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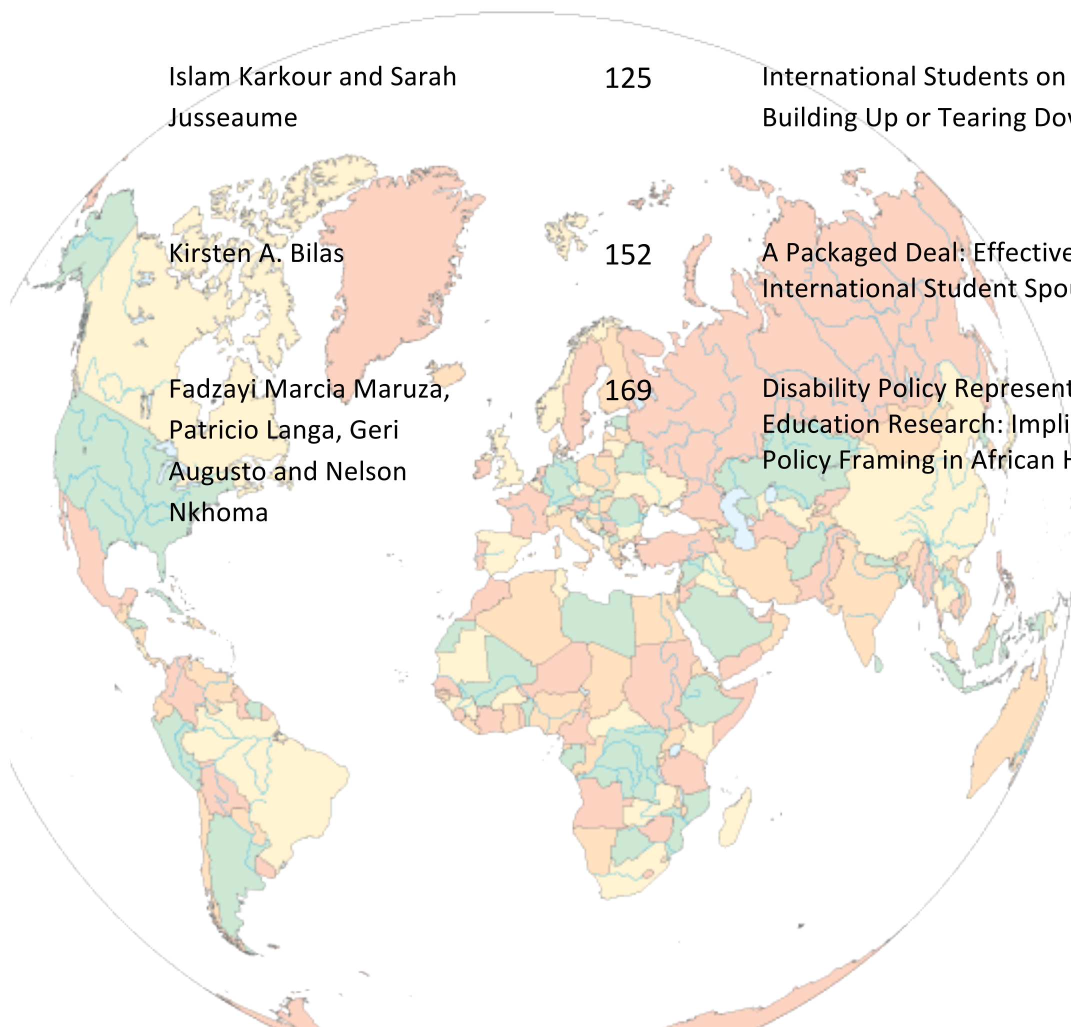

# JOURNAL OF COMPARATIVE & INTERNATIONAL HIGHER EDUCATION

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This is the official journal of the Comparative and International Education Society's (CIES) Higher Education Special Interest Group (HESIG), which was created in 2008. HESIG serves as a networking hub for promoting scholarship opportunities, critical dialogue, and linking professionals and academics to the international aspects of higher education. Accordingly, HESIG will serve as a professional forum supporting development, analysis, and dissemination of theory-, policy-, and practice-related issues that influence higher education.

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**JCIHE: Fall 2020 Introduction**

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Dear Readers -

I am pleased to share the Fall 2020 issue of the *Journal of Comparative and International Higher Education* (JCIHE). JCIHE is an open access, independent, peer-reviewed international and multi-disciplinary journal designed for advancing the field of comparative and international higher education. JCIHE has as its core principles: a) comparative and international research on higher education; b) engagement with theory; and c) diverse voices in terms of authorship. The journal serves as a place to share new thinking on analysis, theory, policy, and practice that relate to issues that influence comparative and international higher education. The JCIHE is the official journal of the Comparative and International Education Society (CIES) Higher Education Special Interest Group (HESIG).

The Fall 2020 issue includes eight articles that examine the intersection of institutional policies and pedagogical practices and the impact that they have on student learning and success. Three of the articles examine the ramifications of institutional practices on faculty output and on student learning. Heuser, Lyken-Segosebe, & Braxton examine what English-speaking universities value in terms of faculty publication productivity across the Boyer's four domains of scholarship. Institutional policies of universities with the highest rankings value different domains than universities with the lowest level of rankings. Thompson, Clarke, Quickfall, & Glazzard explore the connection between teacher trainee well-being and student retention in three European countries. Institutional practices in each country define different criteria for workload, peer relationships, and the quality of pedagogical knowledge, the

combination of which contribute to or decrease teacher stress. In turn, decreased stress is directly related to student retention. Kwasi-Agyeman, Langa, & Swanzy compare how universities in Ghana and South Africa are finding alternative institutional funding from international student fees and from distance education via Satellite campuses fees. The non-traditional funding is then used to counter diminishing public higher education funding. Ghazarian explores how different university stakeholders create or reinforce institutional policies that challenge the perceived importance and the perceptions of quality of internationalization in a university in the Republic of Korea. Karkour & Jusseaume examine how weak institutional practices in a US university result in creating and sustaining an environment that does not promote deep personal connections and that then negatively impacts overall learning of international students. Bilas explores how weak institutional support services and practices negatively affect international student spouses in terms of their health care, housing, and outreach. Finally, Maruza, Langa, Augusto, & Nkhoma detail institutional disability policy framing in African higher education to identify how different academic and professional disciplines influence policy and practice which, in turn, then effects student accommodations and learning.

A second theme found in the Fall 2020 issue is a critical assessment of when and how pedagogy actually allows learning to happen. Karkour & Jusseaume find that intercultural sensitivity learning, that is presumed to occur as a result of student mobility, is limited for international students studying in a US university over one semester. They raise the question then if intercultural sensitivity learning can occur holistically or if it needs specific and directed instruction. Thompson, Clarke, Quickfall, & Glazzard find that when trainee teachers in three European countries are taught conflict resolution and coping mechanism skills, they end up having a stronger learning environment for themselves and, in turn, for their students. Maruza, Langa, Augusto, & Nkoma advocate for a new lens to explore alternative ways of understanding how disability policy in Africa creates or contributes to exclusions that truncate learning possibilities. Finally, Gülen & Yadigar examine the adoption of 'fun books' by teacher trainees in Turkey

to positively influence K-12 students as well as influence higher education students in their note-taking skills, that in turn, allows them to better prepare for exams.

JCIHE is pleased to introduce the new International Advisory Board (2020-2022): Mark Ashwill, CapestoneVietnam; Yeow-Tong Chia, University of Sydney; Christopher Collins, Azusa Pacific University; Omolabake Fakunle, University of Edinburgh; Ali Said Ali Ibrahim, United Arab Emirates University; Dilrabo Jonbekova, Nazarbayev University, Kazakhstan; Mei Li, East China Normal University; Ka Ho Mok (Joshua), Lingnan University, Hong Kong; Daniela Perotta, University of Buenes Aires, Dante J Salto, University of Wisconsin-Milwaukee; and Sharon Stein, University of British Columbia. The International Advisory Board along with the Regional Editors are bringing a wide range of expertise to JCIHE that will help to provide new directions in advancing studies of comparative and international higher education.

I want to give special thanks to Dr. Gerardo Blanco, Boston University, who transitions off of the HE-SIG team and who served as the Executive Editor of the JCIHE. Dr. Blanco will continue with JCIHE as an Associate copy-editor and contributing manager. JCIHE welcomes the new JCIHE Executive Editors, Dr. Pilar Mendoza and Dr. Anatoly Oleksiyenko, who also serve as the co-chairs of the CIES HE-SIG. I would also like to welcome the new JCIHE Managing Editor, Nian Ruan (University of Hong Kong) and the new JCIHE Production Editor, Jade Liu (University of Hong Kong). Finally, I want to extend my sincerest thanks to the current JCIHE Managing Editor, Dr. Hei-hang Hayes Tang (Education University of Hong Kong) who has supported the journal in improving quality and focus. Dr. Tang will be transitioning to be the new JCIHE Associate Editor position.

As JCIHE growths in breadth and depth, it is important to continually refine a structure that is useable for our readership. As such, JCIHE as now adopted the APA 7$^{th}$ edition for all manuscripts. In future issues, JCIHE will continue to recognize the importance of comparative and international higher educational themes in a variety of educational fields with the explicit aim to continually recognize

emerging issues that cross national boundaries and to build new patterns of publishing help to better understand the state of our field.

Editor-in-Chief,

Rosalind Latiner Raby

Fall, 2020

# Internationalizing a Broader View of Scholarship: An Exploratory Study of Faculty Publication Productivity in Boyer's Four Domains of Scholarship in English-speaking Universities

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## Abstract

Boyer's four domains of scholarship provided the basis for a comparative investigation of the scholarly output of faculty members in 14 countries and at 100 English-speaking universities on the Times Higher Education World University Rankings (2013–2014) top-400 institutions. Full-time university faculty members who held tenured, tenure-track, and non-tenure-track academic appointments across three high-consensus and three low-consensus academic fields were the population of interest. The findings revealed that faculty members in US Research I and doctoral-granting universities and their international faculty counterparts in English-speaking universities publish relatively similar levels of scholarship directed toward application and discovery and have similar levels of inactivity in their publication of teaching-oriented scholarship. Tests for academic discipline-specific differences revealed little variation except for the finding that academic chemists tend to produce more publications in the application domain. Cross-national variation was also found in the publication of application-oriented scholarship. Suggestions for further research are proposed.

*Keywords:* faculty scholarship, Ernest Boyer, publication productivity, international faculty, university reward structure, Times Higher Education World University

## Introduction

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In his landmark publication, *Scholarship Reconsidered: Priorities of the Professoriate*, Boyer (1990) proposed that a definition of scholarship within higher education institutions should go beyond the traditional emphasis on the scholarship of discovery and include the scholarships of application, teaching, and integration, which are often overlooked in institutional incentive structures. Boyer further argued that scholarship should be refined into four domains:

> (1) *discovery*, the advancement of knowledge . . . [that] comes closest to what is meant when academics speak of [academic] research; (2) *integration*, making connections across the disciplines, placing the specialties in larger context, [and] illuminating data in a revealing way; (3) *application*, a dynamic model of scholarship that both applies and contributes to human knowledge, beginning with the applied use of existing knowledge; and (4) *teaching*, a dynamic endeavor involving all the analogies, metaphors, and images that build bridges between the teacher's understanding and the student's learning. (pp. 17–21)

The US literature on the nature and the extent to which members of the professoriate conduct scholarship reflective of each of the four domains delineated by Boyer (1990) is growing (e.g., Austin, 2003; Austin & McDaniels, 2006; Boyd, 2013; Braxton et al., 2006; Braxton & Lyken-Segosebe, 2015; Colbeck & Michael, 2006; Doyle, 2006; Glassick, 2000, 2002; McKinney, 2006; Moser & Ream, 2015; O'Meara, 2006; Paulsen & Feldman, 2006). For example, Braxton et al. (2006) examined scholarly activities in the four domains in a sample of 1,424 full-time tenured and tenure-track college and university faculty members in five types of four-year US institutions of higher education and in four academic disciplines (biology, chemistry, history, and sociology). Later, Braxton and Lyken-Segosebe (2015) examined the same scholarly activities in the same four academic disciplines among a sample of 348 full-time faculty members in a national sample of US community colleges.

Boyer (1990) presented several reasons for his call to broaden the definition of scholarship beyond an emphasis on discovery to include application, integration, and teaching. Given the social and political problems that require expert advice and the need to improve undergraduate

instruction, realign the type of scholarship emphasized in the mission of an institution, and recognize the day-to-day activities of college and university faculty members, Boyer included the need for colleges and universities to serve society. Although these reasons arise from conditions within the US system of higher education, Boyer believes that his expanded definition also may hold relevance to the international context of higher education (Boyer et al., 1994).

Outside the United States, faculty members at international universities are engaging in critical research that informs policy and practice in their respective disciplines and countries. There is also a long-standing “international debate about the development of the scholarship of teaching” and the degree to which it should be located within the disciplines or primarily informed by the science of pedagogy (Healey, 2000, p. 169). Little is known, however, about the extent to which the scholarly output of faculty members at universities around the world reflects the various domains of scholarship beyond traditional discovery or the extent to which discovery informs the other domains, thus making this a valuable area of study.

The focus of this exploratory study was the scholarly activities of faculty members at English-speaking institutions in the Times Higher Education World University Rankings’ (2013–2014) top-400 institutions. Our choice of these English-speaking institutions was based on the fact that the mission and scope of research at such universities are similar to those of doctoral universities of the United States. Within these constraints, we were also deliberate about sampling institutions with as broad an international distribution as possible. Universities are included in the Times Higher Education World University Rankings if they achieve an annual research output of at least 200 articles per year (Times Higher Education, 2014). While most rankings systems have continued to place increasing emphasis on metrics of research productivity (e.g. Shanghai Jintao) The Times Ranking has the longest established method of evaluating ‘teaching/the learning environment’ as one of the central functions of higher education institutions. At the time of this writing, it continues to occupy 30% of their methodological weighting, as it did with the dataset we assembled. Because US faculty members in Research I and doctoral-granting universities publish more scholarship reflective of the

scholarship domains of application, discovery, and integration than do their faculty counterparts in other types of US colleges and universities (Braxton et al., 2002), English-speaking universities from the Times Higher Education World University Rankings (2013–2014) top-400 institutions provide a suitable international context for our comparative study, which seeks to address four research questions.

**Research Questions**

1. What is the general level of publication productivity of international faculty members in each of Boyer's four domains of scholarship?
2. How does the level of publication productivity of international faculty members in each of Boyer's four domains of scholarship vary across the six different academic disciplines included in this study?
3. How does the level of publication productivity of international faculty members in each of Boyer's four domains of scholarship vary by their university's international institutional stature, as measured by its Times Higher Education Ranking (2013–2014)?
4. How does the level of publication productivity of international faculty members in each of Boyer's four domains of scholarship vary by the country of the university of their academic appointment?

**Conceptual Framework**

Blackburn and Lawrence (1995) found empirical backing for the influence of self-knowledge and social knowledge on general levels publication productivity. Self-knowledge entails an individual's awareness of their own values whereas social knowledge involves the individual's perception of the expectations for behavior held by their work environment conveyed through norms, values and expectations for performance (Blackburn & Lawrence, 1995). By extension, we posit that self-knowledge and social knowledge also influence the publication productivity of international faculty members in each of Boyer's four domains of scholarship: application, discovery, integration, and teaching.

Specifically, self-knowledge of individual international faculty members involves the cognizance of the values they espouse towards the goals of the scholarships of application, discovery, integration and teaching. Moreover, individual faculty members may vary in the value they place on the goals of these four domains of scholarship.

We also extend the work environment of international faculty members beyond the university of their academic appointment to include their academic discipline and the country of the university of their academic appointment. Each of these dimensions of the work environment communicate norms, values and expectations for publication productivity reflective of the scholarship of application, discovery, integration and teaching to international faculty members.

The norms, values and expectations for publication productivity regarding each of the four domains of scholarship may vary across English-speaking universities of varying degrees of international stature, across different academic disciplines, and across countries of their academic appointment. To elaborate, in their study of 1,424 full-time tenured and tenure-track college and university faculty members in five types of four-year US institutions of higher education (community colleges, four-year baccalaureate level colleges, master's colleges and universities, and research universities of very high research activity), Braxton et al. (2002) found variability in the publication of application, discovery and integration domains scholarship across these types of four-year institutions. Their findings suggest the possibility of differences in the publication of scholarship of the four domains across English-speaking universities of varying degrees of international stature. Moreover, Braxton et al. (2002) also found differences in the level of the publication of application and integration scholarship among the four academic disciplines included in their study. Hence, these findings suggest the possibility of differences in the publication of scholarship of the four domains across the academic disciplines of international faculty members in English-speaking universities. The publication of scholarship in each of the four domains may also vary across different countries of the world because of national priorities regarding the focus of scholarship, especially at institutions receiving public funding.

**Significance of the Study**

This study is significant for at least four reasons. First, it fills a gap in terms of research on comparative and international faculty scholarship. Second, this study extends the body of knowledge on the nature of scholarship pursued by faculty members at international universities beyond the traditional form of discovery scholarship. Third, the study extends Braxton et al.'s (2002) and Braxton and Lyken-Segosebe's (2015) investigation of Boyer's (1990) four domains of scholarship among faculty members at US colleges and universities to international faculty members in English-speaking universities of the world. To this end, the study utilized an adapted version of Braxton et al.'s (2002) Faculty Professional Performance Survey (FPPS) used for the study of the US professoriate and widened the number of disciplines studied to include two additional disciplines (economics and computer science) with the four academic disciplines (biology, chemistry, history, and sociology) used in earlier research.

Fourth, the study presents international equivalents to two institutional characteristics used to distinguish US universities, namely, institutional type and Carnegie classification. The study distinguished international universities by the country of their faculty members' institution of academic appointment rather than by the faculty members' type of college or university, as within the US higher education system. Moreover, the study used the Times Higher Education World University Rankings (2013–2014) as an indicator of the international institutional stature of the English-speaking universities of the world. Like the Carnegie Classification of Institutions used by Braxton et al. (2002) and Braxton and Lyken-Segosebe (2015), the Times Higher Education World University Ranking differentiates universities according to five dimensions that address the mission and performance of the universities of the world.

This research is important and timely because the work associated with the professorate (also often referred to as the 'academic profession' in the US and Canada) is currently experiencing fundamental shifts related to responsibilities, expectations, incentives, resources, and institutional influence. There is an expanding disconnection between the increasing pressures that are being

exerted on the professoriate and how individual faculty members react in their professional pursuits (Höhle & Teichler, 2013; Locke & Teichler, 2007). Faculty across Europe, in no small measure due to the Bologna Process, increasing administrative demands, and expanded teaching responsibilities, are experiencing more negative impacts on their work from the rise of managerialism (Dowling-Hetherington, 2013; Locke et al., 2011; Teelken, 2011). With dramatic geopolitical shifts toward less free inquiry (e.g. Turkey, Hungary, Venezuela, Ukraine, Ecuador and Azerbaijan), the national and structural contexts for faculty work (Finkelstein, 2015) are also shifting rapidly. At the same time, faculty research output is being evaluated by ever narrower standards of what constitutes research quality, prompting academicians to retreat from time-consuming scholarship that is more broadly engaged with social purposes but still strongly tied to their academic disciplines (Willlmott, 2011; Teodorescu, 2000).

These and similar shifts are resulting in higher stakes for the scholarship enterprise and rising "tension[s] between content of research and bureaucratic control" (Teelken, 2011, p. 16). Faculty professional activities are being more routinely quantified, and the pressure for higher perceived performance is causing significantly more stress on faculty productivity. Faculty also report having less academic freedom in response to strong institutional pressures to move away from basic research to more applied forms of scientific inquiry (Kogan & Teichler, 2007). "[Faculty show] a clear dislike of the growing administration, the increasing competition for research funding, the obligation to fill in time-consuming grant applications and the heavier workload. Examples of frustration and stress are omnipresent" (Teelken, 2011, p. 17). It is our hope that this study may help to advance a more complete analytical framework for understanding these tensions in the professoriate.

## Literature Review

The endeavor, since the 1990s, to adequately assess cross-national variations in the professional activities of college and university faculty members has been particularly challenging for scholars. Boyer's (1994) special report for the Carnegie Foundation for the Advancement of Teaching

offered the most comprehensive, international examination at the time of the international professoriate. Utilizing data from the International Survey of the Academic Profession 1991–1993, Boyer provided detailed descriptive analyses of faculty demographics, professional activities, working conditions, governance perceptions, societal orientation, and internationalization.

In his examination of professional activities, Boyer (1994) attempted to gain an understanding of the relationship among teaching, research, and service, with an emphasis on the degree to which teaching and research were differently prioritized and considered complementary or in tension with one another. Boyer (1994) found a clear divide between faculty members in the 14 countries surveyed: “Commitment to teaching predominate[d] in five of the fourteen countries, [whereas] in the other nine countries, faculty interest lean[ed] toward research” (p. 11). Although he also found that a majority of faculty members in every country thought that teaching quality was not hindered by the pressure to publish, faculty across half of the countries in the sample (including the United States and United Kingdom) reported that they felt significant tensions between these activities.

Using the same dataset, Altbach and Lewis (1996) provided a deeper analysis at the individual-country level. Among their core findings was notable discontentment in nearly every country with the state of academic governance and commonly held perceptions regarding challenging, and changing, the academic profession. According to Altbach and Lewis (1996):

> This portrait of the academic profession in fourteen countries shows a complete web of attitudes and values. One cannot but be struck by the many similarities among the scholars and scientists in the diverse countries. It is with regard to those working conditions most affected by local political and cultural customs and policies that international differences are most apparent. (p. 47)

Despite the valuable insights that the Carnegie research studies (Altbach & Lewis 1996; Boyer, 1994) produced, especially related to the tensions between teaching and research as professional

priorities, these studies did not attempt to advance an empirically validated construct for measuring cross-national variability between faculty priorities.

From 2004 to 2013, the Changing Academic Profession (CAP) studies utilized a significant retooling of the Carnegie categories and included participants from 18 countries and territories. "Half of [these countries] had also participated in the Carnegie Study and thus provided the basis for the analysis, how the situation and views of the academic profession have changed over time" (Höhle & Teichler, 2013, p. 12). The CAP studies, for which each country team gathered its own data and conducted its own analyses, focused on academic governance issues as they relate to the changing work and allegiances of academicians. Cummings et al. (2011) presented their main findings as follows:

> On the research side, most academic systems have become more productive, at least as measured by the number of refereed articles written by their academic staff. However, the increases are least notable in those systems that have traditionally been regarded as the centers of learning—indeed, for the last 15 years there has been essentially no change in the total number of refereed articles written by US-based academics. (p. 10)

From another perspective, Teichler's (2013) CAP study indicated differences in the teaching-research foci of faculty that were significantly related to their academic discipline:

> The discipline is relevant for the orientation towards teaching and research. Actually, 62% of the academics in science and engineering—on average across countries—state a preference for research as compared to 56% of the academics in the humanities and social science. (p. 124)

Moreover, nearly 80% of the faculty surveyed also believe that "their research activities reinforce their teaching" (Teichler, 2013, p. 127). Finally, the most relevant aspect of this research to our current study is Teichler's findings on the "notions and approaches to research and scholarship" for which two survey items were developed to explore the "character" of faculty members' research (Teichler, 2013, p. 137). The first item, which pertained to faculty, was, "State whether research and

scholarship is to be understood ('is best defined') as original research, the synthesis of academic knowledge, and/or as the application of knowledge in real-life settings." The second item was more directly linked to their own activities—whether the research that they undertake is "basic/theoretical, practically oriented, international in scope and as mono-disciplinary or multidisciplinary" (Teichler, 2013, p. 137). Such macro-level findings are helpful for understanding the basic orientation of faculty priorities. According to Teichler (2013):

> Many academics do not see research to be geared in a single major direction. Rather, while three quarters of the respondents support the applied nature of academic research, two-thirds support the "basic" and "theoretical" character of research, and two-thirds also support the need for the synthesis of major findings. (p. 137)

Although these studies have significantly advanced our understanding of the degree to which faculty in different countries conceptualize and commit their time and resources to scholarly activities, they did not explore the degree to which faculty members participate in different forms of scholarly outputs. Specifically, they did not explore the extent to which faculty members conduct scholarship reflective of each of Boyer's (1990) four domains of scholarship: discovery, application, teaching, and integration scholarship.

## Methodology

### Sample and Data Collection

Our sample was constructed by randomly selecting 100 English-speaking (defined as language of instruction and/or administration) institutions from the Times Higher Education World University Rankings (2013–2014) top-400 institutions (Times Higher Education, 2014). Cluster sampling was then used to create a sample across institutional type that was randomized at the level of faculty discipline. Full-time faculty members who held tenured, tenure-track, and non-tenure-track academic appointments in the six academic disciplines of biology, chemistry, history, sociology, economics, and computer science constituted the population of interest for this study. A total of 14,181 faculty members were selected, using this cluster sampling design.

The Faculty Professional Performance Survey (FPPS) was emailed as an online survey, using Qualtrics Survey Software, to this sample of faculty members in spring 2015. The FPPS in its original form was developed by Braxton et al. (2002) for their research on faculty engagement in each of Boyer's (1990) four domains of scholarship in four-year colleges and universities in the United States. The survey was informed by the work of Boyer (1990), Braxton and Toombs (1982), and Pellino et al. (1984). Braxton et al. (2002) used two national experts on faculty scholarly performance to establish face validity for the various forms of scholarship contained in the FPPS. The survey was modified for use with international faculty members in this study. In addition to items that relate to characteristics of faculty members, such as full- or part-time status, academic rank, highest degree completed, and tenure status, the modified instrument was internationalized by including items related to the primary language of instruction, country and geographic region of the faculty member's work institution, and institution where the faculty member earned his or her highest degree. This research was approved for execution by the Institutional Review Board for the Protection of Human Subjects of Vanderbilt University, United States.

The initial sample comprised 14,181 faculty members, but, due to immediate opt-outs within Qualtrics, the email that contained a link to the FPPS was sent to 14,136 faculty members. Survey administration statistics provided by Qualtrics indicated that 3,694 faculty members actually received and opened the initial invitation. After the initial email and two additional emails to non-respondents, a total of 690 faculty members started the survey, and 358 faculty members (9.7% of those who opened the email) completed the online survey instrument. From the 358 who completed the survey, 318 identified as full-time faculty members who held tenured, tenure-track, and non-tenure-track academic appointments in one or more of the six academic disciplines of biology, chemistry, history, sociology, economics, and computer science. This sample of 318 international faculty members constituted the population of inference.

Given the low response rate, a wave analysis that used t-tests was conducted for the three administrations of our emailed survey to check for the possibility of response bias. Our results

confirmed that there were no significant differences in the mailing waves. Thus, little or no bias exists in our sample of international faculty members, despite the low response rate to the FPPS.

Our final sample comprised 40% female and 60% male faculty members. With regard to their academic rank, 5% of respondents classified themselves as distinguished professors, 34% as professors, 23% as associate professors, and 8% as assistant professors. Further, 86% were tenured faculty, 7% were untenured but on the tenure track, and 7% were not on the tenure track.

Table 1 shows the disciplinary orientation of the faculty members in the study sample, using Biglan's (1973a, 1973b) classification of academic disciplines as hard-soft, pure-applied disciplines. Most of the study respondents originated from the pure, hard disciplines of biology and chemistry, while the lowest response rate was found among faculty members in the soft, applied discipline of economics.

**Table 1**

*Composition of the Study's Sample*

| Field | Hard Disciplines | | Soft Disciplines | | Total Faculty Members (*n*) |
|---|---|---|---|---|---|
| | Discipline | Faculty Members (*n*) | Discipline | Faculty Members (*n*) | |
| Pure | Biology | 109 | Sociology | 40 | 250 |
| | Chemistry | 64 | History | 37 | |
| Applied | Computer Science | 38 | Economics | 30 | 68 |
| Total | | 211 | | 107 | 318 |

Given our English language criterion for language of instruction and/or administration of the faculty member's institution, our final sample included faculty members from 14 countries. The total analytical sample of 318 faculty members in 14 countries provided the basis for our exploratory study. Table 2 presents the country location distribution of faculty members in the study sample across the six disciplines of interest.

**Table 2**

*Distribution of Faculty Members by Country of University*

| Country of University | Faculty Members (*n*) |
|---|---|
| Australia | 52 |
| Belgium | 2 |
| Canada | 91 |

| | |
|---|---|
| Denmark | 6 |
| Finland | 8 |
| Hong Kong | 3 |
| Iceland | 5 |
| Netherlands | 13 |
| New Zealand | 9 |
| Norway | 3 |
| Singapore | 6 |
| South Africa | 4 |
| Sweden | 12 |
| United Kingdom | 104 |
| Total | 318 |

The research design utilized three independent and four dependent variables. Table 3 presents the measurement of each of the independent variables, derived from faculty responses to FPPS items, and the four dependent variables and their associated professional behaviors.

**Table 3**

*Operational Definition of the Variables*

| Variable | Operational Definition |
|---|---|
| Independent | |
| Academic discipline | Academic disciplines were coded as 1 = biology, 2 = chemistry, 3 = history, 4 = sociology, 5 = economics, 6 = computer science. |
| International institutional stature | International institutional stature was based on the ranking of institutions in the Times Higher Education World University Rankings (2013–2014) and coded as 1 = 1–100, 2 = 101–200, 3 = 201–300, 4 = 301–400. |
| Country of university of academic appointment | The country of faculty members' university of academic appointment was based on institutions with 10 or more international faculty members who responded to *The Faculty Professional Performance Survey*. This measure was coded as 1 = Australia, 2 = Canada, 3 = The Netherlands, 4 = Sweden, 5 = The United Kingdom. |
| Dependent | |
| Publications oriented toward the scholarship of application | Composite of five items measuring publications reporting the outcomes of engagement in the scholarship of application: an article that outlines a new research problem identified through your application of the knowledge and skill of your academic discipline to a practical problem; an article that describes new knowledge you obtained through your application of the knowledge and skill of your academic discipline to a practical problem; an article that applies new disciplinary knowledge to a practical problem; an article that proposes an approach to the bridging of theory and practice; and a refereed journal article reporting findings of research designed to solve a practical problem. Respondents used a five-point scale to indicate their degree of performance during the past three years of the forms of scholarship measured by the seven dependent variables: 1 = none, 2 = 1–2, 3 = 3–5, 4 = 6–10, and 5 = 11+ times. |
| Publications oriented toward the | Composite of five items measuring publications oriented toward the scholarship of discovery: a book chapter describing a new theory developed by you; a refereed journal article reporting findings of research |

| | |
|---|---|
| scholarship of discovery | designed to gain new knowledge; a book reporting findings of research designed to gain new knowledge; a book describing a new theory developed by you; and a refereed journal article describing a new theory developed by you. Respondents used a five-point scale to indicate their degree of performance during the past three years of the forms of scholarship measured by the seven dependent variables: 1 = none, 2 = 1–2, 3 = 3–5, 4 = 6–10, and 5 = 11+ times. |
| Publications oriented towards the scholarship of integration | Composite of twenty items measuring publications reporting the outcomes of engagement in the scholarship of integration: a review of literature on a disciplinary topic; a review essay of two or more books on similar topics; an article on the application of a research method borrowed from another academic discipline to your discipline; a book chapter on the application of a research method borrowed from another academic discipline to your discipline; an article on the application of a theory borrowed from another academic discipline to your discipline; a book chapter on the application of a theory borrowed from another academic discipline to your discipline; a critical book review published in an academic or professional journal; a critical book review published in a newsletter of a professional association; an article addressing current disciplinary topics published by the popular press; an article addressing a disciplinary/interdisciplinary topic published by the popular press; an article that crosses subject matter areas; a book that crosses subject matter areas; a critical book review published in the popular press; a review of literature on an interdisciplinary topic; the number of the following you have published within the past 3 years: edited books, textbooks, and books reporting research to the lay reader; and the number of articles on a current topic in your discipline you have published within the past 3 years in a local newspaper, a college or university publication, or a national magazine of the popular press. Respondents used a five-point scale to indicate their degree of performance during the past three years of the forms of scholarship measured by the seven dependent variables: 1= none, 2 = 1–2, 3 = 3–5, 4 = 6–10, and 5 = 11+ times. |
| Publications oriented towards the scholarship of teaching | Composite of eight items measuring publications reporting the outcomes of engagement in the scholarship of teaching: a publication listing resource materials for a course; a publication on the use of a new instructional method; a publication reporting a new teaching approach developed by you; a publication on a new instructional method or approach developed by you; a publication on a new approach or strategy for dealing with class-management problems faced in teaching a particular type of course; a publication on a new approach or strategy to help students to think critically about course concepts; a publication reporting the development of methods to make ungraded assessments of student learning of course content; and a publication on the use of a new instructional practice and the alterations made to make it successful. Respondents used a five-point scale to indicate their degree of performance during the past three years of the forms of scholarship measured by the seven dependent variables: 1 = none, 2 = 1–2, 3 = 3–5, 4 = 6–10, and 5 = 11+ times. |
| **Independent Variables** | |

The three independent variables are academic discipline, international institutional stature, and country of faculty members' university of academic appointment, each of which is discussed below.

***Academic Discipline***

The six academic disciplines included in this study were biology, chemistry, computer science, economics, history, and sociology. According to Biglan's (1973a, 1973b) schema for the classification of academic subject matter, biology, chemistry, and computer science constitute hard paradigmatic academic fields, whereas economics and sociology are soft paradigmatic fields. Moreover, biology, chemistry, history, and sociology are considered to have a pure orientation, in contrast with computer science and economics, which have an applied orientation (Biglan, 1973a, 1973b). Paradigmatic development refers to the degree of consensus within a field regarding its theoretical orientation, appropriate research methods, and the importance of various research questions (Biglan, 1973a, 1973b; Kuhn, 1970; Lodahl & Gordon, 1972).

***International institutional stature***

The Times Higher Education World University Rankings (2013–2014) of the top-400 institutions was used to measure international institutional stature. This ranking utilizes 13 performance indicators across five main areas with the following values for that period: teaching indicators of the learning environment (30%); research indicators, including volume, income, and reputation (30%); citation indicators associated with research influence (30%); industry income metrics as a measure of innovation (2.5%); and international outlook focused on staff, students, and research (7.5%) (Times Higher Education, 2014). Taken together, these different dimensions of institutional stature were used to construct a composite scale with values that ranged from 1 to 400. Universities in the 1–100 category constituted the universities with the greatest degree of international institutional stature, whereas universities in the 301–400 category had the lowest degree of international institutional stature.

***Country of university of academic appointment***

This variable pertains to the country in which the English-speaking university of a given individual international faculty member was located. As noted, 14 countries were represented among the English-speaking universities of the international faculty members who responded to the FPPS. To construct this variable, however, we used only those countries for which at least 10 international faculty members responded to the survey. As a consequence, the following five countries were used in the construction of this variable: Australia, Canada, the Netherlands, Sweden, and the United Kingdom.

**Dependent Variables**

Using items included in the FPPS, we constructed the four composite variables that constituted the dependent variables. These four composite variables measure publication productivity in each of the four domains of scholarship - application, discovery, integration, and teaching - which are the four dependent variables. The specific professional behaviors included in publications oriented toward application relate to the application of disciplinary knowledge and skills to address important societal and institutional problems (Boyer, 1990) as the thrust of the scholarship of application. The acquisition of knowledge for its own sake constitutes the primary goal of the scholarship of discovery (Boyer, 1990). Generating and testing of theory is an additional critical element of this domain of scholarship (Boyer, 1990).

The specific forms of publication included in the dependent variable publications oriented toward the scholarship of discovery parallel the goals of the scholarship of discovery. The specific forms of publication included in the dependent variable publications oriented toward the scholarship of integration echo the scholarship of integration as involving interpretation and “fitting one’s own work and the work of others into larger intellectual patterns” (Boyer, 1990, p. 19). The scholarship of teaching seeks to develop and improve pedagogical practices (Braxton et al., 2002). The forms of publication included in the dependent variable publications oriented toward the scholarship of teaching reflect this goal of the scholarship of teaching.

We computed the four dependent variables by summing individual responses to specific professional behaviors that reflect the goals of scholarship of the focal domain and then dividing this sum by the total number of specific types of professional behavior subsumed under each dependent variable. Respondents to the FPPS used a 5-point Likert-type scale to indicate their degree of performance of the applicable specific professional behaviors during the past three years (1 = none, 2 = 1–2, 3 = 3–5, 4 = 6–10, and 5 = 11+ times). A mean score for each of these four dependent variables of greater than 1.00 indicated that individuals have reported their engagement in one or more of the specific behaviors that comprise a given dependent variable.

**Results**

The findings are organized according to the four research questions that guided this study. For each research question, we describe the statistical procedures used to address the question.

Research Question 1: What is the general level of publication productivity of international faculty members in each of Boyer's four domains of scholarship?

To address this question, we used the means computed for each of the seven dependent variables. As seen in Table 4, during the past three years of this survey, international faculty members in English-speaking universities published between one and two pieces of scholarship reflective of the domains of application (mean = 1.50) and discovery (mean = 1.41). In contrast, international faculty members reported few or no publications oriented toward the scholarship of integration (mean = 1.05) or the scholarship of teaching (mean = 1.02).

**Table 4**

*International Faculty Publication Productivity in Each of the Four Domains*

| Variable | Mean | Standard Deviation |
|---|---|---|
| Publications oriented toward the scholarship of application | 1.50 | 0.81 |
| Publications oriented toward the scholarship of discovery | 1.41 | 0.52 |
| Publications oriented toward the scholarship of integration | 1.05 | 0.25 |
| Publications oriented toward the scholarship of teaching | 1.02 | 0.14 |

Here, our interest is in how these patterns compare with those of faculty members in US institutions of higher education. Using data derived from the research of Braxton et al. (2002), we derived the mean levels of publication productivity in the four dependent variables for faculty members in US Research I and doctoral-granting universities.

As seen in Table 5, US faculty members in Research I and doctoral-granting universities and their international faculty counterparts in English-speaking universities published relatively similar levels of scholarship directed toward application and discovery as well as similar degrees of inactivity in their publication of teaching-oriented scholarship. US faculty, however, published between one and two pieces of scholarship reflective of integration, compared to few or no such publications by international faculty members in English-speaking universities.

**Table 5**

*US Research I and Doctoral-Granting VS International Universities*

| Variable | International (*n* = 318) | US Research I and Doctoral-granting (*n* = 524) |
|---|---|---|
| | Mean | Mean |
| Publications oriented toward the scholarship of application | 1.50 | 1.48 |
| Publications oriented toward the scholarship of discovery | 1.41 | 1.69 |
| Publications oriented toward the scholarship of integration | 1.05 | 1.26 |
| Publications oriented toward the scholarship of teaching | 1.02 | 1.10 |

Research Question 2: How does the level of publication productivity of international faculty members in each of Boyer's four domains of scholarship vary across the six different academic disciplines included in this study?

We conducted four one-factor analyses of variance to address disciplinary variation across the four measures of publication productivity among international faculty members. The following six academic disciplines constituted the levels of the one-factor analysis of variance: biology, chemistry, history, sociology, computer science, and economics. Prior to executing the analysis of

variance, the homogeneity of variance assumption was tested using the Levene test of homogeneity, and heterogeneous variances were detected. The one-factor analyses were conducted, using the .025 level of statistical significance to reduce the probability of committing a Type I error. Table 6 shows the results of the four analyses of variance.

**Table 6**

*Faculty Publication Productivity by Academic Disciplines*

| Domain/Form of Engagement | *F*-ratio | Mean | | | | | | Post Hoc Mean Comparisons |
|---|---|---|---|---|---|---|---|---|
| | | Biology | Chemistry | History | Sociology | Economics | Computer Science | |
| Publications oriented toward the scholarship of application | 4.08** | 1.61 | 1.78 | 1.18 | 1.43 | 1.66 | 1.22 | Chemistry greater than history and computer science |
| Publications oriented toward the scholarship of discovery | 1.59 | 1.44 | 1.55 | 1.32 | 1.4 | 1.45 | 1.28 | ns |
| Publications oriented toward the scholarship of integration | 0.81 | 1.06 | 1.02 | 1.09 | 1.08 | 1.0 | 1.03 | ns |
| Publications oriented toward the scholarship of teaching | 0.49 | 1.03 | 1.03 | 1.03 | 1.0 | 1.03 | 1.0 | ns |

*$p < .05$, **$p < .01$, ***$p < .001$

Of the four measures of faculty publication productivity in the four domains of scholarship, statistically significant disciplinary differences occurred for only one. The probability of the *F*-ratio for publications oriented toward the scholarship of application fell below the .025 level of statistical significance, and, as a result, the Scheffe method of post hoc mean comparisons was used to identify disciplines that differed in a statistically reliable way. To further reduce the probability of committing

Type I errors, we used the .01 level of statistical significance to delineate statistically significant mean differences identified through the Scheffe method. These results indicated that international faculty members in English-speaking universities who were chemists produced more publications oriented toward the scholarship of application (mean = 1.78) than did their international faculty member counterparts who were historians (mean = 1.18) or computer scientists (mean = 1.22). Moreover, international faculty members who were biologists, sociologists, and economists had levels of publications focused on the scholarship of application similar to those of their international faculty colleagues who were chemists.

Research Question 3: How does the level of publication productivity of international faculty members in each of Boyer's four domains of scholarship vary by their university's international institutional stature, as measured by its Times Higher Education Ranking (2013–2014)?

To address this research question, we used four categories of the Times Higher Education (2014) rankings to measure international institutional stature. These four categories comprised the four levels of the factors of international institutional stature used in the one-way analyses of variance. When a statistically significant overall *F*-ratio resulted, the Scheffe method of post hoc mean comparison was used to identify rankings that differed in a statistically reliable way. Table 7 presents the results of these four analyses of variance.

**Table 7**

*Faculty Publication Productivity in Domains of Scholarship by Times Higher Education Rankings*

| Domain/Form of Engagement | *F*-ratio | Mean | | | | Post Hoc Mean Comparisons |
|---|---|---|---|---|---|---|
| | | 1–100 | 101–200 | 201–300 | 301–400 | |
| Publications oriented toward the scholarship of application | 0.62 | 1.47 | 1.56 | 1.60 | 1.44 | ns |
| Publications oriented toward the scholarship of discovery | 3.01* | 1.37 | 1.47 | 1.53 | 1.27 | ns |

| | | | | | | |
|---|---|---|---|---|---|---|
| Publications oriented toward the scholarship of integration | 1.15 | 1.04 | 1.08 | 1.05 | 1.02 | ns |
| Publications oriented toward the scholarship of teaching | 1.49 | 1.03 | 1.01 | 1.0 | 1.05 | ns |

**p* < .05, ***p* < .01, ****p* < .001

Similar levels of publication productivity in all four measures of performance in Boyer's (1990) domains of scholarship by international faculty members were found, regardless of the category of the rankings of their English-speaking university. Although the post-hoc mean comparisons failed to identify statistically significant differences among the four categories of the rankings and the production of discovery-oriented publications, the overall statistical significance ($p < .05$) of the factor of international institutional stature suggests that some non-orthogonal differences may be occurring. To examine this, we conducted a series of independent *t*-tests between combinations of these four categories. From these tests, we found that the mean number of publications reflective of discovery scholarship performed by international faculty members in universities within the 301–400 ranking (mean = 1.27) was lower than the aggregated mean (mean = 1.44) for universities in all other rankings. In other words, international faculty members in universities of the lowest level of international institutional stature generated fewer publications directed toward the scholarship of discovery than did their international faculty colleagues in universities of higher international stature.

Research Question 4: How does the level of publication productivity of international faculty members in each of Boyer's four domains of scholarship vary by the country of the university of their academic appointment?

For this research question, we conducted four one-way analyses of variance with the country of the university of the international faculty member as the factor. This factor consists of five levels, corresponding to Australia, Canada, Sweden, the Netherlands, and the United Kingdom.

Prior to executing the analysis of variance, the homogeneity of variance assumption was tested, using the Levene test of homogeneity, and heterogeneous variances were detected. The one-factor analyses were conducted, using the .025 level of statistical significance, to reduce the probability of committing a Type I error. The Scheffe method was used to identify countries that differed in a statistically reliable way. We present the results of these analyses of variance in Table 8, which reveals that similar levels of publication productivity for the discovery, integration, and teaching domains of scholarship occurred across the seven nations. There were, however, cross-national differences for the scholarship of application. Specifically, international faculty members with their academic appointment in Australia (mean = 1.86) tended to publish more application-oriented scholarship than did their faculty counterparts in Canada (mean = 1.41).

**Table 8**

*Analysis of Variance Results for Faculty Publication Productivity by Country of Faculty Member's Present Institution*

| Domain/Form of Engagement | *F*-ratio | Mean | | | | | Post Hoc Mean Comparisons |
|---|---|---|---|---|---|---|---|
| | | Australia | Canada | Sweden | The Netherlands | United Kingdom | |
| Publications oriented toward the scholarship of application | 3.26* | 1.86 | 1.41 | 1.10 | 1.44 | 1.57 | Australia greater than Canada |
| Publications oriented toward the scholarship of discovery | 2.36* | 1.55 | 1.36 | 1.10 | 1.44 | 1.48 | ns |
| Publications oriented toward the scholarship of integration | 0.22 | 1.04 | 1.06 | 1.00 | 1.06 | 1.07 | ns |
| Publications oriented toward the scholarship of teaching | 0.22 | 1.02 | 1.02 | 1.00 | 1.00 | 1.03 | ns |

*$p < .05$, **$p < .01$, ***$p < .001$

## Discussion

Comparative differences in the publication of integration-oriented scholarship were found between US and international faculty members in English-speaking universities. US faculty members published between one and two pieces of scholarship reflective of integration, compared to few or no such publications by international faculty members in English-speaking universities. One possible explanation pertains to the academic reward systems of these universities. It may be that publications oriented toward the scholarship of integration receive little or no weight in the reward systems of these universities. If we use Boyer's (1990) working definition that the scholarship of integration primarily involves "making connections across the disciplines [and] placing the specialties in larger context" (p. 18), then it might be the case that such interdisciplinary approaches to scholarship have not become quite as mainstream in some countries as in the United States.

It also may be that the scholarship conducted by faculty members in other countries could still exhibit greater fidelity to strict disciplinary approaches. In 2015, Elsevier's Analytical Services team conducted a nine-country comparison of interdisciplinary research (IDR), using a unique computational method that allowed the team to study the occurrence of IDR beyond typical subject classification systems (Pan et al., 2015). One of their key findings may offer support for this reasoning: IDR was associated with a lower citation impact for the world as a whole and for the nine countries studied. The differing rates of participation in the scholarship of integration makes sense one when considers that the US higher education system already possesses a strong emphasis on interdisciplinarity, whereas IDR is routinely practiced across many academic disciplines; and countries that are trying to gain research advantage and prestige, such as China, are pursuing higher citation impact research (of discovery). As such, the scholarship of integration may be emerging for much of global higher education.

We also found that, among international faculty in English-speaking universities, faculty members in chemistry tended to produce more publications oriented toward the scholarship of

application than did their international faculty member counterparts in history and computer science. Applying Biglan's (1973a, 1973b) classification of academic disciplines, chemistry constitutes a pure-hard discipline, whereas history and computer science constitute pure-soft and applied-hard disciplines, respectively. The difference in publication productivity in application scholarship may reflect the higher paradigmatic development in the chemistry discipline at the international level. Further, among international scholars, there may be higher levels of agreement among chemistry researchers regarding issues such as appropriate applied research topics and methods (Braxton & Hargens 1996).

Our finding of lower discovery-oriented scholarship among lower ranked universities in the Times Higher Education World University Rankings (2013–2014) of top-400 institutions is in keeping with the weights that Times Higher Education (2014) accords to institutional performance in terms of research indicators, including volume, income, and reputation (30%), and citation indicators associated with research influence (30%; Times Higher Education, 2014). Universities ranked with higher international stature would have acquired higher weights in these performance areas.

Our finding of higher publications that are reflective of application scholarship among faculty members in Australia compared to faculty members in other countries, especially Canada, may be due to country-specific factors to which the study researchers were not privy. The findings also may reflect the marketization of the Australian Higher Education Sector (AHES) ushered in by public policy changes in that country that emphasized efficiency, economies of scale, rationalization, increased private contribution for public universities, and the development of greater market responsiveness (Guthrie & Neumann, 2007; Neumann & Guthrie, 2002; Parker, 2011). As a result of reductions in public funding, public universities have moved from being fully funded to partially subsidized and toward market-driven approaches (Guthrie & Neumann, 2007). In an era of performance-related funding, measurable output tends to be in the form of "articles in refereed journals from 'new' sources of inputs such as industry collaborative schemes" and oriented towards applied research" (Neumann & Guthrie, 2002, p. 725).

**Limitations and Future Research**

Our study is subject to at least three limitations. One limitation pertains to the low response rate to the online administration of the FPPS. Nevertheless, our mailing wave analyses indicated no differences in the mean values of the study's variables across the mailing waves. Moreover, the size of our final sample was sufficient to conduct our statistical analyses.

Restrictions to our sampling design created additional limitations. The first restriction pertained to our random selection of English-speaking universities of the world; the second, to our choice to select universities from only the Times Higher Education World University Rankings (2013–2014) top-400 institutions. The third limitation related to our decision to sample international faculty members in English-speaking universities from the following six academic disciplines: biology, chemistry, computer science, economics, history, and sociology. A selection of faculty members from non-English speaking universities not included in the top-400 institutions of the world might yield a different pattern of findings than those obtained for this study. Likewise, a different set of academic disciplines also might produce a different pattern of results.

Based on the limitations of this study, particularly its exploratory nature, the following are areas for future research:

1. This research should be replicated and include a greater sample size, a higher rate of response to the FPPS, [But this could not be guaranteed going into the study] and additional international faculty members per country of the university of appointment.
2. This research should be replicated in English-speaking institutions of higher education other than those in the Times Higher Education World University Rankings (2013–2014) top-400 list of institutions. Doing so would open this research to greater variation in institutional typology and, therefore, the research foci and preferences of faculty members in those institutions. With such variation in institutional functions, we would likely gain an additional perspective on the extent to which the scholarships of integration, application, and teaching hold sway for international faculty members.

3. This research also needs to be replicated in non-English speaking universities of the world. This present research was limited by our ability to provide adequate translations of our instrument into other languages. Extending this research to non-English countries that possess some of the greatest research universities in the world, i.e., China, Germany, France, Switzerland, Denmark, Italy, Japan, Spain, and South Korea, will illuminate whether this present research is biased by the linguistic and socio-cultural traditions of English-language-dominant universities.

**Conclusions**

This exploratory study sought to investigate the extent to which the scholarly output of faculty members in English-speaking universities around the world reflect Boyer's (1990) four domains of scholarship. We found that international faculty members exhibit some degree of publication productivity in two of the four domains of scholarship described by Boyer (1990): application and discovery. Moreover, international faculty members exhibit little or no publication productivity in the scholarships of integration and teaching. Faculty members in US universities, however, demonstrate some publication productivity in three of the four domains of scholarship—application, discovery, and integration—but also show little or no publication productivity in the scholarship of teaching (Braxton et al., 2002). Accordingly, we offer two heuristic conclusions that await further research.

First, the scholarships of application and discovery tend to prevail as the domains of scholarship pursued by faculty members in English-speaking universities of the world, whereas the scholarship of teaching receives scant attention. Second, Boyer's (1990) domains of scholarship tend to more fully capture the research and scholarship role performance of US faculty members than do that of their international faculty counterparts. Faculty members in US universities contribute to the goals of the scholarships of application, discovery, and integration, whereas international faculty members in English-speaking universities contribute to the goals of the scholarship of application and discovery but not to those of integration.

Based on our findings, we offer two additional tentative conclusions that await further research. Although publication performance in the scholarship domains of application and discovery are predominant among international faculty in English-speaking universities, cross-national differences exist in the degree to which international faculty members contribute to the achievement of the goals of the scholarship of application. This conclusion emerges from our finding that international faculty members in Australia publish more application-oriented scholarship than do their counterparts in Canada.

We also found that, in terms of the scholarship of application, international faculty members in English-speaking universities who are chemists tend to produce more publications than do their counterparts who are historians and computer scientists. Moreover, chemists in US institutions of higher education also tend to produce more application-oriented publications than do their colleagues in history and sociology (Braxton et al., 2002). These findings lead us to tentatively conclude that faculty members in the discipline of chemistry in English-speaking universities of the world place more emphasis on the goals of the scholarship of application than do their counterparts in other academic disciplines.

Hermanowicz (2017) asserts that the further advancement of international and comparative work on the professoriate requires the use of analytical concepts. Structural dimensions of the professoriate and scholarship, conceived as comprised of four domains, constitute two such ordering concepts. The academic discipline (the six disciplines represented in this study) and institutional type (Times Higher Education World University Rankings) comprise two differentiating dimensions of the structure of the professoriate (Ruscio, 1987) included in the current study. The pattern of findings of this study tentatively suggest that domains of scholarship work to further differentiate both dimensions. Moreover, the findings of this study also tentatively suggest a third differentiating dimension of the structure of the professoriate: the country of the academic appointment of international faculty members. The utility of these analytical concepts to the international and comparative study of the professoriate awaits further empirical work.

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# Averting the Crisis in Trainee Teacher Well-being – Learning Lessons across European Contexts: A Comparative Study

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## Abstract

Teacher well-being is frequently high-lighted as a significant contributor to poor retention rates. Whilst there remains a focus on the well-being of serving teachers and pupils, there is a paucity of research directly focusing on the well-being of trainee teachers. This pilot study sought to compare the experiences of trainee teachers from three European countries, in an attempt to identify the resources and challenges faced by teachers during their training. Through the use of interviews and visual approaches, key factors, which appeared to influence trainee teachers' well-being, were identified. Through shifting the focus of training onto the development of communities of practice, the development of interpersonal skills, and supporting the development of strong relationships, it is hoped that Initial Teacher Training (ITT) programmes in England can draw on some best practice from other European contexts to better support trainee teachers' well-being.

*Keywords:* well-being; initial teacher training (ITT), teacher retention, resources, challenges

## Introduction

In England, 42,430 full-time equivalent (FTE) teachers entered the profession in 2017 ( Department for Education [DfE], 2017b). Whilst this figure appears to paint a positive picture in terms of teacher recruitment, when considered against the number of FTE teachers leaving the profession in the same year – 42,830 (DfE, 2017b), the outlook becomes less encouraging.

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Retention rates for teachers in England have gradually worsened since 2011, when 80% of teachers remained in the profession after three years of qualifying, dropping to 73% in 2017 (Worth, 2018). The five-year retention rates paint an even bleaker picture, with 73% remaining in the profession after five-years in 2011, compared to just 67% in 2017 (Worth, 2018) and this trend is continuing (Office for Standards in Education, Children's Services and Skills [Ofsted], 2019). In stark contrast, according to a 2013 survey, approximately 90% of Finnish teachers remain in the profession for the duration of their teaching careers (National Center on Education and the Economy, 2019).

In an attempt to understand the reasons behind such teacher attrition in England, several studies have been conducted (DfE, 2016). Amongst the most commonly cited reasons for teachers leaving the profession are: workload; stagnant pay; a lack of adequate work-life balance; a sense of disempowerment; and over-bearing accountability systems (Scott, 2016; National Education Union [NEU], 2019; Ofsted, 2019). In response to such findings, DfE provided guidance for schools and teachers in terms of tackling workload (DfE, 2018a). Nevertheless, according to the Teacher Well-being Index published in 2018, 67% of teachers described themselves as stressed and 74% reported the inability to switch off and relax, contributing to a poor work-life balance (Education Support Partnership, 2018).

Supporting the well-being of serving teachers, and pupils, has become the focus of policy and research over recent years (Bonnell et al., 2014; DfE, 2017a; Ofsted, 2019). However, there remains a paucity of research and guidance for those individuals currently enrolled on initial teacher training (ITT) programmes. Although well-being forms an integral part of many ITT curricula, albeit to varying degrees, the focus of this tends to be on supporting pupils' well-being. Furthermore, it is often embedded within other priorities, such as child protection (Byrne et al., 2015), rather than being considered a discrete subject - as is the case in Finland.

In addition to a focus on well-being for pupils, the drive to consider the well-being of serving teachers is ongoing. A recent government report suggests that well-being at work is a significant

factor in an individual's overall well-being, with educational professionals reporting the highest cases of work-related mental illness of any working group in Britain. Furthermore, the report goes on to state that overall job satisfaction, relationships and a sense of belonging all contribute to a positive sense of well-being (Ofsted, 2019).

In England, in 2018/19, 29,255 trainee teachers enrolled onto postgraduate ITT courses, compared to 5,335 onto undergraduate ITT courses (DfE, 2018b). Despite being the most common ITT route in England, the postgraduate ITT route is extremely short, being just 38 weeks, creating a high-intensity programme. The majority of ITT routes in neighbouring European countries share more similarities with the undergraduate ITT route in England, typically ranging in length from 3-5 years. However, whilst well-being and workload are inevitably addressed and embedded in varying degrees on postgraduate ITT programmes, clearly there is much room for improvement given the current retention statistics. Although there are no published figures for the withdrawal rates of students enrolled onto postgraduate ITT courses, the five-year retention rates for teachers trained on postgraduate routes is the lowest, at just 58% - 61% (IFS, 2016). Of those students withdrawing from postgraduate routes, the most commonly cited reason is workload. Furthermore, of those trainees completing the programmes, the impact of workload on their personal lives has been identified as a common issue (Challen, 2005).

**The Current Study**

Given the current teacher retention rates in England; the paucity of research into the well-being of ITT students; and the intensity of the postgraduate ITT programmes, this pilot study sought to identify best practice from neighbouring European countries, in terms of supporting well-being for this group of students. Despite the reported well-being of teachers new to the profession (<2 years) being higher than those longer-serving teachers (Ofsted, 2019), the rapid decline in well-being and its impact on retention is an area which requires more focus. Although most ITT programmes in other European countries are far from comparable in terms of the length of time spent training, this pilot study set out to explore the similarities and differences in terms of trainee teacher well-being,

between European institutions. It is anticipated that through identifying best practice models and comparing factors contributing (positively or negatively) to well-being for this group of students, lessons may be learned to support and enhance well-being for those students enrolled on postgraduate ITT programmes in England.

Despite a lack of consensus amongst researchers as to a clear and consistent definition of well-being (Dodge et al., 2012; Pollard & Lee, 2003; Putwain, 2007), this pilot study used the following conceptual lens, adapted from Dodge et al. (2012): maintaining the balance between resources and challenges; these factors may be internal or external and operate in a dynamic flux over time. The conceptual lens, which was used to ascertain participants' contributing factors pertaining to well-being, was presented to participants as a 'see-saw' visual representation of maintaining this balance (see Figure 1). Such lens captures the dynamic nature of well-being, as a fluid concept, enabling time to be a factor of consideration. The resources and challenges provide a personal approach to considering both internal and external factors, which may impact upon participants' well-being.

**Figure 1**

*The Well-Being See-Saw Used to Identify Resources and Challenges, Faced by Students, during Their ITT Programmes (Adapted from Dodge et al., 2012)*

***Research Questions***

1. What are the significant challenges, which impact upon the well-being of trainee teachers?
2. What resources do trainee teachers draw upon to support their well-being?
3. What measures can Higher Education Institutions (HEIs) put in place to support the well-being of trainee teachers?

***Participants and Ethics***

The pilot study involved a total of twenty-one ITT students, six academic staff and two newly-qualified teachers, from universities offering ITT programmes in three European countries (Table 1).

**Table 1**

*The Geographical Spread of the Participants in the Current Study*

| Location of the ITT institution | Number of students | Number of academic staff | Number of newly-qualified teachers |
|---|---|---|---|
| Denmark | 6 | 2 | 2 |
| Finland | 5 | 2 | 0 |
| England | 10 | 2 | 0 |
| Total | 21 | 6 | 2 |

Denmark and Finland were selected within the current study, due to Denmark's similar approaches towards education and Finland's consistently high performance in international comparative assessments, such as the Programme for International Student Assessment (PISA) (Organisation for Economic Co-operation and Development [OECD], 2012). One institution was selected for the study from each country. The selection of the institution was made based on the similar courses in teacher education offered, along with similar sized institutions. Each of the institutions offered ITT programmes along with a wide variety of other courses. Information regarding the study was presented to programme leaders prior to recruitment of participants. Programme leaders recruited participants from the cohorts of students currently enrolled onto the ITT programmes. Participants were recruited from those currently enrolled onto teacher education programmes, who had also undertaken at least one period of school experience. This was deemed significant, as the researchers sought to identify the range of factors (both academic and practical) which impacted upon trainee teachers' well-being throughout the various cycles within their training. The information regarding the study was shared with the cohort, by the programme leaders. Participants were then invited to attend interviews, on a voluntary basis, which were held at a pre-determined time, as set out by the programme leaders. Despite the times scheduled for the interviews, the number of participants was still disappointingly low. This may have been due to additional academic work pressures, as the students were working on modules between school placements in each of the institutions visited

during the data collection. All academic staff were involved with teaching on the ITT programmes and the newly qualified teachers were recent graduates (one year and six months post-qualification respectively). All students were aged between 18 and 24 years. Ethical consent was gained for the study from the researchers' own institution, and each of the host institutions, along with informed consent from each participant, prior to the research taking place. Participants were offered the right to withdraw at any point and fieldnotes were shared with the participants for validation.

## Methods

All interviews and discussions were conducted in English. Each of the participants was fluent in English language. However, the use of paired discussions was offered to support individuals with expressing their perceptions and understandings.

### Semi-structured interviews

Semi-structured interviews were carried out, either individually or as a group, to ascertain participants' understanding of well-being and to gain an insight into their perceptions of the ITT programme. Semi-structured interviews were used to ascertain an in-depth understanding of the factors which impacted upon the well-being of ITT students, gained from the trainee teachers' and academic staff perspectives. A key consideration in conducting any type of interview is the 'framing of real-life events' (Denzin & Lincoln, 1994, p. 370), which the current study focused on through the various data collection methods. Such 'real-life events' were deemed an integral part of the data collection, as the researchers intended to gain an insight into the factors influencing the well-being of individuals who were currently, or recently, 'living' the experience of an ITT programme. Furthermore, the use of semi-structured interviews, as opposed to more formal, structured interviews, allowed for the use of probing questions and prompts (Denzin & Lincoln, 1994). This, in turn, enabled the researchers to use a funnelling approach to gain deeper insight into the perspectives of the trainee teachers and the academic staff. Due to the interviews being conducted in English, which was a second language for those participants in institutions outside of England, clarification questions were used to confirm the researchers had correctly interpreted the

participants' responses. Whilst the interviews were not digitally recorded, detailed fieldnotes were taken by two researchers independently during the interviews to enable researcher validation of the data. The fieldnotes were then used to support interpretation of the data (Kvale, 2007).

**Time-lining and visual methodologies**

In an attempt to elicit participants' personal experiences and to promote active collaboration between the participants and the researchers, visual approaches (time-lining, discussed below) were utilised (Banks, 2007; Hicks & Lloyd, 2018; Pain, 2012; Stanczak, 2007).

The working definition of well-being used within this study was shared with each participant to ensure a shared understanding of the term used. However, in order to enable participants to draw on their personal experiences, they were then invited to reflect on the resources and challenges faced during their ITT programme, using the well-being see-saw model in Figure 1.

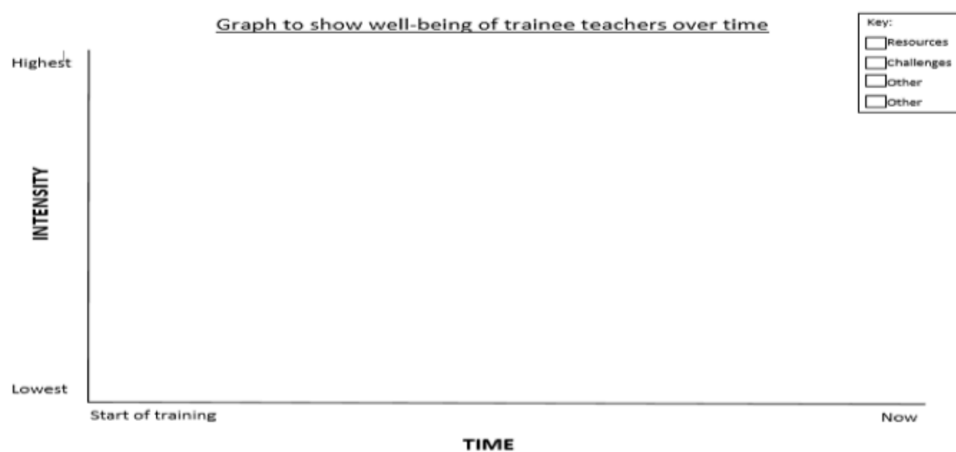
Whilst the ITT students and newly qualified teachers reflected on their own well-being, academic staff were asked to consider the challenges they felt the ITT students faced and the resources that were available to them throughout their training.

Following the well-being see-saw activity, participants were asked to timeline their training from the beginning of the programme to the current time (see Figure 2). Timelining enabled the participants to consider significant factors and events, which they felt had impacted upon their well-being (Adriensen, 2012). Time is not just experienced by the clock for trainee teachers; cycles emerge because of the nature of their movements through university and school communities, changing relationships and their understanding and experience. Furthermore, this approach attempts to remove the influence of the researchers' views on the participants' responses, thus reducing potential bias within the data (Ortega-Alcazar & Dyck, 2012; Putwain, 2007). Visual methods are commonly interdisciplinary and used to explore participants' experiences (Hicks & Lloyd, 2018) and have been increasingly reported in studies of well-being (Ortega-Alcázar & Dyck, 2012). In conjunction with the interview and narrative discussion, timelining offers a mechanism to visually represent participants' perceptions and feelings (Ortega-Alcázar & Dyck, 2012). Whilst it was

suggested that participants may wish to consider the resources and challenges they had cited during the see-saw activity, they were offered the flexibility of personalising their timeline in a way which they felt best represented their own experiences.

**Figure 2**

*The Timeline Offered to Participants to Map Their Resources, Challenges and Well-Being during Their ITT Programme*




Following completion of the task, participants were asked to talk the researchers through their timelines; detailed fieldnotes were taken and validated by the participants prior to analysis.

The data from the 'see-saw' models and the timelines, along with the fieldnotes, were analysed by the researchers to generate emerging codes. The researchers deliberately avoided the use of a priori codes, as critics of a priori coding within social science studies argue that such a strategy may restrict accurate observation, and should therefore be avoided (Kettley, 2012, p. 95). Consequently, the researchers attempted to avoid pre-determined themes, which may have influenced the interpretation of the research data. The codes were assigned to each country and the role of the participants, before being aggregated into an overall set for the study. Such assignment to individual countries and roles, as well as the formation of an aggregated set, supported the researchers to carry out comparative analysis of the data across institutions.

**Findings**

The visual and narrative data collected was coded according to emerging key themes. Comparisons were made between participants within each individual institution as well as between institutions.

Prior to analysis of the narrative data and timelines, the researchers collated the data from the well-being see-saw activity to form an overview of the key codes emerging from this task (see Table 2). The emerging codes were aggregated from the range of participants.

**Table 2**

*The Key Codes Emerging from the Well-Being See-Saw Task*

| Resources | Challenges |
|---|---|
| Teachers on placement | Coping |
| Family | Building relationships |
| Mentors (school and university) | Work-life balance |
| Group tutors | Assignments/academic work |
| Friends | Motivation |
| Sharing experiences | Confidence |
| Downtime | Knowing when to seek help |
| Knowledge and experience | Developing a routine |
| Literature/research | No ‘one size fits all’ |

Using the emerging codes above, the narrative data from the interviews and timelines were analysed, generating themes which are discussed below. The themes were generated through aggregation of codes which encompassed similar data and key words from the participants.

***Comfort Zone***

Many of the trainee teachers made frequent reference to “feeling comfortable” and their “comfort zones” when considering their well-being at various points throughout their programme. Those times where individuals reported being more out of their comfort zone, for example, at the beginning of a programme and at the start of a teaching practice, coincided with lower levels of personal well-being.

Analysis of timelines and discussions with trainee teachers from all of the countries demonstrated a similar pattern between comfort zone and well-being. Whilst being out of one’s comfort zone was seen to have its challenges, students in Finland were able to discuss the merits of this, in terms of a gradual development of coping strategies. One trainee teacher commented that,

"whilst group work can present its own challenges, it can also be a resource. It enables you to draw on peers to develop strategies to manage the workload and pressure points." They referred to drawing on the resources they had gained as the programme progressed to gradually balance the reduction in well-being associated with moving out of their comfort zone. Here, they made specific reference to the importance of peer and colleague learning communities and relationships, also echoed by participants from Denmark. In contrast, within England, although trainees at the researchers' own institution are encouraged to form learning communities, the challenge of the lack of time spent with peers in the university setting was indicated as an obstacle to this. One student commented that, "although I try to make use of social media to maintain social networks, the lack of time and immense workload hinder this. Communicating through social media just isn't the same when you need a shoulder to cry on."

***Challenges***

Whilst many trainee teachers commented on the challenges they faced during their training, e.g. academic work, familiarising themselves with new schools, moving away from family, the academic staff in Denmark offered an alternative viewpoint to challenges and well-being. Although, as in Finland, trainee teachers are not explicitly reminded about the workload at the beginning of the programme, the academic staff reported that the high intensity of the programme is a way of supporting students to develop their own coping strategies and therefore provides them with resources to offset the challenges. In contrast to the English context, the first three years of training in Denmark has a significant focus on group work within university sessions, thus the intensity (and development of associated coping strategies) is managed as a group. Only in the fourth and final year of training, do the trainees need to manage this intensity individually, by which time, they have drawn on their peers to develop and refine their own coping strategies.

***Workload***

To a certain extent, the impact of workload on well-being varied slightly between countries. One participant from Finland claimed that due to the high status of gaining an ITT place, she was

prepared for significant workload, which in turn reduced the associated impact on well-being at the start of the programme. Furthermore, she went on to state how the significant workload was not repeatedly emphasised at the beginning of the course, rather this was something she experienced gradually and therefore developed strategies to manage it as it increased. She stated that, “we were very aware of the intensity and workload associated with the course when we applied. Our lecturers didn’t emphasise this in sessions, it was just assumed that we already knew.” This was echoed by a student in Denmark, who stated that “knowing tough periods are coming is worse than not knowing”. In comparison to the researchers’ experiences in their own institution in England, this was somewhat of a contrast. Some of the initial sessions on the researchers’ own programmes draw trainees’ attention to the sheer volume of workload ahead. Rather than support trainees with the gradual development of such workload management skills throughout the programme, trainees are provided with advice and guidance within these early sessions, potentially adding an increased stress factor from the start of the programme.

When analysing the timelines from English students, areas of intense workload and corresponding areas of reduced well-being, were associated with both academic work and school placements during the programme. This was in contrast to those students in Denmark, who made no indication of school placements impacting on an increase in workload and therefore a reduction in well-being. These students only commented on the impact of academic work throughout the programme as a significant factor contributing to increased workload.

***Maintaining Relationships***

The newly qualified teachers in Denmark highlighted the importance of strong relationships throughout their narratives. They identified a mis-match between the university training and what they referred to as “the real world”. Here they discussed how the availability of staff within the university was greater than that of school-based staff, hence making it much easier to seek guidance and support when in university. To compound this issue, they reported that the structure of initial placements, where two days a week were spent in school and the rest in university, added to the

challenge of being able to establish strong relationships with both the children and the school staff. They felt very strongly that knowing the school and the children contributed significantly to positive well-being.

A trainee teacher in Denmark reported on the importance of social networks for developing a "sense of belonging" and therefore enhancing well-being. He stated that, "whilst training in a large institution has its challenges, communication to new trainees regarding social events, and encouragement to participate in such events, is really important in developing the social networks that are needed to maintain a high level of well-being." He went on to state that "well-being can be significantly influenced by balancing social and academic work. Getting the right balance can be challenging, but once we have this, I think well-being is really improved." This was echoed by another trainee in Denmark, who felt that clear communication linked directly to an increase in well-being. Here, she discussed the importance of ease of access to information, both academic and social. Furthermore, she commented on the importance of the relationships between the academic staff and the students for promoting well-being.

One member of academic staff in Denmark promoted the importance of developing learning communities to support trainees. Within these communities, she suggested that the focus should be on the supporting relationships with other students and colleagues, and that these two areas had the biggest overall impact on trainee teacher well-being. This was supported by one of the trainee teachers who discussed the university sessions delivered to trainees on group conflict mediation and management. She emphasised the importance of these sessions in supporting trainees to develop strategies to manage difficult situations and how her skills had developed significantly in this area throughout these sessions.

## Discussion

Teacher well-being has been acknowledged as a significant factor in the current retention crisis in England and has consequently become the focus of many recent reports, some of which provide policy recommendations to schools and educational establishments (Education Support

Partnership, 2018; DfE, 2017a; 2018a; Ofsted, 2019). Despite the drive to tackle teacher well-being and retention, a paucity of research into those teachers currently in training on ITT programmes, remains. This comparative, pilot study has sought to explore the experiences of trainee teachers at institutions across three European countries to provide an insight into the factors affecting well-being for this group, along with the challenges and resources available to them in supporting their well-being.

Aligning with one of the significant factors contributing to a reduction in work-life balance, and subsequently personal well-being amongst serving teachers, is the challenge of workload (NEU, 2019; Ofsted, 2019; Scott, 2016). For trainee teachers throughout the European institutions within this study, workload is unsurprisingly a significant factor in terms of well-being. However, the role of academic work and school placements, in addition to the manner in which trainee teachers are supported to develop their skills in managing workload, differ across European institutions through programme design and delivery. Unlike English students, those in Denmark and Finland appeared to make little, or no relation between school placements and workload. Furthermore, rather than being made aware of the workload to be expected on ITT programmes in England, the interviews with those trainee teachers in Denmark and Finland suggest a subtler approach, with a focus on providing opportunities to develop skills in managing workload. Linking closely to the role of peer and colleague relationships, which are also a significant driver in the overall well-being of serving teachers in the workplace (Ofsted, 2019), the development and utilisation of communities of practice appears to be a key resource in managing workload and thus supporting well-being. Finnish and Danish ITT programmes appear to embed opportunities for developing these relationships, through conflict resolution and management, and plentiful instances for group work, particularly early on in the programme thus enabling workload management strategies to be developed collaboratively.

Such development of skills early on, and throughout these programmes, may enable trainee teachers to be better equipped for moving out of their comfort zone. Furthermore, such skills may

support these trainee teachers in dealing with some of the challenges faced whilst on school placement, hence the lack of correlation between workload/well-being and school experience.

The time constraints of the English postgraduate ITT programmes result in a very tightly packed curriculum, with significant focus on subject and pedagogical knowledge and skills. Through drawing on the programme design from the Finnish and Danish ITT programmes, perhaps more time should be devoted to developing trainee teachers' personal, and interpersonal skills, which, in turn, may support them to be better equipped at dealing with challenges faced during school placements. Nevertheless, the structure and organisation of school placements suggests that blocks, rather than part-weeks, may be more advantageous in terms of developing relationships with school staff and pupils, and subsequently supporting the well-being of trainee teachers.

Through considering the balance of resources and challenges that trainee teachers draw upon, and face, during their training, through the use of the see-saw construct, the researchers have been able to identify the factors influencing the balance between the two. Such factors impacting upon this balance can enable programme leaders to consider the overall structure and design of ITT programmes in an attempt to maintain this balance.

**Conclusion and Recommendations**

Teacher well-being appears to be at the forefront of the retention crisis in England (Education Support Partnership, 2018; NEU, 2019; Ofsted, 2019; Scott, 2016). Although similar challenges, which inevitably impact upon well-being, are faced by trainee teachers on ITT programmes throughout European institutions, this pilot study has highlighted some subtle differences in programme design and delivery, which may provide a stepping stone to enhancing well-being amongst trainee teachers in England, and beyond. The significant factors impacting upon the well-being of both serving teachers, and trainee teachers, appears deep-rooted in workload and relationships.

Through drawing on the strategies deemed to be most successful at supporting well-being amongst trainee teachers throughout these European institutions, consideration should be given to

embedding and supporting trainee teachers' development of personal, and interpersonal skills, alongside subject and pedagogical knowledge. Furthermore, ITT providers should avoid increasing stress and anxiety levels of trainee teachers with regards to workload, through providing resources to aid the ongoing development of those management skills needed, rather than highlighting workload as an issue.

Finally, through careful structure and organisation of ITT programmes, school placements may become a reduced factor when it comes to workload and subsequently enhanced well-being during these periods. Through embedding opportunities for collaborative work to develop communities of practice and considering the balance between pedagogical knowledge and interpersonal skills, the structure of ITT programmes in England may be able to be developed to better support trainee teachers' well-being. Through supporting trainee teachers to become equipped with skills in conflict resolution and coping mechanisms for workload, in conjunction with block placements, which follow on from these skills development sessions, a significant aspect of the ITT programme may potentially become less of a challenge to well-being and more of an opportunity to draw on resources gained from the programme.

Based on the findings from the current study, the above recommendations can be considered in the ongoing programme design and implementation of ITT programmes in England. Through minor adjustments to the organisation and delivery of such programmes, it is hoped that the issue of trainee teacher well-being may become a more prominent consideration in ITT programmes in England.

**Author Note**

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**Use of Fun Book in Science Education: Sample Applications**

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**Abstract**

This study is to determine the effect of using a fun book in a science course to enhance academic achievement and retention and to investigate student's views on the use of the fun book. Another aim of the study is to set an example for process evaluation in using fun lessons for higher education students. Participants used the fun book for reasons such as learning and not forgetting the subjects, repeating the subject in a fun way, and taking notes from the teacher. The positive aspects of using the fun book was that it enabled students to learn subjects while having fun, prevented them from forgetting material, and it made it easier for teachers to take notes by preparing for the exam. The negative aspects of using the fun book were that students said that they considered it to be exhausting and that the intensive writing caused hand pain.

*Keywords:* academic achievement, crossword, fun book, science, student opinions

**Introduction**

Science lessons provide an understanding of the events in daily life and how those events can be used in the solution of real-world problems. While interesting, these lessons can be a challenge for students. This challenge stems from difficulty in recognizing the Latin names of living things, understanding growth and reproduction, and learning the general characteristics of mitosis meiosis and its phases. Author (2019) found that elementary students can recognize the solar

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system, see light, or hear sound, but because they cannot hold or touch it, they have complications in learning. The challenges in learning science can be reduced by learning how a student can reconstruct something in their mind (Cook, 1994; Demirkuş, 2019) which leads to how well the students will eventually master the material.

This article examines how higher education faculty in Turkey can creatively imagine how to best teach science lessons with the intent to then teach these techniques to teachers. It is known that repetition is an activity that leads to better comprehension (Bromage & Mayer, 1986; Till, 1998) and that repetition of a subject learned at school, at home, or in a work environment affects permanent learning. Application of the subject in daily life is another factor in making learning permanent (Karpicke & Roediger, 2008; Author, 2018). When an individual has the opportunity to practice school learning or embellishes it with examples that one understands well, learning is more permanent (Ministry of National Education [MoNE], 2018). Finally, lasting learning comes from is repeating the learned information in the form of homework. One way to capture these repetitions is to use the fun book method.

**Conceptual Framework**

Although fun is defined as the opposite of hard work, it nonetheless, is an essential element for motivation (Appelbaum & Clark 2001). In science, fun has an important place in ensuring student motivation. There are fun applications for science in developing technology, tablet, computer and interactive board applications (Demirkuş & BatıhanGüzel, 2019; Gopalan et al., 2016). Most importantly, students like to use these applications (Idin & Dönmez, 2017). Fun, as an activity-based learning (Dewey, 2001), influences the student attitude towards the course and it is known that students who are interested in science careers have a good attitude towards science lessons (Gibson & Chase, 2002). It is also known that middle school students' attitudes and motivations towards science classes are not always positive (Azizoğlu & Çetin, 2009). Yet, when fun is introduced in the learning process, all students become aware that fun leads to learning, which helps to build positive connections to how students view science. The focus of this article is to show how higher education

can model fun books as a way to teach teachers about the need to raise interest in all students towards science lesson.

In activity-based science education, the aim is to teach lessons with activities that provide the easiest understanding of the course. Technological methods are used in traditional methods (Yeşiltaş et al., 2017). One of the important factors here is to include the components of language such as speaking, listening, reading and writing as much as possible in the activities (Roth & Worthington, 2011). The teacher needs to be aware that activities, such as reading and writing, need to be constantly dynamic. Students can remember their learning when they have fun at the activities. Because learning becomes easier when the individual has fun or is happy, this builds the context for joyful substances (Ünal & Ünal, 2003). It is our duty as higher education faculty to teach teachers how to ensure that students see science as fun starting from the foundation. When the student has fun in learning, there is a greater chance that the individual will remember the information learned from early childhood to higher education (Hartnett, 1941). This also then applies to university students who will likewise learn better through fun (Zhu, 2019). The success of the student in higher education is mostly based on their permanent learning from the previous years.

The fun book approach is a way of repeating school learning in a fun way. The main purpose of this book is to ensure that the information learned is permanently learned. In this process, the students who use the book repeat the subject, reinforce the information and apply the problems they learned at school in various ways at home. The student repeats learning by using techniques such as poetry, painting, caricature, puzzle, riddle, story, question, humor, play, subject summary, writing, acrostic, news, voices or information in his head. Teachers can offer help in how to best use the fun book or sample applications that focus on repetition of poems, puzzles, riddles or games in the form of homework.

## Literature Review

In a review of the literature, I found emerging research on fun in science education. Gopalan et al. (2016) found a positive and significant relationship between interest, fun and entertainment and students' motivation to learn science. Mutlu (2018) determined that learning experiences in personal entertainment environments (such as desktops, laptops and tablets, smart phones and media, television, cinema, theater, concerts, interviews, exhibitions) were effective in terms of later recognition, meaning and management. Ulus (2015) conducted a review of a magazine, published between 1913 and 1919 that included articles, poems, competitions, and news as an early use of integrating fun into education. In addition, to educational activities, the journal also instilled social awareness. In the above studies, writing activities show that awareness is formed in an individual and that learning is effective.

Ok and Çalışkan (2019) found that fun was a way to reinforce homework and to prevent forgetting. Another study determined that the positive approaches of the teacher in assigning such assignments had a positive effect on the students (Sherman et al., 2008). Other research used tests in the format of puzzles to determine academic success (Coşkun et al., 2012). Finally, Akçay et al. (2014) found that multiple writing activities had a positive effect on student academic achievement and concept learning. When the findings of the above studies are considered, many writing activities, homework and extracurricular activities have a positive effect on keeping students' academic success and learning in mind.

Research is documenting case studies to show that different types of students apply fun in different ways. Arslan and Babadoğan (2005) thought that there is no gender-related learning style in science classes, and that female and male students will be equally interested in the fun book. Yet, there are also differences, such as a NAEP (2014) study that showed that younger age (9 ages) groups read to have more fun than older age (17 ages) groups. Finally, there is emerging research on the implications of fun activities and homework using fun books for higher education students.

**Purpose of the Research**

The main purpose of this study is to determine the effect of fun book used in extracurricular homework activities in a science course and the effects of the fun book on academic achievement and retention of knowledge. Student's views on the use of the fun book were also investigated. Teachers think that science education should be fun (Glackin, 2016), but generally have concerns about how to do this. Higher education faculty play a central role in testing fun and then teaching best practices to teachers. In this study, a sample study of middle school students is presented with the development of best practices to help reduce teacher anxiety. Finally, this study sets an example for process evaluation that can then be applied to higher education students. In this context, the answers of the following questions were sought: 1) According to the puzzle and academic achievement test findings, is there a significant relationship between the experimental and control groups in terms of academic achievement before, after, and one month after the application? 2) What are the participants' views on the fun book? 3) Why do participants use the fun book? 4) What are the positive and negative aspects of the fun book?

## Method

Mixed method was used in the study. With this method, it is aimed to complement the qualitative and quantitative data (Creswell, 2017). Experimental design with experimental and control groups was used in the quantitative part of the study. Experimental study was used to see how effective a particular intervention was in solving a particular problem under controlled conditions and in resulting retention. Experimental and control groups were randomly selected (Büyüköztürk, 2009; Çepni, 2010; Metin, 2014) for the teaching of two 6th grade science subjects, Sound and Features. The class was divided into two groups and both participated in the experimental study in which the fun book was consistently used. The control group did not use the fun book consistently. A fully structured interview form was used in the qualitative aspect of the study to determine the participants' thoughts about the fun book. The following steps were used in the study.

### Research method Application Steps

***Research***

To be able to determine the use of fun book in science classes and make recommendations for best practices in the teaching of science teachers.

***Tools***

Fully structured interview form, puzzle form, academic achievement test.

***Application***

The study lasted 9 weeks. The classes randomly selected as 6 / A is experimental 6 / B is control groups. Control group students are not allowed to use the fun book throughout the application. In the qualitative dimension of the study, thoughts about fun book were taken from both groups.

***Conclusion***

The results of the study are presented in the findings section.

**Participants**

Homogeneous (analogous) samples were used in the study. The aim in the analogous sample is to determine the status of groups of similar characteristics in a subject in order to collect the data effectively (Creswell, 2013). The research was conducted with 6th grade students in a public school in Eastern Anatolia Region during the 2018-2019 academic years. A total of 57 students participated in the study, depending on the volunteerism principle. The socio-economic status of the participants was similar. The families of the majority of the participants are engaged in farming with a focus on agriculture and animal care.

**Data Collection Tools**

Puzzle form and academic achievement tests were used to collect quantitative data. The puzzle form helps to determine the success of learning the concepts and the academic achievement test to determine the academic success. The puzzle test is an ideal scale for remembering what is learned and to assess what was the most frequently remembered and comprehended. The puzzle was prepared for the follow-up of the academic success of the participants in both scales. These

scales were prepared according to the subject gains. While the puzzle remains at the level of comprehension, the achievement test includes questions at the level of comprehension, comprehension and practice. A fully structured interview form was used for the collection of qualitative data. With this form, it was aimed to determine the views and thoughts of the participants towards the fun book.

**Analysis of Data**

The data of the measurement tools used in the study were analyzed with the help of Microsoft Excel program and SPSS. Descriptive and content analyzes and techniques such as Independent Sample T-test, frequency and percentage values were used. In the content analysis, the state of transferring the learned information in the mental structure of the individual to the fun book is examined. The names of the participants were coded with numerical values. Experimental group "*EG*", Control group "*CG*", frequency "*f*" and percent "*%*" were taken.

**Reliability and Validity**

Within the scope of the reliability studies, the status of the sample group was explained in detail, the existing roles were explained, the conceptual framework and data collection and analysis were presented. In addition, these data were supported by descriptive analysis and content analysis (Glesne, 2013; Merriam, 2013). Assistance was obtained from another faculty member in the preparation and scoring of measurement instruments. For the coding and scoring, reliability was calculated using the formula of Miles and Huberman (1994). According to this calculation, 85 % confidence coding was performed throughout the study. In fact, according to Miles and Huberman (1994) 80 % and above has been accepted as reliable (Arik & Yilmaz, 2017). In the descriptive and content analysis of validity of the research, direct quotations were given and the accuracy of the research results was shown (Merriam, 2013). The codes used in the content analysis and the interpretations were done in depth. The names of the participants group are coded. In addition, Academic achievement test was prepared by the researcher based on the subject gains. The reliability and validity study was performed; it was re-performed during the study. The achievement

test, which consisted of 18 questions, was piloted with 90 students at a public school in Van. As a result of the item analysis, items with a substance difficulty index below 0.20 and above 0.75 and items with a substance discrimination index below 0.29 were excluded from the test. The Cronbach Alpha value of the academic achievement test was found to be 0.79. In addition, as a result of item analysis; the item difficulty index of the test was found to be 0.59 (Very good), and the item discrimination index of the test was 0.57 (Very good discriminated). There are 17 questions in the academic achievement test. The questions were prepared to cover all gains. The questions are at the level of recall, comprehension and practice. These levels were used because the gains were at the recall, comprehension, and practice levels. In addition, the structure and appearance validity of the test was taken with expert opinion. In general, these values prepared for measurement tools show that the scales will yield similar results when used in other national or international studies (Metin, 2014; Yıldırım & Şimşek, 2013).

**Limitations of Research**

The study is limited to 57 students in a small district of Eastern Anatolia Region. The research is limited to the topic "Sound and Features" of the 6th grade science.

## Findings

The data obtained in the study are presented below in order of research problems. The results of the pre-test, post-test and permanence test of the research and the opinions of the participants about the fun book are presented respectively.

**Table 1**

*Independent Sample T-Test according to Pretest Results*

| Tests | Groups | N | Mean | Standard deviation | t | df | p |
|---|---|---|---|---|---|---|---|
| Crossword | 6A | 28 | 21.17 | 15.37 | -5.27 | 54 | 0.00 |
| | 6B | 28 | 48.73 | 23.01 | | | |
| Achievement test | 6A | 28 | 48.53 | 15.74 | 0.95 | 54 | 0.35 |
| | 6B | 28 | 44.12 | 18.98 | | | |

Table 1 gives the results of independent sample T-test analysis of the data obtained from the pretest applications of the puzzle and achievement tests. According to this, it is understood that p

value is 0.00 and in favor of 6B groups in the crossword test of the groups. Because the average score of the 6B group is considerably higher than the average score of the 6A group. When the achievement test data were examined, it was found that p value was 0.35 and there was no significant difference between the groups.

**Table 2**

*Independent Sample T-Test according to Posttest Results*

| Tests | Groups | N | Mean | Standard deviation | t | df | p |
|---|---|---|---|---|---|---|---|
| Crossword | 6A | 27 | 62.96 | 29.05 | -3,833 | 54 | 0.000 |
| | 6B | 29 | 89.90 | 23.42 | | | |
| Achievement | 6A | 27 | 58.39 | 21.27 | -2,706 | 54 | 0.006 |
| test | 6B | 29 | 73.83 | 21.42 | | | |

Table 2 gives the results of independent sample T-test analysis of the data obtained from the posttest applications of the crossword and achievement tests. According to this, it is understood that p value is 0.000 and in favor of 6B groups in the crossword test of the groups. Because the average score of the 6B group is considerably higher than the average score of the 6A group. When the achievement test data are analyzed, it is seen that p value is 0.006 and it is in favor of 6B because of the group averages.

**Table 3**

*Independent Sample T-Test according to the Permanence Test Results*

| Tests | Groups | N | Mean | Standard deviation | t | df | p |
|---|---|---|---|---|---|---|---|
| Crossword | 6A | 26 | 68.68 | 24.41 | -2.467 | 46 | 0.017 |
| | 6B | 22 | 87.01 | 27.05 | | | |
| Achievement | 6A | 26 | 59.50 | 21.52 | -1.864 | 46 | 0.068 |
| test | 6B | 22 | 72.46 | 26.58 | | | |

Table 3 gives the results of independent sample T-test analysis of the data obtained as a result of the permanence test applications of crossword and achievement tests. According to this, it is seen that p value is 0.017 and in favor of 6B group in the crossword test of the groups. Because the average score of the 6B group is considerably higher than the average score of the 6A group. When the achievement test data were examined, it was found that the p value was 0.068 and there was no significance between the groups. In addition to these data, a fully structured interview form

analysis, in which participants' views on the fun book, is presented below. Fully structured interview form data descriptive and content analyzes is presented respectively.

The fun book is an extracurricular activity that is required for the repetition of subjects in the science course. The students carry out this activity as homework. The teacher checks the students' books during the course hours. In spite of this obligation of the course teacher, some students did not use this book.

**Table 4**

*Experimental and Control Groups Entertainment Book Use Cases*

| Groups | Fun book users | Not users fun book | Total |
|---|---|---|---|
| Experimental Group (6 / A) | 18 | 9 | 27 |
| Control Group (6 / B) | 29 | 0 | 29 |

Table 4 shows that 18 students from the experimental group used the fun book while 9 do not. The entire control group uses the fun book. Since the experimental and control groups were chosen randomly in the mentioned application groups, the students who did not use the fun book despite the necessity came into the experimental group. The data obtained as a result of qualitative analysis are presented below. Descriptive analysis and some data are presented with tables. Content analysis is given with quotations.

**Table 5**

*Fully Structured Interview Form Most Repeated Expressions*

| Expressions (N: 47) | f | % |
|---|---|---|
| I learn subjects with fun | 24 | 51.06 |
| To learn and not forget topics | 20 | 42.55 |
| Fun lesson to do repetition | 19 | 40.43 |
| Repeating topics and makes me not forget | 17 | 36.17 |
| It's very tiring and it hurts my hand | 12 | 25.53 |
| It takes too much time | 9 | 19.15 |

Table 5 shows that the most repeated expressions appear in the interview form. According to this, the first three most frequently repeated statements are; I am learning subjects having fun with 51.06 % (f: 24), to learn and not forget the subjects with 42.55 % (f: 20) and to make fun

repetition of the course with 40.43 % (f: 19). Theme-category and codes made out of this data are presented below with excerpts.

**Theme 1 Why Fun Book**

The reasons for using the fun book were analyzed under this theme. Table 6 obtained as a result of descriptive analysis in the theme is presented below.

**Table 6**

*The Results of the Descriptive Analysis of Why Fun Book*

| Category | EG (N:18) | f | % | CG (N:29) | f | % | Tot (N:47) (f) | Tot (%) |
|---|---|---|---|---|---|---|---|---|
| To learn and not forget topics | 2,3,4,6,7,9 ,10, 11,14,17 | 10 | 55.56 | 2,6,9,10,15, 16,18,20,21,24 | 10 | 34.48 | 20 | 42.55 |
| Fun repetition to do lesson | 8,15,16 | 3 | 16.67 | 1,3,5,7,8,12,13 , 16,17,19,20,21 , 23,27,28,29 | 16 | 55.17 | 19 | 40.43 |
| Teacher wants or to take notes | 1,5,12,13, 18 | 5 | 27.78 | 4,14,22 | 3 | 10.34 | 8 | 17.02 |

Table 6 shows that the majority (55.56 %) of the experimental group students used the fun book to learn and not forget the subjects. The majority (55.17 %) of the control group students used the fun book to make repetitive lessons. In general, it is understood that 42.55 % of all students used the fun book to learn and not forget the subjects. Apart from these data, the content analysis excerpts of the categories are presented below.

***Category 1 To Learn and Not Forget Topics***

Under this category, it is stated that the fun book is used to learn and not forget the subjects. Random excerpts from both the experimental and control groups are presented below.

> Not to forget what we learned (EG2). To spend summary and learn better (EG9). In lessons, everything or so, to understand the subjects of things (EG17). I'm using it to learn something (CG2). To better understand and reinforce issues (CG20). For better understanding of questions, knowledge, knowledge, riddles, science subjects (CG24).

As it is understood from the quotations above, the participants were found to use the subjects for reasons such as "*not forgetting*", "*learning*" better, "*understanding*" and "*reinforcing*". In general, it can be said that the participants used the fun book to learn and not forget the subjects.

***Category 2 Fun Repetition to Do Lesson***

In this category, it is stated that the fun book provides the repetition of fun. Random excerpts from both experimental and control groups are presented below.

> It saves. The subjects remain in our minds (EG15). We repeat things and become fun (EG16). For fun repetition of lessons like cartoons (CG7). To repeat the science in a fun way (CG19). To repeat the topics we want in a fun way (CG28).

The excerpts above show that the students use the "*fun book*" to be able to do it "*again*" and to "*have fun*". In general, it can be said that the participants used the fun book because they could repeat the subject in a fun way.

***Category 3 Teacher Wants or to Take Notes***

In this category, it is stated that the fun book is the teacher's request or kept for taking notes. Random excerpts are given below.

> I use the fun book because my teacher wants it (EG1). To receive an oral grade (EG12). So that our minds can study the fun book for exam preparation, preparation for class (EG18). Because to get points (CG4). Because our teacher wanted (CG14: 22).

Excerpts show that the students use the fun books d to prepare for the "*exam*", to prepare for "*class*" and to take "*notes*". In addition, it was determined that some of the participants used the "*fun book*" because of their teachers' request. In general, it can be said that some of the participants used the fun book for exam preparation, taking notes and requesting teachers.

**Theme 2 The Positive Aspects of the Fun Book**

Under this theme, the positive aspects of the fun book were analyzed. Table 7 obtained as a result of the descriptive analysis in the theme is presented below.

**Table 7**

*Descriptive Analysis of the Positive Aspects of the Fun Book*

| Category | EG (N: 18) | (f) | (%) | CG (N: 29) | (f) | (%) | Tot (N:47) (f) | Tot (%) |
|---|---|---|---|---|---|---|---|---|
| Learning the subject with fun | 1,5,9,12, 13,17 | 6 | 33.33 | 1,2,6,8,9,12,13, 15,16,17,19,20, 22,24,25,26,28,29 | 18 | 62.07 | 24 | 51.06 |
| Repeat and not forget | 2,3,4,6,8, 15,16 | 7 | 38.89 | 3,11,13,14,15, 18,20,21,23,27 | 10 | 34.48 | 17 | 36.17 |
| Exam preparation and taking notes | 1,8,10,18 | 4 | 22.22 | 4,7 | 2 | 6.90 | 6 | 12.77 |

Table 7 shows the experimental group mostly (38.89%) stated that the positive aspect of the fun book was repetition and not forgetting. The control group students (62.07%) stated that the positive aspect of the fun book enables them to learn by having fun. In general, 51.06% of all students stated that as a positive aspect of their fun book, they provided learning with fun. Apart from these data, the content analysis excerpts of the categories are presented below.

***Category 1 Learning the Subject with Fun***

In this category, it is stated that the fun book provides learning with pleasure. Random excerpts are presented below.

> We learn better. We learn more fun. We do not forget the subject by repeating (EG9). While we use the fun book, we both understand and have fun doing things (EG17). It's fun and keeps it in mind (CG13). We reconsider a topic and understand it better by doing fun things (CG15). Learning scientific things fun (CG22).

When the citations of the participants are examined, it is possible for them to do it “*again*”, to “*understand*” and “*learn*” the subject better. Most importantly, most students had “*fun*” with the activities. In general, it can be said that the majority of the participants stated that they had fun as a positive aspect of the fun book and provided learning the subjects.

***Category 2 Repeat and Not Forget***

It is stated in this category that the fun book serves to repeat and not forget the information. Random excerpts from both experimental and control groups are presented below.

> It repeats the subject and makes us not forget (EG2). It allows us to consolidate the issue better (EG8). It allows us to repeat and learn (EG16). We understand better by doing it again (CG11). Review and understand the subject (CG18). When we repeat what we have learned, we cannot forget (CG21).

When the above excerpts were examined, it was determined that the students used expressions that they were able to "*reproduce*", "*reinforce*", facilitate "*understanding*" and prevent "*forgetting*". In general, it was determined that students perceived repetition prevention as one of the positive aspects of entertainment book.

***Category 3 Exam Preparation and Taking Notes***

In this category, it is stated that the fun book provides preparation for the exams and is useful for taking notes from the course. Random excerpts from both groups are given below.

> The fun book increases my oral grade (EG1). It gives me high marks (EG8). Studying helps to prepare for the exam (EG18). The positive side of the fun book brings me points (CG4). The positive side makes notes (CG7).

When the excerpts are examined, it is understood that the students stated that the fun book had positive aspects such as "*high scores*" and facilitating the preparation for the "*exam*". Although they are small in number, it can be said that some of the participants stated that they prepared the exam as a positive aspect of the fun book and that it provided taking notes.

**Theme 3 The Negative Aspects of the Fun Book**

Under this theme, the negative aspects of the fun book were analyzed. Table 8 obtained as a result of descriptive analysis in the theme is presented below.

**Table 8**

*Descriptive Analysis of the Negative Aspects of the Fun Book*

| Category | EG (N:18) | (f) | (%) | CG (N:29) | (f) | (%) | Tot (N:47) (f) | Tot (%) |
|---|---|---|---|---|---|---|---|---|
| Very tiring and hand pain | 1,9 | 2 | 11.11 | 4,7,16, 17,18, 20, 23,24,26,28 | 10 | 34.48 | 12 | 25.53 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Taking too much time | 1,2,6,10 | 4 | 22.22 | 3,15,16,19,22 | 5 | 17.24 | 9 | 19.15 |
| No negative aspects | 5,7,8,12, 15,16,17,18 | 8 | 44.44 | 2,8,9,10, 13,21,29 | 7 | 24.14 | 15 | 31.91 |

Table 8 shows that the experimental group students (44.44%) stated that there was no negative aspect of the fun book. On the other hand, the control group students (34.48%) stated that the most negative aspect of the fun book was that it was very strenuous and caused hand pain. In general, it is understood that 31.91% of all students stated that there is no negative aspect of fun book. Apart from these data, the content analysis quotations of the categories are presented below.

***Category 1 Very Tiring and Hand Pain***

In this category, it is stated that the fun book is strenuous and that it hurt the hand. Random excerpts from both groups are given below.

> The negative side of the fun book is that it is very tiring (EG1). The fun book makes us do extra work (EG9). Our hands are getting tired (CG16). The writing in the fun book is very tiring (CG20). It hurts my hand (CG23: 24).

As it is understood from the quotations, it is understood that the participants stated that the use of the fun book was "*exhausting*" and that it was "*painful*" because of the constant writing. In general, it can be said that some students stated that the use of entertainment book as a negative aspect was exhausting and hand pain.

***Category 2 Taking Too Much Time***

In this category, it is stated that the fun book takes too much time. Random excerpts from experimental and control groups are given below.

> Failure to fill due to time loss (EG2). I don't have the opportunity to study the fun book (EG6). I don't have time to play games (EG10). Dealing with exams and lessons (taking time) (CG3). It takes some time (CG15). Lose time and points when you do missing (CG19).

Excerpts show that the students did not have the opportunity to study "*other lessons*" due to their engagement with the fun book, that they did not have time to "*play*" games and that the fun book

took too "*much time*" as a "*negative*" aspect. In general, it can be said that some students thought that the fun book takes a lot of time as a negative aspect.

***Category 3 No Negative Aspects***

In this category, there are statements indicating that there are no negative aspects of the fun book. Random excerpts from both groups are given below: "No negative aspects" (EG5). "The downside is nothing at all" (EG17). "There is no negative aspect" (CG2: 8). "There is nothing negative about the fun book" (CG13). When the above excerpts are examined, it is understood that the participants stated that there is "*nothing*" or "*no negative*" about the fun book. In general, it can be said that a significant number of participants stated that there is nothing negative about the fun book. The findings of the research are discussed together with the literature in the discussion section.

## Discussion

In this study, academic achievement of the participants was followed with two scales. The first scale is the use of crossword fun books. According to the pre-test, post-test and retention test results, the control group students were more successful than the experimental group students. Students in the control group always maintained the difference between the experimental group students and that success was evident even after the application was given. This is similar to Coşkun et al. (2012) findings in which educational games containing scientific stories positively affected academic achievement. In fact, the effect of student positive development on academic success is known (Ballo et al., 2019).

The data showed that the fun book used in the experimental study was did not increase the success of the experimental group positively. This is similar to findings from Maden (2011) who found that jigsaw games, such as crossword, do not make a significant difference in terms of academic achievement and remembering.  Similarly, Aydemir (2012) also found that the use of online crossword by experimental group students was not better than the control group in terms of academic success and retention of knowledge. This situation does not match the research findings.

The second scale used to determine academic achievement is the academic achievement test. There is no academic difference between the experimental and control groups in the pretest results of this test. However, when the posttest results are examined, it can be said that the academic achievement of the control group participants is higher than the experimental group participants. Also, one month after the application, there was no significant difference between the experimental and control groups. This situation is quite significant. It can be said that the fun book used by the experimental group participants did not affect the differentiation of academic achievement. Although it has been found that because the academic success of one month after the application did not differ at the level of the groups, it cannot be said that the fun book generally has a positive effect on the academic achievement of the experimental group. Similarly, Kapıkıran and Kıran (1999) found no significant difference in academic achievement in their homework assignments. This differs from other students, such as Karataş-Özür and Şahin (2017) who found out-of-class activities positively affected academic achievement and Bozdoğan and Kavcı (2016) who found that out-of-class activities increased academic achievement in both experimental and control groups, but increased in favor of the experimental group. Finally, Akçay et al. (2014) found that multiple writing activities (such as fun book) had a positive effect on student academic achievement and concept learning. These findings do not match the research findings.

The data showed that the fun book had no positive effect on the experimental group. The interview portion of this research helped to explain this in greater detail. In the descriptive analysis, 18 students from the experimental group used the fun book while nine did not. The entire control group uses the fun book. Since the experimental and control groups were chosen randomly in the mentioned application groups, the students who did not use the fun book despite the necessity came into the experimental group. It can be said that the fact that one third of the participants in the experimental group did not use the fun book at all affected the academic achievement level. Secondly, it was determined that five students from the experimental group and three students from the control group wanted the teachers to use the teacher's book or not to drop their grades.

This is especially important for experimental group students. Because of the experiment group consisting of 27 participants in total, nine of them did not use any book and five of them used because teacher wanted. In fact, they used the books reluctantly. It is not thought that involuntary activities will affect academic achievement positively (Balkıs & Duru, 2010; Ilgar, 2004). Thus, it is assumed that 14 of the experimental group students did not use the fun book. In this case, it can be said that it is normal for the experimental study to not to have a positive effect on the academic achievement. Similarly, Aybek et al. (2011) found that students' participation rate in extracurricular activities was low. Yuladır and Doğan (2009) found that although students increased their participation in homework assignments, they did this unconsciously.

When the participants' views on the fun book were questioned, the first three most commonly used statements were; "*I learn the subjects with fun*" 51.06% (f: 24), "*to learn and not to forget the issues*" 42.55% (f: 20) and "*to make repetition of fun lessons*" 40.43% (f: 19). Apart from these data, the majority of the participants used the fun book as the reason "*for using it to learn and remember the subjects*" and "*to repeat the subject in a fun way.*" In addition, it can be said that some of the participants used the fun book for exam preparation, taking notes, and teachers' desire. Similarly, Ok and Çalışkan (2019) considered activities such as homework as reinforcing to help the student in not forgetting knowledge. In general, students who think and who are interested in science career have a high attitude towards science lessons (Gibson & Chase, 2002). In addition, Gedik et al. (2011) found that the students valued the fun books because they provided repetition and consolidation of homework. These findings are similar to those of a fully structured interview form.

When the positive and negative aspects of the fun book are examined, it can be said that the majority of the participants stated that the fun book provide entertainment as a positive aspect of the fun book. In was also shown that a significant number of participants preferred fun books because they provided repetition. Finally, fun books were preferred because it helped in the note-taking process. Similar to some of the above findings, Appelbaum and Clark (2001) also showed that

fun is important for motivation in science education. Gopalan et al. (2016) found a positive and statistically significant relationship between interesting, fun and entertainment and students' motivation to learn science. Çakır and Ünal (2019) emphasized that students should be given homework assignments in preparation for the exam. When the negative aspects of the fun book are questioned, it can be said that one quarter of all participants stated that the use of the fun book as a negative aspect was exhausting and hand pain. It is also available to participants who have stated that the fun book takes a lot of time. Apart from these, it can be said that a significant number of participants stated that there was no negative aspect of the fun book. Similar to the above findings, Meydanlıoğlu (2015) emphasized that students should perform significant physical activity outside of school. The findings in this study are consistent with the time emphasis in the study. As a matter of fact, students complain that homework in the fun book takes too much time.

**Conclusions and recommendations**

This research project found that the fun book had no positive effect on the increase of academic success. All of the randomly selected experimental and control group participants who did not use the notebook and the majority of the experimental group who involuntarily used the books were studied. The literature suggests that all participants should be motivated by the use of fun books. The research showed that the positive aspect of the fun book enabled students to learn subjects while having fun, prevented them from forgetting previously learned material, and made it easier to prepare for an exam by taking notes.

This research shows that primary and secondary reinforcements can be used primarily to motivate the learner, but that the use of the fun book has no effect on academic achievement. Moreover, the research also showed that some students claimed that fun books were exhausting as it took a lot of time to do. Other students, however, found no negative aspect of using the fun book.

Implications for higher education are linked to teacher training for how to best use fun books in their teaching practices. In higher education courses that train teachers, fun books can become a unit of study that will help the teachers learn in a fun way and will demonstrate how they

can adopt these books in their own classes. It was found that when teachers used the fun book themselves, they, like the students in this study, do not forget the subjects due to the repeating of the subject in a fun way. The research also showed that the fun book when used as an extracurricular training activity, is especially recommended for students who have learning difficulty in understanding the material and for students who are slower learners and need more time in grasping the subjects. New samples can be made regarding the effect of the fun book on academic achievement in higher education.

Finally, the research shows that while there are benefits to doing fun books, there needs to be measures taken to prevent the student from taking too much time doing the games or activities. In this context, it is recommended that the fun book should be used at home but should not be required. From a higher educational point of view, the research suggests that the university student can also be taught to use fun books voluntarily for reinforcement of material and to teach better note-taking skills. Thus, for teachers and for university faculty, it is important to not mandate the use of the fun book, that homework assignment should not be made compulsory, and that all use of assignments should be optional.

This study offers an alternative measurement tool proposal for university faculty, teachers, and candidate teachers in recognizing and adopting curricular change for teaching of science education. Fun books can be used as a scale that can be used to evaluate the process at every stage of education. Fun books offer activities for learning and enable the student to have fun while doing puzzles, jokes, acrostic, drawing, etc. The course of academic success changes with the use of the entertainment notebook. The information learned through the use of the notebook remains up to date. The unit provides a path for the small learning to be transformed into higher education with fun repetitions. Fun book can offer the opportunity to repeat what participants or students learn and to learn more permanently. Fun book can be used in all discipline levels in education, especially science lessons.

## Author Note

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# Higher Education Funding and Student Access in the Global South

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## Abstract

Globally, the increasing cost of university education, growing student enrolments and weak economic of nations have caused a reduction in public funding for university education. This decline in public funding seems to have increased tuition fees, caused deterioration of infrastructure, thereby affecting student access to university education. In the Global South particularly, Ghana and South Africa, there is the quest for universities to widen access. This is as a result of the perceived association of the activities of universities to socio-economic development. However, funds allocated by these governments to the sector is woefully inadequate. The study reveals that public universities in South Africa and Ghana rely on alternative sources such as fees of international students and non-traditional learners to enhance their fiscal strength but this seems inadequate owing to the financial strain that comes with the growth in domestic student numbers.

*Keywords:* public funding, public universities, student access, comparative, global south

## Introduction

The economic development of countries has been linked to their higher education systems (United Nations Educational, Scientific, and Cultural Organization [UNESCO], 2017). The changing nature of skills required for the development of national economies has further deepened the importance of higher education (Bloom et al., 2015). As a result, many higher education systems have experienced revitalization. Chief amongst them is the opening up of the higher education

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system, which has led to a shift from elitist to mass higher education (Mohamedbhai, 2008). For example, there are now more than 140 million students worldwide pursuing higher education and this continues to expand rapidly (Altbach, 2013). Similarly, in Africa, between 2000 and 2010, higher education enrolment more than doubled, increasing from 2.3 million to 5.2 million (Africa-America Institute, 2015). This is a positive signal, but this has put a strain on the fiscal life of the higher education institutions. Currently, funding challenges confront public higher education institutions (PHEIs) both in the developed and the developing world. A report by Study International Staff (2019) states that in 2007/08, the gap between university operating expenditures and provincial grants in Canada was CA$6.1 billion. By 2016/17, this had nearly doubled to CA$12 billion (Study International Staff, 2019). In Australia, higher education grants for teaching and learning and research have declined from 0.7% in 1989 to 0.6% in 2017 (Universities Australia, 2019). Additionally, Australia's Commonwealth Grant Scheme (CGS) declined from 4.2% ($11,730) per student in 1989 to $11,240 per student in 2017 (Universities Australia, 2019). In Russia, the share of spending on education in total budget expenditure fell from 2.75% in 2015 and is expected to reach 2.45% in 2020 (Vorotnikov, 2017).

Funding challenges are severe in Africa. Government funding for the higher education sector has been reducing in real terms over the years. Teferra (2013) claims that in Zambia, the government could only allocate 20% of institutional budgets for over 3years without taking cognizance of inflation. Similarly, Mpofu et al. (2013) mention the main issue facing Zimbabwe universities as under-funding. Tanzania is not immune to this phenomenon. Public higher education institutions (PHEIs) in the country usually obtain about 20% to 30% of their annual approved budget requests (Fussy, 2017; Kossey & Ishengoma, 2017). Equally, the higher education sector in Kenya has been reeling under a financial crisis of unprecedented proportions, raising questions about its long-term sustainability (Munene, 2019). Munene (2019) laments that public university system debt stands at US$110 million, with the debt of the premier public university at over US$10 million. Egypt's 2019 national budget allocated EUR 2 483 million to the university sector (Brussels Research

Group, 2019). However, the Egyptian Central Agency for Public Mobilization and Statistics (CAPMAS) claims that government spending between 2004 and 2017 had declined from 3.5 % to 2.3 % of the state budget for higher education institutions (Brussels Research Group, 2019). It is evident that government funding in real terms in most African countries is plummeting even though Africa's higher education participation rate is far less than the global average of 26% (Africa-America Institute, 2015).

In Ghana and South Africa, there is a quest for higher education institutions to widen access. In this paper, we seek to understand the funding challenges facing higher education institutions in Ghana and South Africa and how these institutions strategize to sustain access in the face of inadequate funding via a cross-national comparative approach.

**Justification for selecting Ghana and South Africa**

The higher education sector in Ghana comprises both public and private higher education institutions. Ghana can boast of 10 Public Universities, 8 Technical Universities, 2 Polytechnics, 44 Colleges of Education, 23 Public Nursing and Midwifery training institutions, 2 Private Nursing Colleges, and 65 Private Higher Education (National Accreditation Board, 2018). In South Africa, the sector comprises 26 Public Universities, and124 Private Higher Education Institutions (Department of Higher Education and Training, 2017). The higher education institutions in these two countries offer an academic program at diploma, bachelor, master's and doctoral degree levels. The countries were chosen because they share some commonalities. Higher education sectors in the two countries have seen revitalization in the last two decades. Furthermore, government-funding support for their higher education sector continues to shrink in real terms while the higher education institutions experience growth in student enrolment. Lastly, Ghana and South Africa's higher education participation rate is 16.16% (Times Higher Education, 2019a) and 20.48% (Times Higher Education, 2019b), respectively, higher than Africa's average of 6% (Africa-America Institute, 2015). These common characteristics possessed by Ghana and South Africa do not imply the two countries are the same. They differ in some respects. South Africa's population is much larger, 57,398,421in 2018

(United Nations, 2018) compared to Ghana's 29,463,643 in the same period (United Nations, 2018). Though differences exist in their higher education structure, yet we deem this study appropriate as this might give insights into how public higher education institutions in African revitalized higher education systems sustain student access in the face of inadequate funding.

## Methodology

The purpose of this study is to understand how higher education institutions in Ghana and South Africa sustain access amidst limited funding. Hence, a systematic review of the literature on this subject matter was vital. We followed explicit and rigorous criteria to identify, critically evaluate and synthesize (Cronin et al., 2008) the literature on higher education funding and student access to provide a comprehensive background for understanding the knowledge produced on the issue. We searched from the University of the Western Cape's Library Educational Database, SCOPUS, ERIC, SAGE journals online, and Google scholar search. Keywords used for the search included: higher education funding, public higher education funding, declining public higher education funding, student access, university funding, debates on private financing of higher education, funding challenges in higher education, measures to sustain access in higher education, cost-sharing in higher education, Ghana and South Africa. The criteria for inclusion of an article were: the focus or an aspect of the article should fall within the scope of higher education funding and student access, and the article should be peer-reviewed. Books and government documents had the same criteria. The search resulted in the retrieval of 62 documents. This was made up of 33 articles, 9 books, 14 government documents, and 6 doctoral theses. Out of this number, 36 met the inclusion criteria. This formed the data for the study and was analysed following the preview, question, read, and summarize (PQRS) approach espoused by Gillian (1990). Through this approach, the major themes that form the findings and discussions were captured.

## Findings

In this section, we present the findings in line with the themes that appeared from the literature review. These are categorized as funding challenges and measures to sustain student access and are presented below.

**Ghana**

In Ghana, where major higher education revitalization has taken place, funding famine persists. Table1 provides an overview of Government of Ghana funding to the public higher education institutions against the institutions' expenditure patterns from 2010-2016.

**Table1**

*Government Funding and Expenditure Patterns of Public Higher Education Institutions (HEIs) in Ghana*

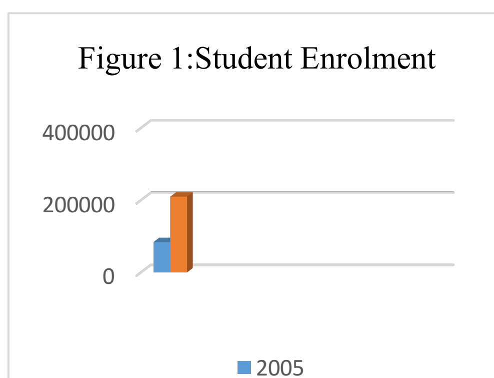
| Country | Year | The amount released by Government to HEIs (GH¢) | Expenditure of the HEIs GH¢ | Funding Gap of HEIs GH¢ |
|---|---|---|---|---|
| Ghana | 2010 | 198,889,276 | 231,918,186 | 33, 028, 910 |
| | 2011 | 208,288,251 | 277,350,710 | 69, 062, 459 |
| | 2012 | 470,619,775 | 590,909,180 | 120,289,404 |
| | 2013 | 490,619,775 | 1,852,440,128 | 1, 361, 820, 353 |
| | 2014 | 952,675,283 | 1,024,275,063 | 71, 599, 780 |
| | 2015 | 1,932,403,802 | 3,153,765,103 | 1, 221, 361, 301 |
| | 2016 | 2,051,212,109 | 4,275,645,094 | 2, 224, 432, 985 |

*Source*: National Council for Tertiary Education, 2016

As Ghana's higher education sector experiences budget shortfalls, enrolment in the sector continues to expand. While the enrolment trends seem to be impressive, Ghana's higher education participation rate, stands at 16.16% (Times Higher Education, 2019a), and is less than the global average of 26% (Africa-America Institute, 2015). An indication that more prospective higher education students are denied access in Ghana. Figure 1 depicts Ghana's enrolment trend from 2005-2015.

**Figure 1**

*Ghana's Enrolment Trend from 2005-2015*




*Source*: Council on Higher Education, 2016

**South Africa**

Similarly, funds allocated to higher education institutions in South Africa have reduced significantly. As a proportion of GDP, public expenditure on public higher education institutions has declined from 0.82% in 1996 (Wangenge-Ouma & Cloete, 2008) to just 0.72% in 2016 (Council on Higher Education, 2016). Table 2 displays the public funding situation in South Africa.

**Table 2**

*Government Funding and Expenditure Patterns of Public Higher Education Institutions (HEIs) in South Africa*

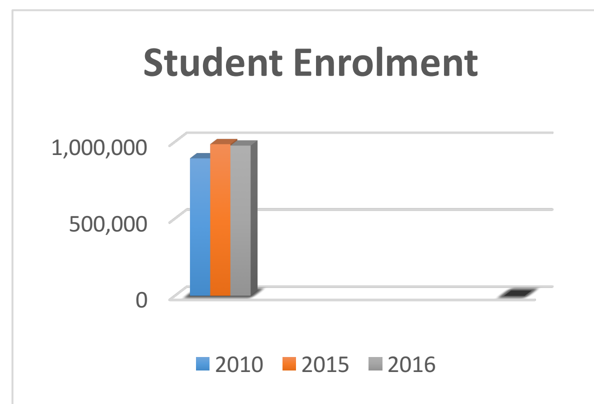
| Country | Year | The amount released by Government to HEIs (R'000) | Expenditure of the HEIs (R'000) | Funding Gap of HEIs (R'000) |
|---|---|---|---|---|
| South Africa | 2010 | 17 516 740 | 37 174 529 | 19657789 |
| | 2011 | 19 354 159 | 40 180 883 | 20826724 |
| | 2012 | 20 902 779 | 45 817 580 | 24914801 |
| | 2013 | 22 388 767 | 49 170 383 | 26781616 |
| | 2014 | 24 155 093 | 54 205 231 | 30050138 |
| | 2015 | 26 342 110 | 58 709 603 | 32367493 |
| | 2016 | 27 964 560 | 65 929 150 | 37964590 |

*Source*: Centre for Higher Education Transformation, 2016; Department of Higher Education and Training, 2019

Table 2 suggests that the funding gap of higher education institutions in South Africa increased every year from ZAR 19 657 789 000 in 2010 to ZAR 37 964 590 000 in 2016. This notwithstanding, the higher education sector in South Africa is experiencing outbursts in student enrolment, as depicted in Figure 2.

**Figure 2**

*Student Enrolment from 2010 to 2016*




*Source*: Department of Higher Education and Training, 2018

From Figure 2, it could be deduced that between 2010 and 2016, student enrolment in public higher education institutions grew by 82 901 and continues to increase after 2016. Even though the funding gap continues to increase in both systems, enrolment of students also continues to increase in the higher education sector of Ghana and South Africa. This situation seems to have compelled public higher education institutions to strategize to sustain student access.

**Measures used to sustain Student Access**

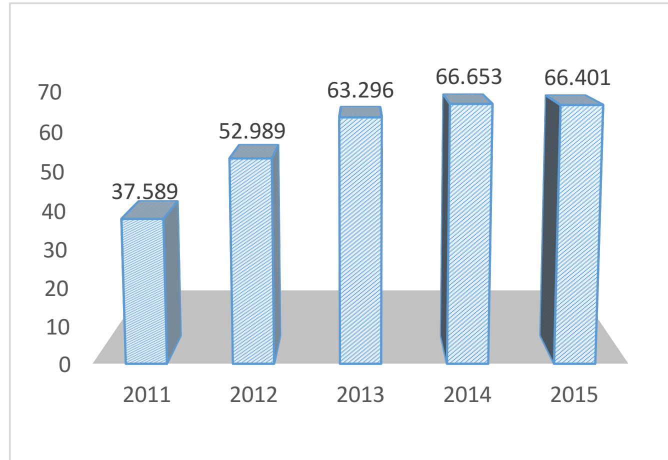
The findings reveal that the public higher education institutions in Ghana and South Africa employ two main measures to sustain student access. These measures are Distance Education provision and recruitment of International Students. Figures 3 and 4 depict the number of students enrolled in the Distance Education program and enrolment of international students in Ghana from 2011 to 2015.

***Ghana***

Figure 3 shows the number of students enrolled in the Distance Education program in Ghana from 2011 to 2015.

**Figure 3**

*Distance Education Enrolment*



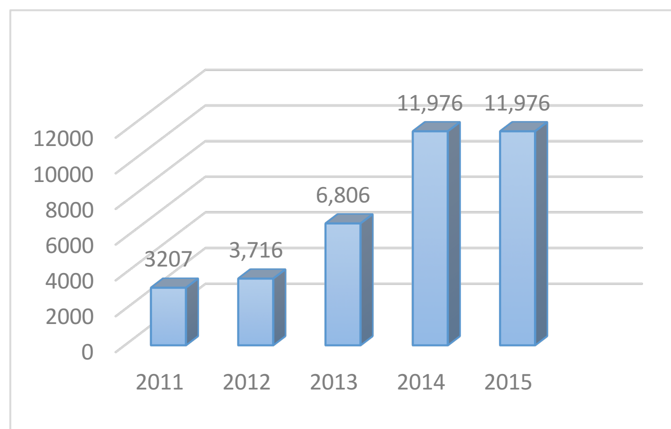

*Source*: National Council for Tertiary Education, 2016

Figure 3 depicts that Distance Education enrolment increased from 37, 589 in 2011 to 66, 653 in 2014. However, this decreased marginally in 2015 to 66 401, bringing the total distance education enrolment of PHEIs in Ghana from 2011 to 2015 to 286 928.

The international student enrolment trend of PHEIs in Ghana from 2011 to 2015 is presented in Figure 4.

**Figure 4**

*International Students' Enrolment*




*Source*: National Accreditation Board, 2018

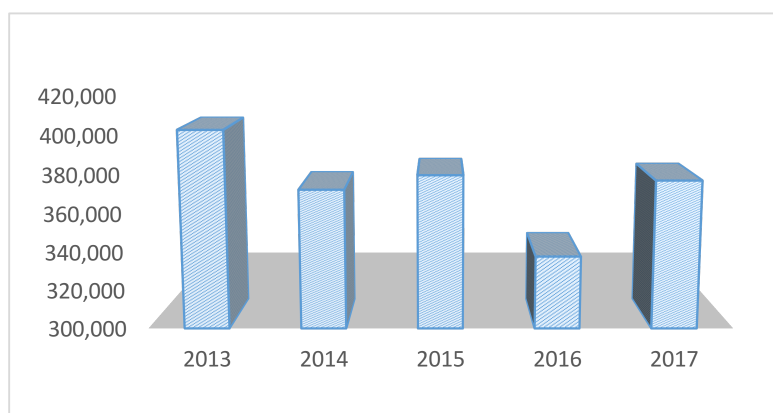
It is evident that the enrolment pattern of international students, as shown in Figure 4, suggests an increase from 3207 in 2011 to 11976 in 2015. Within this period the enrolment of international students amounted to 37 681.

***South Africa***

The number of students studying via distance education mode in South African PHEIs from 2013 to 2017 is shown in Figure 5.

**Figure 5**

*Distance Education Enrolment*

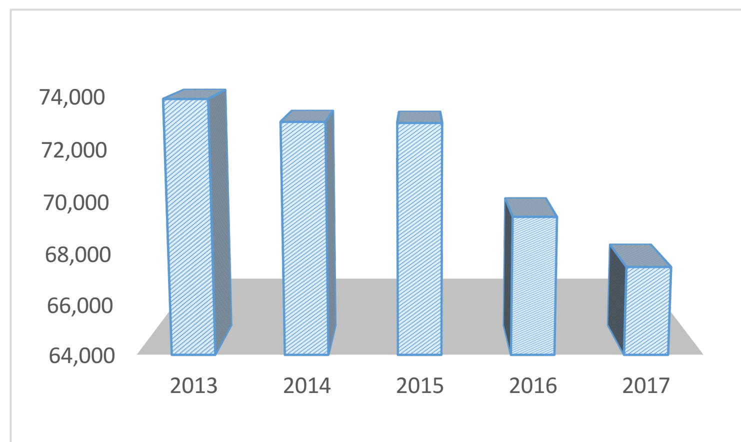



*Source*: Department of Higher Education and Training, 2019

From Figure 5, students who accessed higher education via Distance Education surged from 402 650 in 2013 to 379 732 in 2015. However, by 2017 academic year this figure had plummeted to 377 014. Figure 6 shows the number of international students enrolled in PHEIs from 2013 to 2017.

**Figure 6**

*International Student Enrolment*




*Source*: Department of Higher Education and Training, 2018

As shown in Figure 6, the enrolment of international students was 73 856 in 2013. However, by 2017, this has reduced to 67 434.

**Discussion**

Public funding and expenditure, income from international fees and distance education were the major themes that emerged from the funding literature. Authors such as Wangenge-Ouma and Cloete (2008), Centre for Higher Education Transformation (2016), Department of Higher Education and Training (2018), and National Council for Tertiary Education (2016) offered a detail analysis of public expenditure on public higher education in South Africa and Ghana. They concluded that income from this source continues to plummet and as result, PHEIs are compelled to seek alternative funding support. Furthermore, Mensah & Owusu-Mensah (2002), De Villiers (2009), Fatunde (2014), Sehoole (2015), Swanzy and Langa (2017), Cassidy (2017), and Shem (2018) discuss how income generated from international student fees and distance education by PHEIs assist in absorbing the financial shock that emanates from a decline in public funding in both Ghana and South Africa. With regards to the literature on access, the Department of Higher Education and Training (2017) and the National Accreditation Board (2018) provided an overview of the total number of higher education institutions in the case countries with Times Higher Education (2019a, 2019b), and Africa-America Institute (2015) highlighting the higher education participation rate in Ghana and South Africa and the average higher education participation rate for Africa. Similarly, the data on international and distance student enrolment was deduced from the National Council for Tertiary Education (2016), and the Department of Higher Education and Training, 2018, 2019). Information on the satellite campuses and distance education centres established to widen access was supplied by Ntshoe (2004) and Swanzy et al. (2019).

An analysis (see Table 1 and 2) of the government funding patterns of public higher education institutions in the two countries in the seven years 2010-2016 shows trends that are both similar and different. The statistical analyses show that in both countries, government funding kept increasing in monetary terms in the 2010-2016 period. Another similarity is that during the same

period the funding gap kept increasing. One significant difference characterizes the two countries' government funding of higher education. While Ghana's public higher education funding gap is marked by substantial increases in monetary terms, South Africa's case is characterized by small and moderate increases. The problem of higher education funding in the two countries is, therefore, one of increases in funding gap of the institutions.

It is clear that the funding gap is compelling PHEIs to seek alternative funding mechanisms to sustain student access. For example, in South Africa, Swanzy & Langa (2017) report that fees from international students supplement the budget of PHEIs. For instance, in 2016, the University of Cape Town (UCT) semester study abroad program attracted about 1,000 participants (Cassidy, 2017). UCT charged US$6 000 per student as tuition fees (Cassidy, 2017), contributing about USD 6,000,000 to the university's revenue vault. Moreover, research by the Academy of Science of South Africa indicates that international students manage to complete their doctorates sooner (in about 4.5 to 4.6 years) than the local students (who take an average of 4.9 years) (Sehoole, 2015). The faster the completion rate for a postgraduate degree, the more the institution gets funding from the government (Sehoole, 2015) because South Africa uses performance-based funding framework for allocations of funds to the public higher education institutions. Similarly, PHEIs in Ghana fill their funding gap with fees paid by international students. International student fees are quoted in dollars and are not subject to depreciation like domestic fees charged in Ghana's local currency. For example, it is on record that Nigerian students in Ghana contribute about US $1 billion yearly as tuition fees and other expenses (Fatunde, 2014). It could be deduced that PHEIs in both South Africa and Ghana charge international students fees in dollars and are sometimes double the fees paid by local students. This notwithstanding differences exist. In South Africa, the completion of a postgraduate degree by an international student attracts additional revenue from the government into PHEIs revenue stream, whilst this is not the case in Ghana.

Furthermore, in South Africa, public higher education institutions have established satellite campuses precisely to enroll non-traditional students. Ntshoe (2004) explains that South African

PHEIs have established satellite campuses to reach especially working students in rural areas where there is demand for higher education, but supply is lacking. The revenue generated by PHEIs via distance education provision is enormous. For instance, currently Distance Education is subsidized by South Africa's government at 50% of the amount for contact students (De Villiers, 2009) in addition to the fees that the students pay. Equally, in Ghana, PHEIs have established distance education centers to make their services available to students living in other parts of Ghana (Swanzy et al., 2019). Academic programs offered via this mode are priced higher than those on main campuses (Swanzy et al., 2019). The practice used to be that when an institution was offering a Distance Education program, it was given an extra 2% of its regular subsidy to support its Distance Education program (Mensah & Owusu-Mensah., 2002). This trend has, however, changed. Currently, students enrolled in Distance Education pay fees, which cover full cost of their study (Mensah & Owusu-Mensah., 2002). For example, the University of Cape Coast charges USD 450 and USD 650 equivalent annually for bachelor's and master's programs, respectively (Shem, 2018) higher than similar programmes offered on regular basis. While in South Africa a chunk of the revenue generated by PHEIs from distance education comes from government, in Ghana, the students enrolled in this education mode bear full cost.

**Conclusion**

This paper has discussed how public higher education institutions in Ghana and South Africa sustain student access amidst inadequate funding. It was identified that the institutions rely on alternative sources such as fees of international students and non-traditional learners to enhance their fiscal strength, but this seems inadequate owing to the financial strain that comes with the growth in domestic student numbers. Given that the intent of this review is contextualized in two developing countries, the findings of the review are expected to not only benefit developing countries in terms of offering research-based data for analysis but also benefit developed countries that are exploring best practices for coping with inadequate funding to sustain student access.

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# A Shared Vision? Understanding Barriers to Internationalization

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## Abstract

This mixed methods study identified obstacles to internationalization in the Republic of Korea by examining differences in stakeholder perceptions at a large, private regional university. Questionnaire data ($n$ = 127) and interview transcripts ($n$ = 17) were analyzed. Independent samples t-tests of Korean and international stakeholders (administrators, faculty, and students) and one-way ANOVAs of faculty, students, and administrative staff were conducted to detect differences in the perceived importance and quality of internationalization at the university. Stakeholder groups shared high perceived importance for internationalization, but internationals perceived quality to be lower than Koreans ($p$ = .023), and faculty lower than both students ($p$ = .03) and administrative staff ($p$ = .025). Qualitative analysis revealed differences rooted in inconsistent conceptualizations of internationalization among stakeholder groups. Resentment, confusion, a lack of communication, and low organizational commitment emerged as barriers. Without a change in approach, internationalization efforts at Korean institutions of higher education will likely stall.

*Keywords:* internationalization, higher education, mixed methods, stakeholder analysis, Korea

## Introduction

The magnitude and breadth of international activities in higher education have increased dramatically with internationalization (Mok, 2007). Increased cross-border activity, curriculum reform, and mobility Altbach and Knight (2007) introduce new cultures and ideas to institutions. To

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succeed, higher education institutions (HEIs) must undertake "the process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of post-secondary education" (Knight, 2004, p. 11). This shift in HEIs has also led to a greater emphasis on competition over cooperation, as international education increasingly becomes characterized as an industry that serves as a source of revenue and enhanced reputation (de Wit, 2020). Yet without careful forethought, internationalization can lead to pushback and tension. Integration at the individual, community, and institutional level remains a challenge (Spencer-Oatey & Dauber, 2019).

The Republic of Korea (henceforth, Korea) has implemented internationalization policies to compete in global higher education. Policymakers have focused on establishing a strong presence through internationalization policies that preserve the Korean character (Palmer & Cho, 2012). These efforts have drawn international students and faculty (Ministry of Education, Science and Technology, Korea, 2010). They could achieve internationalization at home by exposing local students and faculty to new cultures (Jon, 2013). Internationalization of higher education in Korea is driven by complex factors within higher education, the environment in which it exists, political and economic developments, and individual expectations for higher education (Yeom, 2019). Academics have experienced structural and cultural adjustments to move Korean HEIs towards a global standard of excellence (Kim, 2005). Meanwhile, internationally mobile faculty (Ghazarian & Youhne, 2015; Gress & Ilon, 2009; Kim, 2016) and students (Jon et al., 2014; Jang, 2017) strive to adjust and succeed within Korean HEIs.

Internationalization policies in Korea have also had unintended consequences. Quantitative indicators of internationalization have shown signs of marked progress (Cho & Palmer, 2013), though concerns remain over whether these quantitative gains have a meaningful impact in practice (Byun et al., 2011). Despite the possibility for positive, sustainable internationalization to occur (Jang, 2017), for many international faculty members, time spent at Korean HEIs ends with frustration and departure (Kim, 2016). This study examines internationalization through a mixed methods design to gauge differences in the perceptions of internationalization held by stakeholders

groups according to their nationality (Korean or international) and status (students, faculty, administrative staff) in order to better define the barriers to internationalization in Korean higher education.

**The Challenges of Internationalization**

HEIs internationalize for various reasons, but competition for resources is often a motive. As HEIs received less public funding (Mok, 2007), international students replaced reduced state funds. In Korea, a number of government policies encouraged recruiting internationals and implementing English-medium instruction (EMI) to allow HEIs to attract students from beyond the borders of Korea. Although EMI featured in political discourse on higher education in the early 2000s, it took time for policies to take shape. In 2004, the "Study Korea Project" offered financial support of as much as 200 million Korean won (approx. USD 200,000) to HEIs that introduced EMI (Byun et al., 2011). The Study Korea Project continues to be funded and run by the Ministry of Education, within its National Institute for International Education, marketing Korean higher education and serving as a portal for international student applicants (Study in Korea, 2019).

The government's quantitative approach encourages administrators to see recruiting international students as an effort to fill a quota. After reaching that quota, continued support relies upon policy incentives and cost-benefit analysis. As policies shifts to other priorities, administrative attention tapers off. Consequently, HEIs are unlikely to invest in the long term success of internationalization and instead focus on short term benefits (Forbes-Mewett & Nyland, 2013). The government's focus on quantitative measures of internationalization has led to a sudden increase in the number of international students and faculty on Korean campuses (Byun & Kim, 2011), creating some tension and conflict.

EMI and the growing presence of internationals have been seen as a threat to Korean higher education. Critics suggest internationalization policies concentrate on Americanization or Westernization and could facilitate the loss of institutional and national identity (Cho & Palmer, 2013). These views draw on nationalist sentiments that are opposed the government's

internationalist vision and see cultural change as threatening. Rather than imposing a foreign culture, however, internationalization seeks to establish a third culture on campus. Drawing from Pollack and Van Reken's (2009), Third Culture Model, such an interstitial or third culture is based on "shared commonalities of those living an internationally mobile lifestyle" (p. 17). This third culture must be negotiated within the context of an HEI's host culture and can benefit local students and faculty by strengthening their intercultural competence. Yet these changes can still be seen as disempowering to the local population (Park, 2018).

Winning over faculty, students, and administrative staff is essential to successful internationalization. Faculty hold positions of power and influence within HEIs and without their commitment to promote change, the impact will be limited. Altbach and Postiglione (2013) emphasize the role of faculty and document the problem of weak faculty engagement in internationalization efforts. Faculty in Korea have also challenged the stated benefits of internationalizing. Park (2015) criticizes the market influences that promote English as the international language of teaching and research, arguing that they have allowed for a form of academic colonization that marginalizes local faculty.

Ensuring students have positive, meaningful experiences as a result of internationalization is also crucial. Superficial contact among local and international students leads to misunderstandings and negative feelings among all parties (Jon, 2012; Jon, 2013; Lee & Rice, 2007). Evidence from within Korea (Jang, 2017) and from other contexts suggest that this conflict is not inevitable. Lehtomäki et al. (2016) find that cultural diversity can add value to students' learning when managed appropriately. Diversity on campus can build students' competencies. Reaping these benefits is not simple, as evidence from both within and beyond Korea indicates that majority students often resist intercultural interactions and intercultural collaboration (Harrison, 2015; Jon, 2012) and often find intercultural communication inefficient and frustrating (Kimmel & Volet, 2010).

Programs to prepare students and faculty for the intercultural classroom and campus remain in their infancy. Ghazarian and Youhne (2015) illustrate the need for more support for international

faculty and Bodycott (2016) points out a similar need for international students' adjustment to host cultures and institutions. Yet given the emphasis on short term benefits, support services struggle to attract adequate funding (Forbes-Mewett & Nyland, 2013). Further work is needed to define problems in the experiences of stakeholders and identify methods to address common conflicts. This study aims to identify what barriers exist that prevent successful internationalization at Korean HEIs. In identifying the differences in perception among stakeholders of Korean HEIs, the study examines the steps to be taken to ensure that the benefits of internationalization will be successfully realized.

## Method

A sample was drawn from a large private, regional university in Korea for the survey (*n*=127) and interviews (*n*=17). The institution hosts roughly 25,000 enrolled students and 1,000 full-time faculty members. It has emphasized internationalization with policies and programs to incentivize international faculty and student recruitment and EMI. These initiatives include the presence of an English-only international college, a Korean language institute, partnerships with overseas institutions, and internationalization criteria in departmental and college evaluations. Questionnaires were collected over seven weeks from March 20 to April 8 and interviews conducted over eight weeks from May 29 to July 25 in 2014. Respondents self-identified as Korean citizens, non-Korean citizens, or dual citizens of Korea and another country (no participants held dual citizenship). The quantitative questionnaire data were tested for differences in perceptions of internationalization between Korean (*n*=77) and international (*n*=50) faculty, students, and staff and among faculty (*n*=50), students (*n*=58), and administrative staff (*n*=19).

### Setting

The university is located within a regional, metropolitan area with a historically industrial economy. The private institution was founded by missionaries and is consequently seen as having historically international roots. The president of the institution serves as a champion of its internationalization efforts, having instituted a policy that requires each department on campus to have at least one international faculty member. The university is a large institution, with over 1,000

Korean faculty members, 100 international faculty, and 500 administrative staff. The institution has a population of undergraduate students over 20,000, postgraduate students over 2,000, and international students over 1,000. The institution is famed for its beautiful and scenic campus.

**Positionality**

This study was conducted by a former international faculty member at a Korean HEI, making the researcher an insider to international faculty members but an outsider to other stakeholder groups. The status of the researcher relative to the subjects and context of a study influences participant responses and the meanings attributed to those responses (Merriam et al., 2001). The use of trained proxies for interviews and transcription of Korean participants in the study was intended to help limit the impact of these effects. However, in the attribution of meaning throughout the coding process, the researcher is an insider among the international faculty and, to a degree, international students, but an outsider to Korean faculty, students, and administrative staff.

**Instruments**

Data were gathered using an online questionnaire and semi-structured interviews. The questionnaire consisted of 5-point Likert response questions regarding the importance of internationalization and their perceptions of the quality of internationalization at the institution. Additionally, the questionnaire asked open-ended questions about the respondents' understanding of internationalization. These open-ended questions asked participants to describe what characteristics they believed to be important for a successfully internationalized university, what factors they felt benefit efforts to internationalize their institutions, and what factors they felt hinder efforts to internationalize their institution.

Korean participants received a Korean language version, while internationals received an English language version. Both versions included a link to the other language version. The questionnaire was distributed to all full-time faculty and administrative staff, of whom 50 full-time faculty and 19 administrative staff completed the questionnaire. Student responses were gathered

using QR-coded Korean and English language posters and by tablets in dining halls and lounges on campus. A total of 40 Korean and 18 international students completed the questionnaire.

Semi-structured interviews provide greater depth to the questionnaire findings by capturing more nuanced individual experiences and opinions. Interviewees elected to be contacted via the questionnaire or were approached and agreed to the interview at public locations on campus. The interviews each lasted approximately 30 minutes and were held in a place chosen by the interviewees, typically an office, empty classroom, or cafe. Interviews with international faculty and international students were conducted and transcribed in English by the author. Given the potential for the interviewer's identity to influence respondents' answers, the interviews of Korean faculty, students, and administrative staff were conducted and transcribed in Korean by two Korean doctoral students trained in qualitative methods.

Interviews introduced the study and requested consent from the participant. The interviews then covered views and experiences of internationalization. Time was spent asking about relationships with each of the stakeholder groups (Korean students, Korean faculty members, Korean administrative staff, international faculty members, and international students). Interviewees were asked about recommendations they believed could improve internationalization and given an opportunity to raise any other matters that were not covered in the interview.

**Analysis**

Quantitative data were tested for differences in perception of internationalization among Korean ($n$=77) and international ($n$=50) faculty, students, and staff using independent samples t-tests. Two t-tests were conducted, one for the importance and one for the quality of internationalization. Questionnaire data were also tested for differences in the perceived quality and importance of internationalization among faculty ($n$=50), students ($n$=58), and administrative staff ($n$=19) using one-way ANOVAs. As with the t-tests, ANOVAs were conducted to test for differences in both the perceived importance and quality of internationalization at the HEI.

Qualitative data from the questionnaire and interviews with Korean faculty (*n*=3), international faculty (*n*=4), Korean students (*n*=5), international students (*n*=3), and administrative staff (*n*=3) were examined to better capture personal experiences of internationalization. Qualitative questionnaire data for each stakeholder group were coded separately for themes in the perceptions of internationalization among these groups. The interview data were also coded by stakeholder groups, seeking out key quotations that illustrated the lived experiences of participants. Particular attention was given to conflicting views expressed within groups to ensure diverse experiences of individuals were represented in the findings. These efforts built upon the findings of the quantitative data by providing an intersubjective understanding of internationalization as reported by the participants, describing their differences and similarities.

## Findings

### Quantitative Results

The independent samples t-test examining differences in the importance of internationalization found that there was no significant difference between the Korean ($M$ = 4.35, $SD$ = .757) and international ($M$ = 4.44, $SD$ = .850) groups; $t$ (127) = -.642, $p$ = .522. Both groups expressed the view that internationalization is very important to the future of their HEI. However, there was a significant difference in perceptions of the quality of internationalization between Koreans ($M$ =3.47, $SD$ = .824), and internationals ($M$ = 3.12, $SD$ = .922); $t$ (126) = 2.30, $p$ = .023. Internationals perceived internationalization to be of a significantly lower quality than their Korean counterparts.

The one-way ANOVAs examining perceptions of the quality and importance of internationalization among students, faculty, and administrative staff found no statistically significant difference between groups ($F$ (2,126) = 1.22, $p$ = .298). In the one-way ANOVA testing perceived quality of internationalization, the assumption of homogeneity of variance was violated, and as a result, a Welch F test was conducted. There was a statistically significant difference between groups' perceived quality determined by the Welch F test ($F$ (2,126) = 2.22, $p$ = .01). A

Games-Howell post-hoc test revealed a perception of the quality of internationalization was statistically significantly higher among students (3.492 ± .972, $p$ = .03) and administrative staff (3.556 ± .616, $p$ = .025) compared with faculty (3.059 ± .785). There was no difference in the perception of quality between students and administrative staff groups ($p$ = .941). Thus, faculty members' perceived internationalization to be of a significantly lower quality than both students and administrative staff.

***Themes in the Questionnaire Responses***

The coding of the qualitative questionnaire responses revealed the themes of culture, curriculum, faculty, language, necessity, networking, opposition, students, support, and quality in the comments of respondents regarding their perceptions of internationalization. The presence of these themes varied in the responses of each of the stakeholder groups, as described below.

**Culture.** While all of the stakeholder groups mentioned culture as important to the success of internationalization, the scope of the cultural change required varied among the groups. Korean students and staff seemed to hold the narrowest view of this change in culture, with the focus primarily on student life. The administrative staff spoke of creating an academic environment that would allow students from diverse cultural backgrounds to come and study. Korean students described this change in culture at internationalized universities as an opportunity for local students to experience new languages and cultures in a way that could help to broaden their perspectives.

The Korean faculty, international faculty, and international students defined the change at internationalized universities more broadly, including changes to the administrative culture and specifically describing desired characteristics for an internationalized HEI culture. Korean faculty members tended to emphasize the need for an open administrative structure, widespread intercultural competence, and the presence and participation of diverse cultures in all aspects of university life. International faculty and international students shared these views. Still, they went further to discuss equalizing power structures, stressing the need to "eliminate differences" such that individuals are treated similarly regardless of cultural background. The international faculty

members, in particular, mentioned the need include all cultures in academic life in the decision making process. Thus, while all groups shared the view that changing HEI culture is essential, the breadth of that change varied according to status.

**Curriculum.** All stakeholder groups mentioned curriculum as important to internationalization, albeit from different perspectives. Staff and Korean students tied these changes to breadth and quality, citing the need, as one administrative staff member put it, for “a curriculum worth sharing with the world.” Korean students mentioned internationalizing the curriculum as important to developing personal capabilities and skills to a global standard. Korean and International faculty focused on the need to ensure that changes were not merely superficial, and, as one Korean faculty member wrote, “not some one-time event, but an internationalization that extends into teaching and learning.” International students also mentioned these concerns, but focused on the need for greater flexibility in the curriculum and integration of domestic and international students. As one student wrote, “mixed classes with regular and foreign students instead of separation” would be necessary.

**Faculty.** All the stakeholders but staff emphasized the role of faculty members for successful internationalization. These groups agreed that faculty members need to engage in research and community service with international scope and appeal. To these ends, faculty should feel encouraged to engage in international research communities and take part in international exchange programs, as well as need to be able to teach and communicate effectively in English. Further, these internationalized faculty members should be engaged as role models and mentors in the HEI community.

**Language.** Korean students did not mention foreign language proficiency as an important characteristic for internationalization, and language was hardly mentioned by staff except for one response that characterized internationalization as simply “studying English.” Korean faculty, international faculty, and international students all emphasized the need for broad-based support

for English language use. Faculty and international student respondents tended to emphasize this need not only for teaching and learning but also for research and campus life.

**Necessity.** Among Korean faculty, students, and staff, internationalization was often described as necessary for the future. The respondents wrote that internationalization of HEIs played into the larger, inevitable trend of globalization. In the words of one administrator, "given the decreasing numbers of potential domestic students, internationalization is essential to the sustainability of the university." Respondents suggested that as part of the overall process of economic development, internationalization represents the next step for Korean society. These respondents described internationalization not as a choice, but as an obligation.

**Networking.** Korean and international faculty expressed a nuanced view of networking relative to the Korean students, international students, and administrative staff. Among students and administration, HEI networking for internationalization serves the function of creating opportunities for students for international exposure and jobs. Faculty, rather, saw HEI networking in terms of education, employment, research, and service. One international faculty wrote that a successfully internationalized HEI creates networks "to provide not only exchange student programs but also to pool resources and ideas." Faculty members suggested that with the proper infrastructure in place to support these kinds of connections, an HEI would attract high quality scholars and students.

**Opposition**. Among Korean faculty and Korean students, some expressed opposition to internationalization in three ways. The first, most common expression of opposition argued internationalization "doesn't really meaning anything at all." While only one Korean faculty member responded in this way, a considerable number of students provided a very similar response. This expression presented uncertainty and cynicism regarding the motives behind internationalization.

The second expression of opposition argued that internationalization may be important for only some academic disciplines. These respondents emphasized the need to protect particular disciplines and departments from excessive internationalization efforts. The third form of opposition

was directly expressed by only students. Internationalization was something “I cannot escape.” As another student wrote, “without internationalization, I will be left behind.” These responses play into the theme of the necessity described above, but also reveal underlying insecurity. These findings indicate that some feel threatened by internationalization efforts.

**Students.** International faculty, international students, and administrative staff all mentioned the role of students in successful internationalization. Administrative staff emphasized the quality of international students, citing the need for students from diverse cultural backgrounds who can succeed in the global labor market. International students saw the role of students in internationalization as social, emphasizing the need for everyone to be open to others and internationally aware. International faculty members incorporated both of these views, expressing the need for students with both high potential and an open mind.

**Support.** Korean faculty, international faculty, and international students all mentioned support services for internationalization. Korean faculty and international students focused on the need for services supporting language skills, intercultural understanding, and exchange programs. International students mentioned the need for communicating current information as a key to success. International faculty expressed concern over their perceived lack of support in areas such as research, local business outreach, and visa matters. They mentioned a desire for stronger intercultural competence and foreign language ability among the administrative staff. As one international faculty member wrote, successful internationalization includes “international students, faculty AND administration” (emphasis theirs).

**Quality.** The issue of internationalization as a measure of quality emerged in the questionnaire responses of Korean faculty members and administrative staff. For administrative staff, internationalization was equated with movement towards greater educational quality and described, in the words of one administrator, as “the basic competitiveness of the university.” Korean faculty often shared this view, but linked quality back to networking, explaining that internationalization would improve access to world class ideas and perspectives, and allow the

institution to draw on resources beyond the domestic scope. These Korean faculty members argued that in successful international networking, the Korean higher education system could become a cultural resource with great relevance in contemporary society.

**Stakeholder Interview Results**

The interviews better define the perspectives of the stakeholders in the themes that emerged as described below.

***Korean faculty***

Interviewees expressed frustration over cultural conflict in broader organizational life. In the words of one junior faculty member: "The culture, overall, is very traditional, how should I say, bureaucratic? Or should I say steeped in seniority? Or always giving precedence to elders? (Korean Faculty Member B)" The interviewees described this culture as a barrier to the development of an international mindset on campus. As one faculty member put it: "It's a little amusing… um, well, those foreign professors don't really understand Korean society, Korean… tradition and culture [...] they often become like lone wolves. (Korean Faculty Member B)" As a result of this cultural divide, the interviewees described two distinct types of international faculty members: the majority who are temporary and live in separation, and those who seek to understand and take part in the mainstream organizational culture.

Discussion of language was predominantly lamentations over the inability to speak and lack of will to learn even basic Korean among most international faculty members and students. However, there were also some expressions of hope for the future based on the perceived greater English language fluency of younger Korean staff, who could help to improve communication.

In terms of networking, Korean faculty focused on the need to expand outbound programs for Korean stakeholders, specifically for students and administrative staff. Korean faculty pointed out such efforts would broaden opportunities available to students and

change the organizational culture by exposing staff to alternative approaches in higher education.

***Korean Students***

Interviewees described surprise and gradual acclimatization to seeing so many foreigners on campus. They talked about Korean society opening up to the world and the inevitability of internationalization in higher education. Most presented these experiences as positive. However, they also described feeling unprepared by the university to study with international students and faculty members. As one student described: “Rather than lots of separated efforts, there needs to be a little bit more of an overarching program (Korean Student A).”

Not all students saw internationalization in a positive light. For instance: “First we need to get our own stuff right, then we can think about internationalization. I mentioned it before, but there are departments that need internationalization, but also other more important departments related to Korean matters (Korean Student D).”

The interviews revealed indications of some discomfort, desire for support, and concerns over internationalization, particularly the worry that local programs suffer as a result of internationalization.

***Administrative Staff***

Interviewees focused on the need for internationalization at the university, cultural differences and conflict, resistance to change, and the lack of resources to provide adequate support. Interviewees described internationalization from two perspectives. The first, more positive view, framed internationalization as an opportunity for the institution to expand and gain recognition by leveraging international resources. The second view presented internationalization as a last resort to ensure survival in an increasingly hostile landscape for private HEIs. As one interviewee described: “It’s very fierce…um… now we can feel…fear for our survival…that feeling has gotten very strong” (Administrative Staff Member C).

Administrative staff described internal conflict in the organizational culture in resistance to change. Universally, the administrative staff expressed frustration with foreign professors and students as not understanding Korean culture and insistent upon following the practices of their home culture. Many administrators expressed the view that foreign faculty need to learn Korean language and culture. However, others also expressed frustration over the stagnant culture that resists innovation among Korean faculty and administrative staff. In contrast to her own (and others') expressed the desire for international faculty to learn Korean language and culture, one administrative staff member stated: "... I think foreign faculty members have the biggest role to play in internationalization. Unfortunately, instead of bringing their global standard, um, uh…I think that foreign faculty members are becoming really Koreanized (Administrative Staff Member B)".

So while some expressed frustration over international faculty members' inability to adapt to the local organizational culture in administrative matters, others expressed concern over international faculty members' perceived adoption of Korean practices.

Administrative staff also expressed concern over the lack of resources to provide adequate support for internationalization. Interviewees mentioned overload in routine work that prevented them from focusing on matters they considered to be more important. One staff member pointed out that only seven staff were responsible for all international affairs and expressed concern over the lack of planning. Another interviewee linked these problems back to the instrumental view of internationalization, stating:

> First, we just hired a lot of them [international faculty] to improve our score in internationalization [in government assessments]. Now the headcount, the headcount is high and our score is high so our ability to compete for public funds got easier. So that's how we did it, but now we need to just figure everything out. (Administrative Staff Member A)

***International Faculty***

Interviews focused on a sense of isolation, concerns about the opposition, and a desire for greater support. International faculty members talked about the culture of the university and their struggle to find a place. As one described:

> With my background and my genuine desire to be involved in [the university's] life, I have the feeling of, this kind of, this missing connection, the, uh, missing part of some mechanism that should work, as a team, but in fact, it fails every time there's an attempt to unite the different parts… (International Faculty Member B)

Responses implied anxiety over opposition and a sense that internationalization was not a priority for all faculty and staff. One respondent described his understanding of the cause of this opposition among Korean colleagues:

> Departments usually have quite a bit of administrative work, especially for younger professors. And they need to kind of spread that around. And when you hire international faculty members who don't speak Korean and aren't familiar with the organizational culture at the university, you create a situation where…you have fewer bodies [laughter] basically, to spread the administrative work around. (International Faculty Member C)

International faculty argued that specialized English-language support integrated into the curriculum would be necessary for Korean students and more English-language support would be needed for some faculty members and staff. Many mentioned that international faculty members need access to resources that could help with intercultural understanding when dealing with Korean constituents of the university. Lastly, some of the interviewees expressed concern over the inconsistent ability level among students from different departments or programs.

***International Students***

These interviews varied more in the experiences described when compared with other stakeholder groups. While international students tended to mention similar positive and negative experiences, the intensity of the experiences varied. They talked about a culture in conflict with their daily lives, imperfect support systems, the role of faculty, and disappointment with the curriculum.

International students frequently mentioned their concerns over practical matters such as the availability of foods for their dietary restrictions, cleanliness, curfew policy, and climate control. They also all mentioned their struggle to break into mainstream student life beyond the international student subculture. As one interviewee lamented: "... there are student clubs that just say no to the foreign students. [...] they just say things like 'We don't take foreigners.' Are you kidding me?" (International Student C). The international students had varying experiences of support. All expressed thankfulness for a genuine desire to help among others, but some felt the system completely left them to fend for themselves. All interviewees expressed hope for more comprehensive, systematic support for international students adjusting to campus life in the future.

International students also had different views on faculty support provided to them. They suggest that individual faculty members respond differently to the presence of international students and the students' experiences vary as a result. International students' cultural backgrounds seem to set different expectations for faculty behavior. For some students, they saw both Korean and international faculty members as very helpful, while others lamented one or both groups as being unavailable.

Students who mentioned the curriculum pointed out concerns over the classroom experience. As one international student described having heard from his peers:

> The other things that students said, complained about, were just like what am I learning in this class? What am I learning? Not so much in due to part because of the English skills of our Korean classmates were not up to par, but mostly because they're just exhausted. They're falling asleep in their chairs and the professor is ruling with an iron fist. (International Student B)

This unfavorable view of the classroom experience was not shared by all international students, but the expectations of some left them disappointed with their time in some classrooms at the Korean university.

## Discussion

This mixed method study sought to determine barriers to internationalization in Korean higher education. Quantitative findings indicate that: (1) all stakeholder groups share a similarly high perceived importance for internationalization at the HEI, (2) internationals perceived internationalization to be of a statistically significantly lower quality than Koreans, and (3) faculty members perceived internationalization to be of a statistically significantly lower quality than both students and administrative staff. Qualitative findings revealed these differences in perceived quality are rooted in varying conceptualizations of internationalization among individuals and stakeholder groups. Further, the qualitative analysis found resentment, confusion, miscommunication, a low degree of commitment, and a lack of consensus as barriers to internationalization.

In questionnaire and interview comments, internationals expressed desire for programs that would support internationals and facilitate change in the organizational culture. Their Korean counterparts, meanwhile, described internationalization as inescapable, and not necessarily positive. Many Korean stakeholders mentioned their satisfaction with the high numbers of international faculty and students on campus, but also a sense of discomfort and confusion. Differences persist over how much and what kind of change should be expected of local Korean and international stakeholders. Many Korean stakeholders expressed the desire for further assimilation of internationals into Korean culture, while internationals expressed a desire for intercultural competence among their Korean counterparts. Without any clear means by which to reconcile these conflicting visions, the process of internationalization seems to have stagnated.

In this state, the view of the majority holds sway. The status quo appears to be an unspoken expectation for assimilation by most, but not all, of Korean stakeholders. In the quantitative findings, Korean stakeholders saw internationalization as being of higher quality, given the growing numbers of internationals on campus as an important first step in accessing global resources. Meanwhile, international stakeholders perceived internationalization to be of a lower quality due to the lack of cultural change at their host institution. Diversity of views exists on either side. In fact, some staff expressed concern over the pressure for assimilation placed on international faculty members. They

described this assimilation as subverting internationalization efforts. Without a clear plan, the local culture continues to dominate organizational life. To achieve progress, the university must more clearly define its vision and build consensus over that vision among the stakeholder groups.

This finding dovetails with the results of prior research on internationalization in Korean higher education. Schenck et al. (2013) found that Confucian cultural background played an important part in the ability of internationals to adjust to Korean higher education. Internationals from other Confucian heritage cultural backgrounds adjusted more easily to Korean higher education. Further, Jon (2012) documented power imbalances on campus that favor the norms and values of the Korean culture. Kim (2016) described how this disempowerment could lead to a flight risk, focusing particularly on Western faculty, though her findings may also have implications for faculty from other cultural backgrounds as well as international students.

The qualitative results indicate that stakeholders of different statuses expressed different conceptualizations of internationalization. Faculty tended to hold the broadest understanding, incorporating organizational culture, curriculum, the role of faculty, language, institutional networking, administrative support, and improved quality. Meanwhile, students and administrative staff tended to express a narrower understanding of internationalization. Students focused on English language and student support issues. Administrative staff saw internationalization as simply the increased the presence of internationals on campus, and their comments suggested varying degrees of opposition and surprise over requests for changes to the organizational culture beyond basic language support. Internationalization held different meanings for administrators, faculty, and students.

The broader and more comprehensive understanding of internationalization expressed by many faculty members may explain their significantly lower perception of the quality of internationalization when compared to perceptions of students and administrative staff in the quantitative analysis. Faculty link the process of internationalization to holistic change across the organization. Regardless of cultural background, they anticipated a deeper, almost transformative

process that extends beyond providing higher education to international students and hosting professors from outside of Korea. Building upon this view may aid efforts to find a way forward for internationalization.

All groups expressed concern over the lack of support and guidance. Respondents pointed out this shortfall and described how it contributed to a sense of uncertainty, helplessness, or even anger. While respondents' expectations deviated, all groups expressed the desire for greater direction. This result illustrates issues stemming from policy focus on quantitative indicators (Byun & Kim, 2011; Cho & Palmer, 2013) and a broader need for greater support (Van Mol, 2019). Given the uncertainty over the government's long-term commitment to rewarding internationalization at higher education institutions, together with the underlying economic rationale for pursuing internationalization, the issue of organizational commitment remains an important concern. Further progress for hinges upon the clear commitment of not just physical, but also political capital. HEIs must strive to establish a shared vision that allows individuals, regardless of background or status, to understand their role within the internationalization needs of their institution.

**Limitations**

The study was limited by self-selection bias and a low response rate. Those participants that chose to give interviews or respond to the questionnaire may have been prompted to do so due to particular experiences or circumstances that conceal other understandings of internationalization. Further, the study only drew on the experience of the stakeholders at a single HEI in Korea, potentially amplifying or obscuring issues related to the specific context of that HEI. Further work would be needed to determine to what extent the findings of this study can be generalized to internationalization efforts more broadly.

**Conclusion**

Successful internationalization requires the interaction and renegotiation of academic cultures and practices at both the individual- and HEI-level (Otten, 2009). For internationalization to

succeed, HEIs need to allow for the renegotiation of expectations for the organization and the roles of their constituent individuals.

Without a change in approach, internationalization efforts at Korean institutions of higher education will likely stall. While the presence of internationals on campus is an important first step, further work is needed to integrate these newcomers into university life and build consensus over a shared vision for internationalization in higher education. This need exists at HEIs around the world that are confronted with growing numbers of international students that have led to uncertainty and, in many cases, segregation of certain stakeholder groups.

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# International Students on U.S. College Campuses: Building Up or Tearing Down Cultural Walls?

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## Abstract

This study uses qualitative and quantitative methods to explore the intercultural sensitivity (IS) of international students at an American university—specifically, whether international students' IS improved over the course of a semester on campus. The findings indicate that the participants did not, on average, achieve progress in their levels of IS as measured by the Intercultural Development Inventory (IDI) during the semester they were surveyed. Per qualitative interviews, the students came to the U.S. full of curiosity, ready to explore the country and make friends. However, they were disappointed to find "intangible walls" separating them from their American classmates. The students felt isolated and disconnected from the domestic student body and described their struggle to connect with American students. Lacking opportunities to engage in deep personal conversations with peers from different backgrounds and cultures, the international students, on average, did not improve their levels of IS and described an unsatisfying experience studying on an American college campus.

*Keywords:* higher education, international students, intercultural sensitivity

## Introduction

In a post-truth world that has witnessed a remarkable increase in hate speech, racial discrimination, political polarization, and intolerance of cultural and human differences, there is an urgent need to improve students' abilities to reconcile such differences. One of the efforts made by universities to fulfill this need is the internationalization of students' higher education experiences

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by encouraging American students to study abroad and recruiting international students to study at U.S. universities (Bloom & Miranda, 2015). This project adds to the discussion of interculturalism by investigating this construct from the perspective of international, degree-seeking students who are in the US temporarily for the purpose of earning a college degree. *How do these students experience their study in American colleges and universities? Do they experience an increase in IS during their time in the United States?* This study addresses the question of whether international students studying at a university in the northeast United States increased their levels of IS as a result of their experience on an American campus.

## Literature Review

### International Students in the United States

Colleges and universities have been forced to adapt to a new financial reality as a result of neoliberal economic policies (i.e. the focus on capitalism, the spread and expansion of markets, less regulation, and greater corporate autonomy) sweeping the globe over the past 30 years and associated decreases in federal funding for higher education (Altbach, 2013). As universities have been forced to re-think how they operate and consider alternative sources of funding, one such adaptation has made internationalization a strategic priority. Traditional internationalization includes activities such as study abroad programs for domestic students, faculty and scholar exchange programs, recruiting international students, the establishment of area studies programs, curricular enrichment and improving foreign language programs (Altbach & Knight, 2007). International student recruitment has subsequently become a major aspect of many universities today, and these efforts have been fruitful. According to 2019 data from the International Institute of Education's annual Open Doors report, the number of international students studying at American colleges and universities reached the highest it has ever been in the 2018-19 academic year—over one million for the fourth year in a row (IIE, 2019). Yet, as international students flood U.S. campuses, universities are finding that many struggle with the transition into a different educational system (Andrade & Evans, 2015), faculty are often unclear about their roles and

responsibilities regarding this new population (Zamel, 2004; Starfield, 2014), and domestic students are not always welcoming (Gareis, 2012; Marginson & Sawir, 2011).

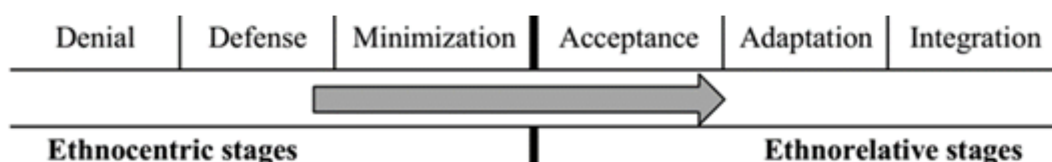
**Intercultural Sensitivity**

The challenge with the construct of intercultural sensitivity is that there are many different definitions and terms that refer to the same concept. In order to obtain high construct validity for any study, it is advised to clearly define the construct at the beginning of the study and make sure that the measurement of the construct remains in line with its definition (Shadish et al., 2002). In this study, we use Hammer et al.'s (2003) definition of the construct because it is a measurable one. To explain, Hammer et. al developed a model and a measurement tool to assess IS as they define it. We believe that using a measurement tool that is based on this construct definition will lead to a higher degree of construct validity. Therefore, to conduct this study we use Hammer et al. definitions and the measurement tool that sprang from it. The authors use the term intercultural *competence* to refer to "the ability to think and act in interculturally appropriate ways," while intercultural *sensitivity* is "the ability to discriminate and experience relevant cultural differences" (Hammer et al., 2003, p. 422). Related to those definitions, a model was developed, the Developmental Model of Intercultural Sensitivity (DMIS), to elaborate on the stages of intercultural sensitivity as a personal growth process (Bennett, 1986, 2004; Bennett et al., 2004; Hammer et al., 2003).

The DMIS model is divided into two basic stages: Ethnocentrism and Ethnorelativism. Each of these stages has three phases. Figure 1 illustrates this model.

**Figure 1**

*Development Intercultural Sensitivity Model (Bennett, 2004, p. 63)*



Ethnocentrism is "the experience of one's own culture as 'central to reality'" (Bennett, 2004, p. 62). Ethnocentrism is the stage where people believe that the values, behaviors, and beliefs in their primary socialization are unquestioned; they are experienced as "just the way things are" (Bennett 2004, p. 62). Bennett divides this stage into three phases: denial, defense, and minimization. The main feature of the denial phase is that one tends to deny differences between his/her culture and different cultures. The defense phase includes a tendency of defensiveness, looking down at different cultures and denying other cultures' rights of being different. Defense is a tendency in which one believes that all other cultures should follow his/her own culture and live their lives in the same way his/her own cultures does. The final phase of the ethnocentrism stage is minimization, which is characterized by the surface recognition of cultural differences and consideration of cultures as fundamentally similar (Bennett, 2004).

The second stage of the DMIS model, as the above figure shows, is ethnorelativism, which refers to "the experience of one's own beliefs and behaviors as just one organization of reality among many viable possibilities" (Bennett, 2004, p. 62). There are three phases in this stage as well: Acceptance, Adaptation, and Integration. The first phase, acceptance, is the tendency when one accepts the fact that people are different. In this phase, an individual's culture is recognized as one of many different cultures. The second phase is adaptation, as one takes an action based on his/her acceptance of cultural differences. In adaptation, one is able to show empathy to different cultures, and even in some cases behave according to another culture's criteria for appropriate behavior. Perhaps the most important feature of this phase is the actual practical behavior one takes toward another culture. The difference between acceptance and adaptation is that acceptance is simply recognizing and accepting the other, while adaption goes beyond basic acceptance. Adaptation is an actual behavior that is based on this acceptance. According to Bennett (2004), "people of both dominant and non-dominant groups are equally inclined to adapt their behavior to one another" (p. 71). Finally, integration is a phase in which one becomes so intercultural that they feel that they belong to more than one culture.

**International and Domestic Students' Intercultural Sensitivity as One Aim of Education**

According to the Delors Report, which was written for United Nations Educational, Scientific, and Cultural Organization (UNESCO) in 1996, there are four pillars of education: learning to know, learning to do, learning to live together, and learning to be. In his commentary of UNESCO's report, Byram (2008) indicates that "living together" is the most important pillar of the four "because it is the means of responding to the tensions of contemporary life, tensions between 'the global and the local,' 'the universal and the individual,' 'tradition and modernity'…" (pp. 109–110). Coulby (2006) argues that education that does not improve students' intercultural learning is, simply, not education. He states that "if education is not intercultural, it is probably not education, but rather the inculcation of nationalist or religious fundamentalism" (p. 246). In addition, in her profound analysis of modern education, Nussbaum (1998) states that "we may continue to produce narrow citizens who have difficulty understanding people different from themselves, whose imaginations rarely venture beyond their local setting" (p. 14). She adds that, despite the depressing status quo, American educators still have a chance to fix this problem. For Nussbaum, calling for more intercultural education is not just a matter of "political correctness," it is the "cultivation of humanity." Hence, we argue that improving intercultural learning is, and should be, one of the most important aims of education. Teaching diversity and dealing openly with different cultures becomes a demand no educator can ignore. In addition, some scholars argue that interculturalism is not just a simple goal; rather, it is described as a "noble and critical" aim of education. Hammer (2012) believes that "building positive relations among cultures, breaking down walls of prejudice and racism, and fostering international goodwill are noble—and critical—goals for universities and K–12 schools in the 21st century" (pp. 115-116). We believe that the existence of international students on U.S. college campuses is important for both American students and international students in order to achieve one of the most important aims of education—improving intercultural sensitivity. If both groups of students, American and international, find a proper environment that facilitates intercultural communication, positive interaction, productive conversation, and human

relationships, this may result in a remarkable increase in both groups' levels of mutual understanding, respect, and intercultural competence.

American universities should facilitate conversation between international students and domestic students. Huebner (1963) stresses the importance of conversation in education. For him, conversation means to be open to the other, to talk to the other, to listen to the other, to understand their background, and even to be willing to be influenced by the other. He distinguishes between conversation and communication: communication is simply the transferring and exchanging of information without taking any action based upon it. Huebner goes on to explain that conversation, meanwhile, "suggests that the recipient act on this information, or reshape it himself, and continue the dialogue at a new level" (Huebner, 1963, p. 78). In his paper, *Classroom Action* (Huebner, 1962), after highlighting the difference between conversation and talking, Huebner confirms the importance of being open to being influenced by the other during a conversation, and how this is vital for promoting coexistence with the other. Indeed, as Huebner (1963) states, "both the speaker and the listener must be disposed to speak, to listen, and to accept the responsibility and opportunity for change" (p. 78). This conversation is the way man can avoid situations of violence and conflict necessary to maintain a love of humanity. Furthermore, he argues that humanity is in real danger if conversation vanishes, as this leads to the absence of love and the promotion of hate and hateful behaviors, including ignoring, controlling, and violence. As evidence of the importance of this type of conversation, Bennett et al. (2013) conducted a case study that found when students "displayed evidence of listening attentively to one another, self-reflexive awareness of their own cultural group, and a keenness to interact with cultural others … positive relationships that provide students with intercultural learning, and academic, emotional, and behavioral support do occur" (pp. 547-548). However, several studies indicate that this is not always the case. For example, using interviews, Leong (2015) found that international students face considerable social and academic difficulties on American campuses, and that those social difficulties increase among Chinese students compared to international students from other

countries. Lee and Rice (2007), using interviews as well, found that international students struggle with unfairness and inhospitality. Yeh and Inose (2003), using a survey, found similarly to Leong (2015) that international students from Asia, Central/Latin America, and Africa face more acculturative stress than European international students. Our study adds to this conversation about international student experiences by combining qualitative data in the form of interviews with quantitative data from the Intercultural Development Inventory (IDI). In addition, our study focuses on intercultural learning as an expected outcome of the existence of international students on an American university campus.

In summary, we believe that international students on U.S. college campuses provide a wonderful opportunity for both American and international students to have a Huebnerian conversation—to influence others, to be influenced by others, to learn about each other, to acknowledge differences, and to learn how to reconcile and how to live with cultural differences in acceptance, respect, understanding, and peace.

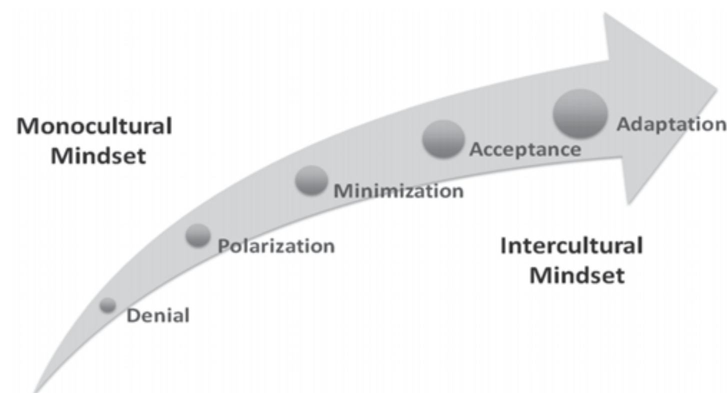
**Measurement of Intercultural Competence**

To measure students' intercultural sensitivity, we used the Intercultural Development Inventory (IDI). The IDI is an online 50-item questionnaire based on the Intercultural Development Continuum (IDC), which was adapted from the DMIS discussed above. We chose to use the IDI for two reasons: first, the IDI is a theory-based tool, influenced by Bennett's DMIS. The IDI defines intercultural sensitivity as DMIS defines it, which gives it a high level of construct and face validity. Second, the validity of the IDI has been proven through extensive psychometric testing (Fantin, 2009; Greenholtz, 2003; Hammer, 1999, 2014; Hammer et al., 2003). In his review of all instruments that measure IS, Fantin (2009) describes the IDI as "a statistically reliable and valid measure of intercultural sensitivity, translated into languages and applicable to people from various cultural backgrounds" (p. 471). Additionally, the IDI is described as "a sound instrument, a satisfactory way of measuring intercultural sensitivity as defined by Bennett" (Paige et al., 2003, p. 485). The IDI has five phases of IS derived from the DMIS: Denial, Polarization, Minimization, Acceptance, and

Adaptation (see Figure 2). The IDI is a proprietary instrument, and its 50 questions are not viewable by those who are not licensed to use it. Therefore, we are, unfortunately, not able to disclose the contents of the IDI in this paper.

**Figure 2**

Intercultural Development Inventory Continuum (Hammer & Bennett, 2009, p. 119)




**Methodology**

Our research efforts represent a mixed methods project. Specifically, this study poses the following research questions focusing on international students studying at an American university in the northeast United States: 1) What are the levels of intercultural sensitivity among international students at an American university at the beginning of the semester, and, on average, does intercultural sensitivity of those students improve over the course of one semester of study? 2) What experience(s) do international students have that may increase intercultural sensitivity? 3) How does the university encourage international students to engage with the greater campus community, and do such interactions impact levels of intercultural sensitivity?

To answer the first question, which investigates the change in international students' levels of IS over a semester of study on an American college campus, the IDI was administered twice- once at the beginning of the fall semester, and again at the semester's end to beginner level world language classes with both international and domestic students. The time frame of the study was one semester, which was a purposeful decision for many reasons. First, the original data from which this study's data was extracted was collected to examine the influence of world language classes on

college students' intercultural sensitivity as explained in more details in the Participants section below. Second, the semester that students were asked to complete the IDI was the students' first semester studying a world language rather than English. Third, in a study conducted by Rienties et al. (2013), international and domestic students were able to form friendships in an 11-week course of study, which is less than a traditional 16-week college semester; therefore, collecting data over the course of a single semester was deemed sufficient for the purpose of our research.

Furthermore, to develop a better understanding of students' individual IDI score changes, each student was invited to attend personal interviews to discuss their IDI scores and their experiences as international students. In addition, an employee from the university's international students resource center was interviewed to explore the college's efforts to help international students engage with the campus community; we utilize this interview to answer the third research question. The interviews conducted to supplement our research are presented in this paper through a discussion of the most important themes that emerged throughout.

**Participants**

The study took place at a large, public university in the northeast region of the United States. The international student population at this university is small, representing only 3.0% of total student enrollment at the time of the study. Most students that attend this university are white American students (83.9%).

The IDI was administered to a group of 110 students in five different world language classes at the beginning and end of fall semester 2017; the data collected was for a separate study assessing the link between world language coursework and levels of intercultural sensitivity among American college students. While reviewing the results of the 110 willing participants, it was discovered that 13 individuals were actually undergraduate international students; thus, their IDI results were excluded from the original study. We chose to utilize the data collected from the 13 international students' IDI pretest/posttest participation in order to develop the study described in this paper, which focuses on levels of IS specifically among international students.

The 13 international student participants include seven students from China, as well as two from South Korea and one each from Vietnam, Turkey, Taiwan, and Hong Kong. None of the participants were raised in a house where English was spoken. Seven students were male and six were female. Table 1 presents the students' distribution in terms of class standing.

**Table 1**

*Students' Distribution in terms of Their Class Standing*

| Class | # of students | % of participants |
|---|---|---|
| Senior | 2 | 15.38% |
| Junior | 5 | 38.46% |
| Sophomore | 4 | 30.77% |
| Freshman | 2 | 15.38% |

**IDI Coding**

According to the IDI, each phase of the intercultural development model begins and ends with a certain score: Denial ranges from 55 to 66.99, Polarization is between 70 and 84.99, Minimization is from 85 to 114.99, and any score above 115 is in the Ethnorelative stage. Table 2 illustrates where each score belongs on the IDI and on the DMIS.

**Table 2**

*IDI Subcategories Scores*

| | Ethnocentric Stage | | | Ethnorelative Stage | | |
|---|---|---|---|---|---|---|
| DMIS | Denial | Defense | Minimization | Acceptance | Adaptation | Integration |
| IDI | Denial | Polarization (Defense/ Reversal) | Minimization | Acceptance | Adaptation | Not Measured |
| Score Range | 55 to 69.99 | 70 to 84.99 | 85 to 114.99 | 115 to 129.99 | 130 to 145 | |

**Results**

The first question this paper seeks to answer is: What are the levels of intercultural sensitivity among international students, who also study a world language course, at an American university at the beginning of the semester, and, on average, does intercultural sensitivity improve over the course

of one semester of study? To answer this question, IDI pretest scores were compared to IDI posttest scores using t-test and Cohen's D.

**Pretest Data**

**Table 3**

*IDI Pretest Data*

| | # of students | % of participants | Mean Score | Score SD | Minimum Score | Maximum Score | Range |
|---|---|---|---|---|---|---|---|
| Denial | 2 | 15.4 | 66.58 | 3.23 | 64.29 | 68.87 | 4.58 |
| Polarization | 4 | 30.8 | 76.52 | 4.21 | 73.13 | 82.45 | 9.32 |
| Minimization | 5 | 38.5 | 92.85 | 8.05 | 85.43 | 105.65 | 20.22 |
| Acceptance | 2 | 15.4 | 116.18 | 0.44 | 115.87 | 116.50 | .63 |
| Adaptation | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| All stages | 13 | 100 | 87.37 | 17.00 | 64.29 | 116.50 | 52.21 |

**Figure 3**

*IDI Pretest Average Score for the Whole Group*

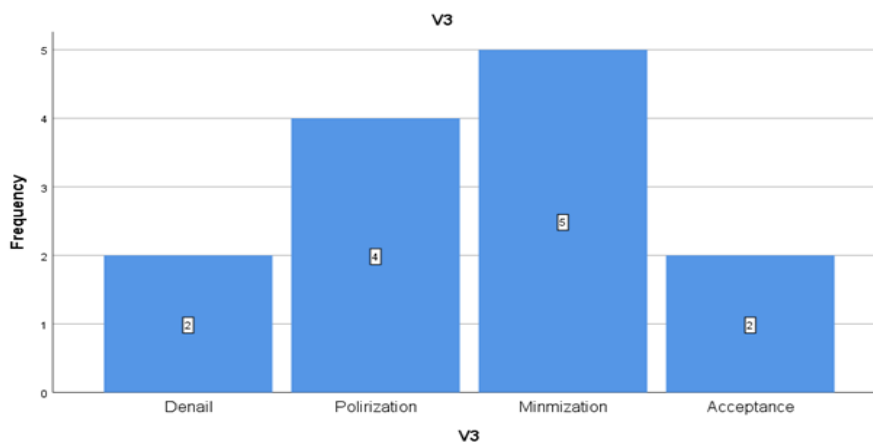
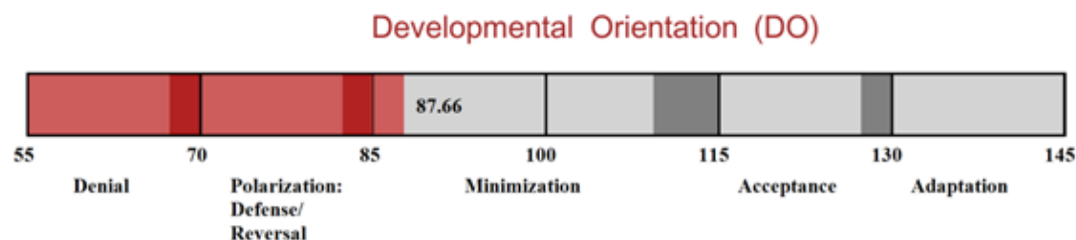


**Figure 4**

*Students' Distribution on the IDI Phrases in the Pretest*




As Figures 3/4 and Table 3 show, the average IDI pretest score was 87.73, which indicates that the group's primary orientation toward cultural differences at the beginning of the fall semester was within the Minimization phase, "reflecting a tendency to highlight commonalities across cultures that can mask important cultural differences in values, perceptions and behaviors" (Hammer, 2011, p. 475). Looking more closely at the group's data, only 15% (2 out of the 13 students) were in the Acceptance phase. Additionally, two students were in the Denial phase, six students were in the Polarization phase, and five students were in the Minimization phase.

**Posttest Data**

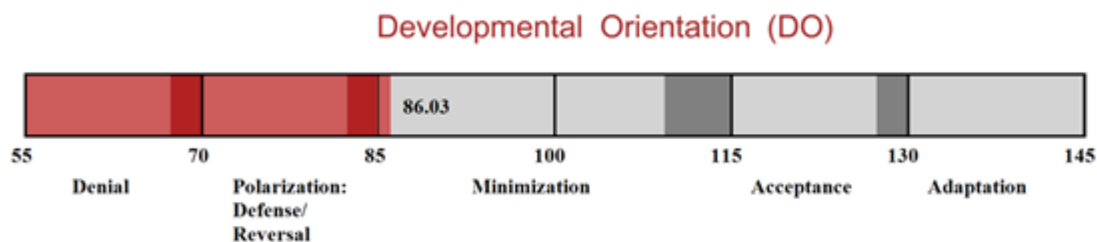
**Table 4**

*Posttest IDI Data*

| | # of students | % of participants | Mean Score | Score SD | Minimum Score | Maximum Score | Range |
|---|---|---|---|---|---|---|---|
| Denial | 4 | 30.8 | 63.73 | 4.84 | 58.67 | 68.34 | 9.67 |
| Polarization | 3 | 23.1 | 73.77 | 0.67 | 73.14 | 74.48 | 1.34 |
| Minimization | 4 | 30.8 | 96.86 | 9.44 | 89.21 | 109.97 | 20.76 |
| Acceptance | 1 | 7.7 | 124.24 | - | - | - | - |
| Adaptation | 1 | 7.7 | 130.41 | - | - | - | - |
| All stages | 13 | 100 | 86.03 | 23.58 | 130.41 | 58.67 | 71.74 |

**Figure 5**

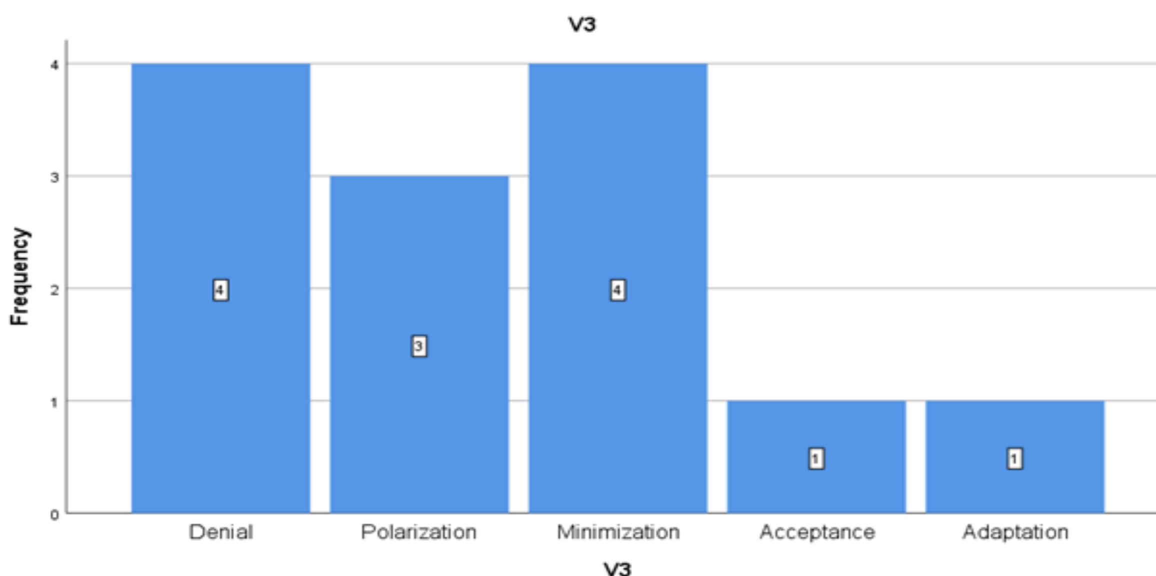
*IDI Posttest Average Score for the Whole Group*




As Figures 5/6 and Table 4 summarize, the average posttest IDI score was 86.03, which locates the group, on average, in the Minimization phase. In the posttest, only one student was in the Adaptation phase, one student was in the Acceptance phase, four were in the Minimization phase, three were in the Polarization phase, and four students were in the Denial phase.

**Figure 6**

*Students' Contribution on the IDI Phrases for the Posttest*




**Pretest vs Posttest: Addressing the First Research Question**

The first research question aims to investigate the levels of intercultural sensitivity of international students who study at an American university at the beginning of an academic semester, and whether IS improves over the course of a semester of study that includes a world language class. Therefore, a paired-samples t-test was conducted to compare pretest to posttest IDI average scores. There is no significant difference in the scores for pretest (M=87.37, SD=17.00) and

posttest (M=86.02, SD=23.58) scores; t (12) =- 423, p = .680. Further, Cohen's effect size value (d = -0.11) suggests low practical significance. These results suggest that students' IDI scores, on average, did not develop throughout the semester. Spending a semester on a U.S. college campus did not help international students to develop their intercultural sensitivity as measured by the IDI—even though their semester included a world language course, which could have also encouraged IS development through world language curriculum. In addition, Table 5 and Figures 7/8 summarize the differences on an individual level.

**Table 5**

*Students' Scores on the IDI Pretest and Posttest and the Difference between the Two Tests*

| Students | Pretest | Posttest | Differences |
|---|---|---|---|
| Student #1 | 116.5 | 130.41 | 13.91 |
| Student #2 | 115.87 | 124.24 | 8.37 |
| Student #3 | 73.13 | 74.48 | 1.35 |
| Student #4 | 73.96 | 73.14 | -0.82 |
| Student #5 | 82.45 | 90.79 | 8.34 |
| Student #6 | 64.29 | 68.34 | 4.05 |
| Student #7 | 86.51 | 97.5 | 10.99 |
| Student #8 | 93.58 | 89.21 | -4.37 |
| Student #9 | 93.08 | 73.7 | -19.38 |
| Student #10 | 68.87 | 60.54 | -8.33 |
| Student #11 | 76.55 | 58.67 | -17.88 |
| Student #12 | 105.65 | 109.97 | 4.32 |
| Student #13 | 85.43 | 67.39 | -18.04 |

**Figure 7**

*Protest VS Posttest for Each Student*

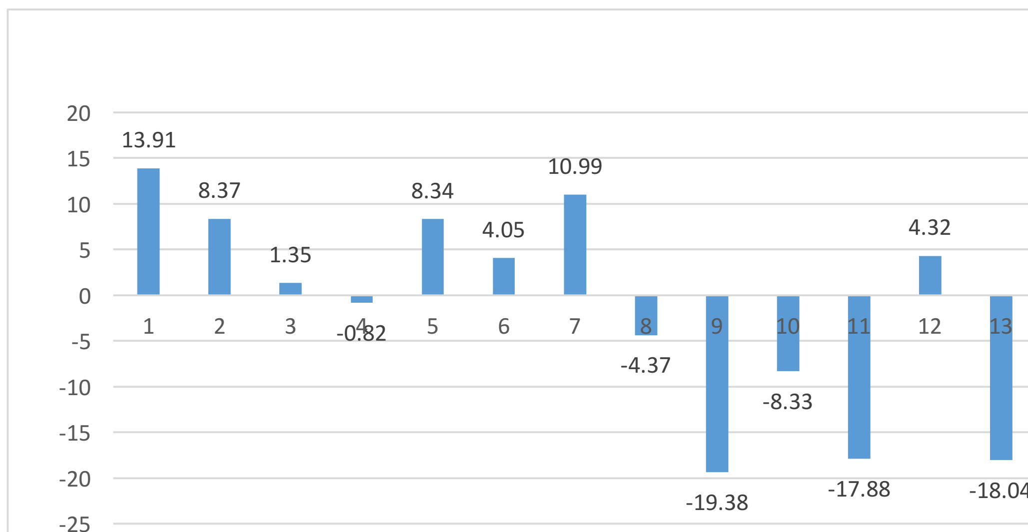
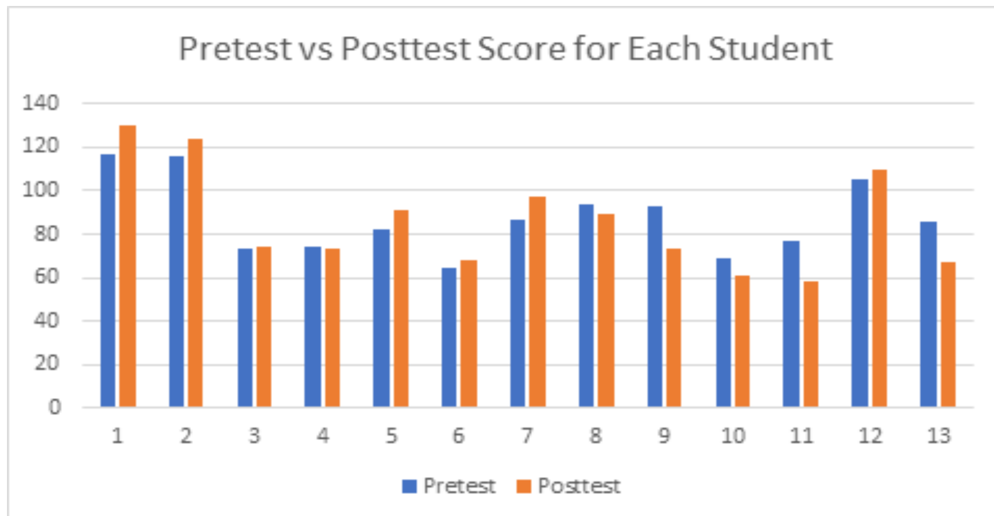



**Figure 8**

*Differences between Pretest and Posttest for Each Students (Each Bar Represents a Student)*




As Table 5 and Figures 7/8 show, there is wide variety among the student participants in terms of their IDI scores and score changes. For example, whereas student #1 increased their IDI score by 13.91 (from 116.50 to 130.41; both scores are in the Acceptance phase), student #9 experienced a score decrease of 19.38 (from 93.08 to 73.70; shift from the Minimization phase to the Polarization phase). To understand why this occurred, we conducted a qualitative analysis of the data through participant interviews, which we present in the following section.

**Qualitative Analysis**

To understand the variability in IDI scores, the 13 international student participants were invited to be interviewed; unfortunately, only six responded to interview requests. Figure 7 above shows the IDI scores of the 13 students. The first six data points in Figure 7 represent the six students who subsequently responded to interview requests; the other seven data points (7-13) represent the students who did not respond to the interview request. The interviews that were conducted were transcribed, coded, and divided by theme, which we have chosen to highlight and discuss in the following section. We use these interviews to answer the second question of this paper, which explores international students' experiences at the university, and if such experiences can be used to explain the change, if any occurred, in the students' levels of IS.

## Discussion of Themes

**Curiosity and Awe**

The desire to explore and engage with American society—in particular American students and the campus of their university—was a common theme among the international students that were interviewed. Curiosity about different people and cultures was a significant motive that drove students to leave their home countries and travel to the United States. For example, Student #4 mentioned that the reason she chose to study in the U.S. was because she saw it as a cultural "melting pot" in which she expected to interact with other people. She was very excited and proud to share a story about communicating with an Uber driver in Spanish; "I talked to him like, 'oh my god, I'm taking … Spanish class … can you talk with me with Spanish?" Curiosity about snow and living in a colder climate was a motive for Student #3 to choose to study at a northeastern university in the United States.

**Segregation and Disappointment**

As mentioned above, many international students came to the U.S. full of wonder and awe about the new society they were going to live in. However, the students interviewed expressed a great deal of disappointment when they found themselves segregated and unable to fulfill their

dreams of exploring due to unexpected “intangible walls.” Student #1 stated that he “[felt] like there is an intangible wall between domestic students and international students.” He indicated that students tended to form groups that included students like themselves. When he was asked to talk more about the notion of an intangible wall, he replied “intangible walls … so they [students] don’t have any … commonplace or square … to have a conversation … or share their thoughts or just simple greetings.”

The concept of segregation was one of the most common themes that appeared in the interviews. Many of the students expressed frustration at not being in classes with American students when they first arrived, and how this led to disappointment and feelings of separation from American students. Five of the six students interviewed gained admission to the university through its pathway-to-college program. The pathway-to-college program is an increasingly common way for international students who lack sufficient proficiency in English to gain college admission in the United States. Students are conditionally admitted to the university and are enrolled in English as a Second Language (ESL) courses to develop their English skills before they matriculate. Most students take English classes for one to two years before they matriculate into their academic programs.

China sends the most students to the US to study, accounting for more than one-third of all international college students in the country (IIE, 2016). The proportion of Chinese to other international students at this university at the time of this study reflects this. Among all international undergraduate students at the university in Fall 2017, 255 or 35% were from China. As a result, many international students in the pathway program often spend the first one to two years in classes with several other students from their same home country, all of whom speak the same first language. This structure prevents them from engaging with local students and the greater campus community until they complete the pathway program and are fully matriculated.

The students in this study indicated that after spending one to two years in a pathway program, in classes with other international students instead of primarily domestic students, that they lost some of their curiosity and awe of exploring the domestic culture, and a fear of interacting

with American students when they finally matriculated into mainstream classes. Student #2, for example, mentioned that she felt nervous and uncomfortable talking to American students because she was self-conscious about her English skills.

What makes this experience worse is that domestic students, who make up most of the campus population, make little effort to communicate with international students, according to the participants of this study. The international students interviewed indicated that domestic students did not participate in campus cultural events organized by the international students resource center.

While the students in this study all expressed interest in meeting new people and talking to American students, even the most outgoing international student can struggle to make friends at an American university, as local students are often less interested in forming those connections (Marginson & Sawir, 2011). In fact, after studying at an American university for four years, more than one-third of international students reported having no close American friends (Gareis, 2012). Reasons for this inability to connect include language and cultural barriers, as well as stereotyping and discrimination. This greatly decreases the level of engagement with the culture that international students so eagerly wanted to explore, which can, in turn, influence students' intercultural sensitivity.

**Absence of Reflections, Critical Thinking, and Huebnerian Conversation in Coursework**

One of the interview questions asked participants about the amount of reflection on cultural differences required from students in their world language classes. Only one student reported that she was assigned once to reflect on the differences between housing in her home culture and housing in the United States.

Bennett (1993) highlights the importance of reflection, critical analysis, and comparison activities in order to promote students' intercultural sensitivity. Therefore, we find that the absence of reflections in the classes the students attended is worth noting, as it might be related to their lack of progress in IS scores as measured by the IDI.

In addition, as mentioned in the literature review, what we call Huebnerian conversation is completely missed in these classes. International students in this study indicated that they did not have a chance to have deeply personal human conversations with their classmates— not in the normal sense of the word, nor in the Huebnerian sense. For instance, Student #1, in his explanation of cultural walls said, "they [students] don't have any … commonplace or square … to have a *conversation* … or share their thoughts or just simple greetings." The same theme appeared in other students' descriptions of their experiences on campus, as mentioned in the ethnographic reviews of their interviews. One student specifically talked about in-class activities not leading to deep connections, only superficial relationships. The absence of the Huebnerian conversation might be the reason many students in this study indicated a sense of loneliness, as "it is through conversation among children that the individual child learns that aloneness is not the same as loneliness" (Huebner, 1962, p. 68).

**How Does the University Encourage Students to Engage with the Campus Community?**

Students generally felt that the campus events and activities organized by the international student resource center were helpful but not enough to help them interact with others, especially American students. Participants reported being disappointed to not see more domestic students at various events. They also talked about not hearing about events sponsored by the international student resource center once they left the pathway program, resulting in a disconnect between their experience in the pathway program and their place in the larger university.

However, some students discussed the international student resource center as if it was the only place responsible for helping them to interact with domestic students and to produce a proper form of intercultural communication. Following Bennet et al. (2013) and Huebner (1963), helping international students to communicate and navigate within the host culture, as well as to develop their intercultural competencies, is not only the responsibility of an international student office, such as the resource center on this campus, rather, it is the responsibility of every single course students take at the university. All courses should be designed in a way that improves students'

intercultural sensitivity. As Coulby (2006) argues, "it [interculturalism] is as important in medicine as in civics, in mathematics as in language teaching" (p. 246).

An employee of the international student resource center was interviewed about their goals, the issues they see with students, and the university's capacity to support international students. The employee indicated that before the university introduced the pathway-to-college program, 75% of the international population was composed of graduate students from many different countries. But, in 2011, after the pathway program was established, the percentage changed dramatically, as did the makeup of the international student body population.

With many responsibilities and a limited staff, the international student resource center tries to focus on the most serious cases of academic, social, and even legal challenges faced by international students. They are keenly tuned in to which students consistently "don't show up." Once those students are identified, the staff initiates contact and ensures that students receive the support they need. In this way, the international student resource center performs a critical service.

**Limitations of this Exploratory Study**

The first languages of student participants in this study were not English. Although the IDI comes with many translations, all students preferred to take the IDI in English. In addition, the interviews with each student participant were conducted in English. This could have affected the students' responses and limited their ability to reflect on their cultural experiences. It is unfortunate that we could not conduct the interviews in the students' first languages, but neither researcher spoke the languages that would have been required.

The most significant limitation of this study is the small sample size. While we accepted participants from five world language classes, comprised of more than 130 students, we found only 13 international students who were willing to participate in the research. The small size may affect the statistical results of the t-test to compare the pretest and posttest scores; for this reason, we tracked each student individually and added qualitative aspects to the study. Furthermore, although we invited all 13 student participants to be interviewed, only six responded to such requests. We

believe the argument this paper tries to make would have been stronger if all 13 students were interviewed.

**Conclusion**

The first question of this paper addressed the levels of international students' intercultural sensitivity and the progress they achieved in this regard throughout a semester of study at an American university, where the majority of students are white American undergraduates. On average, the group of international students in this study did not achieve significant progress in their IS mean scores as measured by the IDI. In fact, the participants' mean scores regressed from pretest to posttest, although not significantly—in spite of the fact that the students are also studying a world language class with American students. As the mean may mask the change in individual scores, we tracked each student individually (see Figure 8). We were planning to interview every student regarding their experiences on campus; however, only six responded to interview requests (Students #1-6 in Figures 7 and 8; Table 4). Based on their interviews, they accounted for quantitative data by describing different forms of isolation and segregation, the structure of the pathway-to-college program, the absence of what we call Huebnerian conversation, and the lack of opportunities to engage with domestic students on campus in and out of the classroom. It is unfortunate that the other students, whose scores dramatically decreased (Students #7-13 in Figures 7 and 8; Table 5), did not respond to interview requests. Interviewing these students might have been revealing, and potentially would have offered an explanation as to why the mean IDI score of the sample decreased.

The aim of the interviews was to explore the experiences that international students had on campus and to learn if these experiences could explain changes in IDI scores. We found that the six students interviewed suffered from different levels of segregation and isolation on campus. They all seemed, however, to suffer from "intangible walls" that separated them from domestic students. They failed to develop meaningful intercultural relationships with domestic students. The reasons for such segregation were:

1) International students in the pathway-to-college program, which included most students in this study, began their university program in classes with only other international students for a year or more before joining mainstream university classes, thereby limiting their interaction with American students. After spending a year or two in these classes, separated from domestic students, they seemed to lose the excitement and curiosity that made them want to travel abroad to study in the first place.

2) The course work, even in foreign language classes, was not targeting a development of intercultural sensitivity. This problem does not only face international students, but all students at colleges and universities. In times of political polarization, growing nationalization, racial tension, wars, violence, and terrorism, there is a desperate need for education that promotes interculturalism, as education can produce individuals who are able to accept, tolerate, and love those who are different. As mentioned earlier, we agree that all subjects and courses can play this role, from natural science to the liberal arts courses.

3) The domestic students were not encouraged to participate in tearing down the perceived "intangible walls." International students in this study mentioned that domestic students rarely showed up at events organized by the international student resource center. We think it would be helpful if domestic students were encouraged by their professors to attend and reflect on these events. Professors can come up with various assignments that promote American students to interact with international students, which might help in tearing down cultural walls.

The third question of this study was: How does the university encourage international students to engage with the campus community? To answer this question, a member of the international student resource center was interviewed in order to compare their perception with the international students' perceptions about the university's efforts to encourage engagement with the campus community.

In general, the students did not perceive any cohesion between their experiences in the pathway-to-college program and mainstream university classes. Many students mentioned that they

did not know about events sponsored by the international student resource center after they left the pathway program. They explained that they used to hear about events when they were in the pathway English classes through their teachers' announcements, but once they moved to freshmen level coursework, their professors no longer announced such events. This indicates a lack of coordination between the pathway program and the university, ultimately resulting in a disconnected and deflating experience for the students.

To summarize, the group of international students in this study did not achieve progress, on average, in their levels of intercultural sensitivity as measured by the IDI. They came to the U.S. full of curiosity and excitement about exploring a new culture and making new friends. However, they were disappointed when they found “intangible walls” separating them from their American classmates. Five out of the six student participants interviewed were brought to the university through the pathway-to-college program. According to those five students, the program left them feeling isolated, learning English in a classroom together, yet separate from the rest of the university. While the international student resource center works to serve those students struggling the most with issues like isolation, it cannot also engage domestic students, which is what the students in this study longed for the most—American friends. The university programs and events did not provide an adequate environment that facilitated and promoted having deeply personal conversations, or what we call a Huebnerian conversation, with those who are different or belonging to a different culture, leading to an unsatisfying study abroad experience for many.

**Recommendations**

As we found that students mentioned the pathway-to-college program in their interviews as a possible factor that influenced their experience on campus and enforced their segregation, we suggest further research on the influence of such programs on students' engagement and intercultural sensitivity. We also suggest improving the collaboration and connection between the pathway-to-college program and university faculty, which would help raise awareness of the international students who will be entering their classrooms. This would also involve encouraging

domestic students to connect with international students for the benefit of all. Moreover, further research is needed on the influence of pathway programs operating on college campuses nationwide, the impact of segregating students in their first year, and how to integrate international students more effectively by engaging domestic students.

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# A Packaged Deal: Effective Support Systems for International Student Spouses

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**Abstract**

Global student mobility is growing in importance as students increasingly turn their interest worldwide. International student spouses and their personal experiences is an emerging problem of practice in higher education due to their connection to international student retention rates. In particular, what support systems are provided to this demographic is especially important. Interpretive Phenomenological Analysis (IPA) was used to examine international student spouses' perception of support services at an urban private institution of higher education in the United States. A qualitative approach addressed the following research question: What role do international student spouses perceive institutions of higher education have in terms of offering support services? This study focused on five international student spouses who came to the United States on F2 dependent visa status.

*Keywords:* international higher education, university support services, international student spouses

## Introduction

For the first time in decades, new international student enrollment in American institutions of higher education has decreased (Institute of International Education [IEE], 2018). In spite of this, the demographic still is considered an integral part of higher education systems (Bordoloi, 2015). While international students benefit greatly during their time abroad, not much has been understood about the same for spouses (Bordoloi, 2015; De Verthelyi, 1995) lending many of them to be considered the "invisible population" (Teshome & Osei-

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Kofi, 2012). IEE's "Open Doors" report (2018) does not mention international student spouses yet they have been found to be significant to higher education (Lin, 2018). With so little statistical information about this demographic, it is hard to determine what percentage of international students bring spouses with them in addition to knowing the exact number of these spouses. However, previous literature (Lei et al., 2015; Lin, 2018; Teshome & Osei, 2012) has shown the link between international student success and retention rates and the successful acculturation of international student spouses. Emotional support and encouragement were found by Lynch (2008) to be major factors in student success as many international students relied on emotional support from their spouses throughout their program. However, international student spouses often emphasized lack of institutional support systems (Campbell & Prins, 2016) and many found themselves oftentimes left alone for the majority of the day (Myers-Walls et al., 2011). Because of their direct link to international student retention (Martens & Grant, 2008), it is important to learn more about international student spouses as well as how institutions can better support them.

While the majority of research in regards to international student spouses have been focused on acculturation issues (Bordoloi, 2015; Campell & Prins, 2016; Chen, 2009; Cho et al., 2006; De Verthelyi, 1995; Kim, 2006; Kim, 2012; Lei et al., 2015; Lin, 2018; Marten & Grant, 2008; Myers-Walls et al., 2011; Teshome & Osei-Kofi, 2012; Zhang et al., 2011), none has focused specifically on support systems institutions could provide to this demographic. The purpose of this study was to investigate individual experiences of international student spouses to understand their perceptions of university support systems by employing Interpretative Phenomenological Analysis (IPA). This study bridges this gap in literature by focusing on the specific support systems international student spouses desired and how institutions can implement such services by answering the research question: What role do international student spouses perceive institutions of higher education have in terms of offering support services?

## Methodology

For this study, the researcher wanted to know what role do international student spouses perceive institutions of higher education have in terms of offering support services. The international program office at the research site sent out an email on behalf of the researcher with

information on the study and requesting spouses to contact the research directly in order to take part. Five participants took part in semi-structured interviews lasting from 30 minutes to an hour about their experiences with university support systems while in F2 dependent visa status. Interviews were transcribed, coded, and analyzed by the researcher with transcripts approved by each participant. All participants were married to current international students enrolled at an urban institution of higher education in the New England region of the United States, and had been in F2 dependent visa status. F2 status meant they are a dependent of an international student who was designated as F1 visa status (US Department of State, 2019). Two participants were from China, one from Egypt, one from India, and one from Turkey. This small pool allowed the researcher to learn more about each spouse's unique experiences with dealing with support services at the institution. Three out of the five participants had switched their visa status from dependent to student at the time of the interview.

**Theoretical Framework**

Acculturation theory is a framework important to many researchers who wish to study international education. It was particularly useful when trying to learn more about the cultural experiences faced by spouses of international students while adjusting to life in the United States. John Berry's (1992) model in regards to acculturation theory looks at the phenomenon in a holistic way instead of looking at one specific component which benefits this study.

The bidimensional model of acculturation by Berry (1992) worked well with this study as it involved international students and their spouses. Since the spouses of international students were oftentimes in touch with family and friends still in their home country (Park et al., 2014), it was easy to assume they would still hold on to cultural aspects of their homeland and their new country for the duration of their stay. This specific acculturation model allowed the researcher to take those experience into account while collecting data.

Acculturation theory shaped the interview questions for this research project in various forms. First of all, the questions were formed to focus directly on the participants' experiences of

coming to the United States. By focusing the questions on their own unique experiences, information could then be provided to institutions of higher education to help better prepare both the institution and the international program offices in general in how to better recruit and retain international students and their families. This could include the creation of specific procedures and programs relating directly to this demographic.

**Procedures**

Interpretative Phenomenological Analysis (IPA) was chosen as the methodology for this research. This methodology focused on perspective, context, and interpretation. IPA was defined by Smith (2004) as aiming "to explore in detail participants' personal lived experience and how participants make sense of that personal experience" (p. 40). In addition, the focus of using this unique methodology was for those taking part in the study to create an understanding of each individual experience (Smith et al., 2009). Pietkiewicz and Smith (2014) regarded the primary concern for researchers using IPA was to gather rich, detailed first-person accounts of unique experiences. Data was collected through in-person interviews, the most popular way for this methodology (Pietkiewicz & Smith, 2014). It was important to work with the international programs office to send an email to the international student population at the research site to get in touch about the study. Once spouses had shown interest, interview requests were made.

Questions were open-ended and semi-structured in format to allow informative responses. This allowed participants and researcher to engage in meaningful dialogue in real-time (Pietkiewicz & Smith, 2014). Participants signed consent forms prior to interview which lent credibility, a major component of IPA (Lincoln & Guba, 1985). Interviews were audio recorded and transcribed prior to analysis. After the completion of the transcriptions of interviews, participants were provided with a copy to review for accuracy and clarification purposes. During the analysis process, coding was conducted through recognition of developing emerging themes and subthemes from the transcripts.

**Data Analysis**

According to Smith et al. (2009), there were four unique characteristics of IPA when it came to data analysis. The characteristics were movement from unique experiences from one participant to what is shared among all participants of the study, how the experience is described moving to how the same experience could be interpreted, commitment by the researcher to attempt to understand the point of view of each participant, and using a psychologically focused context when looking at how participants make meaning of their experiences (Smith et al., 2009). After the completion of all interviews, the audio was then transcribed into a word document format for review. For the purpose of this research, the interview audio was transcribed using a program called Temi. Once in word format and approved by the participant for accuracy, the documents were then reviewed to begin the initial coding process. It was important for the researcher to conduct the transcription and initial coding as soon as possible upon the completion of each individual interview. On average the transcription was completed and emailed to the participant within a week of the interview.

Reading the completed transcripts was considered the next step of the process. This was the first step of the analysis process of the study and is done to make sure the participants were the focus (Smith et al., 2009). The initial readings allowed the researcher to pick up on unique experiences and their importance to the study. Once all of the transcripts had been read through and noted, the second step of analysis began. The transcripts were reread, this time looking for more meaning behind the interview and themes were noted. This was known as coding. The method of coding was used while analyzing data collected from the proposed research study. Specific codes were created by the researcher after the interviews had been transcribed in order to identify various themes which occurred throughout the study. After each of the interview transcriptions initially had been coded, a second review of the transcripts occurred to allow for the possibility of sub-codes to be created. These codes, therefore, began to show common themes throughout each individual interview conducted.

## Findings

Interviews provided detailed experiences from spouses allowing key themes to emerge. These included need for better communication, more opportunities for integration into the campus community, creation of on-ground support, in addition to new findings which had not been found in previous literature.

**Need for Better Communication**

Participants noted consistently the lack of information received from the institution in regards to support services. While participants did not receive any communication from the institution, they stressed desire for that to change. During these discussions, welcome letters, email, and website communication came up as potential ways the institution could provide communication with spouses. Information was really important to the spouses as one noted "as a student you get everything [emails], but as a spouse of the student – nothing." Any type of acknowledgement from the institution was highly desired. In particular, spouses wanted more information on health care, legal support (both in terms of immigration and domestic violence), programming on campus, language programs, obtaining housing, and point of contact at the institution which they could ask questions.

Responses aligned with previous literature noting participants felt, similar to Campbell and Prin's (2016) study, a lack of institutional support. Participants felt there were no services besides providing information on obtaining visas for entry into the United States. They had to figure out information on their own which agreed with Akanawa's (2015) study in which spouses of international students were left to figure support services out without any help from institutions.

**More Opportunities for Integration into Campus Community**

Participants emphasized the need to integrate into the campus community. Similar to those in Campbell and Prin's (2016) study, spouses had difficulty integrating into the local community in spite of attempting to find and use community resources. In particular, participants had a hard time having conversations with native speakers due to lack of confidence in their own language skills but

also not knowing proper cultural etiquette. This was in alignment with De Verthelyi's (1995) study which showed lack of language skills prevented social interactions.

In addition, the majority of the participants wanted to gain more information about events going on around campus. As one questioned, "Why are you not inviting the spouses? Could be educated people who are interested in seminars!" Another spouse came up with the idea being able to volunteer at such events as "because most of us, we won't just want to stay home watching videos, music, and cooking".

Another way participants noted as an opportunity for integration into the campus community was by allowing spouses to have an identification card that would show they had a connection to the institution and would allow them access to the library and events on campus. For example, one participant suggested "like the alumni cards, they're not, for example, allowed to enter the library, but they're allowed to do other stuff or they're recognized as just an, some sort of, you know what I mean. You exist."

**Creation of On-Ground Support**

Administrators who understood unique situations facing international student spouses was strongly desired. One participant mentioned lack of support from the international programs office but was greatly impressed with all the help received from their spouse's academic department which was similar to Blount's (2008) findings of institutional administrators made a huge difference when it came to helping spouses with cultural adjustment. All participants wanted a point of contact which they would be able to communicate with in order to gain information on various topics of importance to them ranging from acculturation issues to administrative issues. While having a designated administrator to help spouses with any concerns and questions they might have is ideal, simply having a peer mentor could do much in terms of emotional support for adjustment to their new normal. Peer mentors would be helpful as they would be able to provide guidance from a personal perspective rather than from an administrative one which could be limited.

**New Findings**

This study unearthed findings not previously discussed in literature. These findings included these five spouses were highly educated, needed affordable housing options, and some switched from dependent to student status to alleviate stressors.

### ***Dependents Are Highly Educated***

Participants were highly educated, included those with advanced degrees and working in high demand fields such as accounting, finance, and government affairs. One participant had their MBA and another one had a masters in engineering. Both of them had decided eventually to earn other advanced degrees in order to switch to student visa status and not remain in dependent status. One was working on another masters while the other was now in a doctorate program. They were not traditional subservient partners. Because highly educated, they were able to articulate services which would benefit them as well as provide suggestions on how the research site could implement them.

### ***Need for Affordable Housing***

Ideal housing was found to be difficult to obtain due to restrictions placed by visa status. Many participants had to live with roommates or pay more to live by themselves. This included having to live in outside the city instead of campus. On-campus couple housing also was a strong desire by participants. Most participants noted they were not prepared to deal with the high demand rental market in the area. As one noted:

Of course things are more expensive… a lot more expensive. I didn't feel like things were all set for us. I mean, like I recall my father always talking about when he got his offer to the PhD, I know that was like 25 years ago or 30 years ago… I do understand that… but he always told us that they already had the housing for married people at [the institution their father attended].

It was clear staying on campus in couples-designated housing would be ideal. While dormitory housing for international students perhaps had come up in previous literature, it has not come up when discussing needs of international student spouses.

### ***Switching from Dependent to Student Status***

Three participants ended up switching from dependent to student status. It is important to note all made the change in visa status not to further their education, but to alleviate stress restrictions had put them under. One of the participants entered a doctorate program purely to get a student visa. They had no intentions of earning a doctorate and had wanted to be a consultant. However, they could not handle the limitations and stressors under the dependent visa so they ended up applying and being accepted into a program to change status. All three participants received no information on how to switch their visa status. Participants would have liked to know how to switch status if one had decided to enroll as a student. Many did not know switching their visa status could be an option and would provide more freedom than under dependent visa status.

## Recommendations

The study provided a wealth of knowledge on how international student spouses perceived support services at a specific institution. Creation of a designated institutional administrator, designated campus housing, and identification card would greatly benefit spouses and be implemented without major issues.

### *Designated Institutional Administrator*

One idea was designating an administrator as a point of contact for international student spouses. They should be housed in the international programs office and primarily focus on working with international student spouses. However, the institution might not have financial resources or need for a full-time administrator as such information was not available. In this case, the duty could be assigned to an existing departmental administrator.

Assessing needs of international student spouses would be imperative to this role. The administrator would be in charge of creating an assessment plan to help update information international student spouses would need communicated to them. They would also be in charge of creating support services such as volunteering, mentorship, and social offerings. This position should be looked at as a voice for these spouses and fight for their inclusion when dealing with issues on an institutional level and would be a direct line of communication between the institution and the

spouses. This administrator could also help students navigate the difficult legal system if needed. For instance, as one participant articulated, spouses might need help switching their visa status from dependent to student, or might need information on how to obtain a divorce or protection due to domestic violence issues which they considered a common issue for international students and their spouses.

***Couple Designated Campus Housing***

Housing was a particular struggle due to financial costs of obtaining housing and secondly, the unavailability of couples designated on-campus housing. One participant was shocked to find out couples housing was not available as options had been provided other places. While the institution does provide housing for students, those who were married were not allowed to take advantage of this service. A portion of available dormitory space should be designated for married couples. The institution required first and second year undergraduate students to live on campus in dormitories. Releasing second year students from the requirement of living on campus could open dormitory space for the spouses and allow traditional undergraduate students more flexibility in their housing options.

***Identification Cards***

One of the most important ways institutions can create a sense of community with international student spouses is by creating a spousal identification card. Most institutions provide identification cards for their alumni to use after graduation. Something similar could easily be made available to spouses. This card would allow spouses to feel like they are part of the campus community and allow them to easily integrate into the area.

The spousal identification card would allow international student spouses access to the institution's library with ease. In addition, this identification card would make it easier for them to attend other events, such as concerts, plays, and seminars, on campus without issue. The spouses could use the card in order to get student discounts as well whether on campus or off campus to events such as museums and concerts. Spouses could even use the card to gain access to the

campus gym if they agree to pay a monthly or semester based membership fee. This way the institution could make some additional money by the increased revenue from the gym, while allowing the spouses to stay together when using facilities.

Such identification card would also come in handy to those spouses who opt to take advantage of on campus couple housing once such is enacted. These cards would allow international student spouses access to the dormitory buildings where their housing is located. Security is an important issue in large cities such as where this institution is located. Spousal identification cards would provide an extra layer of security by only allowing those who should be in the building instead of having to wait to be let in.

Lastly, the spousal identification card could allow spouses to take advantage of some of the services already being offered at the institution, but at a limited capacity. For instance, they could be able to join social groups on campus whether they are to practice their English language skills, social networking, or just personal passions. By having the identification card, the support services at the institution knows they are providing information to a spouse of a current student and not someone who found their way to campus trying to take advantage of services.

## Discussion

The main goal of this research was to gain information on international spouses' experiences with support services at institutions of higher education. The findings from this research were interesting because it gives a clearer picture how international student spouses perceive institutional support services and the duty institutions have to provide them these services. In particular interest was that this sample showed spouses were just as educated and ambitious as their student partners. They were not traditional home-makers and wanted to be involved in the campus community and longed for some sort of connection to the institution. The fact the majority of the participants ended up enrolling in advanced education programs in order to relieve stressors their dependent visa status had put on them shows while the institution was providing adequate

services to their international student population, these services were not being reached to the spouses.

Participants were especially eager to offer suggestions on how the institution could better support them during their time in the United States. Because they were highly educated already, they knew what services would be best to help them with acculturation and provided detailed ways services could be altered to improve. On the other end, they also knew and recognized that they should not receive every single service being offered to students, such as access to classrooms and courses, but felt they should be able to attend student events such as seminars

The implications are massive when dealing with spouses of international students as well as the field of international education as a whole. Since this is still a relatively new research area in the field, the more information studies can bring to the surface, the better off institutions of higher education will be with preparing to deal with this underserved demographic. This means both administrators and faculty in the field of higher education will benefit from It will also allow for other scholar-practitioners who might not originally be considering going into the field, develop interest in conducting their own research projects to help further understanding of the topic. The more information coming from research studies will only lead to improvement of any potential adjustment issues faced by international students as well as their families which then has the possibility to increase international student retention rates.

**Limitations**

Research studies are not perfect and oftentimes have limitations to them. This study is no different. The limitations of using this theory was it focused strictly on the cultural adjustment of the subjects interviewed and did not take into effect directly any other potential overlapping themes. However, the researcher was able to make educated suggestions on what these institutions should look into doing based upon the information received from the interviews about adjustment issues of international student spouses.

After the findings of the study, it would be important and imperative to research the effectiveness of the proposed changes to higher education institutions when it comes to better supporting the spouses of international students. This way, research can be done to show what worked and what did not work when it came to helping them adjust to life in the United States from an institutional perspective. Doing so will provide a whole other view on another important aspect of acculturation experiences.

**Conclusion**

Detailed data was collected from interviewing five international student spouses who took part in the study. Communication appeared to be one of the most important issues to participants. They desired any sort of information from the institution. Lack of communication was one of the reasons spouses struggled during their time on campus. Spouses were not made aware of important topics such as health care, housing, and campus events which might be of interest to them. Such information should be easily and readily available to them. As one participant noted, they felt nonexistent and the institution "did not care about F2… only money".

Need for inclusion into the campus community was another important finding. Since spouses oftentimes felt isolated, simply knowing about events such as seminars and other social programs would have made them feel more included and welcomed. Participants were highly educated and were interested in academic seminars and presentations on campus. However, due to the lack of communication from the institution, they were not made aware of such events until it was too late.

Lack of communication and inclusion for international student spouses came down to the issue there was no on-ground support. If an administrator focused on the needs of international student spouses, they would be able to develop a communication strategy in addition to creating programing to help with inclusion into the campus community. Participants noted they struggled with not knowing who to contact if they had any questions, especially in regards to health care and campus related issues. All of those issues could easily be resolved if an administrator was appointed.

The findings showed the spouses were highly educated and wanted to take part in educational opportunities such as seminars on campus and did not only want social opportunities. Housing options was another big concern of international student spouses which had not been talked about before, including the desire to have more on campus housing designated purely for married couples. Lastly, no previous literature had brought up international student spouses had ended up switching their visa status from dependent to student status in order to gain some more freedom than their visa allowed upon arrival on campus.

**Recommendations for Future Research**

It is important to look into experiences of international student spouses and differences between urban and rural institutions in terms of support services as this study focused on the experiences of those related to a private urban institution in the United States. Researchers should take a look at same sex marriages or male spouses in particular. The majority of available literature has information from female spouses in heterosexual relationships. With growing acceptance of same-sex marriages, it will be important to focus on support services which could be offered to international student spouses in the LGBTQ community. In addition, traditionally available research has not strictly looked at male spouses and the international education field could benefit from looking into their experiences as well. This could be due to the fact many might not wish to participate, which is what occurred in this particular research study.

## Author Note

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# Disability Policy Representation in African Higher Education Research: Implications for Disability Policy Framing in African Higher Education

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## Abstract

This paper sets out to critically explore the way disability policies are framed in African higher education. Presented in this paper is a review of published studies that detail the dominant framing perspectives that have influenced disability policies in African Higher Education (HE). Review of literature was done using the Yair Levy and Timothy J. Ellis (2006) systems approach to conducting an effective literature review. The paper has three sections and these include (a) an introduction (b) dominant policy framing perspectives and (c) a discussion on exploring possibilities for an expansive disability policy framing for Higher Education in Africa. This paper argues for nuanced ways to expand our understanding of the current and emerging issues pertaining to the study of policies on disability in the field of HE in Africa.

*Keywords:* disability, higher education, policy, framing

## Introduction

Throughout the world, education is valued and expected to be a key driver of development. It has become a basic necessity for most nations but research seems to suggest marginalisation still plagues most education systems (Cooper, 2015; Georgeson et al., 2015; van Jaarsveldt & Ndeya-Ndereya, 2015). Similarly various actors have placed strong hopes on higher education (HE) as a panacea for human development. Nonetheless, the impact of HE on society is multifaceted.

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Research shows that HE reproduces inequality and injustice through various levels of discrimination (Bell et al., 2016; Chitaika, 2010; Matshedisho, 2007; Powell, 2013; Mutswangwa, 2014; Riddell & Weedon, 2014). Chief of these, is discrimination based on income, age, gender, race and ability (Morely & Croft 2011; Terzi, 2014; Thaver & Thaver, 2015). Despite of all this, HE is also seen to contribute to eliminating the social problems through its public good values such as promoting access to universities for all regardless of ability (O'Regan & James, 2015; Roper & Hirth, 2005).

Contentiously ability in HE is mostly conceptualized in its negative sense as "disability". "Disability" in Africa is shrouded in a lot of misconceptions which stem from the rich, diverse and complex historical, religious, cultural and ideological conceptions of ability (Chimedza, 2008; Owusu-Ansah, 2013). It follows then that disability in the past, as well as today, embodies contradictions. Much debate exists in the literature about the complexity of defining disability (Chataika & Owusu-Ansah; Chimedza, 2008; Jeffery & Singal, 2007; Lwanga-Ntale, 2003) highlight linguistic, cultural, legislative and political factors that vary from context to context and at times country contexts. Therefore this paper makes no claims of having a common definition however this paper conceptualised disability following the definition of the World Health Organization's International Classification of Functioning, Disability Health (ICFH), (World Health Organization [WHO], 2002). It considers disability and functioning as outcomes of interactions between health conditions (diseases, disorders and injuries ) and contextual factors (WHO, 2002). Among contextual factors are external environment factors(e.g. social attitudes, legal and social structures, natural and built environment, products and technology) and internal personal factors which include gender, age, coping styles, social background, education, profession, past and present experience, motivation and self-esteem, all which influence how much a person participates in society (WHO, 2002).

Contentiously ability in HE is mostly conceptualized in its negative sense as "disability". "Disability" in Africa is shrouded in a lot of misconceptions which stem from the rich, divers and complex historical, religious, cultural and ideological conceptions of ability (Chimedza, 2008; Owusu-Ansah, 2013). It follows then that disability in the past, as well as today, embodies contradictions.

Much debate exists in the literature about the complexity of defining disability (Chataika, 2010; Chataika & Owusu-Ansah; Chimedza, 2008; Jeffery & Singal, 2007; Lwanga-Ntale, 2003 and Owusu-Ansah, 2013) highlight linguistic, cultural, legislative and political factors that vary from context to context and at times country contexts. Therefore this paper makes no claims of having a common definition however this paper conceptualised disability following the definition by (ICFH), (WHO, 2002). It considers disability and functioning as outcomes of interactions between health conditions (diseases, disorders and injuries) and contextual factors (WHO, 2002). Among contextual factors are external environment factors(e.g. social attitudes, legal and social structures, natural and built environment, products and technology) and internal personal factors which include gender, age, coping styles, social background, education, profession, past and present experience, motivation and self-esteem, all which influence how much a person participates in society (WHO, 2002).

Despite the very complex nature of disability and its misconceptions there is growing interest in recent times in HE to improve access for people with disability regardless of how narrow or broad disability is defined. While this momentum is a laudable goal, the enthusiasm for universities to foster access for people with disability has gotten ahead of our understanding of how institutional policies and practices in African countries might be broadly framed to achieve this public good value of HE.

It is also important to note that this paper uses the definition of framing by (van Hulst & Yanow, 2016) which they refer to as a process of sense-making, naming which includes selecting and categorizing and storytelling. There is need to open up the process through which framing is occurring in HE. Importantly focus should be placed on looking into the sense making work entailed in framing disability in HE further also looking into how selections are made how names are given, how categories are created and how stories are told especially about disability. This opens up many dimensions to exploring framing as a process grounded in everyday practices and ordinary beliefs (van Hulst & Yanow, 2016).

This paper will endeavor to answer the following questions: 1) What perspectives influence the framing of disability within current university policies and practices in African HE, among the various perspectives in literature? 2) What can be done to explore a more nuanced tone that can accommodate the understanding of the complex nature of studying policies and practices on disability in the field of HE in the African context?

**A Systematic and Analytical Review of Literature**

This literature review employed the (Levy & Ellis, 2006) systems approach to conducting an effective literature review. The proposed framework follows a systematic data processing approach comprised of three major stages. Firstly, focus was given to gathering and screening the literature from different search engines. Secondly, attention was given to ranking the literature that had been screened by biographical details, research aim, theoretical and conceptual framing perspectives and methods used. Thirdly, organising the literature into themes for discussion.

To incorporate the above factors, the compilation of these studies has been ongoing since 2017 and it was a result of broad database searches and tracking of references encountered in the reading process. Literature was scanned from Scopus, google scholar, academic search using a combination of the search terms "disability", "students with disabilities", "policy", "higher education" and "inclusion". Studies concerning policy with disabilities stem from three main sources: commissioned reports, scholarly articles, and masters and doctoral studies theses. In accordance with the scoping approach suggested by (Levy & Ellis, 2006), the following data was initially extracted from each article in order to facilitate analysis: author(s) name; year of publication; country within which the study took place; journal name; research aim; theoretical and conceptual frameworks, study design and methods used.

The bulk of these studies are qualitative in nature, focusing mostly on a single case study higher education institution and targeted at a particular type of impairment. While very informative, this approach to literature review has its own limitation which we take into account. A potential limitation of this review is that we narrowed the search particularly to very specific field of higher

education studies. While this offers an in-depth analysis of the available literature on the topic, we are cognizant that this leaves out some important categories and perspectives.

Similarly, we narrowed down the search to a specific time frame to make the work practically manageable. Hence this also possessed a potential limitation of historial omission. This work is ongoing and will take several stages. It is for this reason that having established this, further research will continue and take a bibliometric analysis that will be able to deal with some of these issues like establishing the network of actors doing the framing and its ability to quantify research based on geographical locations.

The following section will give a short summary of findings from  the  systematic review and then an analysis of the three dominant policy and practice framing approaches engaged in African research literature. The first takes a medical approach, the second is framed in form of international classification of functioning and the third a social model of disability and these will be examined in the next section

**Policy and Research Framing Perspectives in Literature**

Firstly a total of 44 articles are being used in the literature review, predominantly 34 articles were written on South Africa and the other 10 articles focused on countries like Zimbabwe, Uganda, Ghana, Malawi, Botswana, Tanzania, Lesotho, Mauritius, Morocco and Egypt. The research landscape in Africa regarding disability in Higher Education started in 1981 (Phiri, 1981) and the analysis is exploring literature till 2019 (Clouder et al., 2019). Research has focused on topics relating to specific experiences of students with different disabilities, teaching and learning, disability staff and disability units in universities (Bell & Swart, 2018;  Chitaika, 2010). Research also focuses access, curriculum assistive technologies (Clouder et al., 2019; Holloway, 2006; Kajee, 2010; Matshedisho, 2007) and limited research on policy themes in universities  (Ramaahlo et al., 2018). Literature currently being reviewed shows that 42 articles  are grounded by theory focused on inclusion, social justice and empowerment with strong focus on access participation. The Social Model dominates disability studies in Higher Education primarily because of its focus on social, structural and

environmental barriers rather than on an individual's impairment (Medical model). One article explored the Capabilities approach (Matanga, 2017) and 1 social ecological approach (Chataika, 2010). However, although dominant in Higher Education research in Africa, the Social Model has its critics (Shakespeare & Watson, 2001) who emphasise the need to interrogate cultural constructions and move beyond the dualism position. Methodologically 38 studies are qualitative, 2 are quantitative and 4 are mixed methods. There is very little venturing out to research using different methodological approaches like quantitative, mixed methods and comparative designs (Bishau, 2009). Lastly a key conclusion in Research literature on disability in African Higher Education seems to suggest that a gap exists between policy and practice (Chitaika, 2010; Mutanga, 2017; Mutswangwa, 2014; Ramaahlo et al., 2019). Research highlights that the gap remains ill-defined and under researched, particularly the inter relational dynamics that exist among factors contributing to the policy and practice gap.

It is with the above backdrop that the three globally recognized policy and practice framing approaches that are frequently engaged and critiqued for their influence on disability policy in African HE will be discussed. The first is the medical approach, the second is framed in form of international classification of functioning and the third a social model of disability.

*The medical model* has influenced policy that takes the medical frame (Kasser & Lytle, 2005; Thomas & Woods, 2003). A distinguishing characteristic of policies and practices of this conceptualization of disability is the assumption that disability is located within an individual who has impairment. Thus, under this model, disability is conceptualized as an individual limitation that can be counteracted by individual rehabilitation.

In relation to more formal structures of policy and legislation, the medical model translates to discourses around help, assistance and welfare. In HE this policy framework outlines the support of students by identifying and classifying special education needs (Riddell et al. 2000) and the provision of resourcing and funding to support these needs. Research from this approach has influenced the provision of various individualized responses to address issues of disability. This has

been done by providing teaching and learning services (pedagogy), technology and medical services in institutions of HE. Additionally, some studies and policy analysis have advocated for new infrastructural design in to make campuses accessible for individuals with disability. Although, the focus on the individual is paramount, the weakness with such policy and practice and framing is that it sees society as a whole playing an insignificant role. The application of the medical model results in wider contextual and political responses being dismissed or ignored in favour of functionalist approaches through amelioration (Oliver, 1986; Rioux, 1997; Skrtic, 2005).

**International Classification Framing**

In stark contrast to the medical model, the International Classification of Functioning, Disability and Health (ICFH) was introduced in 2001 by the World Health Organization (WHO, 2002). Explicitly in this model, disability policy framing and practices are seen as being on a continuum with health and are the result of the interaction of health conditions with environmental and personal factors. Research that takes this approach like the medical model tend to fall in the functionalist paradigm in that they tend to examine the functions of various actors surrounding a policy on the issues of disability in HE. These studies aim at understanding how universities can institutionalize their organizational services and interact with communities to promote capacity-building on disability. Functionalist studies of policy and practices are characterized by similar assumptions: economic rationalism, efficiency, and effectiveness are critical to achieve ideal functioning of individuals with disability and in return institutions processes and outcomes. Studies by (Imrie, 2004; Mitra, 2006; Saleeby, 2007) tend to take this approach.

**Social-Cultural Framing of Disability**

The social framing of policy and practice of disability in HE challenges and expands the functionalist assumptions of the medical and international classification framing. Research and policy from this perspective shows that disability is constructed through social, structural and environmental barriers rather than an individual's impairment alone. The proponents of the social framing of policies in HE argues that, there is no causal link between impairment – the body's

biology and disability (Anastasiou & Kauffman 2013). Disabled people may experience life difficulties because of the state of their body, but that is something entirely different compared with the difficulties caused by a society that creates experiences in HE that are constructed without regard to the variety of people (Oliver, 1990).

Studies, policies and practices that take a social framing of disability tend to exhibit a constructivist and criticalist paradigm in that they tend to focus on discourse and language and how these create reality that has both positive and negative consequences. Such policy framing looks at how the language of policy and practices can be used to change the oppressive structures that have been historically used to discriminate people considered to have different levels of disability. It is widely acknowledged that language surrounding disability to-date (including the term disability itself) reflects dominant knowledge and discourse. This language has occupied a substantial role in the shaping of disability identity (Kraus, 2008). Concepts such as mainstreaming, integration and now inclusion that originate from developed countries may not mean the same across different cultures (Chimedza, 2008; Owusu-Ansah, 2013). As the socio-cultural perspective to disability aptly remarks, disability is a social construct and not an objective condition (Armstrong & Barton, 1999; Edgerton, 1993; Trent, 1994). The social context of disability is instrumental in defining disability itself and its related concepts. Research by (Ferguson & Nussbaum, 2012; Ingstad & White, 1995; Owusu-Ansah, 2013) observed that attempts to universalize the category disability runs into conceptual problems because such definitions do not take into consideration the social and cultural contexts. With regards to HE Mutanga (2018) concludes that the concepts of disability, inclusion and exclusion thus require closer and thorough analysis in order to fully comprehend who is included or excluded. Powell (2013), Fordyce et al (2013), Pliner and Johnstone (2004), and Spratt and Florian (2015) also concur that policies and practices in education must be revised to ensure that education is inclusive thus guaranteeing that all the students can participate fully and that all can benefit from a process of quality teaching and learning

A major weakness of most of framing approaches is that they are produced in deferent HE context which makes it hard to fully understand their generalizability and transferability to the African HE context (Matshedisho, 2007). Moreover, few take a multi-policy actor (students, staff, community, etc.), comparative, qualitative, multi-country and institution approach in their units of analysis. This is critical justification for an in depth understanding of the conceptualization of HE policy on disability in the African context.

## Discussion

### Exploring Possibility for an Expansive Disability Policy Framing for HE in Africa

The literature available has shown a dominance of the Qualitative research approach and Social Model research direction in African Higher Education. This overemphasis has led to the lack of robust statistical data regarding disability in higher education (Matanga, 2017; Van de Merwe, 2017).There is little or no statistical knowledge about the experiences and participation rates of students with disability (Morley & Croft, 2011). Resultantly, there tends to be a leaning to lived experiences without any statistical data to describe the disability landscape in Higher Education.

In view of the above findings we now discuss two important points in relation to research and policy framing pertaining to disability issues in African higher education. We also do this to position potential areas of research and position our future research. The first is that policy and research in this area of study comes from other disciplines other than higher education and how part of the problem has been that our understanding of the critical issues in the field of higher education is lacking theoretical contextual and conceptual rigor (Strom, 2018; Taylor & Harris-Evans, 2018; Wang, 2015) and second is that very few studies on policy are conducted within the African higher education context.

The three main models discussed above have historically influenced practices in HE education (Allan, 1996; Owusu-Ansah, 2013). Interestingly, the framing perspectives influence a wide spectrum of research that sits at the foundations of paradigms at epistemic odds. The theoretical clashes in the education space have created a scenario where tensions and

contradictions in theory have produced heated debate in the literature for example (Brantlinger, 1997; Kauffman & Sasso, 2006). African researchers like (Chataika, 2010; Chimedza, 2008; Matshedisho, 2007; Owusu-Ansah, 2013) highlight that the different range of interpretations of meanings of disability can become a source of dissonance which has the potential to complicate and therefore impede the delivery of meaningful educational responses for students with disabilities as HE practitioners navigate a divided professional knowledge base. It is such dissonance and the complexities that arise that research needs to explore to get new information that might guide us to new approaches and meanings that are relevant and relatable to higher education. It is important for higher education in Africa to contextualise and conceptualise the meaning and understanding issues of disability.

Matshedisho (2007) notes higher education systems in general, may consciously or unconsciously prefer one mode of disability representation over the other. These choices may have implications for students with disability in higher education. The dichotomies that exist for students with disabilities that revolve around language and actions of institutions, society, denial of human rights, economic opportunities, compromises of government systems in different African contexts point to the need for critical higher education research to make sense of such concepts so as to bridge the gap of the lack of theoretical and conceptual rigor on critical issues in higher education (Chataika, 2010; Owusu-Ansah, 2013). This therefore points to the need to go beyond the existing models that are influencing the representation of disability in Higher Education.

Secondly, Given the odds and tensions predominant in the perspectives in literature presented in this article it is evident there is more to be done to understand how we can frame disability policies in the African HE. Mutanga (2017), Chitaika (2010), Mutswangwa (2014) and Ramaahlo et al. (2018) observed that students with disability pose particular challenges to higher education especially with regards to policy. Therefore, there is a need to explore more into how Africa's diverse historical backgrounds and context specificities have significant bearing on the

higher education system. Thus, it is important to bring context complexity into the research agenda and explore how they influence representation of disability in higher education.

Fawcett (2000) and Johnstone (2001) reinforce the above points by describing disability as a contested area where definitions vary according to historical, cultural and social locations and the nature of the environment in which it is observed. Stone (1990) and Chataika (2010) in a similar vein points out how the minimised or ignorance of local cultures by researchers, academics, activists and practitioner's has brought risks and complications into their work around ideology, definitions, cultural or religious values should be paid attention to, whose social systems or ways of working have to be followed.

Zeroing in on the African context a major characteristic of the current HE research and policy context is that there is so much policy lending and borrowing (Chimedza, 2008; Matshedisho, 2007; Ramaahlo et al., 2018). While there is nothing inherently wrong with such an approach there is a concerning need to contextualise the debate and keep exploring more and nuanced ways to expand our understanding of the challenges facing African HE. Literature suggests that higher education is positioned as a key driver of development thus it has the capacity to challenge what we have been socialized to understand about disability.

This article advocates for robust theoretical, conceptual and contextualised research that should examine the policy space that frames disability in higher education. Research should also go further into exploring disability as a socio-political category, strategies used by universities to frame disability and dig deeper into the institutional responsibility of a universities as actors in the African space. Research is needed to provide more depth in how the conversation about disability can be better addressed, through constructive and critical theory.

Thus there is need in the HE space in Africa to delve more into the historic, political, social and cultural forces through which educational policy has and is still being formulated to create barriers to equitable access to education and this can be done by intentionally prioritising the examining of HE policies regarding student disability on the African continent. Consequently, this

might help tease out the risk of replicating systems of education that marginalise and this therefore requires ongoing review and critique from approaches that engage multiple stakeholders.

**Conclusion**

Researching the experiences of disabled students provides important insights especially using qualitative methodologies. However, having understanding of the experience without the relevant statistical description of the disability landscape will only contribute to unfairly representing disability in African Higher Education. With this in mind this literature review was set out to answer the following questions: 1) What perspectives influence the framing of disability within current university policies and practices in African HE? 2) What can be done to explore a more nuanced tone that can accommodate the understanding of the complex nature of studying policies and practices on disability in the field of HE in the African context? Three main policy and practice framing approaches were identified in the research literature on disability in HE. The medical approach, the second is framed in form of international classification of functioning and the third a social model of disability. Several concerns were noted firstly that policy and research in this area of study comes from other disciplines other than higher education and second is that very few studies are conducted within the African higher education context. Thus the framing perspectives compete and even conflict around their conceptions of disability and reveal a need for an analysis of how these tensions manifest themselves especially in higher education in African contexts.

Importantly the paper advocates for new lens of looking into defining conceptions of disability that may arise from different complex African cultural histories by exposing the need to possibly explore alternative ways of understanding how policy processes create, or contribute to exclusions in higher education. Ultimately the paper argues for nuanced ways to expand our understanding of the current and emerging issues pertaining to the study of policies on disability in the field of HE in Africa.

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