

Academic and Social Support Services for International Students: Current Practices

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Abstract: International students make valuable intellectual, cultural, and economic contributions to host-country colleges and universities. Some U.S. institutions enrolling greater numbers of international students offer a variety of specialized services designed to support students' social adjustment, academic achievement, and language development in ways that potentially lead to greater retention and international student engagement. In this exploratory study, researchers analyzed website content to describe the types of support services offered by the top 20 U.S. universities with the greatest enrollment of international students in 2016. Implications are offered for U.S. higher education leaders interested in offering services to attract, support, and retain international students in an uncertain national political environment.

Keywords: academic support, international students, social support

Introduction

For decades, universities around the world have been intellectually, culturally, and educationally enriched by the enrollment of international students, who bring a plethora of experiences, perspectives, and skills to host country institutions. Researchers highlight the valuable perspectives and experiences that international students bring to intellectual environments, enhancing innovation and contributing to the development of global perspectives among all students (Alvarez, 2016; Hegarty, 2014; Luo & Jamieson-Drake, 2013; Perry, 2016). Universities also have benefitted from the economic contributions of international student enrollment. This has been particularly evident in colleges and universities in the United States, Canada, Australia, and Western Europe.

In the United States, since 1954, universities experienced steady increases in international student enrollments, which continued over several decades (Institute for International Education [IIE], 2016b). During the 2015–2016 academic year, over one million international students were enrolled in U.S. colleges and universities, comprising 5.2% of the overall student population and contributing nearly \$36 billion to the U.S.

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economy (IIE, 2016a). Consequently, many college administrators in the United States came to rely upon the sustained enrollment of full-time international undergraduate students as a basis for financial planning and future enrollment projections (Loudenback, 2016).

Despite steady growth in international student enrollment in recent decades, U.S. higher education leaders began observing rapid decreases in international student applications and enrollment in 2017, likely in response to government immigration reforms, changes to policies for issuing international student visas, U.S. travel bans targeting specific countries, and a surge in nationalist politics (Patel, 2017). As such, academic and social support services for international students are essential to continued international student matriculation, engagement, and success in U.S. higher education (Cetinkaya-Yildiz, Cakir, & Kondakci, 2011; Cho & Yu, 2015; Hegarty, 2014).

IIE, a U.S.-based non-profit organization located in New York, publishes an annual report on international student exchange and enrollment in the United States titled the Open Doors Report. The 2016 Open Doors Report listed the top 20 U.S.-based universities that consistently host notably higher numbers of international students than other U.S. universities (IIE, 2016b). A complete list of these universities is presented in Table 1. All 20 universities listed in the Open Doors Report provide a wide range of specialized student support services designed to meet the unique needs of international students and, in the case of long-term graduate students, their families.

The purpose of this study was to describe the types of academic and social support services provided by each of the top 20 universities named in the Open Doors report (IIE, 2016b). This research was exploratory and descriptive in nature and did not account for international students' perceptions of the value and quality of the U.S. university support services provided. However, results from this research provide a starting place for more in-depth future research on how international students at these top 20 universities might experience the support services described and the extent of perceived value of these services from the perspectives of enrolled international students. Despite the volatility of internationalism in higher education environments, many American universities are committed to enacting, at minimum, first order changes—or initial programmatic interventions that support multiculturalism (Pope, Reynolds, & Mueller, 2014). Universities interested in attracting and retaining international students might benefit from learning what other U.S. universities are attempting to do to support the academic success and social integration of international students.

Literature Review

The value of international exchange and international students on U.S. college campuses cannot be underestimated. Hegarty (2014) argued that although U.S. universities may recognize the value of enrolling international students, many of them fail to understand the scale of influence international students bring as a vital component to higher education, particularly because they enrich university environments intellectually and culturally (Luo & Jamieson-Drake, 2013).

For decades, U.S. higher education researchers have stressed that college-sponsored student success programs are important to the academic success and engagement of all

Table 1. International student enrollment at top 20 institutions.

University name	International student enrollment
New York University	15,543
University of Southern California	13,340
Arizona State University - Tempe	12,751
Columbia University	12,740
University of Illinois–Urbana-Champaign	12,085
Northeastern University–Boston	11,702
University of California–Los Angeles	11,513
Purdue University	10,563
Boston University	8,455
University of Washington	8,259
Michigan State University	8,256
University of Texas–Dallas	8,145
Penn State University–University Park	8,084
University of Michigan–Ann Arbor	7,630
University of California–San Diego	7,556
University of California–Berkeley	7,313
Indiana University–Bloomington	7,159
Ohio State University–Columbus	7,117
Carnegie Mellon University	7,051
University of Minnesota–Twin Cities	7,037

Note. From "2016 Fast Facts," by the Institute for International Education, 2016 (<https://www.iie.org/Research-and-Insights/Open-Doors/Fact-Sheets-and-Infographics/Fast-Facts>). In the public domain.

students (Kuh, Kinzie, Schuh, & Whitt, 2005; Tinto, 1998). For international students and, in some cases, their families, university-based academic and social support services have been highlighted as key to international student success and continued matriculation in higher education institutions (Cho & Yu, 2015; Glass, Gomez, & Urzua, 2014; Zhang & Goodson, 2011; Zhao, Kuh, & Carini, 2005). Researchers also have indicated that international students experience unique challenges related to their social adjustment and academics that often require specialized support services (Andrade, 2006; Hendrickson, Rosen, & Aune, 2011; Perry, 2016; Zhang & Goodson, 2011).

In recent years, however, some global scholars (Rose-Redwood, 2017; Tardy, 2017; Vasiloupoulos, 2016) have argued for a more nuanced, critical view of research on international students' experiences, particularly as extant research has focused on students who attend Western Anglophone universities or institutions located in Australia, New Zealand, the United Kingdom, Canada, and the United States. As more countries around the world (e.g., China, India) offer increasing opportunities that attract international students, critical scholars are calling for more expansive research that goes beyond a focus on academic and social adjustment and acculturation. Despite this recent

call in response to heightened global tensions, for purposes of this study on support services offered by top enrolling U.S. universities, we briefly reviewed the extant literature on international student support needs from a programmatic perspective. This review also includes information on suggested best practices in supporting international students.

Social Adjustment Challenges of International Students in the United States

Adjustment in academic settings describes the extent to which there is a “fit” between students and the academic environment (Andrade, 2006). Overall, when compared to host country students, international students are more likely to experience anxiety, homesickness, and stress in adjusting to college (Fritz, Chin, & DeMarinis, 2008). Separation from close family and friends, lack of comfort and familiarity with different cultural practices (e.g., foods and social customs), social isolation, and challenges with host country language proficiency contribute to challenges with social adjustment (Johnson & Sandhu, 2007; Khawaja & Stallman, 2011).

Researchers (e.g., Ebinger, 2011; Jackson, Ray, & Bybell, 2013) have examined various contributing factors to social adjustment of international students. Friendship is cited as an important social adjustment factor. In fact, social support is highlighted as one of the most essential determinants of the psychological well-being of international students (Misra, Crist, & Burant, 2003). Many scholars emphasize that international students’ adjustment in U.S. colleges is contingent on how well students can establish social networks with various campus groups including peer groups, clubs, recreational sports, and other activities that facilitate social involvement on campus (Hwang, Martirosyan, & Moore, 2016).

Chavajay (2013) distinguished between instrumental support and social emotional support in describing international students’ social relationships. Instrumental support represents the kind of support a friend might provide in the form of a study session, a planned social activity, or by assisting with transportation. Although instrumental support involves interaction and purpose, the level of intimacy and engagement remains at a more superficial level and rarely compensates for the social–emotional support that close friends or family members provide (Chavajay, 2013). Chavajay (2013) reported that international students tended to gain more social–emotional satisfaction from interacting with other international students than from host country friends, perhaps because of empathy for feeling like an outsider. As students establish friendships with other international students, as well as host country peers, study results indicate that they experience greater social adjustment (Ebinger, 2011; Rienties & Nolan, 2014). To facilitate the social adjustment of international students on campus, universities can promote programs that facilitate the formation of friendships among international students, as well as with host country nationals (Ebinger, 2011).

Cho and Yu (2015) examined the role of university support in determining international students’ well-being. Positive effects of university support were found on two dimensions—university support increased the college-life satisfaction of international students and reduced their psychological stress. International students typically sense fewer feelings of belongingness within the college community compared to domestic

students who commonly connect with family and communities outside of the university. Overall, researchers find that international students tend to be more actively engaged in college and identify more with a university when they receive university-based support (Cho & Yu, 2015; Glass et al., 2014; Zhang & Goodson, 2011).

Academic Challenges of International Students in the United States

Although academic pursuits are reported as a primary goal for most international students, Choi (2006) emphasized that minimal research has addressed the academic adjustment of international students, compared to other areas of adjustment (e.g., acculturation, psychological adjustment). Much of the extant literature (e.g., Andrade, 2006; Araujo, 2011) focuses on a discussion of the critical role of English language proficiency on the academic achievement of international students because many international students studying in the United States do not speak English as their first language and, therefore, struggle with language challenges in college.

Some scholars have examined relationships between English language proficiency and academic difficulties (Martirosyan, Hwang, & Wanjohi, 2015; Poyrazli & Grahame, 2007). Lee (2013) described how students who do not speak English as a native language often have difficulty meeting expectations of U.S. classrooms, where class participation is both encouraged and often graded. Language challenges make it particularly difficult to engage in discussions and communicate effectively in the classroom. Linguistic and cultural differences contribute to student difficulty with assignments, particularly when in-class participation and group collaboration are required (Lee, 2013). In some countries (e.g., China), academic standards often are centered on memorization and task repetition (Kennedy, 2002) rather than group work and classroom interaction and participation, making the need for English language fluency even more essential to academic success.

Results from some studies suggest that limited English language proficiency levels have cumulative effects on international student adjustment. Language proficiency was found to be a significant predictor of academic difficulties and academic stress (Poyrazli & Kavanaugh, 2006), which then led to acculturative stress in the forms of depression or anxiety (Dao, Lee & Chang, 2007; Poyrazli & Kavanaugh, 2006). Because they are unable to accomplish their educational goals due to limited English language proficiency, many international students could feel forced to leave college (Martirosyan et al., 2015).

Mismatches in culturally rooted academic expectations can strain international students' interactions and relationships with professors or academic advisors, which consequently impacts their academic adjustment (Hung & Hyun, 2010; Kim, 2007; Mukminin & McMahan, 2013; Sato & Hodge, 2009). International students likely encounter fundamental cultural differences (e.g., classroom norms, teaching and learning styles, procedures, discourse and communication, and professor–student and student–student interactions) among education systems (Hung & Hyun, 2010). Often, even though general university-sponsored academic support services are available, international students may have difficulty accessing these services due to a lack of awareness and unfamiliarity with the system. Because support services are likely not a typical university function in their native countries, students might be unaccustomed to seeking them out (Lee, 2013).

In addition to academic challenges, international students and visiting scholars have expressed feelings of powerlessness in a higher education system that determines their educational visa status, or even financial and living resources (Hwang et al., 2016). Some universities make an ombudsperson available as an advocate to assist students with visa processing and scholarships (Lee, 2013). The ombudsperson typically has the responsibility to ensure confidentiality in assisting students with resolving conflicts, and to handle concerns with discrimination, harassment, and unfair treatment.

Administrators' and Professors' Views of International Students' Challenges and Support Needs

Some survey studies (e.g., Redden, 2014; Robertson, Line, Jones, & Thomas, 2000) have focused on university administrators' and professors' perceptions of international students. These perceptions are important to consider because they can influence the type and degree of university support services offered. Overall, in most of the studies reviewed, professors generally recognized that international students face unique personal and academic challenges when compared to domestic students. Professors believed that English language proficiency was a primary challenge, followed by cultural differences, unfamiliarity with host country educational systems, and modes of instruction (Robertson et al., 2000).

Sometimes, the views of college administrators and international students differ. In a survey of international students (n = 517) and international education administrators (n = 480), best student support practices were identified and compared (Redden, 2014). Students namely identified financial support as highly important—in the form of scholarships and campus-based jobs—along with career services, academic advising, and campus-life activities. Financial support was identified as the “primary source of dissatisfaction” for international students in a comparative study by Schulmann and Choudaha (2014, p. 6). Administrators in the Redden (2014) study, however, shared different perspectives, citing academic support and campus acculturation programs as important practices. Specific programs mentioned included campus employment, orientation programs, early warning systems for academic and visa issues, and traditional academic support such as tutoring and writing programs. Based on these findings, the researcher suggested that international students often underestimate the amount of academic preparation needed for success and overestimate the potential to work, earn scholarships, and obtain other forms of financial assistance. Conversely, administrators demonstrated a limited understanding of the importance of financial challenges. Redden (2014) therefore recommended that college administrators better inform and prepare students about academic and financial expectations during the recruiting process so that students may be better equipped to address these challenges prior to their arrival.

Campus Support Services: Suggested Best Practices

A number of scholars (e.g., Cho & Yu, 2015; Glass et al., 2014; Zhang & Goodson, 2011) have emphasized the important role of university support programs and services for international student success and matriculation in higher education. Challenges

associated with provision of such services also have been noted in existing literature along with some recommendations on how to best support international students (Education Advisory Board, 2014). A study entitled *17 High Impact Practices to Ensure Student Success* released by the Education Advisory Board (2014) offers some strategies on how to support international students on campus. Those strategies are centered on navigating campus transitions, revamping academic integrity initiatives, developing customized career resources, and recalibrating mental health outreach. Similarly, the Center for Global Education at California State University (2014) presented a list of innovative practices on international student support implemented at various U.S. colleges and universities. Services and programs on academics, language support, career development, and mental wellness support are among the many practices presented.

In order for support services to be effective and serve their purpose, Tillman (1990) noted the importance of institutional commitment. He stated that when designing support services, international students' academic and personal needs should be considered. This in turn would make the services more meaningful for international students. More recently, in a study exploring international students' views regarding campus support services in Australia, Roberts, Boldy, and Dunworth (2015) reiterated the need for "more student-centered service structure and delivery" (p. 122). They also discussed the issue of awareness, which echoed the findings of an earlier study by Harrybam, Guilfoyle, and Knight (2012), who reported a "gap between service provision and utilization" (p. 3). It is therefore imperative for institutions not only to consider the implementation of best practices based on their students' needs, but also to think about ways of increasing awareness of the available services and access to those services.

Research Method

This exploratory, descriptive study was designed to obtain an overview of the types of academic and social support services offered to international students enrolled at the top 20 U.S. universities with the highest matriculation of international student enrollment in 2016, as reported in the 2016 Open Doors Report (IIE, 2016b). The research question guiding this study was: What types of academic and support services were offered to international students by U.S. universities with the greatest number of international student enrollments in 2016? The purpose of this particular study was to describe the types of services offered on U.S. university websites as a starting place for uncovering how these universities attempt to attract and support international students during their campus enrollment. As such, limitations to using website-based data are acknowledged given that websites might not be up to date in describing the actual services offered. Additionally, we recognize that while reporting on institutional offerings provides an exploratory profile of services offered, it does not account for how international students may be experiencing the quality of these services in supporting academic achievement and a sense of belonging on campus. However, our objective in carrying out this study was to identify academic and social support services offered to international students in a selected number of U.S. universities that enrolled the greatest number of international students in 2016 as one way to provide a profile of the potential programs higher education institutions might offer.

Sample

The sample consisted of 20 universities (see Table 1) that were identified as top hosting universities by IIE (2016b) in their 2016 Open Doors report. These universities were located in 12 different states and had international student populations ranging from slightly over 7,000 (University of Minnesota–Twin Lakes, which was the 20th on the list) to over 15,500 (New York University [NYU], which was the first on the list). Although the top hosting universities change slightly from year to year, some U.S. institutions consistently appear on the list. In the 2016 Open Doors report, NYU and the University of Southern California (USC) were two of the campuses hosting the greatest numbers of international students for 3 consecutive years. Both universities also are known to provide extensive academic and social support services for international students.

Among the top 20 institutions, international student enrollment percentage in relation to overall student enrollment ranged from over 10% (The Ohio State University) to over 40% (Carnegie Mellon University; Northeastern University–Boston). In eight universities (NYU, USC, Arizona State University–Tempe [ASU–Tempe], Columbia University, University of California–Los Angeles [UCLA], Purdue University, Boston University, University of Texas at Dallas [UT–Dallas]), international students contributed to overall student enrollment by approximately 25%, to slightly over 30%. These percentages were calculated using data provided in the Open Doors report, and publicly available enrollment numbers obtained from the institutions' websites.

Data Collection and Analysis

This study used data available through individual websites of all 20 U.S. universities listed in the report. Information on international student demographics, as well as on academic and social support services that are designed to support international students at these institutions, was obtained from the international office's webpage of each institution and entered into Microsoft Excel for further examination and analysis. Each university included in the sample had several programs and services listed, all of which were included in the data set. Caution was applied to ensure accuracy of the collected data by double checking and comparing all entries with descriptions of programs and services provided on the institutional websites.

A content analysis approach (Krippendorff, 2013) was then applied to determine the types of services offered at each of the 20 universities. All specialized programs and services were coded through several cycles (Saldana, 2016), tallied to determine frequency of offerings, and grouped to ascertain which specialized services were most commonly offered to international students at the institutions in the sample. As a result, six themes were interpreted through the content analysis process. These themes, along with their relevant codes are presented in Table 2.

Results

All 20 top host universities had a designated administrative unit overseeing services offered to international students most commonly called the Office of International Students and Scholars. Other names included: International Center, Office of Global Services, and

Table 2. Emergent themes and relevant codes.

Theme	Relevant codes
English language programs	English classes Language exchange; Conversation partners American culture and conversation class American language program English conversation hours Practical English tutorials Accent reduction sessions
Academic support and student success initiatives	New student orientation Advising and counseling Academic tips Workshops/webinars on U.S. academic life Tutoring Supplemental instruction
Targeted writing support	Writing centers Writing consultants
Social and cultural events	International Education Week Global festivals World fair Heritage and culture celebrations Meet-and-greet receptions Sightseeing trips Weekly coffee hour Global siblings program Global student mentors program
Professional development workshops	Job search strategies Finance management Tax preparation
Family member programs	Support programs English classes Day care

International Students and Programs Office. Furthermore, the majority of international students studying in participating institutions came from countries where English was not the official language or was rarely spoken as a primary household language. Information on international student demographics obtained through annual reports, as well as quick facts available online, revealed that China, India and South Korea were the top three countries of origin for international students in 13 out of 20 participant institutions. Often, the total number of international students coming from these countries comprised more than half of the overall international student enrollment. Students from China were the most represented in the majority (18) of top 20 institutions. Overall, this view is consistent with the Open Doorreport (IIE, 2016b), which listed China and India as the top two countries of origin for international students, and South Korea as the fourth country of origin.

Content analysis of academic and social support services offered by participant institutions yield six themes: English language programs, academic support and student success initiatives, targeted writing support, social and cultural events, professional development workshops, and family member programs. Table 2 displays all six themes with relevant codes. It is important to note that all these services were available to international students free of charge except English classes for which fees were charged.

English Language Programs

English language programs were the most prevalent programs offered at participant campuses. This was not a surprise given the profile of international student demographics noted earlier. Every institution had some type of program designed to enhance international students' English language proficiency as needed. Most of the English language programs offered classes at various levels of fluency and aimed to develop skills in listening, speaking, and academic writing and reading. Other language development related classes included: language exchange; American culture and conversation class; American language program focused on listening, speaking, and pronunciation; English conversation hour (ECH); practical English tutorials; and accent reduction sessions. A common practice was having an English Language Institute, which offered various levels of English classes (e.g., basic, advanced) for international students (and for anyone else who is interested in learning English). In most cases, fees were assessed for these courses. One institution (Boston University) also had customized short- and long-term professional English language courses available to its students. English courses for students in specific disciplines (e.g., engineering, business, law) are offered in addition to generic English courses that are available to those who want to generally improve their English language skills (Boston University Global Programs, n.d.).

An ECH was another initiative offered at some of the campuses highlighted in the report. For example, at UT-Dallas (n.d.-b), English conversations are held regularly and focus on improving English skills via conversation, written activities, and games. These sessions also are structured to cultivate understanding and knowledge of American culture. Similarly, ASU-Tempe (n.d.) promotes ongoing ECHs as a "safe space" for international students "to practice their English speaking skills in a small, interactive group." Participants would either pursue topics of interest for conversation, or the

organizers would offer a selection of topics to choose from once participants came to the ECH.

A program called Language Exchange was offered in one of the universities (Dashew Center for International Students and Scholars, UCLA [Dashew Center], n.d.-a) where an international student is paired with a native English speaker to practice language skills. Interestingly, this program also serves domestic students who are learning foreign languages. For example, if a native American speaker is learning Chinese and wants to be exposed to a native Chinese speaker, then he/she could sign up and be paired with a Chinese international student in campus. A similar initiative called Conversation Partners was offered at Indiana University–Bloomington (2017) with the same focus of improving language skills of paired students.

Finally, one institution provided speech therapy to all students to include accent reduction sessions available to nonnative English speakers interested in speech therapy services. These sessions are conducted by speech-language pathologists who also offer speech therapy services for students who “have experienced strokes, traumatic brain injury or other acquired brain injury” (UT–Dallas, n.d.-a). As stated on the university website, “the goal is to make accent speech easier to understand by improving sound production, intonation, stress, and rate of speech” (UT–Dallas, n.d.-a). Speech therapy for accent modification improvement in a target language has been considered an acceptable practice among language acquisition specialists and does not necessarily imply that accents are negatively perceived and should be reduced or eliminated (Chakraborty, 2017). In some cases, speech therapy has been included as part of a language acquisition process in language academies for accent modification (Brady, Duewer, & King, 2016).

Academic Support and Student Success Initiatives

All of the top 20 host universities listed in the 2016 Open Doors report offered various academic support and student services programs to international students. These programs included: new student orientation, advising and counseling, academic tips, workshops and webinars on U.S. academic life, tutoring, and supplemental instruction. Not surprising, new student orientation was the most commonly offered event, which was usually held upon international students’ arrival to their campuses. Such orientation sessions were mandatory. Advising and counseling were also offered, although not every institution in the sample referenced these services through their International Office’s website so that international students could easily access this information (e.g., location, contact information, advising hours, etc.).

Workshops and webinars on U.S. academic life included topics such as academic integrity, classroom expectations, and success in an American classroom. Some institutions offered similar information in a narrative form entitled Academic Tips. Tutoring was another service available, not only in form of drop-in face-to-face sessions, but also online. Several institutions had both tutorial videos and online live tutoring available to international students. Finally, supplemental instruction was offered at some of the participant institutions. Like many other academic support initiatives, supplemental instruction was also available to all students, not just international students.

Targeted Writing Support

The next theme present in the data from participant institutions was targeted writing support. Although this theme could have been combined with the academic support and success services theme, we decided to identify it as a separate category because the service was focused on writing only. Two codes were present under this theme: writing centers and writing consultants. Like several other services and programs mentioned so far, writing centers were also available to all students, not just international students. However, in some cases, the centers had staff members who were knowledgeable on how to work specifically with international or English as a Second Language students. A notable writing assistance service for graduate students was the availability of writing consultants at one of the institutions (ASU–Tempe). Graduate students could schedule a one-on-one writing appointment with a writing consultant who would help them improve their graduate writing skills, as well as offer advice on how to navigate graduate life and be successful.

Social and Cultural Events

Participant institutions in this study organized a number of social and cultural activities for international students (see Table 2). International Education Week (IEW) was the most common event, followed by global festivals, world fairs, heritage and cultural celebrations, meet-and-greet receptions, sightseeing trips, weekly coffee hours, a global siblings program, and a global student mentors program. IEW is a nationwide initiative by the U.S. Department of State and the U.S. Department of Education and is “an opportunity to celebrate the benefits of international education and exchange worldwide” (Bureau of Educational and Cultural Affairs, U.S. Department of State, n.d.). Within IEW, institutions offered a series of events aimed to “promote international understanding and build support for international education exchange” (NYU, n.d.-a).

At some of the participant institutions in this study, multicultural exchange and understanding was promoted through global festivals, world fairs, and heritage and cultural celebrations. During such events, international students and scholars from various countries came together and shared their culture with the host university community. A common attribute seen in those events was the organization of cultural exhibits and demonstrations, which often included food from around the world. Meet-and-greet receptions were commonly organized for international students to welcome them and introduce them to host community members. Sightseeing trips were implemented to give international students opportunities to visit places and learn more about the American culture and people.

Other notable initiatives under the social and cultural events theme were: weekly coffee hours, global siblings programs, and global student mentors programs. During weekly coffee hours, institutions provide an informal setting for conversation, networking, and making friendships. For example, Michigan State University (2017a) has a weekly coffee hour every Friday during the Fall and Spring semesters. Students are encouraged to enjoy free coffee and tea and to be engaged in their university community. The global siblings program at UCLA (Dashew Center, n.d.-c) pairs domestic students with international

students to offer an opportunity to develop friendships, facilitate international students' transition into the American environment, and give local students a chance to learn about other cultures around the world. Similarly, the global student mentors program at Northeastern University (2017) engages international and domestic students to offer "social, academic, and educational support" through a variety of activities such as mentoring, orientations, workshops, and networking activities. Overall, the list of activities offered by the institutions chosen for this study is diverse and offers multiple opportunities for international students to be engaged and connected to their host campuses.

Professional Development Workshops

Offering professional development workshops and information sessions on various topics such as tax preparation, job search strategies, and other topics of interest to international students was a common practice in the top 20 host universities. Examples of tax preparation assistance come from the Pennsylvania State University (Penn State, 2017) and Michigan State University (2017b). Free tax preparation assistance is available to international students and scholars at Penn State (University Park campus) through a local non-profit organization called Global Connections. Michigan State University also offers free tax preparation seminars and tax filing sessions, and encourages international students and scholars to take advantage of the help. Tax preparation is among a list of topics covered in information sessions for international students at Washington State University (n.d.).

While in the U.S., it is common for international students to seek job opportunities both during and after completing their studies. Several universities in the sample (e.g., USC, NYU) provided resources and professional development workshops on job search processes and strategies. Sessions on optional practical training and curricular practical training were the most prevalent sessions in all institutions included in the study.

Family Member Programs

Notable initiatives offered to family members of international students included support programs for spouses of international students, English classes, and childcare centers. For example, UCLA organizes a spouses' circle, a weekly get-together for the spouses of international students that offers them opportunities to be engaged in various activities implemented by the Center for International Students and Scholars (Dashew Center, n.d.-b). A similar initiative is implemented at NYU (n.d.-b) where spouses and partners of international students meet and share "common interests and concerns as well as explore NYC together." NYU also offers noncredit English classes for international spouses and partners.

Carnegie Mellon University, another institution in the sample, also has support programs for family members of international students. Within the University, there are two organizations that support international spouses and partners: an International Spouses and Partners Organization and The International Women's Association of Pittsburg. The International Spouses and Partners Organization "provides opportunities for spouses and partners from different cultural backgrounds to share their cultures,

enjoy social activities, and make friends,” and the Women’s Association “offers English conversation classes, international cooking, crafts, and programs about world customs and culture” (Carnegie Mellon University, 2017).

Although not restricted to international students and their families, another example of a family support initiative is available at the University of Illinois at Urbana-Champaign. This University has day care centers and preschools for children, aged 6 weeks to 6 years old (Illinois International, n.d.). International students can apply and enroll their children into half- or full-day programs, depending on the age of their children.

Additional Observations

In reviewing individual websites during the data collection process, several observations were made. Most of the universities in the sample had user-friendly websites. Detailed handbooks, guides, and FAQs included on the websites offered information not only on academic-related matters, but also on housing, getting to know the community, regulations, and procedures on obtaining a drivers’ license, just to name a few. Moreover, quick links to additional resources available through the university and community also were available through the international offices’ websites. In some cases, specific resources for undergraduate and graduate students, as well as visiting scholars, were included in separate links making them easy to navigate. Finally, live chats, virtual tours, student testimonies, and newsletters for current and prospective international students and their families are some of the additional features available on some of the participant institutions’ websites.

Implications for Practice

University-level support has been demonstrated as essential to international student success in host universities and societies (Cho & Yu, 2015). In general, international students who study in the United States report that specialized support services are a factor that attracts them to apply and enroll in certain universities over others (Cho & Yu, 2015; Glass et al., 2014; Zhang & Goodson, 2011; Zhao et al., 2005). International students report seeking out institutions they perceive will facilitate their social and academic adjustment in ways that enhance their social integration, retention, and college success (Cetinkaya-Yildiz et al., 2011; Cho & Yu, 2015). The provision of student support services such as those identified in this study are increasingly important for American colleges and universities as changes in government immigration policies and general enrollment trends impact the recruitment and application of students from abroad. Results from a study commissioned in March of 2017 by six higher education groups affirmed decreases in the number of undergraduate and graduate applications to U.S. colleges by international students as a result of more recent policies restricting immigration and banning student visas from specified countries (Patel, 2017). In overseas recruitment sessions, some higher education administrators reported that potential international students expressed concerns over the 2017 U.S. travel bans and, therefore, hesitated to apply for U.S. visa authorization. Other potential international students expressed concerns about campus climates, and

the quality and amount of support they might receive if they venture to enroll in an American university (Patel, 2017).

Concern about how tuition and living expenses are financed also can contribute to public resistance to international student enrollment and provision of support services at U.S. universities. Policy makers sometimes assume that the universities are providing international students with numerous scholarships. Contrary to common misconceptions about how international students' studies are funded, the U.S. Department of Commerce reported that most of the funds used to pay international student tuition and expenses originated from sources outside of the United States (IIE, 2016a). In fact, 75% of costs were paid from international students' personal or family funds, and from non-U.S. government (country of origin) and international university resources (IIE, 2016a). Interestingly, international student enrollment therefore provides a key funding source during a time when many U.S. public universities are experiencing funding retrenchment. Conversely, findings from this study did not indicate systematic efforts to provide scholarships or other means of funding specifically targeted to international students. No particular programs to address college financing and funding availability were identified either. Implications of lack of institution-based funding are apparent and align with findings by Schulmann and Choudaha (2014), who reported that international students were dissatisfied with financial support from host universities. In addition to providing targeted funding for international students, educating them about the expense of living in the United States and attending college remains important. Based on the extant research, we suggest that university administrators recognize the educational, cultural, and economic benefits of enrolling and retaining international students. Administrators can demonstrate recognition of these benefits by ensuring that specialized support services attracting and retaining international students are in place.

Similar to the services of the top 20 universities examined in this study, higher education administrators at other U.S. institutions are encouraged to recognize the extent to which international students are critical to strategic planning efforts. In general, studying abroad can be a daunting, overwhelming experience for students. However, by demonstrating intentionality in ensuring that specialized social, financial, and academic support services are in place, colleges can be well-positioned to facilitate the adaptation and integration of international students on U.S. campuses in ways that mirror the initiatives of the top universities included in this study.

Limitations and Recommendations for Future Research

This study has recognized limitations. The purpose of the study was to describe the types of support services offered to international students at the top 20 U.S. universities hosting the greatest number of international students in 2016 and to discuss implications for universities interested in expanding and improving support services for international students. We recognize that information presented on websites may not be as current or accurate as presented. Moreover, from the data available, it was not possible to evaluate students' experiences with and perceptions of the quality of programs and services offered. Exploring international students' experiences with the services described and their general

sense of belonging within those top 20 university environments would be a next step in expanding this research.

For future research, we recommend further examining the efficacy of the services offered by participant institutions, as well as how these services might relate to international students' sense of belonging on campus. This could be done by obtaining direct feedback from international students who potentially benefit from these services. Personnel involved in the provision of services could also be surveyed or interviewed to get insights on the effectiveness of the services and programs offered.

Second, as noted earlier, most of the universities in the sample had user-friendly websites with detailed information on academic and social support services offered. However, from the information available, it was not possible to make any conclusions on how these institutions view their international students, or how decisions are made on which services to offer. In further research, we recommend surveying international office personnel representing participant institutions to find out not only how decisions are made about offering a particular program or service to international students, but also to learn about their views and perceptions on international students' presence in their campuses. In addition, they could offer insights on how their institutions attract such a larger number of international students in this era of competitiveness in higher education and what suggestions they have for other institutions that are interested in increasing international student enrollment.

Third, it is often that existing literature (e.g., Hegarty, 2014) focuses on the economic benefits of enrolling international students in American campuses. It is recommended that researchers obtain direct feedback from administrators and faculty of the top 20 host institutions about the educational, cultural, and social benefits of having a large international student population on campus. Such research findings could further strengthen the case for why and how international students bring valuable contributions to American higher education and why they should be supported at an institutional level.

Finally, it is suggested to conduct a similar study in 5–10 years and compare the results with this study's findings. The comparison will be helpful, especially in finding out whether the 2017 immigration reforms have any long-term impact on international student enrollment, countries of origin, as well as on the variety of services offered. As indicated earlier in this paper, U.S. higher education leaders have already begun observing decreases in international student applications and enrollment in 2017 (Patel, 2017). Continuous decreases in enrollment could limit the availability of resources generated from international students' fees at individual institutions, which might potentially affect provision of services for international students.

Conclusions

In this study, we identified and described the types of support services offered to international students at the top 20 U.S. universities that hosted the greatest number of students in 2016. Six main categories of services offered at these universities were identified and described to gain a more complete understanding of the types of support programs that might be most instrumental in facilitating international students' social adjustment and academic success when studying in the United States. Overall, the

universities included in this study attempted to address language, writing, and academic challenges with programs targeted specifically toward international students based on challenges cited in the extant literature. Lee (2013) noted that international students tended to underutilize specialized student support services. Therefore, orientation programs and activities for international students should purposefully engage and acclimate them with these programs. Determining whether or not this was actually occurring was beyond the scope of this study.

As also noted in the research literature, financial challenges often are a substantial source of international student dissatisfaction and a primary reason for their attrition (Redden, 2014; Schulmann & Choudaha, 2014). Students stated that financial needs included jobs, internship opportunities, scholarships, and tuition affordability. Given this, it appears that financial needs are generally unserved by the leading U.S. institutions for international student enrollment. In fact, some institutions clearly state on their websites that “financial aid is not available to students who are not U.S. citizens or permanent residents” and “therefore, international students must document that they have sufficient funds to cover both the direct costs to the University and living expenses” (Penn State, 2015, p. 4). Offering some type of financial support in form of work/study and internship opportunities might be something for institutions to consider. Such opportunities would not only meet the financial needs of international students, but would also facilitate their social adjustment and college engagement in host campuses.

References

- Alvarez, E. H. (2016). Fostering open communication in a culturally diverse classroom. *Chronicle of Higher Education*, 63(4).
- Andrade, M. S. (2006). International students in English-speaking universities: Adjustment factors. *Journal of Research in International Education*, 5(2), 131–154.
- Araujo, A. A. (2011). Adjustment issues of international students enrolled in American colleges and universities: A review of the literature. *Higher Education Studies*, 1(1), 2–8.
- Bloomington, I. U. (2017). Office of International Services.
- Board, E. A. (2014). Supporting international students on campus: 17 high impact practices to ensure student success.
- Brady, K. W., Duewer, N., & King, A. M. (2016). The effectiveness of a multimodal vowel-targeted intervention in accent modification. *Contemporary Issues in Communication Science and Disorders*, 43, 23–35.
- Cetinkaya-Yildiz, E., Cakir, S. G., & Kondakci, Y. (2011). Psychological distress among international students in Turkey. *International Journal of Intercultural Relations*, 35, 534–539.
- Chakraborty, R. (2017). A short note on accent–bias, social identity and ethnocentrism. *Advances in Language and Literary Studies*, 8(4), 82–100.
- Chavajay, P. (2013). Perceived social support among international students at a U.S. university. *Psychological Reports: Sociocultural Issues in Psychology*, 112(2), 667–677.
- Choi, T. (2006). Asian international students' academic adjustment in a U. S. graduate school and Stanton-Salazar's framework. *Pacific Asian Education*, 18(2), 51–68.

- Dao, K. T., Lee, D., & Chang, H. L. (2007). Acculturation level, perceived English fluency, perceived social support level, and depression among Taiwanese international students. *College Student Journal, 41*(2), 287–295.
- Ebinger, S. E. (2011). International students' perceptions of university assistance with their social adjustment (Doctoral dissertation).
- Fritz, M. V., Chin, D., & DeMarinis, V. (2008). Stressors, anxiety, acculturation, and adjustment among international and North American students. *International Journal of Intercultural Relations, 32*(3), 244–259.
- Glass, C. R., Gomez, E., & Urzua, A. (2014). Recreation, intercultural friendship, and international students' adaptation to college by region of origin. *International Journal of Intercultural Relations, 42*, 104–117.
- Harrybam, S. A., Guilfoyle, M. A., & Knight, S. (2012). Understanding the challenges of accessing university support services: The perspectives of staff member and international students. *The International Journal of Learning, 18*(6), 263–290.
- Hegarty, N. (2014). Where we are now—The presence and importance of international students to universities in the United States. *Journal of International Studies, 4*(3), 223–235.
- Hendrickson, B., Rosen, D., & Aune, R. K. (2010). An analysis of friendship networks, social connectedness, homesickness, and satisfaction levels of international students. *International Journal of Intercultural Relations.*
- Hung, H. L. & Hyun, E. (2010). East Asian international graduate students' epistemological experience in an American university. *International Journal of Intercultural Relations, 34*, 340–353.
- Hwang, E., Martirosyan, N. M., & Moore, G. W. (2016). A review of literature on adjustment issues of international students. In Foster, K. B. C., editor, *Global perspective and local challenges surrounding international student mobility*, pages 223–242, Hershey, PA. IGI Global.
- Jackson, M., Ray, S., & Bybell, D. (2013). International students in the U. S.: Social and psychological adjustment. *Journal of International Students, 3*(1), 17–28.
- Johnson, L. R. & Sandhu, D. S. (2007). Isolation, adjustment, and acculturation issues of international students: Intervention strategies for counselors. In Singaravelu, H. & Pope, M., editors, *the United States*, pages 13–37, Alexandria, VA. American Counseling Association.
- Kennedy, P. (2002). Learning cultures and learning styles: Myth-understandings about adult (Hong Kong) Chinese learners. *International Journal of Lifelong Education, 21*(5), 430–445.
- Khawaja, N. G. & Stallman, H. M. (2011). Understanding the coping strategies of international students: A qualitative approach. *Australian Journal of Guidance & Counselling, 21*(2), 203–224.
- Kim, Y. (2007). Difficulties in quality doctoral academic advising: Experiences of Korean students. *Journal of Research in International Education, 6*(2), 171–193.
- Krippendorff, K. (2013). *Content analysis: An introduction to its methodology*. Sage, Oaks, CA.

- Kuh, G., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2005). *Student success in college: Creating conditions that matter*. Jossey-Bass, San Francisco, CA.
- Lee, J. J. (2013). Find on-campus support for international students. An ombudsman is just one type of campus support often underutilized by international students.
- Loudenback, T. (2016). 16. International students are now 'subsidizing' public American universities to the tune of \$9 billion a year. *Business*.
- Luo, J. & Jamieson-Drake, D. (2013). Examining the educational benefits of interacting with international students. *Journal of International Students*, 3(2), 85–101.
- Martirosyan, N. M., Hwang, E., & Wanjohi, R. (2015). Impact of language proficiency on academic performance of international students. *Journal of International Students*, 5(1), 72–86.
- Misra, R., Crist, M., & Burant, C. J. (2003). Relationships among life stress, social support, academic stressors, and reactions to stressors of international students in the United States. *International Journal of Stress Management*, 10, 137–157.
- Mukminin, A. & McMahan, B. (2013). International graduate students' cross-cultural academic engagement: Stories of Indonesian doctoral students on American campus. *The Qualitative Report*, 18(69), 1–19.
- Patel, V. (2017). Prospective international students show new reluctance to study in the U.S. Chronicle for Higher Education.
- Perry, C. J. (2016). Comparing international and American students' challenges: A literature review. *Journal of International Studies*, 6(3), 712–721.
- Pope, R. L., Reynolds, A. L., & Mueller, J. A. (2014). *Creating multicultural change on campus*. Jossey-Bass, San Francisco, CA.
- Poyrazli, S. & Grahame, K. M. (2007). Barriers to adjustment: Needs of international students within a semi-urban campus community. *Journal of Instructional Psychology*, 34(1), 28–36.
- Poyrazli, S. & Kavanaugh, P. R. (2006). Marital status, ethnicity, academic achievement, and adjustment strains: The case of graduate international students. *College Student Journal*, 40(4), 767–780.
- Redden, E. (2014). Why they stay or leave. In new research being released at international education conference, foreign students identify financial issues as their main sources of dissatisfaction.
- Rienties, B. & Nolan, E. M. (2014). Understanding friendship and learning networks of international and host students using longitudinal social network analysis. *International Journal of Intercultural Relations*, 41, 164–180.
- Roberts, P., Boldy, D., & Dunworth, K. (2015). The views of international students regarding university support services in Australia: A case study. *The International Education Journal: Comparative Perspectives*, 14(3), 122–137.
- Robertson, M., Line, M., Jones, S., & Thomas, S. (2000). International students, learning environments and perceptions: A case study using the Delphi technique. *Higher Education Research & Development*, 19(1), 89–102.
- Rose-Redwood, C. A. (2017). Rethinking the politics of the international student experience in the Age of Trump. *Journal of International Studies*, 7(3).
- Saldana, J. (2016). *The coding manual for qualitative researchers*. Sage, Oaks: CA.

- Sato, T. & Hodge, S. R. (2009). Asian international doctoral students' experiences at two American universities: Assimilation, accommodation, and resistance. *Journal of Diversity in Higher Education*, 2(3), 136–148.
- Schulmann, P. & Choudaha, R. (2014). International student retention and success: A comparative perspective.
- Tardy, C. M. (2017). The challenge of genre in the academic writing classroom: Implications for L2 writing teacher education. In Bitchener, J., Storch, N., & Wette, R., editors, *Instructional approaches*, pages 69–83, Abingdon. United Kingdom, Taylor & Francis.
- Tillman, M. J. (1990). Effective support services for international students. *New Directions for Community Colleges*, 16(2), 87–98.
- Tinto, V. (1998). Colleges as communities: Taking research on student persistence seriously. *The Review of Higher Education*, 21(2), 167–177.
- Vasiloupoulos, G. (2016). A critical review of international students' adjustment research from a Deleuzian perspective. *Journal of International Studies*, 6(1), 283–307.
- Zhang, J. & Goodson, P. (2011). Predictors of international students' psychosocial adjustment to life in the United States: A systematic review. *International Journal of Intercultural Relations*, 35, 139–162.
- Zhao, C. M., Kuh, G. D., & Carini, R. M. (2005). A comparison of international students and American student engagement in effective educational practices. *Journal of Higher Education*, 76(2), 209–231.

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