College Readiness and Engagement Gaps between Domestic and International Students:

Re-envisioning Educational Diversity and Equity for Global Campus

Jaekyung Lee, Ph.D.

Namsook Kim, Ph.D.

Yin Wu, Ph.D.

University at Buffalo, The State University of New York

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Abstract

This study examines undergraduate students' college readiness and educational engagement gaps in a U.S. public research university. The study reveals the heterogeneity of domestic (American) and international student groups. While typical international students may have disadvantages in college readiness and engagement, English speakers and American high schoolers among international students perform even better than domestic peers. In contrast, English learners and foreign high schoolers among domestic students, such as recent immigrants face the same challenges as typical international peers lacking adequate language and cultural preparation for college success. The study re-envisions educational diversity and equity for global campus where an integrated system of academic and sociocultural support enables transnational students to succeed.

Keywords: college readiness, international education, higher education, diversity, equity

College access and success among domestic and international students provides an important barometer for monitoring national progress in higher education equity. Increasing attention to the matter duly reflects the exploding rise of international students' higher education enrollments worldwide from 0.8 million in the late 1970s to 4.6 million in 2015 (Organization for Economic Cooperation and Development [OECD], 2017). Echoing the status of English as the lingua franca of the interconnected world, top destinations for transnationally mobile students are English-speaking countries including Australia, the United Kingdom, and the United States (OECD, 2017).

American tertiary institutions remain as the leading destination for students from around the world and record the highest international enrollment of 1,078,822 students (about 5% of total U.S. college population) in the 2016/17 academic year, contributing to its economy and diversity (Institute of International Education [IIE], 2017). International students come from all over the world, including both developed nations such as Canada (2.5%), Japan (1.7%), South Korea (5.4%), and Taiwan (2%) and developing nations such as China (32.5%), India (17.3%), Vietnam (2.1%), Brazil (1.2%), and Mexico (1.6%) (IIE, 2017).

As with the increasing diversity of international students, a similar pattern of growth and diversity exists among domestic students. In recent decades, the student body of American higher education institutions has become increasingly diverse with influx of more immigrant students (Capps et al., 2005; Erisman & Looney, 2007). Overall, children of immigrants were nearly as likely as children in native families to have parents with a college degree (Hernandez, Denton, & Macartney, 2009). However, the aggregate pattern obscures substantial variations within immigrant student group in terms of the highest parental education level; 50 to 80 percent of foreign-born fathers from Africa, Japan, Korea, Hong Kong, Taiwan, India,

Pakistan/Bangladesh, and Iran were college graduates, compared with only 4 to 10 percent of fathers from Mexico, the Caribbean, Laos, and Cambodia (Hernandez et al., 2009). There are many first-generation college immigrant students.

The increasing diversity of fast-growing immigrant and international student groups presents new challenges for American colleges and universities to become globally inclusive higher education institutions. The current literature provides evidence for domestic students on factors impacting college success and completion: school grades (positive), educational aspiration (positive), on-campus residence (positive), private control (positive), institutional size (negative), institutional selectivity (positive), and peer socioeconomic level (positive) (Arum & Roksa, 2011; Mow & Nettles, 1990; Oseguera, 2005). In contrast, relatively little evidence exists on factors impacting the dynamic transition from high school to college for international students (Jones, 2017) and immigrant students (Portes & Rumbaut, 2006; Rumbaut, 2004).

To fill the gap in the literature, this study takes into account students' sociocultural backgrounds and educational experience in both high school and college in analyzing gaps and commonalities between domestic and international college students in terms of college readiness and engagement. Moreover, in acknowledgment of the danger of overgeneralizing the international student group by means of the traditional but uncritical domestic-international divide (Jones, 2017), the study focuses particularly on subgroup differences within domestic and international groups in their academic and sociocultural readiness factors. A central hypothesis is that both academic and sociocultural readiness is a key factor for college engagement and success, specifically for recent immigrant students and international students who are likely to be English learners and foreign high schoolers; they are vulnerable to the risk of educational disengagement and underachievement. Noting the limitation of the predominant approach in

existing literature that fails to account for the complexities of student experience as (potential) agents in their journeys of negotiation (Tran & Vu, 2017), this study also attempts to unpack mobile students' lived experience with regard to college readiness and engagement. Building a more globally diverse and inclusive college campus depends on how well institutions support the educational process of self-formation by strengthening agency of the whole student body regardless of national origin, expanding the liberating environment, and enhancing the resources that address all students' needs such as cross-cultural engagement and communicative competence (Jones, 2017; Marginson, 2014; Tran & Vu, 2017). This empirical study is expected to enhance our understanding of college pathways that help close the gaps among native, immigrant and international students in higher education.

Theoretical Perspectives and Research Questions

The widely used functionalist way of normalization in which linguistically and culturally diverse students in (international) higher education are framed in research views education as a process of adjustment to and assimilation into the norms of the host environment and culture (Marginson, 2014). In order to advance a paradigm shift and shed impartial and critical insights on international students' educational experiences, this study is grounded on the transformative perspectives of higher education as a process of 'self-formation' and participating students as 'self-forming agents'.

From the deficit model view of typical intercultural interactional manifestations that looks to the dominant culture for isolating the silenced culture (Fox, 1996), immigrant and international students are often seen as passive objects of and failure to integrate into the education systems, lacking in independent, critical thinking skills and (English) language

competence, and as rote learners and plagiarizers, having limited or awkward class participation, all of which may normalize Anglo-Western standards (Jones, 2017; Ryan & Carroll, 2005). The deficiency paradigm perpetuates cultural identities as fixed attributes and may reinforce negative stereotypical perspectives against diverse students with other backgrounds than those identified with the mainstream culture (Marginson, 2014). As a result, empirical evidence shows that native English speaking students in English speaking host countries demonstrate negative attitudes toward non-native English speaking peers due to problems with comprehensibility (Kang, Rubin, & Lindemann, 2015) and also that international students perceive general attitudes on campus toward them as negative (Maringe & Jenkins, 1995).

In the difference-as-problem-laden discourse with international students' contribution forgotten and participation prejudicially or partially understated (Straker, 2016), it is too easy for college faculty and administrators to overlook positive attributes when dealing with students who don't have the same background knowledge and experiences as domestic (US-born) students or who don't yet possess fluent language skills needed to express ideas and demonstrate abilities.[1] According to this deficit view, any 'problem' is the student's and it is the role of faculty and staff to 'correct' the problem whereas it is the student's responsibility to adjust (McLean & Ransom, 2005) and assimilate into the dominant culture (Fox, 1996). Further, the accompanying tendency to overgeneralize international students' portraits and experiences often fails to acknowledge the diversity among domestic students and also heterogeneity within international students as well as the commonalities among students in general (Jones, 2017; Yoon & Portman, 2004).

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[1] Murphy (2007) found that, on average, the SAT verbal test scores of immigrant college students are significantly lower than those of their native counterparts in American colleges based on the data of National Postsecondary Student Aid Study (NPSAS:2000) and the 1996 Beginning Postsecondary Students Longitudinal Study (BPS:96/01). In contrast, the same data show that average SAT verbal test scores of international students compare much more favorably with those of American students, but their spoken English proficiency still tends to lag behind American counterparts.

In contrast, the transformation or asset model is based on the critical paradigm of 'higher education as self-formation' as a normative framework that breaks from essentialism and ethnocentrism; multidimensional development of student 'agency' with transformations involving the host society and various actors related to the lived experience (Marginson, 2014; Montgomery & McDowell, 2009; Tran & Vu, 2017). In this perspective, immigrant and international students with transnational identities are viewed as self-forming agents and cultural and linguistic assets; institutions that function in this paradigm mediate to support the desired self-formation process by developing multicultural competencies for 'all' students and fostering the critical process of dialogue to build bridges across plural cultural identities and truths (Fox, 1996; Li & Beckett, 2006; Rizvi, 2009; Ryan & Carroll, 2005; Summers & Volet, 2008). Multiple forms of agency in mobility were observed among international students who would engage and respond in relation to self-transformation and future aspirations ("agency for becoming"), the structural and social context ("needs-response agency"), or unjust situations ("agency as struggle and resistance" and "collective agency for contestation") (Tran & Vu, 2017).

Typical college education challenges experienced by international students involve instructional delivery, unmet academic expectations regarding the level of academic challenge, level of faculty-student engagement, a supportive campus environment with high quality of relationships and institutional emphasis, and enriching educational experiences (Kim, Collins, Rennick, & Edens, 2017; Korobova & Starobin, 2015; Lin & Shertz, 2014). Such factors that impact international students significantly in their academic success as self-esteem and confidence levels (Brown, Brown, Beale, & Gould, 2014; Telbis, Helgeson, & Kingsbury, 2014) may be further impacted by the discriminatory treatment and stereotyping toward the

international students (Kang et al., 2015; Maringe & Jenkins, 2015; Russell, Rosenthal, & Thomson, 2010).

Nevertheless, those challenges are not necessarily exclusive for international students and may apply to domestic students with disadvantaged background characteristics and college readiness gaps. A more traditional notion of college readiness focuses on student's academic preparation for postsecondary education. In the recent education literature, however, the term is inclusive of access to college knowledge and preparation to make effective social adjustment as well (Conley, 2005; Kirst & Venezia, 2004; Perna, 2006). Academic and social collegiate experiences are the primary predictors of students' persistence and degree completion (Pascarella, 1985; Tinto, 1993; Strauss & Volkwein, 2001; Bowen, Chingos, & McPherson, 2009). Research finds that students will benefit from high-impact college educational practices, such as first-year seminars, learning communities, writing-intensive courses, field-based experiential learning, and common interdisciplinary curriculum (see Association of American Colleges & Universities, 2014; Kuh, 2008). Independent of personal and family background characteristics, college students are more likely to succeed when they take ownership over learning and engage actively in class activities.

The study aims to explore undergraduate students' college readiness and engagement in the areas of academic and sociocultural readiness. It intends to address following overarching questions: (a) how academically and socially ready are students?; (b) how different or similar are international students' and domestic students' college readiness and educational engagement?; (c) how different or similar are the students' high school and college experiences?; and (d) how can the students' college readiness and success be improved? The research is needed to fill in the gap in the literature on college readiness and success on ever-increasingly multicultural college

campuses in the era of globalization and internationalization of higher education. It also addresses the need for alternative frameworks and mixed methods including an appropriate instrument with which to better understand sociocultural readiness that is largely neglected in the literature.

Methods

To address the fore-mentioned purpose of the research grounded in transformative perspectives on higher education students, we designed a mixed-methods research that allows quantitative comparisons across meaningful student groups of interest and qualitative accounts of students' lived experience and identity work with regard to college readiness and engagement.

The target population of this mixed-methods research included undergraduate students in a large public research university. This university is selected among ones with reputation for internationalization policy towards global campus, ranked among top 25 public universities in the U.S. in terms of the number of international students. We obtained the roster of all undergraduate students along with demographic and contact information (Total population $N = $ 18,457 undergraduate students including $N = 14,198$ domestic students and $N = 4,259$ international students). By official definition, domestic students are US citizens or permanent residents, whereas international students are non-resident aliens (i.e., temporary foreign visitors with an F-1 or J-1 status for studying in US colleges). From the roster of these students, we stratified them into domestic vs. international categories and then randomly selected 1,000 from each category to ensure adequate and comparable sample size for each group.

To better address the research questions that guide this study, the research team developed a new questionnaire—College Readiness for Global Campus Survey—with 31

questions. After instrument validation through a pilot test, we invited 2,000 randomly selected

eligible students to a 30-minute online survey and a follow-up 30-minute interview. Students

with missing data for key research variables among 219 respondents (International: 99,

Domestic: 120) were removed. Final analytic sample size is N = 97 (International: 37, Domestic:

60). The sample includes 53 females and 44 males; 33 first-year students, 13 sophomores, 31

juniors and 20 seniors. In general, parental highest education level, mean is 3.34, SD= 1.38 (3

denoting '2-year college, vocational, or trade school'; 4 indicating '4-year college'). 16 of them

major in Engineering, 21 in Science, 36 in Social Science, 14 in Art and Humanity, 7 taking

double-major and 3 with no specific major.

Further, we differentiated both domestic and international groups in our sample into

subgroups for based on experience of English language and American culture and education

prior to college entry: (1) whether they spoke English as primary language at home (in their

home country) and (2) whether they attended high school in the U.S. where English was the

primary medium of instruction (see Table 1). International students whose answers are 'yes' for

at least one of these two questions were treated as a transnational subgroup called "International-

English speaker/American high schooler (I-ESA)" (N = 11) based on the assumption of having

both foreign and American culture/education experiences. Remaining international students form

another subgroup called "International-English learner/Foreign high schooler (I-ELF)" (N = 26).

Among domestic students, the same method of grouping differentiated "Domestic-English

speaker/American high schooler (D-ESA)" (N = 40) from transnational "Domestic-English

learner/Foreign high schooler (D-ELF)" (N = 20) or immigrants (either US citizens or permanent

residents) with exposure to their heritage culture/language prior to American college entry.

Table 1 here

We hypothesized that college students' language, culture and prior education backgrounds, which are used to form their subgroup type (beyond conventional dichotomy of domestic vs. international student status), affect their college readiness and educational engagement (see Figure 1). The levels of both academic and sociocultural readiness are expected to influence the degree of engagement in high-impact education practices in college classes. To explore the hypotheses, we constructed composite variables of college readiness and educational engagement from student survey data (see Appendix for variable descriptions). Then we examined domestic-international student gaps and subgroup differences across those factors through a series of t-tests.

Figure 1 here

Additionally, we conducted qualitative research to gain in-depth understanding of the complexities among college student subgroups and to identify critical factors on student readiness and engagement. Developmental analyses of 97 survey participants' responses and seven interview cases led to intersectional insights on academic and sociocultural readiness among college students participating in higher education in the United States. In Qualitative Analyses section, we present key themes regarding college student readiness and engagement experience: (a) changing portraits of the college student population, (b) self-forming competence for college readiness and success, and (c) toward agent-empowering environments.

This study has limitations. The study is a cross-sectional snapshot of the problems. Subsequent research needs to track students' development and success longitudinally. Also, the study sample size for domestic and international student subgroups is small; it may not fully represent the target population thus may not comprehensively depict the complexities of the study subgroups.

Results

In what follows, we answer the research questions holistically as we present the results of quantitative and qualitative analyses of complementary nature. Quantitative analyses provide multiple layers of comparisons on college readiness and engagement across student groups of interest, whereas qualitative analyses offer nuanced student narratives of dynamic college readiness and engagement experience.

Quantitative Analyses

Table 2 summarizes the gaps between domestic and international student groups (conventional dichotomous breakdown). Table 3 summarizes the gaps between domestic subgroups (D-ESA, D-ELF) and international subgroups (I-ESA, I-ELF). Comparison of the results in these two tables would allow us to examine group differences in multiple ways and reveal within-group variations that the dichotomy or polarization may obscure.

Table 2 and Table 3 here

Except for the US citizenship/resident status and the length of US residence, there are no significant differences in other background characteristics between international student group and domestic student group in our study sample, specifically in terms of the distribution of gender, age, class level, high school grades, and parent education (See Table 2). This pattern confirms that the two groups in our sample are highly comparable, implying that university admissions process and criteria were similar between domestic and international student groups. However, subgroup breakdown within domestic and international groups reveals variations as D-ELF group has significantly shorter US residence and lower parental education than D-ESA group (see Table 3). Similarly, subgroup breakdown within international group also reveals

some, albeit insignificant, variations as I-ELF group has relatively shorter US residence and lower parental education than I-ESA group (see Table 3).

In terms of students' college readiness, the patterns are mixed. There are significant differences between international and domestic students in academic readiness and college education engagement. Domestic students reported significantly better academic readiness than international counterparts (see Table 2). Given that the two groups' compatible high school GPAs were similar, this gap in the self-perception of academic readiness may appear contradictory. Specifically, the gap was reported to be significant in 9 out of 16 areas: critical thinking, computing skills, reading comprehension, writing, US history, world history, literature, biology and chemistry. Since some of these skills require English language skills and/or learning opportunities in US schools, it is understandable that international students lag behind domestic peers. It also suggests that the global mobile selves of international students in self-formation are active in both host and home countries (Marginson, 2014) and may have developed higher expectations/standards for academic knowledge/skills in their home countries to the extent that they feel less confident about academic readiness for college education in the U.S. On the other hand, there are no significant differences in sociocultural readiness between the two groups; the gap was very small and insignificant in all of 11 areas.

Notwithstanding these aggregate patterns, the breakdown of domestic and international groups reveals significant within-group gaps (see Table 3). For academic readiness, D-ELF group average is significantly lower than D-ESA counterpart, whereas I-ELF group average is significantly lower than I-ESA counterpart. For sociocultural readiness, D-ELF group average is insignificantly lower than D-ESA counterpart, whereas I-ELF group average is significantly lower than I-ESA counterpart. It turns out that ESA subgroups of domestic and international

students are better prepared than ELF subgroup counterparts. On a closer look, it appears that I-ESA subgroup performs as well as or even better than D-ESA subgroup, whereas I-ELF subgroup lags behind D-ELF subgroup.

In terms of students' educational engagement in high-impact class practices, the patterns are also mixed. International students scored higher than domestic students in college education engagement (see Table 2). On the other hand, there are no differences between the two groups in high school education engagement. This pattern challenges the stereotyped myth that American schools employ more of these progressive student-centered, experiential learning practices than schools in other nations, particularly Asian countries. Further breaking down by subgroup reveals that I-ESA group had significantly higher level of high school education engagement than I-ELF group (see Table 3).

The pattern of bivariate correlations among key variables is shown in Table 4. As college readiness indicator, academic readiness is positively associated with sociocultural readiness ($r = .65$, $p < .01$). This moderate correlation between the two types of college readiness measures suggests that they may share some commonalities but also tap into different aspects of readiness. In terms of high school predictors of college readiness, high school grade is positively associated with both academic readiness ($r = .33$, $p < .01$) and sociocultural readiness ($r = .23$, $p < .05$). High school education engagement is also positively associated with both academic readiness ($r = .44$, $p < .01$) and sociocultural readiness ($r = .39$, $p < .01$). College education engagement is positively associated with sociocultural readiness ($r = .28$, $p < .05$) and high school education engagement ($r = .36$, $p < .05$), but not with academic readiness ($r = .01$). Overall, this pattern suggests that college students with higher level of college readiness and prior high school

educational engagement are more likely to show active engagement in high-impact college class activities.

Qualitative Analyses

  Changing portraits of the college student population: Blended, divided, and hidden students. First, contemporary college students are blended crossing the national or regional boundaries. One of the prominent findings about the college students participating in this study is within-group heterogeneity. The worldwide wave of international education accounts for the diversification of pre-collegiate and collegiate student demographics and also the internationalization of the students' educational experiences as a whole. The trend in transnational education was notably found among the educational trajectories of the international students in this study. More than one fifth (21.6 percent, %) of international survey respondents did not attend high schools in their countries of origin but they rather experienced transnational high schooling. In particular, about half (45.5%) of I-ESA subgroup studied abroad in the U.S. before college. This ecology of global student migration in the process of self-formation may have provided both domestic and international students with potential opportunities to blend in broader social and educational landscapes, currently at college or earlier during K-12 years (Biesta & Tedder, 2007). Early international education experience may contribute to self-forming international students academically and socioculturally ready for American college. Ling (I-ESA)—who was born in China and began her international schooling in English language in a middle school in Singapore—self-assessed her academic readiness and sociocultural readiness at the time she entered the American college positively as "good" and "fair", respectively, among the five-scale ratings of none, poor, fair, good, and excellent.

Second, current college students in the U.S. are divided and self-segregated. According to the survey results, both domestic and international students ranked college peers as the most important support that can help them to succeed socioculturally in college. They also ranked peers, as the second most important support that can help them to succeed academically, after "academic advisors and instructors" rated as the most important support. However, the potential cross-cultural network and engagement (Montgomery & McDowell, 2009) was not easily realized; rather, the desired peer support network rarely crossed the country of origin or home language borders. Indicators of domestic and international students' co-existence in a range of college curricular and extracurricular activities and potential opportunities for mutual growth on college campus fell short of convincing evidence of meaningful interaction, networking, and peer relationship building. Case analyses revealed dissonant stories of reasoned self-segregation and partial cohesion.

Michelle—a White female English-monolingual American in her junior year studying social sciences (D-ESA)—described her global campus as a contact zone with "diverse cultures" to learn about (Marginson, 2014). However, "a lot of interaction" and "cultural fusion" that she experienced among peers seemed limited to other fluent speakers of English, with other speakers of languages self-segregating, as follows:

> It is a diverse school. It's a diverse student body so I did learn about diverse cultures…. I had a lot of interaction [with English-speaking peers]...there is no language barrier among us. International students tend to hang out with each other. Or international students from the same country hang out with each other because they are in a new place and they speak the same language, and when they are in trouble while adjusting then they want something familiar, if they hang out with their group of their own culture in a different

place. Those people from New York City or Long Island speak English fluently if not in

a different dialect, and then I can easily learn about the culture because we can become

friends because we can talk. Unfortunately, I would say English proficiency is the biggest

thing in like cultural fusion with international students.

International education in this English-speaking host country did not contribute much to this

English-speaking local student's self-formation. Neither did the ecology of partial cohesion

hinder her college experience. Michelle, with a partial but still working peer network, rated her

academic readiness "excellent" and sociocultural readiness "good".

A notable comparison was observed in a self-forming process of a domestic student with

transnational aspirations. Tina—a Black female English-Korean bilingual American junior

studying communications, business, and Korean (D-ESA)—self-assessed both her academic and

sociocultural readiness at "excellent". Tina's peer network transgressed the typical language,

nationality, or ethnicity boundaries in that she "met her [a recent immigrant peer from Korea] in

communication class and then some other friends in some different classes, and I also made

international friends in my Korean courses as well because we had similar interest." Difference

between Tina and Michelle in the active will or 'agency freedom' (Marginson, 2014) whether to

network with cross-border students made a difference in their intentional actions and the level of

college readiness and cross-cultural engagement.

Although both domestic and international survey respondents indicated gaining diverse

cultural experiences and new friends as one of the most important reasons to go to college, for

students who speak other first or heritage languages than English, friendship building across the

typically dividing boundaries is not a simple task, as Michelle described above, but requires self-

determination and action on personal development and transformation of the situated context

(Tran & Vu, 2017). Often, the salient language difference hinders academic and sociocultural readiness. For example, academic and sociocultural readiness of Jihyun—a Korea-born Korean-English bilingual female junior studying engineering (I-ELF)—was both rated at "poor" at the time she entered the American college. Jihyun's lived experience concentrated heavily on "really English problem…[as a] major...obstacle" in her American collegiate experience. Also among other international survey respondents, "English" remains one of the most important areas that they need to improve to succeed in college academically (the most important area to improve) and socioculturally (the second most important after "understanding and experiencing the U.S. culture").

Third, a subgroup of domestic students who speak other languages than English at home (D-ELF in this study) constitutes language minorities among college students. In particular, the minority domestic students who are recent immigrants or have been immersed in immigrant-language communities before college are hidden from a reductionist view focused on typical college students. So are the needs of the hidden or neglected minority college students in that the traditional Anglo norm among American college students may assume that they acquired native or fluent English proficiency ready for college education (Jones, 2017). In fact, both domestic survey respondents as a whole and D-ESA subgroup ranked "English" at the last of the areas to improve to succeed academically in college. Differently from English-speaking domestic peers but same as English-proficient international peers, D-ELF subgroup respondents rated English as the third important area to improve.

Thus, English was the area of difficulty for Mei—a China-born Chinese-Hokkien-English multilingual female sophomore studying business management (D-ELF). Instruction fully in English during her first American college year was a 'culture shock' for Mei immediately after

graduating from a public bilingual high school in a Chinese immigrant community where Chinese was used as the primary medium of instruction and communication and even some tests were in Chinese. Her teachers shared the Chinese heritage predominant in school and spoke Chinese in class. Mei reflected on the transition period of disorientation as follows: "I just stare at the professor. I had no clue about what they are talking about. I just feel like fool, sitting there, doing nothing because I do not understand what they are talking about, the language." Mei qualified her academic readiness rating at "excellent" only because she was "really good at taking exam"; she, then, lamented over her "poor" sociocultural readiness due to the language competence. Mei continued to elaborate on her hardship of communication in English that limited her social network as follows:

> I have difficulty [in] communicat[ing] with people because [of] my language skill. Then I actually don't really go out making friend[s]. Even [when] I have [a] friend, it is [a] Chinese friend. That's why it is hard to let me get along in the university…. After I c[a]me to college…I stop[ped] communicat[ing] with people. I don't know how to pick topic[s]….I feel like my brain [is] just freezing.

To her story of struggle and disengagement, Mei added her frustration of the institutional obliviousness to the needs of recent immigrant students and the need for language support for language minority immigrant students: "I really want school [to] have more program[s] like that [language support]. I really believe a lot of immigrant [students need it]….. We are just working alone. It is not really good."

Self-forming competence for college readiness and success: Social networking and purposing and engaging college for career. College students use a range of effective self-forming strategies to prepare for transition to college (Jones, 2017). When putting aside

"practicing English"—the utmost college readiness strategy among international survey respondents, "consulting and seeking help from faculty", "networking and information exchange", and "extracurricular activities" were selected as the most effective strategies that domestic and international students used to improve academic and sociocultural readiness. The differences between domestic and international student groups' ratings were found in two strategies: "networking and information exchange" for academic readiness and "extracurricular activities" for sociocultural readiness, both of which domestic respondents ranked higher as the most effective. A closer investigation found that I-ESA subgroup's ranking of networking strategy was closer to overall domestic students' ranking than that of overall international respondents. I-ESA's English-competence and transnational experience afforded their 'agency for becoming' to project who they wanted to become and how they could achieve the goal, and to engage in actions (Tran & Vu, 2017).

Agentive stories of Rahul, an exemplar of I-ESA subgroup member, add insights to the nature of his 'purposeful investment' in social networking in college with career prospects in mind. Rahul—an India-born Hindi-Meiteilon-English multilingual male senior studying engineering—humbly rated both his academic and sociocultural readiness at "good" although deemed "excellent". Rahul—a small fish in a big (international) pond—compared his imperfect GPA of 3.9 to the perfect GPA of 4.0 that other fellow Indian students achieved, and insisted on the modest rating at "good". Ever since his first year in college, he had enacted his 'needs-response agency' (Tran & Vu, 2017) to ease financial burden by means of multiple on-campus jobs with wide-ranging roles that required effective cross-cultural social interactions. Simultaneously, Rahul's 'agency for becoming' (Tran & Vu, 2017) was active to achieve his self-projected transformation from an Indian military officer to an engineer in the host country

and cosmopolitan society; for the purpose, he held student leadership positions and joined a professional club for engineers and a sports club "to grow professionally, to grow socially, to network, and to focus on my [his] career development and also all the skillsets to face the world". Thus, Rahul's self-forming competence for success was career-goal-driven, not only for "studying but also using my [his] skills to further my [his] talents and skillsets and experience."

To secure a good job was the most important reason for both domestic and international survey respondents to go to college. Despite this imagined purpose commonly held in students' mind, their actual engagement in collegiate experiences varied. For example, the campus life routine of Mei (D-ELF) who would "only go to class, go back to my [her] dorm, forth, back and forth" was a stark contrast to 'agency for becoming' (Tran & Vu, 2017) in Rahul (I-ESA)'s high level of investment and engagement in student life and Tina (D-ESA)'s career purposing "even as a kid" and engaging actively in college experience toward the projected goals—"to lean more so that can help me [her] become a leader and also be my [her] own boss one day…to help encourage people…to learn about people, travel the world"—by completing double majors in communication and business, an optional minor in Korean, and an optional study abroad in Korea.

Toward agent-empowering environments: Inclusive education "from a customer student's perspective". Successful transition to postsecondary education environments that are complicated by personal, familial, institutional, and (trans)national milieus is not a given fact for all students (Jones, 2017). All survey respondents made efforts to prepare for higher education socioculturally, not merely academically. As diverse micro cultures exist within the U.S. macro culture, the domestic cases noted cultural differences that influenced each of their college experiences (as shown in Figure 1)—in terms of geographical region (Michelle), university type

for transfer students (Tina), and immigration status (Mei). Further, international students as a whole and domestic English learner/foreign high schooler subgroup (D-ELF) made more efforts (approximately 35% of each group)—than international English speaker/American high schooler subgroup (9.1% of I-ESA subgroup) and domestic students as a whole (7.5% of domestic group)—to be "psychologically ready for a new culture". When students perceive the language barrier and cultural shock as insurmountable, they may feel disempowered and resort to disengagement in college as Mei (D-ELF)—poorly ready for college culture due to difficulty to communicate in English—barricaded herself into a reclusive college life.

Probably due to the primal role on student success, many challenges in academic life were related to faculty, the most important support for both domestic and international respondents' academic success. Interviewees echoed a faculty virtue of being "really kind" regarding academic support. The exceptional kindness was not just "friendly" gestures but facilitated student transformations via such caring educational practice as availability and responsiveness when students sought help, elaborate explanation of student questions at hand, and respect for and understanding of student's language and culture. In contrast to domestic interviewees, all international informants attributed helpful academic support to teaching assistants who "spent more time with students (Ling)" rather than professors, whom they considered "hard to talk to (Rahul)" or "not really open (Jihyun)".

Survey respondents and interviewees acknowledged that they invested in participating in a range of institutional curricular and extracurricular programs and student services that oriented new comers and support continuing students for successful college life. Well-intended curricula and student services were available on campus but they may have ended up serving the dominant culture groups, leaving unanswered dominated subgroups' critical needs, whether academic or

sociocultural. Ling (I-ESA) reflected on the school of management workshop in her first year and regretted attending it as "it doesn't have anything to do with me….We [International students] are generally intimidated." Tina (D-ESA) criticized the institutional division of domestic and international student orientations and recommended that the university "stop separating orientations because that alone just makes us feel kind of segregated." In response to the university environments that forced her to repeat the courses on foundations that she had learned in her country of origin and to waste time and tuition fees only to fulfill the system requirement, Shu (I-ELF) attempted conversation with faculty to reconstruct the undesirable context ('agency as struggle and resistance' mediating eventual 'agency for becoming', Tran & Vu, 2017). Different students' stories converged on the need for college environments that resonate with diverse students, in other words, inclusive education "from a customer student's perspective" as Rahul advocated metaphorically.

Discussion

Enlightening the Relationships among Student Backgrounds, College Readiness, Educational Engagement, and College Success

Among US domestic students in the sample, English learners and foreign high schoolers, such as recent immigrants, tend to feel less competent in terms of college readiness than English speakers and US high schoolers. Likewise, among international students, those who speak English as primary home language and/or have American high school experiences report higher level of college readiness and educational engagement than their peers without corresponding background and experiences. Regardless of whether it is domestic or international student group, ESA subgroup tends to report higher levels of college readiness than ELF subgroup. This finding

suggests that it is not simply the status of US citizenship or permanent residency but rather students' language/culture and education background (i.e., English as home language and American or English-speaking high school experience) that matter for American college readiness, educational engagement, and college success (Figure 1). Student diversity characteristics transgress the normalized demographic categorical bounds in terms of citizenship and immigration status. Further, student identities are not fixed but (re)shaped as they experience and invest in transitioning to higher education as a self-forming process of dynamic hybrid and negotiation on multiple milieus (Jones, 2017; Marginson, 2014).

Particularly in regard to language diversity—with more than half of the total survey respondents in this study (about 30% of domestic and 90% of international group) speaking other languages than English at home, individual multilingualism and multiculturalism seems to outpace educational multilingualism and multiculturalism in the U.S. university. Additional burden on language minorities lies in the often-ignored fact that academic English is not a simple fix that can be done through a single workshop but that its development in the genre requires several years of quality learning (Hakuta, 2011). Similarly, understanding cultural differences and developing multicultural competence requires a long investment (Pope, Reynolds, & Mueller, 2014). Then, lack of awareness and knowledge of the relationships between students' language and cultural backgrounds and their pre-collegiate and collegiate experiences may perpetuate the paradoxical cycle of surface-level blending, alienating labeling, other-separation, and self-segregation, all of which in the college environment in favor of the conventional majority would fail the continuing efforts in policy and practice improving educational diversity and equity on global campus.

Re-envisioning College Students and Support Systems

The findings of this study challenge traditional grouping and stereotyping based on the dichotomy of domestic and international students as well as the inclusiveness of the conception about traditional or typical college students. They also draw attention to a growing transnational group globally, an often-neglected intersection of domestic and international categories, in that the trend in transnational student mobility in K-12 and higher education worldwide may feature the portraits of future college students in globally interconnected societies including the U.S. There is a need for global colleges and universities to foster the environments encompassing changes in policy and day-to-day administrative and pedagogical practices that best support all students' agency development and exercise (Strange & Banning, 2001; Tran & Vu, 2017), and also to provide more targeted support to those subgroups of domestic students as well as international students who are foreign-born with limited proficiency in the lingua franca and host culture/education experiences (Kim, 2016).

Further, the transnational trend necessitates for global countries helping develop multicultural competence among young pupils in early education systems of the nations. Case analyses of this study suggest complicated trajectories of college readiness and success among transnational domestic and international students. Conventional demographic categories, for example, citizenship, the length of stay in the host country, or the location of high schooling, were arguably contested as dynamics of within- and between-group heterogeneity were found. As the characteristics and needs of the participants in contemporary higher education keep changing, it is a tall order to re-examine and help develop new competences that new college students need to succeed academically and socioculturally. It is not a productive or equitable system if it forces some minority students to blame themselves and remain disoriented and other-formed, because the desired support is not integrated in the system.

Therefore, we would make suggestions for building more equitable, successful global colleges and universities. It is necessary to investigate and understand the needs of 'all' college students in transition, not just the dominant culture group, and to design and provide the systems that help students develop both academic and sociocultural competences for college and career success. Curricular and extracurricular considerations are not mutually exclusive; comprehensive and lateral operation is crucial (Jones, 2017). Critical areas of institutional considerations for diverse students' college success should be academic and at the same time sociocultural. Strategic and sustained efforts should not be limited to but include fostering multicultural competence that bridges global citizens beyond borders, self-management, help-seeking competence, language competence for communication and academics, critical thinking, individualized competence building, genuine collaboration, sense of belonging and community, social networking, experiential learning, peer support system, and faculty-student relationship building.

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students. *Journal of Multicultural Counseling and Development, 32*, 33–44.

Appendix: Description of Variables

Background Variables

Gender. This is a categorical variable (1=female, 0=male) that measures students' gender.

Class Level. This is a categorical variable (1=Freshman, 2=Sophomore, 3=Junior, 4=Senior) that measures students' class level in college.

Parent Education. This is a categorical variable that measures the highest level of education completed by student's parents. The categories are 1=Less than a high school diploma, 2=High school diploma or equivalent, 3=College, vocational, or trade school (including a 2-year degree), 4=Graduated from a 4-year college (bachelor's degree) and 5= Graduate or professional schooling.

Residence Length. This is a continuous variable measuring how long the student has lived in the U.S. The unit of the value is year.

Home Language. This is a categorical variable indicating the student's language(s) spoken at home most of the time. The responses had 15 categories: English, Chinese Mandarin, Chinese Cantonese, Spanish, Korean, Japanese, Hindi, Vietnamese, Turkish, Bengali, Bangla, Nigeria, Arabic, Kiswahili, and More than one home language.

Major. This is a categorical variable which indicates intended major or academic area of study. The responses had 7 categories: 1= Engineering, 2= Science, 3=Social Science, 4= Art and Humanity, 9=Double major, -1= Undecided and -2= Not specific.

High School Grade. This is a continuous variable indicating average high school grade (0-100% or F-A). The letters are recoded to corresponding percentages.

College Readiness and Engagement Variables

Academic Readiness. This is a continuous variable, the composite score of 16 specific types of academic competencies including critical thinking, problem solving, computing skills, note taking, presentation speech in class, test taking skills, reading comprehension, writing, and mastery in subject areas (math, US history, world history, literature, biology, chemistry, physics, and foreign language). The participants are asked to evaluate "How well prepared/ready were you in each of the academic competencies/abilities at the time of college entrance?" Responses were coded on a 5-point scale: 1=none, 2=Poor, 3=Fair, 4=Good, 5=Excellent. The overall reliability is .92.

Sociocultural Readiness. This is a continuous variable, the composite score of 11 specific types of sociocultural competencies: collaboration/teamwork, commitment to learning, understanding of school/program/career paths, responsibility, academic integrity, communication, creativity, independence, help-seeking, balancing school and other demands, and multicultural competence. The participants are asked to evaluate "How well prepared/ready were you in each of the social and cultural competences/abilities at the time of college entrance?" Responses were coded on a 5-point scale: 1=none, 2=Poor, 3=Fair, 4=Good, 5=Excellent. The overall reliability is .93.

College Education Engagement. This is a continuous variable, the composite score of student engagement in 7 high-impact college education practices: Students ask questions in class; Students express opinions in class; Students cooperate on class activities; Students present assignments in class; Teachers give feedback other than test scores; Students have ownership/leadership of the class; Learning practical applications of knowledge is the focus of

class. The participants are asked to report "How often do you experience the following practices or activities during your typical college classes?" Responses were coded on a 4-point scale of 1= Hardly/Never, 2= Sometimes, 3=Frequently and 4= Always. The reliability of this scale is .88.

High School Education Engagement. This is a continuous variable, the composite score of student engagement in 8 high-impact high school education practices: Students asked questions in class; Students expressed opinions in class; Students cooperated on class activities; Students presented assignments in class; Academic writing was common; Teachers gave feedback other than test scores; Learning conceptual knowledge/theory is the focus of class; Learning practical applications of knowledge is the focus of class. The participants are asked to report "How often did you experience the following practices or activities during your typical high school classes?" Responses were coded on a 4-point scale of 1=Hardly/Never, 2=Sometimes, 3=Frequently and 4=Always. The reliability of this scale is .89.

Table 1.

New Classification of Domestic and International College Students

		US citizenship or permanent residency	
		Yes [Domestic]	No [International]
English as home language or U.S. high school attendance	Yes [English speaker/American high schooler]	Domestic- English speaker/American high schooler (D-ESA)	International- English speaker /American high schooler (I-ESA)
	No [English learner/Foreign high schooler]	Domestic- English learner/foreign high schooler (D-ELF)	International- English learner/foreign high schooler (I-ELF)

Table 2.
Descriptive Statistics by Student Type

Variable name	Statistics	Student Type		Gap
		Domestic	International	
Gender	Mean	.57	.51	.05
	SD	.5	.51	
Age	Mean	21.95	22.09	-.14
	SD	3.65	2.25	
Parental education	Mean	3.15	3.65	-.50
	SD	1.39	1.32	
Years of US residence	Mean	16.64	2.12	14.52***
	SD	6.32	2.80	
College class level	Mean	2.42	2.35	.07
	SD	1.20	1.11	
High school GPA	Mean	90.71	87.84	2.87
	SD	6.30	7.95	
Academic readiness	Mean	58.35	51.32	7.03**
	SD	9.33	10.09	
Sociocultural readiness	Mean	42.11	40.58	1.53
	SD	7.09	7.94	
College education engagement	Mean	20.93	23.25	-2.32*
	SD	5.02	5.14	
High school education engagement	Mean	22.26	21.93	.33
	SD	4.88	5.31	

Note. * *p*<.05. ** *p*<.01. *** *p*<.001.

Table 3.

Descriptive Statistics for Domestic and International Subgroups of Students

| Variable name	Statistic	Student Type			
		Domestic		International	
		D-ESA	D-ELF	I-ELF	I-ESA
Gender	Mean	.6	.5	.62	.27
	SD	.50	.51	.50	.47
Age	Mean	21.39	23.11	22.46	21.27
	SD	2.39	5.35	2.34	1.90
Parental education	Mean	3.6	2.25***	3.54	3.91
	SD	1.22	1.29	1.30	1.38
Years of US Residence	Mean	19.41	11.10***	1.80	2.79
	SD	4.00	6.54	1.43	2.32
College class level	Mean	2.43	2.4	2.5	2
	SD	1.20	1.23	1.14	1
High school GPA	Mean	91.09	89.95	86.62	90.73
	SD	6.19	6.60	8.08	7.16
Academic readiness	Mean	60.73	53.6**	48.38	58.27**
	SD	9.05	8.16	6.87	13.16
Sociocultural readiness	Mean	42.42	41.4	38.14	45.7**
	SD	7.54	6.27	7.84	5.52
College education engagement	Mean	20.83	21.11	22.15	25.36^
	SD	4.77	5.62	4.88	5.18
High school education engagement	Mean	22.51	21.78	19.00	26.30***
	SD	4.76	5.22	5.05	4.95

Note. * *p*<.05. ** *p*<.01. *** *p*<.001. D-ESA group (domestic majority) is used as reference group for t-tests of within-domestic subgroup comparison, whereas I-ELF group (international majority) is used as reference group for t-tests of within-international subgroup comparison. Asterisks next to mean values for D-ELF and I-ESA groups indicate statistical significance of the gap relative to D-ESA and I-ELF groups respectively.

Table 4.
Correlations among key variables

	High school grade	Academic Readiness	Social Readiness	College education engagement	HS education engagement
High school grade	1				
Academic Readiness	.33**	1			
Sociocultural Readiness	.23*	.65**	1		
College education engagement	-0.03	0.01	.28*	1	
HS education engagement	0.21	.44**	.39**	.36**	1

**. Correlation is significant at the 0.01 level (2-tailed).

 *. Correlation is significant at the 0.05 level (2-tailed).
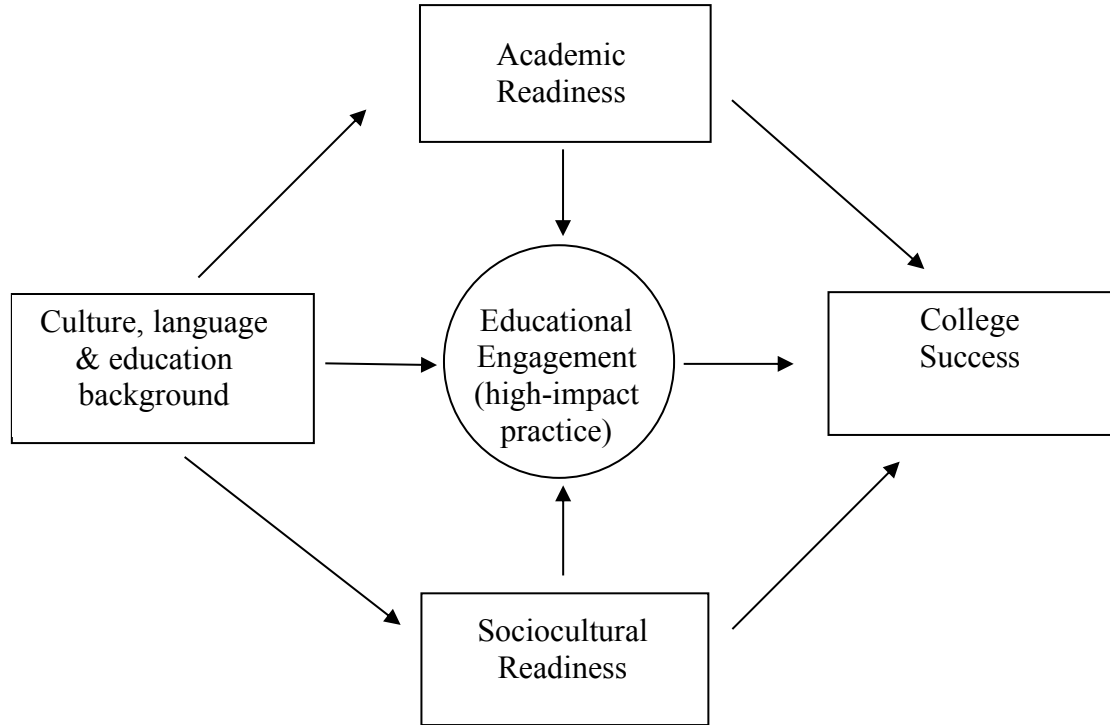
Figure 1. Diagram of the Relationships between Student Backgrounds, College
Readiness, Educational Engagement (High-impact Practice), and College Success