, students should sometimes engage in adult-like activities such as scientific experiments, and teachers should provide what is needed to accomplish these activities successfully and encourage students to use adult language while engaging in these tasks (Ormrod, 2012). Sociocultural theory asserts that to gain a more complete representation of an individuals' cognitive development and abilities, an assessment of both their actual developmental level and their level of potential development is needed. The practice in most classrooms and educational settings is to focus only on students' actual developmental level,

asking students to carry out assignments with no help from anyone else. Dynamic assessment is an alternative approach that seeks to assess not only what students have already learned but also their ability to learn something new, possibly with assistance. The value in this approach is that it provides insight into students' thinking processes and approaches to learning and thus helps guide future instruction (Swanson & Lussier, 2001).

### **Sociocultural Theory and Higher Education**

Sociocultural theory plays an important role in informing instructional strategies at all levels of education, including higher education. Latucca (2002) notes that sociocultural theory is especially useful for learning in higher education research because it enables learning to be conceptualized as rooted in different intersecting contexts. Learning takes place in settings such as classrooms, offices, and laboratories positioned within social and cultural practices of different academic disciplines and also in particular historical and cultural moments in time and space. A sociocultural perspective examines the influence of these different factors to better understand how people learn. Research has argued that sociocultural theory has major implications for three broad components of learning in higher education: assessment, curriculum, and instruction (Gatua, 2013; Scott & Palinscar, 2009). Sociocultural theory encourages the development of collaborative learning activities that enable students to actively engage in the learning process. Research based on sociocultural theory provides evidence for the need for assessment, instruction, and curriculum that is culturally responsive and thus incorporates the diversity of cultures, nationalities, and worldviews in higher education (Caffarella & Merriam, 2000; Delgado-Gaitan & Trueba, 1991; Guy, 1999; Lee & Sheared, 2002; Merriam & Kim, 2008; Richards, Brown, & Forde, 2006).



According to sociocultural theory, learning is fundamentally a social phenomenon that takes place within communities, including classroom communities (Wilson & Peterson, 2006). Knowledge and learning exist in interactions between individuals, contexts in which they live, and the activities they participate in. Sociocultural theory has been used to examine how institutions of higher education create spaces for interdisciplinary thinking, research, and teaching, to foster student learning (Latucca, 2002). Specifically, sociocultural theory informs institutions on how to create and maintain interpersonal relationships between disciplines to make learning relational, mediated, and transformative (Latucca, 2002).

An increasing number of studies are examining assessment feedback in higher education and its importance to student learning from a sociocultural perspective (Evans, 2013; Ferguson, 2011; Lew, Alwis, & Schmidt, 2010; Shulman & Shulman, 2004; Wenger, McDermott, & Synder, 2002). Feedback is regarded as crucial to students' development as independent learners able to monitor, evaluate, and regulate their own learning (Evans, 2013). The sociocultural nature of learning is important for understanding how feedback can be transferred from one context to another and how feedback impacts the development of identity and self-concept for both the lecturer and student (Bereiter, 2002; Shulman & Shulman, 2004). During assessment, conversations about learning contribute to how feedback givers and receivers view themselves as part of identity development (Wenger et al., 2002). Thus assessment feedback is a "social practice" emphasizing not only the nature of feedback but also the means by which the feedback is produced, distributed, and received (Mutch, 2003).

Sociocultural theory informs the area of information literacy in higher education as well. The aim in information literacy teaching is to reduce the time teachers and librarians spend

delivering lectures and increase the time interacting with students during learning tasks in the classroom (Wang, 2007). Sociocultural theory encourages creating libraries in higher education where students interact with information resources as directed by faculty, complete assignments and study with peers, extend their knowledge at multiple levels, and seek connections and make meaning in more self-directed ways (Simons, Young, & Gibson, 2000). Lazarow (2004) argued that sociocultural theory provides an excellent framework to understand the need to employ collaborative learning activities in information literacy. Through collaborative activities and interactions, teachers and librarians provide learners with effective assistance that enables performance at higher levels (Lazarow, 2004; Simons et al., 2000; Wang, 2007).

Sociocultural theory also greatly informs efforts to motivate and engage students in higher education by focusing on the relationships that students have with other students in the classroom and cultural contexts (Järvelä & Salovaara, 2004; McCaslin & Murdock, 1991; McCaslin & Good, 1996; Nolen, 2007; Turner & Meyer, 2000; Yowell & Smylie, 1999). Studies indicate that students' regulation of thinking processes originate in the negotiation of goals and norms among students, teachers, and families (McCaslin & Mudock, 1991; McCaslin & Good, 1996). These studies are important because they identify the source of motivation as the relationships that students develop, including relationships with school activities and the many other participants in school settings. It is important for educators in higher education to help students learn how to negotiate worthwhile goals before searching for strategies to motivate them (Turner & Meyer, 2000; Yowell & Smylie, 1999). This approach requires the acknowledgment of the influence of other goals that might interfere with classroom learning but have real value for students (McCaslin & Murdock, 1991; McCaslin & Good, 1996). Other

studies informed by sociocultural theory argue that the focus of efforts to improve motivation for classroom learning should be on engagement (Hickey, 2009). This approach advocates for teachers paying attention to engaging their students by enhancing collective participation in domain-specific discourse, which indirectly enhances intrinsic motivation (e.g., goals and self-determination) while improving overall behavior (e.g., disciplinary actions and enrollments in advanced courses) (Hickey 2009).

Sociocultural theory is helpful in examining issues of particular populations in higher education. For example, sociocultural theory plays a significant role in understanding how students come to be active in the learning process and become members of the second language (L2) community (Baleghizadeh, Memar, & Memar, 2011; Donato, 1994). Research provides evidence for scaffolding support for students in their language and then gradually diminishing the support as students become more independent (Donato, 1994; Schumm, 2006; Verity, 2005). Sociocultural theory is also helpful in efforts to assist adult learners (Choy, 2002; Reed, 2005). Research indicates this population is potentially more vulnerable to challenges of transitioning into higher education because adult learners are in the minority, have little recent experience of formal education, and may have additional life pressures out of school (O'Donnell & Tobbell, 2007; Reed, 2005). Sociocultural theory informs efforts to understand adult learners' perceptions regarding participation in the higher education community, the practices that include and exclude them from participation, the ways learning occurs in the community, and the effects of participation on identity (Choy, 2002; Reed, 2005).

### **Sociocultural Theory and International Students**

Sociocultural theory is especially effective as a lens for examining the learning

experiences and programs for international students, an important and increasing subpopulation in universities in the United States. It is important to gain insight into the learning expectations and experiences of international students before planning curriculum and instructional methods. Without understanding what individual culture and beliefs these students bring with them, the complex socio-cultural context in which they are situated, as well as the practices and activities in which they participate, a complete picture of the learning experiences of international students cannot be attained. The following information on increases in this population, the benefits they bring to higher education, along with their challenges is presented to describe the learning context experienced by international students. Specific ways that sociocultural theory informs efforts to support and identify needs of international students is also addressed.

**Increases in population.** Increasing global interdependence has led to a rise in the frequency of educational exchanges across geographical country boundaries (Rai, 2002). People from societies around the world are crossing national, linguistic, and cultural borders more than ever before seeking the credentials that will allow them to participate in an ever-globalizing world (Lee, 2013). According to Rai (2002), an examination of schools and universities reveal that global forces impact education practices, and the intersections of globalization, education, and English can be identified in a range of formal learning contexts. Arthur (2004) stated that the internationalization of higher education may well serve as an important vehicle for individuals, schools, and countries to be competitive in the global marketplace. International students have become an undeniable and significant subgroup of universities in the United States, and their enrollment has been on a steady rise (Jund, 2010). According to the Institute of International Education (2013), overall international student enrollment in the United States has consistently increased over the last six years. In the 2007-2008 academic year, there were

623,805 international students, representing a 7% increase from the previous year. Numbers continued to rise, and the 2008-2009 academic year saw a 7.7 % increase to 671,616. Subsequent years continued to see increases. In the 2009-2010 academic year there were 690,923 international students, a 2.9 % increase from the previous year. This was followed by a 4.7 % increase in the 2010-2011 academic year with an enrollment of 723,277 international students. During the 2011-2012 academic year the number of international students enrolled in colleges and universities across the United States totaled 764,495, representing a 5.7 % increase from the year before. The latest report from the IIE (2013) shows that the 2012-2013 academic year saw a 7.2 increase from the year before, with a total of 819, 644 international students in the United States.

**Benefits of international students to higher education.** The increase in international student enrollment in higher education enriches institutions of higher education the United States in many ways. They add diverse cultural experiences to an increasingly multicultural campus scene, thereby increasing campus diversity (Castaneda, 2008; Glass, 2012). The diversity they bring adds new perspectives to classroom conversations and awareness and appreciation for other countries and cultures (Lee & Rice, 2007; Lee, 2013). International students are not only exposed to the culture in the United States but also introduce other cultures to domestic students (Zhao, Kuh, & Carini, 2005). Therefore, international students help globalize the learning community by interjecting their varied perspectives and experiences into discussions that take place both inside and outside the classroom (Lee, 2013). This is a critical component of the educational process for domestic students in the United States who are being trained to work in the marketplace of the new millennium (Davis, 2002; Kim, 2011; Lee & Rice, 2007).

International students also enlarge student enrollment, thereby making institutions more profitable by generating substantial revenue (Lee & Rice, 2007). International students in the United States are a significant source of tuition revenue for institutions of higher education (Davis, 2002; Glass, 2012; Lin, 2012). In fact, they allow many undergraduate and graduate programs to continue at their current enrollment and research levels. Although international education is not a new phenomenon, the driving forces behind it have changed considerably from that of diplomacy and intercultural exchange to globalism, often with underlying economic motivations (Lee & Rice, 2007). One such motivation has come from the shift towards understanding students as customers and consumers, a change which has contributed to increased recruitment of international students for revenue (Lee & Rice, 2007; Rhee & Sagari, 2004). Additionally, international students foster long-term goodwill, improve national security through enhanced cultural understanding, facilitate American achievement of future global partnerships (Castaneda, 2008), and provide access to talent across the globe (Glass, 2012).

**Challenges faced by international students.** Despite the growing number of new international students enrolling in universities in the United States and the benefits they bring to higher education, fairly little attention is paid to their needs. Researchers suggest that much of the higher education community in the United States has historically shown little interest in accommodating international students (Lacina, 2002; Lee & Rice, 2007; Lee 2013; Lin, 2012; Okorochoa, 1996). Nonetheless, research documents that international students face challenges generally cross cultural in nature because they are adjusting to new social and cultural norms (Abe, Talbot, & Geelhoed, 1998; Brown, 2008; Liu, 2011; Trice, 2005).

In addition to dealing with the typical stressors associated with college life, such as

financial demands, academic pressures, loneliness, and career indecision, international students must also contend with challenges associated with adapting to a foreign country and culture (Reynolds & Constantine, 2007). Such challenges include culture shock, confusion about role expectations in the United States, loss of social support, and discrimination (Reynolds & Constantine, 2007; Sodowsky & Lai, 1997). These challenging experiences collectively have been referred to as “acculturative stress” and relate to specific types of difficulties associated with individuals’ cross-cultural encounters that can manifest in a range of adjustment and personal concerns (Brown, 2008; Lee, 2013; Nwadiora & McAdoo, 1996). International students in the United States not only struggle with finding their way in the host country’s culture but also navigating the differences between academic cultures and ways of thinking and seeing the world (Glass, 2012; Lee, 2013; Okorochoa 1996). Additionally, students coming to the United States may encounter difficulties beginning as early as obtaining permission to pursue education. Immigration regulations and interviews have become burdensome enough to discourage some students from applying to institutions in the United States (Glass, 2012; Lee & Rice, 2007).

Research has established that the cross cultural challenges international students face generally fall under one of two broad categories; academic problems such as adjusting to second languages or learning new and different educational systems and personal issues such as homesickness and geographic distance from familiar culture, family, and friends (Abe et al., 1998; Brown, 2008; Liu, 2011; Trice, 2005). Early research on international students identified language, placement, and adjustment to a new educational system as the main types of academic problems encountered (Church, 1982). Often, international students have difficulty with the new

educational system due to their English proficiency (Brown, 2008). Language difficulties can lead to confusion, misunderstandings, and struggles with course and program content that contribute to great anxiety and stress concerning class participation and presentations (Okorochoa, 1996). Brown (2008) reported international students' weak English-language skills could result in a number of negative outcomes for their academic experience. Additionally, self-doubt often leads to low self-esteem as international students struggle to understand and be understood in their new language (Liu, 2011). The lower international students' English proficiency, the less confident they are about interacting with others, which in turn makes it more difficult to improve their English and adapt to the host culture (Liu, 2011; Trice, 2005).

In addition to English proficiency, international students face difficulty negotiating basic academic procedures (Sam, 2001), inadequate prior orientation and academic advising, difficulties adjusting to the academic culture in the United States, and complications in communicating with instructors and faculty (Okorochoa, 2010). Another academic challenge that international students face is academic isolation. Erichsen and Bolliger (2011) defined academic isolation as a feeling of marginalization and anxiety in adapting to new learner roles and relationships and stress concerning the ability to perform in a teaching and learning environment. According to Erichsen and Bolliger, perceptions of academic isolation differed depending on the cultural origin of international students. Students from Asia believed their intelligence and hard work were less acknowledged and regarded by their peers, teachers, and advisors, and their input and points of views were not equally valued in the learning environment (Erichsen & Bolliger, 2011). As a result Asian international students felt more invisible than students from other continents. International students from Europe, however, felt that their input and points of view were equally valued, and they had the academic support needed to be successful in their studies



in the United States. Additionally, they felt more confident about talking to faculty regardless of language difficulties and Americans valued their culture (Erichsen & Bolliger, 2011).

International students face many personal challenges, such as adjusting to different food tastes, views regarding sexual openness, perceptions of time, and gender roles, often resulting in feelings of homesickness (Brown, 2008; Okorochoa, 2010; Sam, 2001). Additionally, personal issues such as organizing living arrangements are daunting tasks, and they experience difficulties in forging meaningful social relationships (Sam, 2001). International students share an overwhelming desire to be accepted and succeed. Researchers have examined the social relationships domain, dealing with friends, friendship patterns, and discrimination and found students who made satisfactory social contacts with American peers also reported more general satisfaction with their academic experience and overall adaptation (Okorochoa, 2010; Sam, 2001). International students tend to have distinct friendship patterns with co-national friendships being the most common followed by friendships with other international students (Brown, 2008; Sam, 2001). The least common form of friendship is one with members of the host country.

**Research informed by sociocultural theory.** Despite the growth in diversity research, higher education environments in the United States are often out of touch with the realities and experiences of learners from other cultures (Caffarella & Merriam, 2000; Lee & Sheared, 2002; Merriam & Kim, 2008). Research examining the learning context of international students through the lens of sociocultural theory contributes to addressing this issue and serves to inform and influence international programs with the aim of making learning experiences more successful. For example, research based on sociocultural theory advocates for the creation of more inclusive environments in higher education that incorporate personal, socio-historical, and

community or institutional/ organizational dimensions that influence learning (Alfred, 2009; Apps, 1985; Brookfield, 2003; Delgado-Gaitan & Trueba, 1991; Guy, 1999; Maher & Tetreault, 2001). These studies argue that the rapid growth of international populations in higher education calls for new models of practice that expand the predominant Eurocentric worldview allowing for other knowledge systems and ways of knowing, particularly those that originate from non-western traditions. Many studies recommend educators working with international students adopt a more sociocultural approach to teaching and learning that involves reflexive engagement with self and practice along with instructional design that promotes cultural responsiveness (Apps, 1985; Brookfield, 2003; Delgado-Gaitan & Trueba, 1991; Guy, 1999; Maher & Tetreault, 2001; Trumbull, Rothstein-Fisch, & Greenfield, 2000). When educators acknowledge their sociocultural histories, identities, biases, and assumptions and understand how they shape their worldviews, behaviors, and interactions with members of diverse communities, it requires a continuous reflexive engagement with self and practice (Brookfield, 2003). Reflexive engagement enables educators to see how personal histories inform assumptions and influence the planning and delivery of education. Reflexive engagement also helps instructors identify the values they place on certain ways of knowing and recognize how interactions with different cultural and ethnic groups are informed by their sociocultural histories (Richards, Brown, & Forde, 2006).

Examples of research that encourages instructional design promoting cultural responsiveness includes work by Alfred (2009) and Richards et al. (2006) suggesting educators (a) engage in reflective thinking and writing, (b) explore personal and family histories, (c) acknowledge membership in different groups, (d) learn about the history and experiences of

diverse groups, (e) visit students' communities, (f) develop appreciation for diversity, and (g) participate in reforming the institution. Richards et al. (2006) suggest that culturally responsive pedagogy has a vital instructional dimension that includes materials, strategies, and activities that guide classroom dynamics. According to Delgado-Gaitan and Trueba (1991) and Trueba (1988), when instructional tools are incompatible with students' cultural and educational experiences, a disconnect with school that poses a threat to academic achievement is likely to occur. Culturally responsive pedagogy recognizes and utilizes students' cultures, histories, and identities to plan and deliver instruction. Furthermore it incorporates individual learning, social learning with community members, and characteristics the learner brings to the classroom (Richards et al., 2006), all concepts inherent to sociocultural theory. Alfred (2009) suggests the following to guide the development of culturally sensitive instructional practices: (a) integrate nonwestern knowledge into the curricula, (b) acknowledge cultural differences among immigrant groups, (c) de-emphasize assimilation in the curricula and practice, (d) foster an inclusive discourse community, and (e) consider the early schooling and work socialization of immigrant groups.

Sociocultural theory also informs research that examines how universities act as communities of practice for international students. Kim (2011) found that international students as newcomers to these communities bring internalized practices and cultures into the learning environment and a need to interact and collaborate with students in this new environment. This study also noted that there are numerous unfamiliar artifacts in the new community, including language and culture. When international students enter this unfamiliar community they inevitably participate in its practices to gain knowledge and become full, legitimate community

members. Specifically, findings from this study indicate that international students' struggle with spoken language is key in their learning process. In keeping with sociocultural theory, Kim argued that language for international students is an important way to control social and cognitive activities, and thinking and speaking are interrelated because thought is completed through speaking and speaking is the manifestation of thought (Kim, 2011). International students struggle with practices and cultures unfamiliar to them because they often do not share the meanings of some practices that are a critical part of university classrooms in the United States. According to sociocultural theory, international students come to the United States with beliefs about classrooms and learning formed in their cultures of origins. Thus, practices in the learning environments that they experience in American culture do not hold the same meaning (Kim, 2011). International students become members of an academic community with certain academic practices when they experience learning in a new culture. However, the goals and values in the classroom of the new culture may not be clear to international students who originate from different sociocultural communities. Because cultural practices are encoded in daily classroom practices, those who are already members of the culture do not recognize classroom activities as cultural practices (Kim, 2011).

Research on communities of practice has explored specifically the relationships that international students form among themselves both in their academic activity and the environment that surrounds the classroom. Montgomery and McDowell (2009) reported that international students use friendships to support their study and the social aspect of learning. The "academic" learning of the classroom has an indirect link with international students'

social networks through group work and supportive relationships with classmates. Additionally, a sense of learning about oneself and others as well as developing communication skills occurs through involvement in this social network. Montgomery and McDowell found that international students benefit from their friends' knowledge and skills through discussion of assignments and proof reading of each other's work, and this social aspect of learning becomes an important part of their learning experience in itself. Although the most obvious purpose of the community of practice is learning how to be academically successful, students also learn about "global citizenship" and preparation for living and working in a global community (Montgomery & McDowell, 2009).

Sociocultural theory also informed research conducted by Abasi and Graves (2008) who investigated how university policies on textual plagiarism interact with international students' academic writing as they develop as students. The social and cultural practice of writing for international students may be viewed through sociocultural theory in terms of both the situated and distributed nature of learning mediated by the cultural artifacts and practices of a community (Abasi & Graves, 2008). Plagiarism represents an academic practice that is culture specific, and plagiarism in the United States is specific to Western culture. The study found that international students from Asia, Africa, and South America were largely unaware of what constitutes plagiarism, and the university unintentionally withheld important information regarding this topic from students in the early stages of their relationship with North American academic writing. Academic writing is a social practice, and the challenges of academic writing are more pronounced for international students writing in another language in a writing culture different than their own (Abasi & Graves, 2008).

Research on the effectiveness of institutional programs for international students is often viewed through sociocultural theory. For example, peer programs have been created to enhance adjustment through pairing international and American students. Abe, et al. (1998) describe a semester-long International Peer Program (IPP) created by the Office of Residence Life (ORL) and the Office of International Student Services (OISS) at a public university. Approximately 2,000 of the university's 26,000 students were international, representing 97 different countries, and over half of the international population was from the Asian countries of Malaysia, Japan, India, Thailand, and South Korea. The IPP paired 36 interested incoming international students with returning university students who volunteered as hosts. Consistent with the demographics of the university, the majority of the participating international students came from Asian countries. The role of the international students was to help host students increase their knowledge and appreciation of foreign cultures, customs, and languages. The role of the host students was to have ongoing interactions with the international students to help them become more familiar with the university and the residence hall community (Abe et al., 1998). Results indicated that this program was very successful in helping international students adjust to life, both in and out the classroom. Specifically, the study utilized sociocultural theory to emphasize the importance of peer interaction and programs and the positive impact interaction with peers has on international students in their new learning context (Abe et al., 1998).

Sociocultural theory also provides an effective framework for examining international student learning experiences that occur in specific departments. Trice (2005) examined how faculty and entire departments respond to the presence of significant numbers of international graduate students through a sociocultural lens. Specifically, this study investigated whether faculty members modify their curriculum and instructional strategies to address international

students' individual needs, and whether or not faculty make an effort to tap into the prior knowledge and cultural beliefs of international students. Additionally, this study explored whether departments established formal policies related to international students adjusting to their new culture and created platforms to foster interaction of international students with their American peers. Trice (2005) reported results that varied by department, with faculty from architecture and public health departments adapting more readily to efforts to address international students' needs by consciously altering their roles as advisors and research supervisors when working with this population. They spent more time explaining tasks and concepts to these students, provided extra supervision in the beginning, or even became more personally involved in their lives as students struggled to adapt to life in the United States. In the classroom, several of the faculty used overheads, spoke more slowly, and avoided colloquialisms to assist students with comprehension. Most departments had at least some policies in place regarding international students, but these were largely informal and not highly developed. English language requirements and funding policies were the two most common issues departments addressed, the first through formal policies, the latter often more informally. Recommendations from the findings of the study included creating a learning environment that includes cultural diversity so students can learn from each other as well as from the faculty and a curriculum that reflects the presence of international students (Trice, 2005).

Results from the same study also indicated that faculty from two engineering departments believed international students did not enhance the organization. They viewed engineering principles as universal, which meant that students' cultural backgrounds were far less relevant or valuable to the learning process. The engineering faculty in this study also believed that students

learn primarily from faculty rather than from other students. Many faculty comments reflected the idea that what domestic and international students learn from each other is only the peripheral issue of how to function in a diverse work environment (Trice, 2005). The faculty in these two departments were more concerned with domestic students and reported that they felt international students were of value because domestic students will face a diverse environment when they go out into the work force. Therefore, faculty did not emphasize group work in their courses, and students had their own area of responsibility within research groups, which did not require collaboration (Trice, 2005). Additionally, poor English language skills were a significant barrier for some international students who wanted to voice concerns to faculty. Many faculty members insisted requiring English in the labs and offices would result in international students' improvement in communicating in the dominant language. Others' insistence on English seemed focused on helping the department to function better through being more cohesive and Americanized (Trice, 2005).

Sociocultural theory suggests that the actions of this faculty were hindering international students learning. Faculty did not place any value on what international students bring to their learning experiences in terms of cultural and social heritage. Further, faculty neglected the powerful role of peer collaboration and interaction in the learning process. International students in this study reported that occasionally speaking in their native tongue allowed them to discuss complex, technical issues without language barriers and provided them with an important sense of control, as they were able to communicate effortlessly with co-nationals. Speaking in their native language also allowed international students to feel "at home" for a time and feel a sense of belonging. Although faculty may have wanted international students to improve their English skills for good reasons, asserting that they should not speak their native language while in the



department limited these students' power. Trice (2005) stated that one means for international students to increase their value and thus their power in the departments was through their unique intellectual contributions. However, in the engineering departments especially, faculty did not believe that international students contributed in a meaningful way to the learning process (Trice, 2005).

Sociocultural theory has also served as a framework for research examining one of the biggest challenges international students face in the learning context of the United States, learning a second language (Gomez, Urzua, & Glass, 2014; Liu, 2011; Morris & Maxey, 2014; Trice, 2005). Results consistently indicate the important role of social interaction in facilitating learners' English proficiency. For example, Suh, Wasansomsithi, Short, and Majid (1999) investigated through interviews the out-of-class learning experiences of Asian international graduate students enrolled in English as a Second Language (ESL) program. Most participants confirmed that in addition to some private leisure activities, interacting with native English speakers was the major out-of-class strategy for enhancing their English proficiency (Suh et al., 1999). In a more recent study, Derwing, Thomson, and Munro (2006) investigated the relationship between English learners' exposure to native English-speakers outside the classroom and their improvement in accent and fluency. Results revealed that alternative learning strategies such as out-of-class communication with native English speakers helped to facilitate English improvement. Likewise Liu (2011) reported that Japanese international students who studied in the Visiting Students Certificate Program (VSCP) at an American university broke language and social barriers to seek out more opportunities to interact with native English speakers outside the classroom. Results from oral interviews and questionnaire surveys found that effective out-of-

class learning activities for students' English-language improvement were language exchanges, clubs, church and social events, and volunteer experiences (Liu, 2011).

In another study drawing on sociocultural theory, Glass (2012) examined the extent to which specific educational experiences may be associated with international undergraduates' learning, development, and perception of campus climate. Findings identified specific educational experiences that provide both support and challenges for international students in particular. Specifically, the educational experiences that provided support included access to activities sponsored by the students' own culture, classroom contexts where faculty facilitated intergroup dialogue among students, and collaborative work in co-curricular leadership programs (Glass, 2012). International students found their learning environments more positive when the cultural values that they brought into the classroom were valued and when they had opportunities to interact with American peers (Glass, 2012). This study underscores the point that international student experiences in the classroom matter and challenges assumptions that meaningful cross-group dialogue occurs just because the demographic makeup of the student body is more diverse. The authors recommend creating courses where international students engage with content related to cultural and ethnic diversity to foster both cognitive and social development for both international and domestic students. The findings of this study support previous research that links international student academic and learning with social interaction with students from other cultures (Kashima & Loh, 2006).

## **Conclusions**

This chapter provides information on how cognitivism, constructivism, and social cognitivism served as the foundation for the development of sociocultural theory. The significant role sociocultural theory plays in informing instructional strategies at all levels is

addressed with specific attention to implications for assessment, curriculum, and instruction in higher education. Although there has been significant research on diversity, higher education environments in the United States often fail to support learners from other cultures (Caffarella & Merriam, 2000; Lee & Sheared, 2002; Merriam & Kim, 2008). Research examining the learning context of international students through the lens of sociocultural theory informs faculty, administrators, and programs on how to make their learning experiences more successful. This chapter reviewed research informed by sociocultural theory that addresses the needs of international students at the institutional, departmental, and classroom level. Furthermore, sociocultural theory enables researchers and instructors to examine the cultural values international students bring into the classroom and their influence on learning experiences and expectations. Sociocultural theory also provides a framework for understanding how international students construct knowledge and learn.

Although previous research based on the framework offered by sociocultural theory has provided valuable information, much more attention needs to be given to the social, cultural, and introspective aspects of learning for international students. Kim (2011) makes the argument that sociocultural theory helps research delve deeper into the introspective aspect of international student learning experiences; gaining insight into what conceptions and views shaped by culture that international students bring with them into their new learning context. One area of research that may provide considerable insight into the learning experiences of international students is investigations on conceptions of learning. Unfortunately, there is often a misleading assumption that learning is standard and well defined across cultures (Jones, 2008). Research on international students' views of what is meant by learning is beneficial for many reasons. Conceptions of learning are important because they impact how students approach learning

(Marshall, Summer, & Woolnough, 1999), quality of learning outcomes (Tsai, 2009), and academic achievement (Allan, 2003; Boulton-Lewis, Marton, Lewis, & Wilss, 2000; Tsai & Kuo, 2008). This area represents one of many worthy investigations that may inform efforts to meet the needs of international students, an increasingly important population in higher education.

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## 2 INVESTIGATING INTERNATIONAL STUDENTS' CONCEPTIONS OF LEARNING

The growth and benefits of international student enrollment in higher education provide compelling reasons to more closely examine the educational experiences of this population. Institutions are considering where to invest limited resources to create educational environments that support international students' adjustment to the social and academic demands of college life, and they are turning to research for insight (Glass, 2012). For example, research on the factors that influence international students' academic performance (Li, Chen, & Duanmu, 2009) and language-related problems in academic studies ( Moores & Popadiuk, 2011; Zhang & Mi, 2009) have contributed to understanding the ways universities in the United States can create positive learning environments. Recommendations based on empirical evidence include improving institutional orientation and intervention practices, such as creating "buddy" programs, explaining informal channels of communication, investigating circumstances that are disorienting, and better advisement on the part of international student services that can be tailored to specific cultural backgrounds (Moores & Popadiuk, 2011).

Sociocultural theory helps research delve deeper into the introspective aspect of international student learning experiences; gaining insight into what conceptions and views shaped by culture that international students bring with them into their new learning context (Kim, 2011). One area of research that informs institutions about meeting the needs of international students is the literature on conceptions of learning. All students come to learning situations with very different preconceived views of what is meant by "learning" (Marshall, Summer, & Woolnough, 1999). Conceptions of learning refer to students' fundamental understanding, or interpretation, of the learning phenomena (Marton, 1981) and have been defined as coherent



systems of knowledge and beliefs about learning and phenomena related to learning (Marshall et al., 1999; Tsai, 2009; Vermunt & Vermetten, 2004). In more depth, Cano and Cardelle-Elawar (2004) explained that learning conceptions are individual constructions that develop from knowledge and experience and dictate the different ways in which learning is understood. Vermunt and Vermetten (2004) argued that conceptions of learning include what an individual thinks about learning objectives, activities, strategies, tasks, and processes. Early definitions in the research identified quantitative or qualitative conceptions of learning (Marton & Saljo, 1976). A quantitative conception views learning as a process of accumulating information in order to reproduce or apply knowledge, whereas a qualitative conception implies that learning has to do with comprehension and interpretation of meaning (Marton & Saljo, 1976).

Students' conceptions of learning are important because they have a profound impact on approaches to learning and quality of learning outcomes (Tsai, 2009). Conceptions of learning also provide insights into the ways students choose to approach learning and influence how they interact with courses, classroom environment, teachers and peers (Marshall et al., 1999). Further, learning conceptions include preconceived ideas about students' roles, the role of the instructor and other professionals in academia, and these ideas about roles and the relationships between all the different players in educational settings impact how students approach learning (Mclean, 2001). Tsai (2009) argued students' conceptions of learning guide primary beliefs about and interpretations of learning experiences as well as ultimately influence learning outcomes. Students' conceptions of learning have also been found to impact and predict academic achievement (Allan, 2003; Boulton-Lewis, Marton, Lewis, & Wilss, 2000; Tsai & Kuo, 2008). Cano and Cardelle-Elawar (2004) noted the more capable students are of deciding for themselves

what learning means the more successful they are in their academic performance. It is therefore critical that educators are aware of and understand students' conceptions of learning.

When investigating international students' conceptions of learning, culture is an important construct to consider (Marshall et al., 1999; Tsai & Kuo, 2008; Tsai, 2009). Hong and Salili (2000) argued that conceptions of learning are formed by cultural values. Purdie, Hattie, and Douglas (1996) stated that environment, where learning occurs, influences conceptions of learning, and culture is embedded in environment. The general assumption that learning is a well-defined standard experience across cultures has been challenged by research indicating students from various cultures have different conceptions of learning (Jones, 2008). For example, Purdie, et al. (1996) examined students' conceptions of learning and found that while Australian students have a narrow school based view of learning, Japanese students have a broader and more community based view of learning. Along similar veins, Boulton-Lewis et al. (2004) examined conceptions of learning of indigenous Australian and Australian university students and reported differences in their views of learning as an increase in knowledge, memorizing and reproducing, applying, and understanding. More recently, Abhayawansa and Fonseca (2010) examining Sri Lankan students enrolled in an Australian university found that culture and prior learning experiences influence their conceptions of learning. Specifically, the students from Sri Lanka reported beliefs about learning being teacher centered, whereas their Australian classmates perceive learning as student centered (Abhayawansa & Fonseca, 2010).

Research on conceptions of learning reveals differences between Eastern and Western views as well. Marshall, et al. (1999) examined students' cross-cultural conceptions of learning in higher education in the United Kingdom and reported that culture has great influence on

students' conceptions of learning, particularly on their view of learning as an increase in knowledge. In contrast, studies with Eastern students found that Nepalese students view learning as a moralistic change in behavior that differs from a Western view of learning as a change in understanding (Dahlin & Regmi, 1997). More recent research has reported that Asian students' conceptions of learning differ from their Western classmates because they consider learning to be more than the transference of knowledge and attending school (Jones, 2008). Jones (2008) reported that Asian students view knowledge as having to do with things that cannot be measured such as emotions, intuitive feelings, spirituality, morality, and social skills, and this view differs from traditional Western beliefs about learning being built upon things that can be scientifically proven.

Thus, students from various cultures differ in their conceptions of learning. However, research on students' conceptions of learning has predominantly been with "Western students," students from Europe, North America, and Australia. In these studies, students are typically from Western cultures and are compared with those from "non-Western", usually represented by Asia. The general trend in student conceptions of learning research is to rely on investigations in these regions as the basis for cross-cultural theorizing. Students from other geographical locations are not included in the literature (Abhayawansa & Fonseca, 2010; Dahlin & Regmi, 1997; Jones, 2008; Marshall et al., 1999; Purdie et al., 1996; Tsai & Kuo, 2008; Tsai, 2009), and so not all international students receive the same amount of attention.

In particular, conceptions of learning of international students from South America studying in the United States are not typically investigated although this population is steadily increasing, with most students arriving from Brazil (Castaneda, 2008; Downie, 2005). Brazil is the world's fifth most populated country and seventh largest economy, and it is the largest

country and economy in the continent of South America (Downie, 2005). The land area of Brazil extends over 8.5 million square kilometers, occupying just under half (47%) of the area of South America, and the population is approximately 183 million inhabitants with the majority (81%) residing in urban areas (Brazilian Institute of Geography and Statistics, 2014). The structure of the Brazilian educational system involves one year of pre-school followed by elementary school (also known as fundamental school) which is divided into two parts with four grades each, designed for children between seven and 14 years (Lannes, Rumjanek, Velloso, & Meis, 2010). Finally, secondary school is made up of three grades for students aged 15 to 17 years, after which they are expected to choose a career path and take the university entry examination (Lannes et al., 2010).

According to the International Institute of Education (2013), 10,868 Brazilian students were enrolled in universities in the United States in the 2012-2013 academic year. This was a big increase (20.4%) from the previous 2011-2012 academic year which saw 9,029 students from Brazil studying in the United States. The number of Brazilian students in the United States increased steadily in the 1990s, peaking at 8,972 students in the 2001-2002 academic year. After many years of decline, the number of Brazilian students began to rebound in the 2006-2007 academic year, increased by 16% in the 2008-2009 academic year, and has continued to steadily increase (IIE, 2013) with the majority of Brazilian students studying at the undergraduate level. Brazil is currently the eleventh leading place of origin for students coming to the United States and has the largest number of students from the continent of South America specifically.

African students' conceptions of learning are also not being addressed although the numbers coming to the United States to study in universities is increasing with Nigeria sending the most students. Often referred to as the "Giant of Africa" due to its large population and

economy, Nigeria is the most populous country in Africa and the seventh most populous country in the world. With approximately 174 million citizens Nigeria is made up of more than 500 distinct ethnic tribal groups (Amaghionyeodiwe & Osinubi, 2006). The structure of the Nigerian educational system comprises two to three years of kindergarten education and six years of primary school. Post primary education is made up of three years of Junior Secondary School and three years of Senior Secondary School, generally followed by four to six years at the University level (Amaghionyeodiwe & Osinubi, 2006).

According to the IIE's open door report (2013), Nigeria is the nineteenth leading place of origin for students coming to the United States and sends the most students from the continent of Africa. In the 2012-2013 academic year, 7,028 students from Nigeria were studying in the United States. This increased by 4.1% in the 2011-2012 academic year to 7,316. The IIE reports the number of Nigerian students enrolled in American universities has been on a general upward trend since the 1990s, except for decreases in the 2005-2006 and 2006-2007 academic years. However, with an increase of 5% in the 2007-2008 academic year, Nigeria replaced Kenya as the only African country in the top 20 places of origin and remains in that position to date. The majority of Nigerian students study at the undergraduate level.

Previous research encourages concentrating on international students from Brazil and Nigeria due to their steadily increasing numbers (Castaneda, 2008; Downie, 2005). Yet very few investigations focus solely on these two groups of students. Some research that includes international students from Africa has addressed transition problems (Adelegan & Parks, 1985), racial identity (Phinney & Onwughalu, 1996), and cultural adjustment (Constantine, Anderson, Berkel, Caldwell, & Utsey, 2005). One of the few studies with international students solely from Africa examined female scientists enrolled in Western universities. Results revealed that White

professors questioned the students' ability to do the work, asked them to take remedial classes, and criticized their accents (Beoku-Betts, 2004). Additionally, participants experienced feelings of exclusion and a lack of support emanating directly from prejudicial attitudes. Similarly, few studies have focused on international students from South America. Wilton and Constantine (2003) found high levels of psychological distress among South American international students. More recently, Reynolds and Constantine (2007) examined South American students' sense of social and academic competence and reported that a lack of confidence in their social, academic, and career contexts might have a profound effect on their future career goals and aspirations. Castaneda (2008) examined the academic needs of South American students and found that second language problems, quality of academic advisement, availability of financial support, level of integration into their academic program, and cultural adjustment impact their academic experiences.

Research examining students from South American and West African cultures may be considered through Hofstede's Theory of Cultural Dimensions (1986). Hofstede defined culture as a collective programming of the mind of the people in an environment that differentiates one group of people from another. Through his early seminal work in 1980 on national work culture in 72 countries he identified five cultural dimensions: individualism-collectivism, power distance, uncertainty avoidance, masculinity-femininity, and long-versus short-term orientation (Hofstede, 1986; Jaju, Kwak, & Zinkhan, 2002). Individualism-collectivism describes how individuals define themselves within society and measures the extent of the role of the individual versus the role of the group in a society. The dimension of power distance represents the extent to which members of a society expect and accept power distribution within the society. Uncertainty avoidance measures the degree to which members of a society feel threatened by

uncertain, ambiguous, and unstructured situations. The dimension of masculinity-femininity represents the polarization between gender roles in any given society. Masculine cultures are male dominated societies characterized by clearly distinct gender roles, while feminine cultures in contrast have overlapping gender roles. Long-term orientation cultures foster virtues oriented towards future rewards, such as adaptation, perseverance, and thrift, while short-term orientation cultures foster virtues oriented toward past and present, such as respect for tradition, preservation of face, and fulfilling social obligations. According to Hofstede (1986), most West African and South American nations such as Nigeria and Brazil fall along similar sides on the five dimensions. These cultures are highly collectivistic and masculine with high power distance, weak uncertainty avoidance and are short-term orientated (Hofstede, 1986).

More recent research with students in Brazil and Nigeria support Hofstede's findings. A study on conceptions of learning reported Brazilians view learning as not constrained to a formal learning environment but an ongoing process in everyday life (Crabtree & Sapp, 2004). This study also found students in Brazil believe learning takes place when there is a social, emotional, and physical closeness between teachers and learners. These findings are supported by Santilli, Miller, and Katt (2011) who found Brazilian students are comfortable spontaneously greeting their teachers on the street with an embrace and a kiss on the cheek and expect instructors to be actively interested in their personal as well as academic affairs. However, Fidalgo-Neto et al. (2009) found that in learning settings in Brazil teachers play a central role in knowledge transference, and students play a more passive role in their learning process. Watkins and Akande (1994) reported Nigerian students believe that they do not play an active role in learning, and it is the responsibility of the teacher to pass down knowledge to them. This study also reported students prefer a less competitive classroom environment. Sunal, Inuwa, Sunal,

and Haas, (2001) similarly reported Nigerian students believe learning takes place through hands-on experience but teachers play a governing role in the learning process, with students expected to follow and cooperate with the teacher. This study also found students in Nigeria view learning as something that should be practical and applicable to everyday life instead of being theoretical. Another study reported students in Nigeria believe learning is a group activity and as a result often participate in cooperative learning (Iyamu & Ukadike, 2007).

While these studies provide valuable information on Brazilian and Nigerian students' conceptions of learning, it is important to note that data was collected in the students' countries of origin. The purpose of this study is to investigate Brazilian and Nigerian international undergraduate students' conceptions of learning while in an institution of higher learning in the United States. Students may be experiencing, or may already have experienced conflict between what is presented and expected in the American university setting and what their home culture conception of learning is/was and as such their conceptions may be fluid and shifting. No study to date has investigated Brazilian and Nigerian students' conceptions of learning within the context of the United States, and no other research has examined both groups within the same study. Thus, this study is exploratory in nature. Findings from this study provide information on Brazilian and Nigerian students' conceptions of learning and inform instructors of international students and international programs in general. The research questions are:

- 1) What are Brazilian and Nigerian students' conceptions of learning?
- 2) Are there differences and/or similarities between their conceptions of learning and their learning experiences in the United States?
- 3) Are there differences and/or similarities between the two groups in their conceptions of learning?



## **Method**

This study is informed by grounded theory developed by Glaser and Strauss (1967) whereby researchers discover concepts and hypotheses through the method of constant comparative analysis. This methodology, best suited for exploring social phenomena and the behavior of groups, allows a shift from existing theory to themes that emerge from current data and focuses on areas with little or no literature (Glaser & Strauss, 1967). According to Glaser (1992), emerging categories must fit and explain the collected data rather than preconceived concepts being forced upon the data. Data are coded into as many categories as possible with frequent adjustments as the researcher engages in the process of identifying themes. Coding is then followed by integrating the different codes and categories. The researcher then reshapes the categories developed earlier in the coding process and makes connections between the categories identified, a process referred to as dimensionalization. Finally, the researcher constructs themes and theories and interprets the findings (Lindlof & Taylor, 2002).

### **Researcher's Positionality**

My personal experiences of crossing cultural borders as an international student informed this research and contributed toward efforts to be transparent. I came to the United States as an international student for undergraduate and graduate studies 11 years ago and therefore closely related to the participants in this study. As a Ghanaian international student, I continuously examined my relationship to the participants and the study. Though my familiarity with the experiences of the participants presented somewhat of a challenge to my objectivity, I was also well aware that my identity as an international student did not necessarily mean that the participants and I had the exact same experiences. However, I had an "insider" status because of shared similar cultural and educational experiences, and I constantly reflected on this during the

research process. My insider status also influenced the way participants engaged with me. In fact, participants often expressed they were comfortable talking to me because they felt I could relate to them and the experiences they shared with me. Our shared status as international students was advantageous and helped build a cordial and trusting relationship that allowed the interviews to run very smoothly. In some instances participants asked if I understood the experiences they shared or if I had similar experiences. I refrained as much as possible from sharing my experiences so as not to influence participants' responses. Some participants asked me questions about my experiences as an international student, expressing curiosity about my learning experiences. I made efforts to always keep their experiences the focus of the conversations and reflecting on this positionality allowed me to find the middle ground.

My reflections during the research process heavily relied on theoretical sensitivity and reflexivity. Theoretical sensitivity refers to the researcher's ability to use personal and professional experiences together with methodological knowledge to see data in new ways and think abstractly about data in the process of developing theory (Glaser & Strauss, 1967; Strauss & Corbin, 1998). However, since theoretical sensitivity may create a situation where the researcher explains data in a biased way, the process should be complemented by reflexivity. Reflexivity is defined by Horsburgh (2003) as "active acknowledgement by the researcher that his or her own actions and decisions will inevitably impact upon the meaning and context of the experience under investigation" (p. 308). Reflexivity allows researchers to deconstruct who they are and the ways in which their beliefs, experiences, and identity intersect with that of the participants (Macbeth, 2001). This reflection occurs both in individual thought and through

dialog with others that acknowledges the researcher's own experience and perspectives (Johnson & Waterfield, 2004). Instead of trying to hide behind a false sense of objectivity, the researcher makes his or her own sociocultural position explicit. For example, reflexivity requires researchers to question how the "researcher-participant interaction" and the researcher's perspective affect the analysis and the results (Hall & Callery, 2001). Reflexivity is a process that occurs throughout every stage of research (Guillemin & Gillam, 2004). Guided by theoretical sensitivity, my personal and academic experiences as an international student allowed me to view the data in new ways and think abstractly about the data. Also, I actively engaged in constant reflexivity throughout the stages of research design, data collection, and analysis.

In addition to theoretical sensitivity and reflexivity, I employed various techniques recommended by and Lietz, Langer, and Furman (2006) and Shenton (2004) to ensure the trustworthiness of qualitative research. Shenton (2004) suggests that it is important to use well-established research methods and triangulate by using different methods of data collection for rigor. This study was informed by grounded theory, a well-established methodology, and employed the use of interviews and reflective diaries as established methods of data collection. The use of two data sources in this study, in addition to theoretical memos, allowed for triangulation and contributes towards the credibility and trustworthiness of the research. It is important that qualitative researchers help ensure honesty from participants by giving them opportunities to refuse participation to make sure that data collection involves only those who are genuinely willing to take part and prepared to offer data freely (Shenton, 2004; Lietz et al., 2006). Accordingly subjects were informed that their involvement was strictly voluntary, and they could refuse and/or stop participation at any time. This study employed the use of iterative questioning which Shenton (2004) argues allows the researcher to return to matters previously

raised by participants and extract related data through rephrased questions. A second round of interviews gave opportunities for issues raised in student diaries to be further explored and clarified.

### **Participants**

Participants were thirteen undergraduate students, with six from Brazil and seven from Nigeria. The final number of participants was determined when saturation occurred. Saturation, a critical concept in grounded theory, is based on a subjective decision that no information containing new or different themes is being obtained (Lindlof & Taylor, 2002). In reality one can never know for certain if further interviewing would provide information with new themes, and it is therefore important not to start theoretical sampling too early in the data collection process. Rather, the researcher should continue open sampling to maximize variations, and theoretical sampling should be used late in the process (Hallberg, 2006). Purposive sampling, where participants are intentionally selected because of who they are and what they know rather than by chance (Glaser & Strauss, 1967), was used in this study. Participants were undergraduate students (2 freshmen, 7 sophomores, 1 junior and 3 seniors). No restrictions were placed on academic rank, gender, or major. The final population included 8 females and 5 males. In order to insure that participants had experienced education and learning in a culture different from the United States, information was collected on whether students had grown up in their countries of origin before coming to the United States to attend university. Length of stay in the United States ranged from 6 months to 4 years, with an average of a year.

## **Procedures**

Participants were recruited through emails sent by the international education office at Georgia State University to currently enrolled undergraduate students from Brazil and Nigeria. Those interested in participating in the study were asked to contact me directly via email. Students were also asked to forward the email to other students from Brazil and Nigeria who might be interested in taking part in the study. I emailed interested students with information on the study and the requirements for their participation.

## **Data Collection**

Data was collected through initial interviews, reflective diaries, and final interviews. Interested participants were scheduled for an initial interview where consent forms with information on the study and their rights were provided. Interviews were audio-recorded and took place at a location of the participants' choosing. Initial semi-structured interviews lasted approximately an hour and a half and were guided by these questions:

- 1) What is your definition of learning?
- 2) What would you describe as good teaching? Or a good teacher?
- 3) How do you learn best?
- 4) How do you know when you have learned something?
- 5) What do you think makes up a good learning environment?

These questions are from previous studies on students' conceptions of learning with international undergraduate students from different countries other than Nigeria and Brazil (Marshall et al., 1999; Tsai, 2004 & Tsai & Kuo, 2008). The abstract nature of these questions is so as not to place any restrictions or limitations on participants' responses. Grounded theory

argues for intensive interviewing that allows an in-depth exploration of a particular topic and goes beneath the surface of ordinary conversation (Charmaz, 2006). The participants were asked to describe and reflect upon experiences in ways that rarely occur in everyday life (Charmaz, 2006). The rationale behind initial interviews was to create rapport between the participants and researcher and prompt participants' thinking about learning beliefs and experiences.

The atmosphere and nature of the interviews were generally pleasant and conversational. Participants would often start by sharing some personal information, either about their day or some experience they had on their way to the interviews. After reading the consent form, most participants asked why I was interested in studying students' conceptions of learning. The abstract nature of the guiding questions caused participants to generally pause before they responded or stumble once they had started responding. Participants often began their responses with statements that indicated that they needed some time to think about the questions and stated that it was something they did not often think about. They often provided concrete examples to help explain their responses. It is important to note that participants generally put a lot of thought into their responses, often pausing and asking for time to think before responding. Questions about good teaching elicited the quickest and most forthcoming responses. Participants generally responded to these questions without pausing or stumbling. However, questions about what learning is, how they learn best, how they know they have learned, and learning environments were more difficult, and participants expressed that they did not often think about these issues. Follow up questions often involved asking participants for clarification on provided examples and illustrations. Examples and illustrations were usually drawn from experiences in school and out of school situations with friends, family, and work environments. Interviews often ended with participants thanking me and stating that the interview had

encouraged them to think about learning and their beliefs about learning.

After initial interviews participants were instructed to keep a diary every day for one week to record reflections about learning. Participants were instructed to select one learning experience connected to their education each day and reflect on it using these guiding questions:

- 1) What did you learn? (Describe the learning experience)
- 2) What did you find satisfying or frustrating in your learning experience?
- 3) When were you aware that you had learned something?
- 4) How did you feel if you thought you were not learning as you should?
- 5) What about this learning experience was different from previous experiences?

Participants were instructed not to limit their reflections to these questions but to address other issues they believed to be pertinent and provide examples that were connected to their reflections. They were instructed to state the date and time at the start of every reflection and contact me if they had any questions. No restrictions were placed on the length or format of the diaries, and participants chose to either hand write or type their entries. When presented with the instructions for the diaries, participants generally did not ask many questions and expressed that they understood what was expected of them. Issues of clarification comprised of expectations about lengths of entries and if each guided question had to be addressed. None of the participants contacted me during the week of diary entry for clarification on requirements and expectations.

The use of reflective diaries within research and formal learning settings as a way to deepen learning and stimulate critical thinking has increased in recent years (Prinsloo, Slade, & Galpin, 2011). Reflective diaries are useful mechanisms that can move students beyond simple observation towards deeper reflection, analysis, synthesis, and critique (McGuinness & Simm,

2005; Travers, 2011). This is because students are required to observe and record information, thoughts and feelings and then think about them and make connections to wider theories and concepts (Dummer, Cook, Parker, Barrett, & Hull, 2008; Travers, 2011). This process of keeping a reflective diary is termed “critical reflectivity” in the literature (Nairn, Higgitt, & Vanneste, 2000). Furthermore, reflective diaries give learners a platform to record experiences, assist learning, and develop critical thinking or the development of a questioning attitude. Reflective diaries also play the role of encouraging metacognition and improving problem solving skills (Prinsloo et al., 2011) and encourage self-expression by giving students a voice (Moon, 1999). Additionally, when writers are actively engaged in the writing process, they are making decisions, organizing, translating, reviewing, and revising which can promote critical thinking skills, such as hypothesizing, comparing, and contrasting, generalizing, synthesizing, and evaluating (Mills, 2000). Many educators advocate for reflective journaling both as a way of engaging in content matter and helping writers find some level of personal connection to content material (Moon, 1999).

Once participants submitted their diaries, final interviews were scheduled. A majority of the participants emailed me an electronic version of their diaries. A few of the participants contacted me via email about scheduling a meeting in order for them to turn in their hand written diaries to me. At these meetings I collected their diaries and scheduled follow up interviews. All final interviews were scheduled for and occurred two to five days after diaries had been submitted. The interview schedule allowed me the opportunity to thoroughly read through each diary and prepare questions from the information in the diaries where necessary. The purpose of the final interviews was to clarify and further explore issues addressed in the diaries and gain further information on the students’ broader views and ideas about learning. Semi-structured



final interviews which lasted approximately an hour and a half were audio-recorded and guided by the following questions:

- 1) Do you use the same or different approaches to learning in the United States that you used at home?
- 2) What have you found fulfilling or frustrating about approaches that are new to you versus ones that you used to at home?
- 3) Do you find that the learning experiences you have in the United States are different from or similar to learning experiences you had at home?
- 4) Do you find that the learning environments you experience in the United States are different from or similar to the learning environments you experienced at home?
- 5) Do you feel you are learning more, less or differently than what you were accustomed to previously?
- 6) How would you say the process of adapting to a new learning environment has been like for you?

Whereas initial interviews concentrated on asking students abstract questions about learning in order to explore how they would respond independently, these questions were more specific in order to guide students to think about how learning experiences in their home culture either differ from or are similar to those in the United States. Similar to the initial interviews the atmosphere for the follow up interviews was pleasant and conversational, and participants would often start by sharing some personal information. During final interviews most of the participants stated that they enjoyed the reflective journal process because it encouraged them to think about learning and be conscious about how they were learning in their day-to-day

experiences. The time period between initial and final interviews was approximately two to three weeks.

### **Data Analysis**

I transcribed all interviews verbatim and read each individual diary thoroughly to develop an empathetic understanding of individual views. Following the hierarchical coding process of grounded theory I initially conducted open, line-by-line coding followed by axial or theoretical coding that specifies relationships between categories (Hallberg, 2006). During the open coding process I read initial interview transcripts, diaries, and final interview transcripts line by line several times and created tentative labels for chunks of data that summarized or represented distinct concepts and categories, which formed the basic units of my analysis. As I read through and created codes and labels, I highlighted words and sentences that were representative of the codes. My focus during this stage of analysis was on descriptive keywords and phrases pertaining to learning, and I was guided by the following questions recommended by Glaser and Strauss (1967), where applicable:

- 1) What is going on here?
- 2) Why is this being done?
- 3) What if this or that changed? Why has this or that changed?
- 4) What would be the outcomes of any change?
- 5) What category does this incident indicate? Indicate a category?

I created a chart to keep track of emerging codes and categories. The chart contained the name and description of the category and an example from the data. According to Hallberg (2006), every category must earn its way into the analysis, i.e. it must be grounded in the data rather than being generated from the researcher's hypotheses and preconceptions.

Following the open coding stage, I engaged in axial coding that involved breaking down each category or concept that emerged during open coding into subcategories. I identified and verified the relations between emerging categories and between categories and their properties in the data to ensure that these conceptual relationships were grounded in the data. I re-read the text to confirm that concepts and categories accurately represented interview responses. The final stage of analysis was an integration of empirical data with theoretical memos. Through this analysis process, the themes and categories that emerged from both sources were identified. I utilized the constant comparative method throughout the analysis process that insures every part of the data, i.e. emerging codes, categories, properties, and dimensions is constantly compared with all other parts of the data to explore variations, similarities, and differences in data (Hallberg 2006). In accordance with this process, after initial categories were coded during open coding, incidents applicable to each category were compared. Each incident in the data was coded into as many categories as possible. Analysis of data then shifted from comparing individual participant responses to one another to comparing individual responses to categories and their properties. During this process I used NVivo 7, a software program designed for qualitative research, to organize the data.

As a part of data analysis, theoretical memos were written every time I coded data. These memos served as a record of how codes were developed along with the properties of each category and concept. According to Glaser and Strauss (1967), memoing allows researchers to follow the pathway from properties to concept, develop the properties that characterize each category, and link categories to generate theory. In my theoretical memos I recorded my ideas about codes and their interconnections as they developed and documented my thinking

processes. I engaged in detailed memoing during the entire analysis process by writing down my ideas, my assumed associations between categories, and theoretical reflections related to each of the emerging categories. Additionally, this process encouraged reflection and helped me keep track of the coding process while critically questioning and making necessary adjustments when needed. I followed the guidelines for preparing effective memos offered by Glaser (1978):

- 1) Keep memos separate from data.
- 2) Stop coding when an idea for a memo occurs, so as not to lose the thoughts.
- 3) A memo can be brought to you by literally forcing it or by beginning to write about the code.
- 4) When a lot of memos on different codes appear similar, compare the codes for any differences that may have been missed. If the codes still seem the same, collapse the codes into one.
- 5) When you have two ideas, add two separate memos to avoid confusion.

## **Results**

### **Findings**

**Reflective diaries.** Eleven of the 13 participants typed and two hand-wrote their diaries. Diary entries for all participants were well done and organized but varied in terms of length, format and depth. Most of the participants organized their daily entries according to the guiding questions, stating and answering each question after describing the learning experience. Others did not use this format and wrote in paragraph form, addressing each question but not stating the questions. Participant entries varied in length. Approximately, half the participants wrote lengthy reflections that were often a page long for each day. The other half wrote shorter responses consisting of about a paragraph (half a page) long for each day. The nature of the

responses and reflections indicated participants considered writing in their diaries as a serious activity. Participants mentioned that the diaries helped them think about learning in new ways and be conscious about their experiences as they went through the week.

Data from the reflective diaries indicated participants wrote about either non-school or school related experiences, and most of the students (9 out of 13) wrote more about non-school related learning experiences. Participants were instructed to select and reflect on learning experiences related to their education. It is possible that the participants selected experiences that were influenced by conversations during initial interviews about learning that happens outside of school, even though no indication was given to participants about what kind of experiences I expected. Because this study was exploratory, I did not conduct data collection expecting or looking for specific information. The heavy focus on outside of classroom experiences was not surprising since participants discussed outside classroom experiences during both interviews. Table 1 indicates the frequency of non-school and school related experiences selected by each participant. In other words, the frequency reflects whether each participant described a learning experience that did or did not occur within a classroom or was associated with school or a formal educational setting. The participant order in the table is not in order of when participants were interviewed.

Table 1

*Number of Non-school and School Related Learning Experiences from Reflective Diaries*

<b>Participant</b>	<b>Non-school</b>	<b>School</b>
<b>1</b>	7	0
<b>2</b>	7	0
<b>3</b>	7	0
<b>4</b>	7	0
<b>5</b>	7	0
<b>6</b>	6	1
<b>7</b>	6	1
<b>8</b>	5	2
<b>9</b>	5	2
<b>10</b>	4	3
<b>11</b>	3	4
<b>12</b>	3	3
<b>13</b>	0	7

Nine out of thirteen participants (69 %) more often described non-school related experiences than they did school related experiences. Three out of thirteen (23%) reported a more balanced split of non-school and school related learning experiences. Only one participant (7.7%) described school related experiences more times than non-school related experiences. Non-school related topics ranged from learning about culture through activities such as cooking, watching movies, music, artwork, sororities, and fraternities to learning experiences that taught

participants values, such as being hopeful, polite, hardworking, and patient. Other non-school related learning experiences included playing an instrument, improving listening skills, parallel parking, twirling a flag, and using a gun safely. Participants also wrote about learning experiences that helped make their day-to-day life easier, such as how to use the different functions of an iPad, a fax machine and an automated teller machine (ATM). School related topics experiences included business capstone class assignments, petro physics, derivatives for calculus, and Rene Descartes' Theory on Realism. Participants addressed other issues about their learning experiences in their diaries, however participant responses were very varied and no clear themes emerged.

**Initial and final interview transcripts.** In response to Research Question one, "What are Brazilian and Nigerian international students' conceptions of learning," both initial and final interview transcripts revealed five qualitatively different conceptions of learning identified by students from both countries. Conceptions of learning are described in terms of: 1) new/increase in knowledge, 2) acquisition of knowledge for practical application, 3) memorization, reproducing and studying, 4) understanding, and 5) a process not bound by context or time. Although not specified as a research question, three themes emerged regarding what constitutes good teaching: 1) providing clear explanations/instructions, 2) using a variety of methods, and 3) creating interest. Each theme is presented below with representative quotes from participants. The participants' nationality appears in parentheses after each quote.

***Learning as increase in knowledge.*** Participants talked about learning in terms of acquiring new knowledge and/or increasing one's knowledge. This conception of learning is quantitative in nature, referring to the accumulation, increase or absorption of knowledge. Participants also made statements that described learning as coming into contact with new

information or new knowledge. Participants described learning as becoming aware of or being presented with information, knowledge, or skills that they did not know before. One Nigerian student said “learning is basically...hmmm never thought of this before, learning is basically knowing something, getting information you did not know before you didn’t know before, so yeah learning something new.” Similarly, a Brazilian student stated “hmmm, I think it’s having knowledge of something, a subject or...a subject I guess. It’s just having new knowledge of something.” Another example statement was:

I think I would ummm say learning is picking up something I didn’t know previously, basically and it depends, like in school, yeah I think that’s just it, learning is finding out something I didn’t know before or being exposed to something I didn’t know, like getting more information.

(Nigerian student)

Learning was also described as an increase in a particular skill or acquiring a new skill:

Well when you learn your grow, you develop skills that you maybe you know don’t even know that you have, ummm, it’s difficult to explain, but like also, anything you didn’t know before, like skills, different subjects, like culture too, not just learning in like a school.

(Brazilian student)

I think you learn and you grow, like learn a new skill, ability, you learn stuff you did not know before, like information and knowledge like, but you also learn like skills and stuff you did not know before like maybe you can learn the skill of management, cooking, playing an instrument, you know, that is also learning.

(Nigerian student)



When talking about gaining new knowledge in the learning process, participants noted knowledge and information are often transferred from teacher to student, and they often described teaching as the transference of knowledge. Brazilian students made statements such as “teacher for me would be ummm patient a person who knows how to transmit knowledge to students because it’s always very important in learning for good teacher to be able to transmit knowledge” and “a good teacher is organized, but it’s not just this, good teacher’s errr like what they do, good teachers can transmit the knowledge easily.” In addition to identifying teachers as one source for new knowledge, participants discussed personal experiences and the experiences of others as ways through which new information and knowledge is acquired. Example statements included:

In Brazil somebody tells you, your own experiences, shared experience, with other people, you learn a lot with others, not just on your own, you are able to see, you are able to participate and here you have a little bit of instruction.

(Brazilian student)

Like ummm getting new things every day and ummm peoples experience and probably your experience and ummm not trying to make the same mistakes you’ve made before and trying to you know like, just get like getting new information and stuffs like that, that’s what I think about when I think about learning, yeah and trying to get to know new things.

(Nigerian student)

***Learning as acquisition of knowledge for practical application.*** When participants discussed learning as acquisition of knowledge for practical application, they often described what purpose it serves. A Brazilian student said, “learning is when I can actually put it to use,

yes, (laughs) practicality is very important to me. If I cannot practically put something, some knowledge, some piece of information to use, then what the point of knowing it? That's learning to me." Participants generally did not discuss the purpose of learning within the context of school or educational settings. Their responses were focused more on general real life applications. Other representative statements were:

I'd say, hmmm being able to use something that you've actually been taught, in the sense that you can recall it later in the future not just what is being forced down into you, where you cram and you write an exam, pass and that's it, to me that's not learning, it's actually being able to use what you know, what you've been taught, that's learning.... Oh yes definitely, that's what I mean, learning should have a practical end, I don't want to learn something that I won't use in life and I should go further and say in my day to day life, to me then it's useless. We learn, or we should learn in order to be able to use it, so yes, it should be practical.

(Nigerian student)

It's being able to errr understand a certain, not just subject but being able to use what you are being taught in class, you know, to basically be able to take what you are taught, manipulate it to understand in a simple manner, make it your own, make sense of it in your own way. So for me, its two very important things, learning must be something practical. That I can use, but also I think true learning has occurred only when I can manipulate or play around with whatever information, knowledge, concept, theory that I have been given make it my own explain it my own words, apply it in my own way, stuff like that.

(Nigerian student)

Central to this application-based conception of learning is practice and the importance of being able to practice what one learns. This focus on practice was emphasized in comments regarding opportunities for hands-on experiences directly related to their education. Participants made statements such as:

Yeah, like so people can relate, not just classroom, but take it out the classroom, not just book, book and technical, but make the content and subject real, like give us something to do to make what we are learning real to us students...like an activity outside of class.  
Real life.

(Brazilian student)

Such comments implied a shift from learning as passive with learners who receive new knowledge transferred either from the teacher or other sources to a more active process that involves practicing and utilizing the acquired knowledge.

***Learning as memorization, reproducing and studying.*** This conception of learning is characterized by viewing learning as remembering and/or partly in terms of being able to reproduce something. For some participants learning was inseparable from memory:

I learn when I remember, to me, learning is like remembering when I get some new information and I can remember it later, and give it back, either in writing, like a test or paper, or I am able to tell someone else and I remember it all.

(Nigerian student)

To me I think, if I am able to remember something I have been told and taught, if I am remembering and explain to someone else, that how I know I've learnt something or if I am able to bring it up in a conversation, that's learning, I study too, when I study I learn

too you know?.

(Brazilian student)

Oh ok, yeah, I think I learn a subject or idea when I can reproduce it more times, not just once, but more times, like I said before, learning is making it your own, so when I can make it my own and then reproduce it in my own way then yeah.

(Nigerian student)

***Learning as understanding.*** Central to this conception of learning is a focus on understanding, with personal meaning being a prominent feature. Within this conception, gaining, developing, and discovering meaning is important. A Brazilian student stated that “learning, hmmm, you know it’s not something you think about but give me a minute. For me personally finding your meaning of what you are taught, gaining a grasp on it, an understanding of it.” Other example comments were:

Hmmm, well I would say, understanding, making sense of it, in a way that makes sense to me, you know. You can’t say you have learned something if you can’t say you understand it and not just understand it exactly as it is taught to you, but in your own way. Make it your own.

(Nigerian student)

Learning I think is when where you have the possibility to really understand something in our own view point, in our own. Ummm, learning for me is when we have possibility to comprehend, have comprehension about all the topics about one thing, when we have opportunity to solve doubts.

(Brazilian student)

*Learning as a process not bound by context or time.* This conception of learning is characterized by the belief that learning occurs outside of schools and other formal educational settings. In this case, participants expressed that they believe that learning takes place predominantly outside of the formal classroom. Additionally they see life, from birth to death and life's experiences as a learning process, stating that they believe all of life is a learning experience and that learning never stops. They made statements such as:

In life too, I would say most outside of school is when you learn...you learn such things like hmmm, how I am to behave, good behavior, how to talk to someone, talk to people, to be polite, not rude. Simple things like, walking, talking (laughs), you know how to like errr live.

(Brazilian student)

We can learn, ummm outside of school...I think the school is ummm 30% percent, 40% percent maybe, it can be different for each individual, but mainly I think, we learn mostly out of school. And I think in Brazil this is how I felt, that we learn a lot, more than in school, in life, outside of school....Like ummm, things that happen to you during day to day what you are doing...for me I say school 30% because I learn mostly from my family and people around me at home you know...they tell me things about life in general..... sometimes I see things happen to them and I learn, like that.

(Brazilian student)

I think we may not always be aware of it, but we are learn in our day to day living, I think because mentally we know, we are told that school is where you come to learn, we expect to learn there, but are not always consciously expecting or consciously aware of learning outside of school, but I think we definitely do, I would dare say that I think for

most people, or let me say for myself when I really sit to analyze and compare, I learn more outside of school than in school...I think you are learning until you die, everyone.

(Nigerian student)

But like I think we may not necessarily see the things that happen outside of school as learning experiences, but like at home, you will have for example an older woman, your mom, or auntie, or some relative, like maybe pull you into the kitchen and say she is teaching you this or that, like how to prepare this or that and that is learning you know, there is more to life than books, you know, like you can learn so much outside of books and outside of like structured school and I was like there are like you know different learnt experiences, other than what you learn in the classroom, things people do and things they say to you can teach you something, whether it's something you can use or something just so you know it and stuff like that.

(Nigerian student)

**Good teaching.** Other comments emerged that had to do with teaching. Students' views on good teaching are closely related to their conceptions of learning. The teacher plays an important role in the learning process, and many students noted that how teaching takes place impacts how they learn. It is therefore important to gain an understanding of how students view teaching for a more comprehensive picture of their conceptions of learning. Three main themes emerged concerning participants' views on good teaching. Good teaching is described in terms of teachers 1) providing clear explanations/instructions, 2) using a variety of methods, and 3) creating interest.

***Providing clear explanations/instructions.*** Clear explanations and instructions are seen as central to good teaching, and it is considered absolutely necessary for a teacher to be able to

do those two things well. A Nigerian student stated, “someone that can explain the topic of you know what the person is teaching, very very clearly.” Another representative statement was:

Ok, a good teacher to me is someone who speaks clear and errr I like, I am, very visual and so I like that they give me instructions and show very detailed, for example in like a math class, if he shows me step by step one time, I am going to be able to follow it, but if he doesn't show then it will be really hard and then I am going to consider him a bad teacher.

(Brazilian student)

Oh yes, it's very important, instruction, clear instruction is very important to me and I don't feel like, like it's only because I am international student, because I feel like errr, my classmates, the other students when I express to them my passion, they are like, I don't get it either. They need clear instructions, telling the students clear, specific steps of what to do....that's a good teacher trait.

(Brazilian student)

A good teacher I think for me tells you very clearly, what they want you to do, instructions in class, for exercises, homework, papers and stuff like that, give really clear instructions.....you know, because without it, sometimes it's hard to know what they want, you know, and that can bring confusion, so I think a good teacher gives clear instruction.

(Nigerian student)

***Using a variety of methods.*** Another theme that emerged regarding characteristics of good teaching was the use of a variety of teaching methods, materials, and activities.

Participants expressed that variety is important because students learn in different ways. They made statements such as:

And also like putting in, putting in like videos and other stuff, incorporating different technology and good things into the learning process because I for one I like seeing things sometimes, like visually, so I could then it just like stays in my memory like oh I remember that thing, so yeah I think that will be good, yeah incorporating like visual videos and stuff like that in there yeah.

(Nigerian student)

I think to be a good teacher you need to understand that not all students learn the same way, so to try and find different ways to teach your different students....use different methods, activities, assignments...you know, have some things they can see, you know visual, some students like to hear, other also like to touch to help them learn, you know what I am saying.

(Brazilian student)

***Creating interest.*** The final theme that emerged in connection to good teaching was creating interest. Participants expressed that good teachers should be able to create and maintain students' interest in what they teach. Some example statements were:

A good teacher? Someone who make me want to know what they are talking about, someone who make me feel like I actually want to find out more because like you could have lots of information but it's the way you pass it across, like if it's boring, I don't want to know what you are talking about, a good teacher is someone who keeps me interested in the topic.

(Nigerian student)



I think it's the person that makes, not only says the content but ummm they know how to make people want to learn it, like interested you know, maybe showing the different words, but not so technical, where everyone can understand.

(Brazilian student)

In response to Research Question two, “what are the differences and/or similarities between participants’ conceptions of learning and their learning experiences in the United States?” initial and final interviews revealed four themes indicating differences and one theme indicating similarities. Themes regarding the differences between conceptions of learning and learning experiences in the United States are 1) the role of the teacher in the learning process, 2) the role of the student in the learning process, 3) competition versus collaboration between learners, and 4) hands-on learning. The theme regarding similarities between conceptions of learning and learning experiences in the United States concerns diversity. These themes, which indicate that participants’ learning experiences mainly conflict with their beliefs about learning together with participants’ discussions about their cultural adjustment experiences and their adaptation process paint a general picture of the learning experiences of the population in this study.

***Role of teacher.*** Differences emerged between participants’ conceptions about the role of the teacher in the learning process and their experiences in the United States. Students expressed the belief that teachers should play the role of expert in learning environments and be in charge of the classroom while students play a passive role. However, in their experiences in the United States teachers play the role of guides and facilitators, and students play a more active role in their learning. Some example statements were:

Good teachers transmit the knowledge easily, guide students but ummm like in Brazil, we think maybe I think (laughs) that teacher have most of knowledge, give this to students, it is here in America that I see teacher more as guide to assist students but ummm good teacher can also be perceptual about students' difficulties, give directions for the students.

(Brazilian student)

So like in Brazil, the professor can like know your name and know you from outside of school...but like errr in the classroom, they had the power you know, they were teacher and you student, so they were in control and you listen to them, but you can form a friendship with them, like student professor friendship. In United States it's not that way.

(Brazilian student)

Here they actually want you to go read on your own, and know things and discover things on your own, like they are not going to be like, I am the one who knows, so I am teaching you everything, and your role is just to take in the information I give you, which is the way it is in Nigeria, here you play a role in learning and discovering things for yourself.

(Nigerian student)

Some statements indicated that participants believe culture is responsible for this difference:

In my country we usually listen the teacher explains the content, we solve doubts and go to the home. Teacher is in charge you know he knows everything and you do never challenge the teacher. But here, students challenge teacher in class, ask questions, say to the whole class what they think.

(Brazilian student)

Sometimes, I believe the relationship doesn't have to be close, I feel like this could be a background thing, like my cultural thing, I think there should be clear distinction

between teacher and student you know, respect should be there the teacher is in charge like I said back at home, teachers have power over students, they have knowledge, are passing it down, they maintain that distance, play that role and students also play their role of following instructions and maintaining that respect. Like you should be able to talk to your teacher, if you need explanation, a reference or some extra help, but I am not saying you and your teacher should go out to dinner...that boundary should be respected, but I also feel like it should go beyond just coming to class and saying this is the syllabus.

(Nigerian student)

***Role of student.*** Participants' beliefs about the role of the student in the learning process is directly related to views on the role of the teacher and are different from their experiences in the United States. Participants expressed beliefs that learners should be passive and dependent on the authority and leadership of teachers. However, in their experiences in the United States students are very active learners:

I don't like reading much, but I am having to do it because here it's different from Brazil, like there are bigger classes and stuff like that too, so it's not so simple to go to the professor and talk in person and errr well, I think here we have to look for and search for the information for yourself, like by yourself, not like together, well maybe only the class is not enough, you have to do stuff outside the classroom on your own, the teacher don't just tell you what to do, and it was more like that in Brazil, but here the students do more, like by themselves.

(Brazilian student)

Errr, I think so, errr I think that errr because we are not so used to things here, we are a

little bit more dependent on the class and not so much of our own research on the subject and to learn at home, like you can learn in class and get a tutor, or you can just read it and its fine, so yeah I think we get some kind of dependency.

(Nigerian student)

***Competition versus collaboration.*** Participants' beliefs about competition versus collaboration in the learning process also differ from their experiences in the United States. Participants expressed the belief that students should work together and collaborate in learning environments. However, they reported their experiences in the United States involve competitive environments. They made statements such as:

Ummm no, I don't like competition, I think sometimes, maybe good competitions helps, it can be good for challenging ourselves, but I think we have all, it's my view point, we all have to help each other for all of us to grow and develop together, competition is not nice from my view point, like, we learn better when we all do together and help each other.

(Brazilian student)

Others attribute competition versus collaboration in learning to an individual's cultural and social background:

With competition, if you see others being competitive it might motivate you, but I think it also depends on your background to a huge extent, because I think that might be an American thing, because I think, for me when I first came from Nigeria, it wasn't helpful to me at all, because you may not be used to so much competition, because maybe you have been encouraged or raised to work with others, help others, share with others you know.

(Nigerian student)

No we are not encouraged to compete, errr, I think it's a social, cultural thing, I first heard about it, then saw it for myself, about the selfishness of American people, the individual thing, maybe it's not a bad thing, but American students are like "I will do the best for myself, and you do the best for yourself" and errr, I find that back at home you can talk to more people and bond, with other classmates and here there is more of the competition feeling, with people used to doing it by themselves, yeah competition is not so big in Brazil.

(Brazilian student)

To me it should be cooperative, competitive makes everyone want to overshadow everybody and that way no one is learning anything, because for example, if there is someone who doesn't like competition, the person will actually lose out, but if everything is cooperative and you know, then students learn from each other, maybe a comment here, a comment there, that person will understand what is being taught better, competition, I feel, can destroy morale, because I believe learning is encouraged when people do it together, at any level, in any setting you know, not just the classroom, when there are other people around you learning, you open up and learn more.....I feel.

(Nigerian student)

Their views on collaboration are directly in contrast with their views on competition. Their statements convey what they believe to be the cons of competition and pros of collaboration.

***Hands-on learning.*** Participants reported what they believe to be a stark difference in their home countries of Nigeria and Brazil and the United States in terms of hands-on learning. They reported that since they experienced a great deal of hands-on learning in their home

countries, it is central to their conception of learning. However, they stated that their experiences in the United States are different. A Brazilian student said, “In Brazil I can practice a lot and have a real learn experience. I miss talking more in English during classes and practice the natural oral communication.” Other example comments were:

So it's a little difficult. In Nigeria, we didn't have so much to do like here, some we did in classes, but a lot of it was take it outside the classroom and do it in life, you know, like you are learning, take it home and then see how you can connect or ummm link it to life and make sense of it that way, so everything was not classroom, classroom, like here, it was more than classroom, like it was life you know.

(Nigerian student)

Errr, I think that here in the United States, it's really based on the book and if you wanna do good you have to do your research, errr and then I feel like back home the professors, they are more clear, errr, like I'll go back to the instructions, they give you more, ummm, you'll be able to see more things than you see here, for example in one of my classes in Brazil, we had to learn, errr, it was very similar to my capstone class, somehow. The difference was we actually went to a factory where we saw the raw material from Argentina and then you are actually able to see the whole process of the raw material becoming flour and then we had access to the books, so then that's how we made our report.

(Brazilian student)

So I feel like the way things go at Georgia State, you have options, things are not imposed to you, like this is what we are going to do, that is how it is and you know, deal with it. I think that the disadvantage here, of the education is that it is very, on the book,

we don't get the real life experience that I had a lot of Back in Brazil, you know, learning was not only from the book, but from life as well. And I would love to, because a lot of our professors have connections for example with Coca Cola, Georgia State has connections with Coca Cola, so I think that we should be able to for example go to Coca Cola and see the marketing department for example.

(Brazilian student)

***Similarities.*** Participants expressed that they believe there are very few similarities between their conceptions of learning and learning experiences in the United States. The one theme that reflects a similarity between their learning experiences at home and in the United States is diversity. Participants reported that their learning environments at home are very diverse and their experiences in the United States are similar. Some example comments were:

I think, like ummm, like not really similar, I think like in a way because, you know Nigeria is a different culture, so you know, it's like different, it's like almost all African there, here and in America it's like different people, so at the end of the day if I meet someone from a different tribe in Nigeria, I can learn something new from them, same thing here, if I meet someone from a different country, I feel like that's a similarity like you tend to learn from people outside, outside, your own you know, own, ummm tribe country or whatnot, so I think that's kinda like a similarity, yeah.

(Nigerian student)

I'd say, because where I grew up, it's a big city, so it was very diverse, lots of different people, from different tribes, countries, so but here, in Atlanta, in GSU, it's also diverse, a lot more diverse I would say, and so though its broader in a sense, I would say it's a similarity a lot of cultures from all over in the world, so in both places, you are exposed,

maybe to different degrees, to different viewpoints, experiences, perspectives, and that is very vital to learning you know...that exposure.

(Brazilian student)

***Cultural Adjustments.*** Participants discussed having to adjust to a new and different culture. They expressed how different they find the culture in the United States. A Nigerian student stated, “America is a different culture from Nigeria, like very different you so in general when you come, it’s actually like learning a new place, culture, and the people and how they are.” Other example comments were:

However, I needed learn a lot of things that I already knew in Brazil, but I needed learned again because it is a new country, new language, and new culture. The learning experiences I have in USA are different than I had in Brazil because here I need to understand a lot of things, such as language and culture. For example, for learn how I ask water, I need know which words to use, how look for the person. In Brazil, I already knew how I need ask.

(Brazilian student)

Other statements addressed more specific things that were new and required adjustment, such as the relationship between old and young people. Some example statements were:

So I think that was one of the things I found challenging and when I first came to this country and ummm...the way people view things, people see things quite differently from how I as Nigerian sees things and I think it’s a cultural thing. Ummm this is quite basic anyways, like when you are talking to someone who is older than you are, you know, there’s a couple of terms you can’t us, how you refer to them, how you address them , like here people talk to older people as if they are their age mates, call them by the



first names and things like that, you know, just those basic things and it all piled up and I wasn't used to things like that, so I had to slowly adjust, so in relation to that, in the classroom, I would see students talking to the teacher any way they want, and that was new to me, students arguing with teachers, telling them they were wrong, even when the teachers were a lot older than us. I wasn't used to that, you give them that respect because they are older and because they are our teachers you no...so I have had to adjust.

(Nigerian student)

We with me, I don't really see, well that's the thing with Nigeria...well, that's why the kids here in America are different, when I say different I mean in terms of how fast they grow, respecting people, very different from the kids in Nigeria, because in Nigeria, it's like everyone is involved in raising a child, the neighbors, the parents. But here in America, it's like only you and your parents, no one else can talk to you, you get what I'm saying, so yeah I think that's the difference. In Nigeria, the reason why I am saying that is a good thing is because it just makes a child have this respect and value things, because here it's like, ok, nobody can talk to me and I'm gonna do what I want to do, but back home it's like there are some things you know are wrong, like they are going to teach you right from wrong, yeah, so I think that's kinda like the difference.

(Nigerian student)

Well like for me, something that is not like related to learning...or maybe it is, but over here, it's like there is no respect for older people, you will see children talking any way they want, or very rudely to their own parents...like their own parents...you would never see that in Brazil its very surprising to me.

(Brazilian student)

Other specific issues included closeness between students and teachers:

For me another thing that is frustrating for me, here I have to do a lot of work on my own. I am not so close to teacher. At home I had a lot of practice and have a real learn experience. And teachers are close; the teachers know you and our parents and often are from the same neighborhood. I guess it's a cultural thing, which I am having to adjust to I miss talking more in English during classes and practice the natural oral communication.

(Nigerian student)

Errr, there is a closer relationship, and not just school, like personal, like they know about your family, home, like society, but I guess it also depends, I was studying in a small college so it was closer and it helped. So like in Brazil, the professor can like know your name and know you from outside of school...but like err in the classroom, they had the power you know, they were teacher and you student, so they were in control and you listen to them, but you can form a friendship with them, like student professor friendship. In United States it's not that way.

(Brazilian student)

***Process of adapting.*** In general, participants expressed that the process of adapting to learning in the United States is difficult:

Very hard, like if I should put it on a scale of zero to ten, I would put ten and I am errr thinking of this when I first started going to college here, because I am a transfer student because the systems work a little different because, here, you have, every time you ask someone something, they address you to the website, oh go to the website go to desire2learn, go to your paws account, you do not have someone, you don't have a

mentor that says, I'm gonna talk to you, like look, that's how it was when I got started, go here, go there, and I know from my culture, Brazilian people we are very passionate about helping people, we are not afraid to help others, with learning too, we help each other, together and our way of helping people, like I do it, we are very hands-on. And then the American culture is very private, individualist, and there is a conflict for those students coming here, and I can't imagine, for those also doing the ESL, how hard it is for them because they also have to learn the language and be with a big group of teachers, it is such a diverse school, such a diverse body of teachers, where sometimes you can be in a classroom with a teacher who also has an accent, so it must be really hard for them.

(Brazilian student)

The adaptation is a long and slow process. For me, it has been difficult because the rhythm of study is very different, is harder. It means, that I have too much more homework to do, too much more records to listening, and too much presentations. Sometimes I have more than one presentation in a week in the same day. Besides them, in my country, my friends and I studied together, so it is very difficult study alone.

(Nigerian student)

The environments are very different. First, I live in the university, so I do not spend time in traffic or waiting a bus because I can go to classes walking. Second, the classes are organized. They start when they have to start and finish when they have to finish. So, I do not waste time waiting the teacher and I can organize the rest of my day after class. It is ok and a challenge. Ok, because it is all the opportunity for everyone that is student from IEP. All of we have access to all of the university. It is a challenge because of all the

problems around of to be far from family and friends.

(Brazilian student)

Well it's been both smooth in some senses and also difficult me, I mean because I, I already spoke English, so English wasn't a barrier for me, so I didn't really have any problem, I just came, the more difficult was I had to figure out how to do things more using the computer because you know in Nigeria, its mostly written and manual, but here your grades are online, the quizzes are online and stuff, so that was pretty much the only thing I learnt how to do, but adapting was cool, I would say easy, but not too easy, some difficulties.

(Nigerian student)

In response to Research Question three, "What were the Similarities and Differences in Brazilian and Nigerian Students' Conceptions of Learning?" very similar conceptions of learning were described by both groups of students despite direct comparisons between students from the two countries. Interestingly, no clear themes emerged regarding differences in Brazilian and Nigerian students' conceptions of learning.

### **Discussion**

This study explored the learning conceptions of international students from South America and West Africa, focusing specifically on Brazil and Nigeria. Although previous studies investigated Brazilian and Nigerian students' conceptions of learning (Crabtree & Sapp, 2004; Fidalgo-Neto et al, 2009; Iyamu & Ukadike, 2007; Santilli, et al., 2011; Sunal et al., 2001; Watkins & Akande, 1994), data was collected in the students' countries of origin. This study is important because it examines Brazilian and Nigerian undergraduate students' conceptions of learning while they are studying in the United States. No study to date has investigated Brazilian

and Nigerian students' conceptions of learning within the context of the United States, and no other research has examined both groups within the same study.

Data from the reflective diaries indicated students' awareness of how much learning takes place outside formal school environments. A majority of students described non-school related learning experiences more often than they did school related experiences. Furthermore, there is a wide variety in the types of non-school related learning experiences discussed. This finding is supported by previous research that found non-Western participants had similar views on the broad extent of learning. Purdie et al. (1996) found Japanese students have an expansive view of learning in terms of what context it can occur in, believing that learning occurs often outside of school. Research with Brazilian and Nigerian students in their countries of origin also indicates beliefs that learning is not reserved for formal learning environments but is an ongoing process in everyday life outside of school (Crabtree & Sapp, 2004; Iyamu & Ukadike, 2007). Thus, whether Brazilian and Nigerian students are home or abroad they consider learning as a process not limited to inside the classroom. Educators that work with Brazilian and Nigerian students may wish to encourage students to pay attention to the learning experiences they have beyond the classroom. Specifically, drawing students' attention to how they learn outside of school could inform what methods and strategies they chose to use in the classroom.

In response to Research Question One, "What are Brazilian and Nigerian students' conceptions of learning?" five themes emerged regarding learning as 1) new/increase in knowledge, 2) acquisition of knowledge for practical application, 3) memorization, reproducing and studying, 4) understanding, and 5) a process not bound by context or time. Three of these themes (new/increase in knowledge, acquisition of knowledge for practical application, and memorization, reproducing and studying) may be viewed as quantitative conceptions of learning

focusing on accumulating information in order to reproduce or apply it (Saljo, 1976). Only one theme (understanding) may be viewed as a qualitative conception that focuses on learning as comprehension and interpretation of meaning (Saljo, 1976). Biggs and Moore (1993) noted that quantitative conceptions relate to surface learning and qualitative conceptions relate to deep approaches to learning. While speculative, the finding that Brazilian and Nigerian international students often describe learning as quantitative in nature may indicate surface approaches to learning. Watkins (1984) and Allan (2003) argued when students have conceptions that indicate a deep approach to learning, they are more likely to be academically successful. Enwistle and Peterson (2004) also reported there is a significant relationship between deep learning and high academic functioning, while surface learning is related to weak academic functioning. Brazilian and Nigerian international students may particularly benefit from explicit teaching strategies that foster deep approaches to learning.

The five conceptions of learning revealed in this study may also be viewed in terms of active and passive learning. The theme of acquiring knowledge for practice indicates ideas about learning as an active process. Research has established that in order for students to develop mastery in any concept or skill, they must go beyond knowledge acquisition and learn how to apply and practice it, this is vital to students' academic achievement because it speeds up learning, helps with long-term retention, and facilitates recall (Seels & Glasgow, 1997). Previous research with Nigerians in their country of origin reported a preference for practical instead of theoretical learning (Watkins & Akande, 1994). An important finding of this study is that Nigerian students whether home or abroad view learning as a practical endeavor involving practice, indicating an active approach to learning. Learning as understanding is another conception involving action. In this instance, gaining, developing, and discovering personal meaning

from knowledge is important. The view that learning is not bound by context or time may also be considered active. Students discussed that they learn in a variety of environments, and they will continue to learn over their life span. Research on active learners has established that they utilize higher order thinking and problem solving skills and are more enthusiastic about learning which leads to greater academic success (Anderson et al., 2005; Emelo, 2013; Petress, 2008; Thaman, Dhillon, Saggar, Gupta, & Kaur, 2013; Wolfe, 2006).

The view that learning is the accumulation of knowledge may be considered passive since students often describe themselves as the recipients of information from teachers. Another example of passive learning is the view of learning as memorization since students discussed this category in terms of being able to remember and reproduce information rather than do something with the information. Research on passive learners established that they have diminished motivation and enthusiasm, are less likely to ask questions, apply what they learn, and engage the information they receive, an approach to learning that often presents a challenge to academic achievement (Anderson et al., 2005; Emelo, 2013; Petress, 2008; Thaman et al., 2013; Wolfe, 2006). It is interesting that both active and passive conceptions of learning emerged from Brazilian and Nigerian students' responses. It is also important to note specifically that elements of both active and passive conceptions of learning were present in individual participant responses. Perhaps this finding is a result of students transitioning from a culture that focuses on passive learning to one that focuses on active learning. In any case, educators working with this population may wish to foster and encourage active learning.

Due to the fact that participants' conceptions were examined within the context of the United States, findings of this study may be compared to previous research on United States

students' conceptions of learning (Hong & Salili, 2000). Two conceptions of learning (learning as gaining information and learning as a process not bound by time or place) that emerged in this study were also reported in earlier research with American students (Hong & Salili, 2000; Purdie & Hattie, 2002). It is important to consider that conceptions of learning may be shifting as Brazilian and Nigerian students adapt to the culture in the United States. International students studying in other cultures may have "hybrid" conceptions of learning, or ideas that are influenced both by their culture of origin and the culture they are experiencing while studying abroad. The fact that participants in this study report conceptions of learning similar to American students may indicate their conceptions of learning are shifting as they experience American culture.

Conceptions of learning that emerged in this study may also be considered in terms of both traditional Eastern and Western views on learning. For example, Brazilian and Nigerian students describe ideas of learning as a process of memorization, reproducing, and studying. Purdie and Hattie (2002) argued that memorization has historically been a consistent separating factor in Eastern and Western conceptions of learning. Among Eastern cultures and educational contexts, memorization is often seen as a valid conception of learning because it is viewed as aiding the development of understanding (Watkins & Biggs, 1996). However, in Western cultures and educational contexts memorization is often looked down upon as a rote and shallow approach to learning (Watkins & Biggs, 1996). Another example is the idea that learning involves understanding and making personal meaning, a concept that is at the core of constructivism, which is embedded in Western philosophy (Lui & Matthew, 2005). The essence of constructivist theory is that learners must individually transform information they receive and



develop their own meaning (Fosnot, 2005; Wang, 2007). Thus, findings of this study indicate that Brazilian and Nigerian students' conceptions of learning have both Eastern and Western elements.

Both Brazilian and Nigerian international students' addressed what constitutes good teaching when they discussed learning. The themes reported by the participants of this study (providing clear explanations/instructions, using a variety of methods, and creating interest) are techniques identified in previous research as practices of good teaching (Danielson, 2007; Lampert, 2001; Lemov, 2010). Research indicates clear and explicit instruction is effective because it offers unambiguous explanations of the skills and information being presented to students (Fordyce, 2014; Reed, 2013; Williams & Colomb, 1993). Using different approaches and methods in the classroom increases the likelihood that the learning style of every student is considered (Samuelsson, 2008). Creating student interest in the classroom is influential in keeping students attentive and motivated (Kember, Ho, & Hong, 2008; Stalder & Stec, 2007). Entwistle and Peterson (2004) argued students form beliefs about teaching that are tied into learning conceptions and influenced by prior educational experiences. Students bring their beliefs about teaching into learning experiences, and when entering higher education they encounter a range of different teaching methods (Entwistle & Peterson, 2004). Clear themes emerged on this topic providing additional evidence on the strong tie between teaching and learning. Based on this population's beliefs about what constitutes good teaching, instructors may wish to focus on clear and detailed instruction, using a variety of teaching methods and finding activities that can create and maintain students' interest in their subject matter.

In response to Research Question Two, “Are there differences and/or similarities between their conceptions of learning and their learning experiences in the United States?” four themes emerged: 1) the role of the teacher in the learning process 2), the role of the student in the learning process, 3) competition versus collaboration between learners, and 4) hands-on learning. Students reported interacting with teachers in the United States who play the role of facilitators and guides, an experience that conflicts with their beliefs about teachers being experts who control the learning process. Students also reported that teachers often encourage them to play an active role in the learning process, another experience that conflicts with their beliefs about students being passive learners. Additionally, participants reported that they view collaboration as more beneficial to learning than competition, but they experienced learning environments in the United States that are more competitive than their home countries. Participants also expressed the belief that hands-on experiences are vital to learning, but they report academic environments in the United States often do not provide opportunities for this type of learning. This populations’ belief about the passive role of students and importance of collaboration and hands-on learning provide further insight for educators. Brazilian and Nigerian international students may benefit from learning environments and activities that encourage and support active learning. Furthermore, this population may respond well to instruction that offers opportunities for collaborative work with their peers and helps them make connections between what they learn in the classroom and the larger world. Educators may wish to offer opportunities for students to engage with society through experiences outside of school that tie into the classroom and prepare them to be successful in different environments.

Findings of this study on differences between learning conceptions and experiences, in particular the roles played by teachers and students and an emphasis on competition, are not

surprising when considering previous research on classroom environments in the United States. American classrooms are predominantly learner centered where teachers present content, facilitate dialogue, demonstrate analytical skills, and students think critically about content, express perspectives in class, participate in dialogue, and demonstrate understanding. In other words, the learning process is directed by both instructor and student (Smithee, Greenblatt, & Eland, 2013). Additionally, research has found that classrooms in the United States are environments where there are expectations of independent work, which can hinder collaboration.

These conflicts between conceptions and experiences may also be viewed in terms of traditional notions regarding Eastern and Western approaches to learning. Research has established that Western views of learning are characterized by valuing the individual learner over the collective and the promotion of autonomy and independent thought over collectivism and interdependence (Maftoon & Ziafar, 2013; Merriam et al., 2005). These values tend to result in Western students placing a higher value on competition instead of collaboration within learning environments (Maftoon & Ziafar, 2013; Merriam et al., 2005). In contrast, in Eastern cultures, Nah (1999) argued that collectivism and collaboration are instilled as important values from childhood and result in Eastern students' tendency to prefer collaboration in their learning environments (Maftoon & Ziafar, 2013; Merriam et al., 2005). Li (2005) also reported that for Eastern students, more so than their Western classmates, the application of knowledge to real-life situations was important, and they therefore valued hands-on experiences. Thus Brazilian and Nigerian international students reported beliefs on collaboration, application, and hands-on experiences overlap with traditional Eastern beliefs about learning. While their general conceptions of learning have elements of both Western and Eastern perspectives, differences between their beliefs and experiences more directly relate to Eastern beliefs.

The one theme that reflected a similarity between learning beliefs and experiences in the United States was diversity. Participants expressed the belief that diversity is important because it presents opportunities to learn from different people and allows exposure to different viewpoints, experiences, and perspectives which is very vital to learning. This belief in the value of diversity is supported by the diverse learning environments they experience in the United States. Research outlined several benefits of diversity in higher education, including enriching educational experiences, promoting personal growth by challenging stereotypes, encouraging critical thinking, helping students learn to communicate effectively with people of varied background, and fostering mutual respect and teamwork (Hardy & Tolhurst, 2014; Tienda, 2013; Turner, 2013). It is important to note that participants in this study were attending an urban, diverse institution where their belief in the importance of diversity in a learning environment was likely matched by their experiences. This value of diversity underlines the importance of educators working with Brazilian and Nigerian students creating opportunities for students to interact and work with various groups of students and facilitate a context for diverse points of view to be expressed in the classroom. Programs and institutions that are explicit about diversity as an institutional value would be contributing toward international student feeling more comfortable in their educational environment.

Participants in this study discussed some aspects of American culture that they had to adjust to and the general process of adapting to learning in the United States. Participants reported that adapting had been a difficult process due to the individualist nature of American culture, increase in workload, being away from family and friends, new environments, and increase in technology use. These are challenges of international students reported by previous research (Abe, Talbot, & Geelhoed 1998; Brown, 2008; Liu, 2011; Okorochoa, 2010; Sam, 2001;

Trice, 2005). Institutions may wish to directly address these identified issues through providing international students with workshops and courses.

In response to Research Question Three, “Are there differences and/or similarities between the two groups in their conceptions of learning?” no clear themes emerged regarding differences in Brazilian and Nigerian international students’ conceptions of learning. Thus results indicate noticeably similar conceptions of learning among students from both countries. Hofstede’s Theory of Cultural Dimensions (1986) may provide one explanation for this finding since most West African and South American nations fall along similar sides on the five cultural dimensions. Brazil and Nigeria are identified as cultures that are highly collectivistic and masculine with high power distance, weak uncertainty avoidance, and short-term orientation (Hofstede, 1986). Beliefs about learning in collectivistic cultures are centered on the collaborative process, and there is a general preference for group learning (Al-Fraih, Duffy, Monserrat, & Baker, 2012; Foley & Mitsis, 2004; Hofstede, 1986; Jaju et al., 2002; Signorini, Wiesemes, & Murphy, 2009). Students from high power distance cultures expect to learn and abide by the truth provided by teachers, and thus learning mostly involves teachers transmitting content to students. Cultures with weak uncertainty avoidance have learning environments characterized by flexibility with teachers as guides and facilitators in the learning process (Al-Fraih et al., 2012; Foley & Mitsis, 2004; Jaju et al., 2002; Signorini et al., 2009). However, the similarities between the Brazilian and Nigerian cultures on Hofstede’s dimensions and conceptions of learning among students from both countries should not be interpreted as an indication that these two groups of international students are homogenous and share identical learning experiences. Rather, implications for educational practice drawn from the findings for these two groups should serve as important frameworks to guide educators and institutions.

## **Significance**

Information on international students' conceptions of learning is significant for a number of reasons. Research has argued that there is very little congruence between university students' conceptions of learning and those of their teachers, citing this discrepancy as one of the reasons for learning difficulties in higher education (Perry, 1970; Burnett, Pillay, & Dart, 2003).

Hofstede (1986) emphasized that teachers at all levels of education need to be trained to become intellectually and emotionally accustomed to the fact that in other societies people learn differently, especially as learning environments become more culturally diverse. He argued that ways of knowing, learning, and expressing knowledge are culturally induced, and it is therefore very important to examine different aspects of learning in different cultures in order to be able to effectively develop culturally-inclusive teaching approaches to facilitate adjustment of students from different cultural backgrounds. Learning shapes the main ideas of educational practice. The way individuals define learning and beliefs about the way learning occurs has important implications for educators who facilitate learning. An understanding of learning theories and conceptions provides instructional designers with verified instructional strategies and techniques for facilitating learning as well as a foundation for intelligent strategy selection (Ertmer & Newby, 2013). It is a fundamental belief that when educators gain a full understanding of students' conceptions of learning, they can design better teaching and curricula or instructional environments (Burnett et al., 2003; Chin & Brown, 2000; Tsai, 2009).

A significant finding of this study is that Nigerian and Brazilian participants have multiple conceptions of learning. Previous research revealed students who have multiple conceptions of learning use a variety of different methods for learning. According to Lee (1998), students with multiple conceptions of learning pay attention to learning conditions and subject difficulty level.

Furthermore, Lin and Tsai (2008) believe that students with multiple conceptions of learning use higher levels of cognitive and metacognitive strategies and thinking skills, such as self-monitoring, and a selection of different problem-solving strategies that are effective in their academic achievement. In other words, students who have multiple conceptions of learning use a combination of various learning methods to achieve academic success. Even though the focus of this present study did not extend to learning strategies, it can be inferred that the population employs a variety of learning methods. Educators who work with students from Brazil and Nigeria may consider encouraging them to explore and think about the different ways in which they conceptualize learning and expose them to the different conceptions of learning identified in the literature. Additionally, educators and teachers can help students understand how learning conceptions influence and shape learning strategies and methods. Practical implications of the findings of this study include educators talking to international students and encouraging them to reflect on their beliefs and develop personal meaning concerning conceptions about learning, teaching, and academic environments.

This study is also significant because it addresses the importance in understanding definitions of learning. Saljo (1976) early on emphasized, “learning does not exist as a general phenomenon. To learn is to act within man-made institutions and to adapt to the particular definitions of learning that are valid in the educational environment in which one finds oneself” (p.106). Different educational environments define learning according to “different socially and culturally established conventions with respect to what counts as learning” (p.104). In this regard, international students come to institutions of higher education in the United States with a variety of culturally and socially influenced definitions of learning and must learn how to

function and integrate into already established learning environments with existing definitions of learning. For this linking of different definitions of learning to work effectively, it is important that all parties involved have an understanding of each other's definition of learning. This study provides educators in universities in the United States with information on how students from Brazil and Nigeria define learning. Additionally by asking participants to examine how their conceptions of learning differed from their learning experiences in the United States, it brought an awareness to the participants of how some aspects learning are defined in the United States.

On a broader level, this research is significant because it expands on the relatively small literature on international undergraduate students from Brazil and Nigeria studying in universities in the United States. Prior research has largely focused on students from North America, Europe and Asia, not giving much focus to students from other regions of the world such as Africa and South America. Thus, this study sheds light on a segment of the international undergraduate student population not previously addressed in the literature (Dahlin & Regmi, 1997; Marshall et al., 1999; Purdie et al., 1996; Tsai, 2009). The general trend in students' conceptions of learning research is to rely on an East-West dichotomy as the basis for cross-cultural theorizing, and this study offers additional lens with which to view learning by a much understudied population. This study reports findings that provide much needed information on Brazilian and Nigerian international undergraduate students, populations that are increasingly becoming part of classrooms in universities across the United States.

### **Limitations and Future Research**

One limitation of this study is the reliance on self-report data. Future studies could combine additional techniques such as observations together with self-report to gain a deeper



understanding of conceptions of learning. Another limitation of this study is maturational effects are not examined. Future research could examine students' conceptions of learning at the beginning, middle, and end of their study abroad experience to determine if length of stay in the United States may change learning conceptions over time. Importantly, future research could also examine the relationship between Brazilian and Nigerian students' conceptions of learning and academic achievement, as has been done with other populations.

### **Conclusions**

An increasing number of Brazilian and Nigerian international students are enrolling in universities in the United States who are tasked with creating educational programs and offices that offer support. As such there is the need for a bridge between research on the learning experiences of international students and educational practice. One area of research that helps understand the learning experiences of international students is investigations on conceptions of learning. Previous research has found that conceptions of learning guide primary beliefs, experiences, interpretations, and outcomes of learning, provide insight into the ways students choose to approach learning, and influence how they interact with courses, classroom environment, teachers, and peers (Marshall et al., 1999). However, research on international students conceptions of learning have predominantly focused on some groups, leaving out others. Brazilian and Nigerian international student's conceptions of learning have not received much attention in the literature and this study sheds light on the learning conceptions and experiences of this group. Through reflective diaries and interviews themes emerge that paint a clear picture of the learning conceptions and experiences of this population. Findings inform instructional, curriculum, and program designers and educators who work directly and indirectly with Brazilian and Nigerian international students, and provide valuable information for making

decisions regarding learning objectives and strategies. Understanding how students learn is useful in determining what kinds of programs can be created to help international undergraduate students succeed academically and overall transition smoothly into the American Education system.

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