A Cross-Case Analysis of Internationalization at National Universities in Singapore and Japan

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Abstract

Governments and universities are increasingly turning to internationalization as a way to respond to the opportunities and challenges of the globalizing 21st century knowledge economy. This study explores the phenomenon of internationalization of higher education (IoHE) at the global, national and institutional levels through the lens of two East Asian contexts: Singapore and Japan. Though not geographically located in East Asia, existing models suggest that Singapore shares more similar characteristics with East Asian than South East Asian nations. This study moves from a review of the literature of IoHE at the conceptual level, down to an in-depth review of the IoHE policy context in each nation, and finally into an institutional level exploration at two case study national universities in each context: The National University of Singapore, Nanyang Technological University, Kyoto University and Osaka University. Drawing on document analysis and interviews with institutional leadership and administrators, the study provides detailed descriptions of the case universities' approaches to international strategy, management structures, partnerships, international students and faculty, internationalization of the curriculum, activities abroad, and international reputation management. The study then uses these case narratives as a platform to move back up and engages in a cross-cases analysis of the connections between institutional approach, institutional circumstances, individual stakeholder rationales and agency, broader national context and global trends. From there it moves into a discussion of the process of developing and implementing a vision and strategy for effective internationalization. Finally, the study concludes by exploring what the evidence presented herein suggests about the conceptualization of internationalization as a response to globalization, as well as implications for the concepts of an 'East Asian' model of higher education or IoHE.

Contents

1 Introduction

Since the 1980s, globalization, the emergence of a global knowledge-based society/economy (KBE), marketization, and massification have dramatically changed the face of higher education. These changes have brought internationalization to the forefront of many higher education agendas. In 2004, Vidovich argued that "'internationalization' is becoming one of the meta-discourses in education policy as a 'global knowledge society' (often collapsed into a `global knowledge economy') is foregrounded" (p. 460). Eight years later, Rumbley et al (2012) note that "internationalization has been one of the most prevailing forces at work within higher education around the world during the last two decades" (p. 3). The International Association of Universities (IAU) (2012) also argues that:

> Irrespective of contextual differences within and between countries, nearly all higher education institutions worldwide are engaged in international activities and are seeking to expand them. Engaging with the world is now considered part of the very definition of quality in education and research. (p. 2)

Despite its mainstreaming, the scope and complexity of the internationalization of higher education (IoHE) taking place around the world is still often inadequately understood. Often it is collapsed into a discussion of international students or faculty without proper consideration of how the international dimension affects both the delivery of the core missions of higher education as well as institutional operations. At the same time, Asia is rising to the status of a 'higher education superpower' (Bhandari and Lefebure 2015), and the world is slowly beginning to shift its gaze to the region. However, despite some notable scholars examining IoHE in Asia (e.g. Marginson; Mok; Yonezawa), Koh (2011) points out that the bulk of the literature on IoHE is both generated in the 'West' and focuses on Western contexts.

1.1 Aims and objectives

To address these issues, this research aims to add to our understanding of IoHE by examining the phenomenon in four institutional contexts in two East Asian nations. Working from the viewpoint that despite the many and diverse actors in IoHE, ultimately it is within higher education institutions (HEIs) that internationalization takes place, this study uses four comprehensive national research universities in Singapore and Japan as cases to explore the relationship between internationalization and the institutional contexts. Marginson, Kaur and Sawir (2011) argue that to trace local, national and global changes and variations, we must engage in situated case studies, and system and institutional activity cannot be explained by describing broad theories such as globalization, neoliberalism or New Public Management. Using a comparative cross-case analysis, this research seeks not just to compare the phenomenon in the four cases, but to use the cases to explore the phenomenon more broadly (Vidovich, 2004). Drawing on a wide range of sources, the research seeks to explore the relationship between external trends, contextual factors, individual rationales and institutional approach to internationalization.

Like most education policy, IoHE is grounded in local realities and particular mixes of history, culture, political institutions and traditions, industrial structures, labor markets, pressures, and aspirations (Koh, 2011). Thus, by comparing similar institutions in two distinct Asian contexts, this paper highlights how IoHE is affected by unique national and institutional circumstances in ways that might be less apparent when examining only one context (Kubow and Fossum, 2007). Well-established highly ranked flagship universities were chosen as the cases, as a more diverse sample of HEIs may have proved too unwieldy for analysis. It is very important to highlight that the experiences of these types of universities may not translate to all types of HEIs. Nonetheless, the focus is on influence of institutional context to discourage uncritical policy or strategy 'borrowing', and thus the hope is that there are some valuable lessons for a variety of different HEIs. The selection of two East Asian contexts provides not only an opportunity for greater intra-regional learning, but also allows us to re-contextualize IoHE and perhaps develop more regionally relevant understandings of the traditionally Western construct (Lim, 2016).

Singapore and Japan are particularly interesting cases because, although Marginson (2011) classifies both as East Asian post-Confucian higher education models, considerable differences between the contexts and their approach to higher education bring in to sharp focus the diversity within the region. In this way, this comparison may in some ways be more illuminating than comparing more similar contexts such as Singapore and Hong Kong or Japan and South Korea. Finally, the author's own experience living and working in both places allows for the analysis to be grounded in some first-hand experience and knowledge.

Higher education in the Eastern hemisphere is developing rapidly. Yet much of this development is based on or influenced by scholarship, models and practice-oriented resources that originate Western contexts. As such, the author felt it a good opportunity to explore and document the experience of some of the more mature and successful 'East Asian' universities (in this case, the National University of Singapore, Nanyang Technological University, Kyoto University, and Osaka University) to help provide additional evidence and examples to help guide further development in the region. Ultimately this project is driven by a desire to help higher education policy makers, administrators and educators more effectively use internationalization as a tool to fulfil their individual institutional missions.

Based on this goal, this dissertation aims to:

- For each case university, document and provide insight into the activities, strategies and structures related to internationalization, as well as the rationales tied to these elements
- Provide some comparative analysis of international activities at the four cases in light of their particular contexts and circumstances.
- Explore the salient factors related to internationalization approach and strategy as evidenced by the literature and findings from the cases.
- Use the cases as a platform to explore the concept of an East Asian approach to higher education internationalization.
- Use the cases as a platform to explore some of the broader concepts connected to IoHE.

1.2 Personal experience and rationale

For the past 15 years I have moved through many areas of education and at levels ranging from the individual school, to the national, regional and global. Throughout, I have been narrowing in on the specific area that both holds the most personal interest for me, and where I feel I perhaps have the most to offer in the long term: to help the higher education sector more effectively implement the international and global dimensions into their operations, thus improving their ability to fulfill their missions while promoting international exchange and understanding.

Beginning with hosting an international exchange student in high school, and stints studying abroad in Spain, volunteer teaching in Azerbaijan, and hosting dozens of international travelers since, I have developed a strong commitment to intercultural exchange. Similarly, a thirteen-year career in the education sector spanning, teaching, governance, research, admissions and other areas, as well as attending dozens of international events and working with educators from around the globe, has allowed me to develop an understanding of international education from a wide range of perspectives.

I have also been fortunate enough to live in both Singapore and Japan and travel extensively throughout the region, convincing me of the dynamism of Asia and the importance of pursuing this research in the region. As experience studying and working in a variety of environments has shown me, nothing enhances understanding like personal experience. For this reason, it seemed most appropriate to undertake this research from within one of the case study institutions.

1.3 Dissertation structure

Methodology

The methodology chapter outlines the research questions and design, along with a discussion of the study's theoretical framework and research process. The chapter then outlines the main means of data collection and analysis. It concludes with a discussion of reliability, validity, generalizability, and ethical considerations.

Literature review

This research project examines internationalization from the perspective of comprehensive national universities in two East Asian nations. To gain proper perspective it is important to examine the literature on several broad distinct but interrelated areas.

1. The nature of higher education and the university, and its historic and current roles
2. The relationship between higher education and the nation state
3. Current global trends affecting the sector

4. IoHE definitions, drivers, activities, and approaches
5. IoHE in East Asia

Through this brief review of the literature in these areas, I hope to explore reoccurring and relevant themes such as globalization and strategic planning. These themes will help to build the foundation for the analysis of internationalization within the case study universities.

National contexts in Singapore and Japan

To properly identify the contextual factors affecting internationalization at the case study universities, this chapter thoroughly and critically explores the literature and relevant policy documents related to higher education in the two countries. The chapter outlines the historical development and higher education and internationalization in each country as well as the current policy environment.

The cases

This chapter presents independent narratives of each case university. The narratives are the result and presentation of the findings of the documentary review, interviews, and observations at each university. By necessity the narratives cannot touch on every aspect of IoHE at each case, but are meant to provide sufficient evidence upon which to base the cross-case analysis, and to understand the development of internationalization approach at each university. Attention is given to student and faculty mobility, partnerships, internationalization of the curriculum, strategy development, activities abroad, and international reputation management.

Comparative analysis

The analysis chapter uses the narratives from the previous chapter to highlight the similarities and differences between the cases and their contexts. It begins with a comparative analysis of the actual practices associated with IoHE in each case, and then moves back up through a more general discussion of how context, trends, rationales and circumstances influence strategy and approach.

Conclusion

The dissertation concludes with a brief discussion of the implications of this research in the conceptualization of IoHE as a response to globalization as well the case for or against an East Asian model of higher education generally and IoHE specifically. Limitations as well as directions for future research are then discussed.

2 Methodology

2.1 Questions

To achieve the aims and objectives outlined in the introduction, this research seeks to answer seven questions. The first three can be thought of as the background knowledge necessary to adequately explore IoHE at the global, national and institutional levels. From that stand point, the study then moves back up to explore what the evidence presented here suggests about the nature of IoHE more broadly.

1. What are the global trends influencing higher education generally and internationalization specifically?
2. What is the national policy context for the four cases?
3. What are the activities, strategies and structures related to internationalization at each case university?
4. How do the activities, strategies and structures at each case university translate into overall institutional approach, and how are these approaches related to global trends, national context, individual rationales and agency, and institutional circumstances?
5. Based on the literature review and the experience of the four case universities, what can be learned about internationalization strategy development?
6. What do the experience of the four cases, and the accompanying cross-case analysis suggest about the conceptualization of IoHE as a response to globalization?
7. Does the cross-case analysis support or detract from the theory of a shared model or characteristic of IoHE in East Asia?

2.2 Research design

This research uses an exploratory, multi-layer, cross-case analysis to explore IoHE in four case study national universities in Singapore and Japan. Relevant literature, national, institutional and program level documentary sources, and semi-structured interviews with university staff and faculty leadership are used to progressively focus from general theory and scholarship on IoHE down through regional, national, institutional, and program level realities. Most of the existing empirical IoHE related research uses case studies, document and policy review, interviews and surveys. This research attempts to go a step further by embedding all of these approaches in a multi-layered cross-case comparative analysis. While IoHE is too broad to analyze in comprehensive detail, this research highlights some of the key features and components of IoHE, following their transitions from the macro to micro and then working back up to the macro. The strengths of this approach lie in the design and structure of the research, which aims to observe how IoHE moves between macro and micro levels, while at the same time providing both domestic and international comparative perspectives.

The study begins with a thorough review of the literature on higher education, with particular emphases on comprehensive research universities, the role of the state, and current trends such as globalization and the KBE. From there it moves into a review of IoHE globally and within the broader East Asian context. From this grounding, IoHE is explored at the national level within Singapore and Japan before moving on to investigate the phenomenon within the four case universities.

By comparing the phenomena between countries and individual universities within countries, the study seeks to highlight how both national and institutional contextual factors may influence IoHE. Data gathered on each case are combined to build case narratives which are then examined side by side to make within and between country comparisons. By using cross-case analysis, the study then works back up to the more macro levels. Given the direct connection the cases have to the state, analysis focuses particularly on how the institutions engage semi-autonomous faculty who are not necessarily beholden to state direction. This analysis is then used to the extent possible to further inform the researcher's understanding of IoHE at the national, regional and global/theoretical levels. Such an approach hopes to identify important contextual factors to be considered when developing and implementing internationalization strategies.

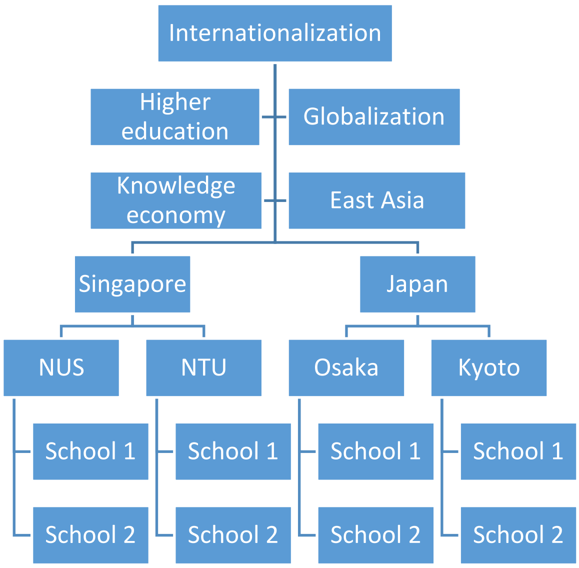

Figure 1. Visual representation of the intersecting themes and research design.

2.3 Theoretical framework

This section explains the theoretical and epistemological foundations upon which the study rests. Klees (2008) argues that the theoretical framework significantly affects the outcome of analysis. As a qualitative study concerned with a social phenomenon, and not designed to test any clearly defined hypotheses, this research is almost by default interpretivist and exploratory in nature (Yin, 2009). To understand the nature of internationalization in the cases, this study explores both the why and how of its implementation while providing proper contextualization in this exploration (Corbin and Strauss, 1990). Klees (2008) continues that qualitative research is particularly well suited to finding causal relationships by looking directly at the processes underpinning events and how these lead to particular outcomes. This research has both deductive and inductive elements. Although not attempting to reject or confirm discrete hypotheses, it does seek to deduce whether the cases support existing IoHE theory. At the same time, the researcher is open to forming new theories where observed evidence and analysis warrants it.

Interpretivists argue that analysis of social phenomena cannot exist independently of the analyst's perceptions of it, and there is no single objective reality (Egbert and Sanden, 2014). Meaning is constructed not just by those under study, but by the researcher as well, and the analysis cannot exist entirely independently from the researcher. In a study of this nature, it is difficult to argue against such a view, and the researcher accepts his role as an active participant in the study. By becoming immersed in the project, the analysis and discussion reflect an individual view informed by the data. In this way, theory and understanding are continuously revised and refined throughout the duration of the research. In addition, continually revising perspective, methodology and analysis as the research progresses is an important aspect of case study research. As discussed in section 2.6, this naturally has some implications for generalizability, as analysis can never be entirely replicated.

The interpretivist nature of the research is tempered by a pragmatic worldview, less concerned with meaning, and more with how observation and analysis can be used to improve implementation and application (Johnson, Onwuegbuzie and Turner, 2007). More so than generating unique meaning from the cases, the research is concerned with how the observed meanings can influence policy and practice. It is guided by the outcome more so than the approach. In other words, while the analysis generated in this study may indeed be unique, it aims to not be so unique that is lacks utility. At the same time, the outcome orientation frees the research to use a variety of data, methods or paradigms that might yield useful findings (Merriam, 2002; Johnson, Onwuegbuzie and Turner, 2007). To this end, in addition to multiple data sources, as is common in case study research, analysis draws from a variety of areas including case study methodology, comparative education, policy analysis, globalization studies, organizational theory and higher education theory. Like IoHE itself, this study is not limited to or grounded in any single disciplinary theoretical framework. Klees (2008) argues that more so than any other field, international and comparative education researchers must draw from a wide breadth of fields, including anthropology, economics, sociology, and political science.

Though IoHE is not a discipline in the traditional sense, it is an important emerging field of research, and the review of IoHE literature has helped to formulate both the research aims and questions, as well as the framework under which the data was collected and analyzed (Yin, 2009). IoHE is often understood as a field of practice rather than research, and much literature is practice oriented and functional in nature with a relatively small portion based on empirical data collection and analysis. Although general consensus has emerged around Knight's (2004) definition of IoHE, to be discussed in greater detail in section 3.2.1, the field lacks established theoretical or methodological frameworks. Additionally, IoHE tends to attract researchers from other disciplines with relatively few specialized researchers, although this trend is changing. Despite not having many established theoretical or methodological models, the literature does identify a number of central tenets of IoHE, upon which this research is based:

- IoHE is a means to achieving other goals, not an end in and of itself (although ‘internationalism’ can be one potential goal of internationalization).
- Rationales for and approaches to IoHE are determined by, and can change dramatically depending on, perspective and context.
- Globalization and the knowledge-based economy are central drivers of IoHE.

IoHE literature clearly demonstrates the importance of context, and this study dedicates considerable attention to the national contexts in which the case study universities operate. Without this, understanding of institutional approaches would be superficial at best. Ultimately the goal is to highlight the relationship between approaches and these contextual factors, so we can better understand the weight and role of particular contextual factors in determining approach.

As discussed in section 3.1, universities are complex organizations with a variety of influential stakeholders (Kerr, 1963). More so than other types of organizations, universities can be loosely organized groups working simultaneously towards multiple and sometimes competing ends. The goals of administration may not be the same as for the faculty or students. The qualitative approach helps us understand the pluralistic nature of the policy and practice formation processes (Punch, 1998). However, as this particular study is concerned primarily with policy and strategy, the focus is put on leadership and administrators responsible for these areas, which is not to say that they represent the entirety of internationalization at any given institution. Nor is it to say that other stakeholder groups are not equally as important. Indeed, a major weakness of this research is that it does not incorporate a broader range of stakeholder views.

It should be noted that many IoHE evaluation and measurement tools have been developed (Gao, 2015), and this research seriously considered the use of some of these tools as a framework for understanding and comparing internationalization at each case. Indeed, such an approach would likely yield very interesting and useful results. Ultimately, this approach was not taken because the purpose of this research is not evaluative in nature, but more concerned with the process by which decision makers determine institutional approach and how this process is related to their unique contexts. As such, it is not a benchmarking exercise. Although a comparative study, the intended outcome is not so much to say how one university's internationalization compares to another, but rather what others can learn from the internationalization journey of the cases. In this way, the research hopes to emphasize the importance of purposefully considering context in determining policy, strategy and evaluation of IoHE.

2.4 Research process

As a first step in the research process, a wide sample of literature related to higher education and its internationalization was reviewed. First highly cited books and articles from key authors on IoHE were identified, drawing largely on the author's knowledge from graduate works and several years in the sector. From these resources, other important authors in the field were identified, and their contributions reviewed. This included sub-topics and related areas such as student mobility, comprehensive internationalization and so on. Throughout, key authors and theories related to higher education more generally were also identified, and these areas were reviewed in turn. The bulk of the literature review was conducted from August, 2016 to February, 2017, but continued through September, 2018.

The review chapter begins with a brief review of higher education in general and the global research university in particular, and the major trends affecting the sector, in order to provide an understanding of the different functions of higher education that internationalization is generally meant to enhance. From there, the review moved into literature specifically focusing on IoHE within East Asia as well as higher education within the two case study countries. Key region and country specific literature was identified and reviewed. Understanding of IoHE generated from the review formed the lens through with the cases were analyzed, but at the same time that understanding was continuously refined based on what was learned through the cases.

Although several good examples of comparative studies centered in Asia were identified during the literature review (e.g. Mok, 2010; Gao, 2014; Lee, 2015; Morita, 2015), Koh (2011) points out, and the review confirms, that much of the IoHE literature is generated from or focuses on Western contexts. Thus, by comparing two distinct East Asian contexts this research not only helps in some small part to balance the field, but also allows for the use of 'Asia as method' to re-contextualize and generate new understandings of the somewhat westernized conceptions of IoHE (Lim, 2016). Such comparison may be able to help generate a more regionally relevant understanding of IoHE and its uses, and provide an opportunity for additional intra-regional learning.

IoHE, like all educational policy, is necessarily grounded in local realities, and results from particular mixes of history, culture, political institutions and traditions, industrial structures, labor markets, pressures, and aspirations (Koh, 2011). As such it is important to anchor theoretical discussions of IoHE in the national contexts in which the case studies are located, thus highlighting the critical factors affecting implementation. In addition to the literature from and on Singapore and Japan, primary sources such as policy documents, speeches, and reports were reviewed to generate a more detailed understanding of the national contexts. These sources were primarily accessed via government websites and archives. From this review, detailed profiles of the two national policy environments were developed. Review of these sources largely took place between January and June of 2017, but continued throughout the remainder of 2017.

The exploration of the national policy environments proved to be very rich in and of itself, but ultimately this research is about the institutional perspective. Accordingly, the main units of analysis were the four case study universities. National universities were chosen because of their close relationship with national direction setting. All cases are flagship highly ranked comprehensive research universities. For Singapore, the two oldest and largest public universities were chosen. Japan has a much larger higher education sector, and the two most prestigious national universities in the Kansai region were chosen. The University of Tokyo was considered, but for reasons of proximity and the somewhat uniqueness of that university in the Japanese context, the two Kansai universities were chosen. It was also felt that the two Kansai universities were more directly comparable to the two Singapore universities.

Two universities from each country were used to allow for within country comparisons as well as more robust cross-country comparisons than one case per country would have provided. Similarly, two national contexts are included to reveal insights that might not be as readily apparent when examining only one context. Japan and Singapore were chosen as they represent very different contexts within the East Asia region. Through comparison, this study seeks to highlight the relationship between context and approach, and similarities and differences that may exist across cases. In this way, we can understand not just what happens at the individual universities, but also explore some of the emergent conceptual themes related to IoHE (Vidovich, 2004). Background data from primary and secondary sources were gathered to trace the history, background and context of internationalization, and to build profiles of each case study university. Relevant documents were reviewed and analyzed mainly between June and October, 2017 for the Singaporean universities and November, 2017 to March, 2018 for the Japanese universities. It is important to note, that the narratives of the cases are, for the most part, only representative of the situation through the end of 2017.

Primary and secondary documents in English and Japanese produced by or about the universities comprised the baseline data for this research. These sources were used to build detailed profiles for each case and their respective national policy environments. Primary sources included government documents and reports, and publicly available documentation from the universities including websites, brochures, strategic plans, annual reports, press releases, and presentations by administration and faculty. Such documents provided information on activities and programs related towards internationalization and often provided some insight into the rationales behind and intended outcomes for such initiatives. Rarely though did they provide deeper insights into the decision making process behind the initiatives. Secondary sources, including previous research, media reports, and evaluative reports were more helpful in this regard as they often included some investigative work. Both types of documents provided valuable information on not only the issues surrounding internationalization, but also other ongoing considerations or major events that somehow impacted the approach to internationalization. To the extent possible, analysis of primary and secondary sources identified the actual or likely author, their purpose in producing the document, and major potential influencers of the content of the document. Beginning with the document analysis was helpful in making the best use of the existing resources (Merriam, 2002), and developing as complete narratives as possible before moving on interviews to fill in the gaps.

After the document review, to develop a more thorough understanding of why and how particular approaches and initiatives identified in the documentation were adopted, interviews were conducted with key administrators and faculty leadership at each university. These interviews were designed to build upon the data collected through the document review and contribute to a more detailed and comprehensive narrative for each case study. Interviews were semi-structured, and while there were some general questions asked across interviews, most were tailored to the unique position and experience of the interviewees. Interviews lasted between 50 and 80 minutes. Most of the interviews at the Singaporean universities took place in September, 2017, and at the Japanese universities in March, 2018. In total, formal interviews with 29 individuals were conducted, while informal conversations with and additional four individuals were used to provide general background knowledge as well as check and verify particular perceptions and pieces of information.

The interviews served as a supplementary albeit very important and rich source of data to build on and ‘fill out’ the university profiles developed from the document review. Beyond what published documents can provide, interviews permit insights into the actual perceptions, experiences and rationales of those involved with internationalization at the case study universities (Punch, 1998). In this sense they are critical in providing a more in-depth picture of not just what the universities were doing to internationalize, but why and how; two questions central to this research.

During the document gathering and review process, key staff were identified at each university, and thus the sampling technique was purposeful. Purposive sampling approach is one of the most common sampling research strategies (Denzin and Lincoln, 2000), and is particularly effective and appropriate when there are particular individuals who can provide the most insight (Punch, 1998; Merriam, 2002). Based on positions and job responsibilities, leadership from each university with direct responsibility for relevant areas were selected and approached for interview. Of those approached, approximately 35% agreed to an interview.

That many individuals with key responsibilities related to internationalization did not respond to requests for interviews did introduce some limitations to this methodology. In total, six to nine formal interviews were conducted at each university, as well as informal conversations with an additional three to five individuals per university.

Semi-structured interviews were deemed the most appropriate for research of this nature, as formal structured interviews can be too ‘artificial’ and inflexible, and unstructured interviews carrying too great a risk of not acquiring the desired data (Bryman and Bell, 2007). A list of interviewee-specific questions was prepared to direct the conversation. Since roles and responsibilities of interviewees varied, the questions were tailored to the experience of each participant. At the same time, similar questions were asked of each interviewee to explore some common themes around internationalization more consistently. General interview questions were created prior to the first interview, with participant-specific questions developed as the researcher gained an understanding of that interviewee’s particular area of responsibility. Questions typically fell into three categories: informative questions addressing objective facts, analytical questions discussing the reasons behind particular approaches, and evaluative questions investigating the interviewees' subjective views on the merit of particular approaches. In all cases permission was granted to record and take notes during the interviews. Interview notes were not limited to content, but also included points to highlight and consider for further interviews. The literature and document review data were revisited between interviews to gain a better understanding of new data and continually refine the researcher’s understanding and interview content and format.

Finally, the gathered data was used to create detailed narratives of the process of internationalization at each case study university. These individual narratives were then couched within the profiles of their respective national contexts and then compared against each other. These profiles and the cross-case analysis were then sent to all interviewees for comment and corrections. Interviewees from all four cases responded with clarifications. The analysis of these comparisons was then used to generate discussion of the relationship between intuitional approach and relevant contextual factors.

2.4.1 Analysis

Data gathered were summarized, grouped and incorporated into narratives for each case. Given the very large amount and diverse nature of the data, Excel databases were used to assist with storing, categorizing, sorting, and retrieving data for analysis. Content analysis, one of the most common forms of converting qualitative text into coded categories (Weber, 1990), was the main form of analysis for both the document review and interviews. Content analysis may not be as in-depth as other techniques such as critical discourse analysis (CDA) which delve deeply into contextual circumstances and accompanying elements of text (i.e. facial expressions), but given the nature of this research, it was not felt that such a detailed reading was necessary to sufficiently understand the process of internationalization at each case university. Text from documentary sources and interview transcriptions were summarized, categorized and coded to manage the information and around key themes. Summarization was done with care not to reduce the data to the point of significant loss of meaning or context (Punch, 1998).

A constant comparison technique was used to relate data back to the research questions and systematically compare themes emerging from the data (Glaser & Strauss, 1967). Data were repeatedly reviewed to consider various interpretations, create new insights, expose conflicts, and explore various linkages. Some graphics and models were created to help the researcher conceptualize the relationships between the data. Findings from one source were checked against other sources as much as possible for triangulation. One advantage of utilizing such a wide variety of sources in constructing the narratives was that multiple perspectives could be taken into account, and information from one source could be cross-checked against other sources. The data summaries were then used to generate individual narratives for each case.

The individual narratives were then used for a cross-case analysis looking at similar data across all cases, highlighting the similarities and differences between each case. Simplistic models and thematic maps were sometimes generated to help understand the relationships. The cross-case analysis aimed to identify how unique aspects of internationalization at each case study were related to their unique institutional characteristics or national circumstances. As patterns emerged, supporting or contradicting evidence began to stand out, and general explanations were derived from analysis of the relationships between each case and their respective contexts. Similarities between cases within a single national context were then compared with the similarities between the other national context to see where there was convergence or divergence. Aspects that were shared by the in-country cases, but were dissimilar between countries were highlighted and potential explanations from the national context were sought. Similarities that existed across all four cases studies were also highlighted.

The aim of this cross-case analysis was to both highlight the similarities and differences between cases, as well as to try and explain why they exist. Such explanation could provide valuable insight into the more important contextual factors that should be considered when developing internationalization strategy. It may also highlight intuitional and program level factors that should be taken into account when developing national level policy and strategy. Consistent with the interpretivist view, it is acknowledged that this process of analysis was impacted by the researcher's own informed subjective perceptions. Nonetheless, the researcher made every attempt to bear in mind the study objectives, and to remain critical and objective when analyzing the cases.

2.5 Case studies

Cross-case analysis is the main methodological approach to this research. Case studies are common in both higher education research and small-scale research projects of this nature (Merriam, 2002). There has long been a debate in educational research, as in other fields, around exploring a narrow topic in a broad sample (variable oriented) versus exploring a broad topic in a narrow sample (case oriented). In the author's view, both are essential for informed understanding. For this research, case studies were chosen over other potential methods (e.g. a wide sample survey) in order to paint a more detailed picture of the process of internationalization within a smaller number of universities. However, the value of such an approach is most evident when the results are used in combination with research utilizing other methods. When grounded in this broader understanding, case studies can provide valuable evidence of how theory plays out in real life circumstances, and thus can be a valuable tool for informing policy and practice.

Definitions of case studies vary, but there are a few common elements including: using multiple sources of evidence to investigate or explain a contemporary phenomenon; examining a phenomenon in parallel with their real-life contexts; seeking to answer 'how' and 'why' questions; examining interactions within an enclosed system; targeting to a limited number of events or conditions and their inter-relationships; and using varied units of analysis (Soy, 2006; Yin, 2009). Case studies can be factual, descriptive, explanatory, exploratory, interpretative, or evaluative in nature, or as is the case for this research, a combination of several of these.

Case study data typically comes from documentation, archival records, interviews, direct observations, participant observation and physical artefacts, and the multiple sources of evidence can increase the credibility of the findings (Merriam, 2002; Yin, 2009). However, rather than a detailed analysis of each last piece of data, it is customary to collate the data into a manageable form, identify important trends, and construct a narrative, using examples to highlight relevant points (Shuttleworth, 2008). In this way, method and analysis occur simultaneously (Zucker, 2009).

While no good research will disregard context, case studies are especially effective in providing a detailed contextual analysis difficult to obtain through other approaches. This approach can foster a more holistic understanding of the organizational processes taking place within the case study universities (Yin, 2009). In this way, the broadness and complexity around a concept like IoHE, can be narrowed down into a manageable research topic, bridging theory and real world examples. Yin (2003), however, warns against the challenges that arise when considering the context, such as the richness of the context resulting in too many variables to be studied. Adopting multiple methods for data collection can help to better capture this richness.

While the depth is an advantage, generalizability is the most common critique. Comparative cross-case analysis seeks to temper this by studying several cases at once (Shavit, Arum and Gamoran, 2007). Another critique is that too much exposure to the case introduces bias on the part of the researcher (Soy, 2006). This interpretive aspect is viewed as an unavoidable risk in this sort of research. The data collected are open to interpretation, and the research attempts to make the role and views of the author clear. It is worth noting though, that bias though can occur in many other types of research and is more linked to the interpretation of the findings rather than the method itself (Yin, 2003).

2.6 Reliability, validity and generalizability

Case study research is no different than any other form of research in its need to establish rigor. Rigor in design and procedure establishes reliability and validity. This speaks to whether the process and findings adequately answer the research questions. Validity is concerned with the integrity of the data sources and collection methods and whether they address the research question(s) (Bryman and Bell, 2007). It is reflected and grounded within the whole research process, including the setting of the research aim and objectives, research design, data collection and analysis, and is connected to the researcher's ability to adequately carry out the research and analysis as intended.

Reliability is often equated with repeatability, and the ability of the data collection and analysis methods to generate similar results by others over time (Bryman and Bell; 2007). Replicability is an essential consideration for much research in the natural sciences, but is somewhat less applicable to social sciences. As we saw, Interpretivists hold that reality is socially constructed and forever shifting, and that the researcher takes part in its construction. Therefore, nothing is ever truly replicable. As a result, many qualitative researchers associate reliability with quality and the research's ability to generate understanding. This 'quality' is generally arrived at through the appropriateness of the research design and data collection methods, and soundness of the analysis. In this sense, it is often replaced with 'credibility' (Cohen, Manion and Morrison, 2007). The term credibility though is often closely associated with internal validity, and understood as whether the study findings make sense and resonate with participants and other researchers and informed observers (Zucker, 2009).

Triangulation is a typical strategy in case studies for improving reliability and validity, controlling bias and providing a more detailed and balanced picture of the case. Triangulation can strengthen findings by using multiple investigators, theories, data sources, and/or methods within a single research project (Merriam, 2002; Patton, 2002). Triangulation attempts to map out, or explain more fully, the richness and complexity of human behavior by studying it from more than one standpoint (Cohen, Manion and Morrison, 2007). For this research, triangulation is arrived at through multiple sources of data as well as multiple approaches to analysis.

Finally, with regard to generalizability and transferability, while case study findings can never be truly generalizable, this research aims to highlight the *types* of contextual factors that should be considered regardless of setting. Thus, it is more about transferability, and sufficiently describing the methods, instruments, and data for the research to have relevance and application in different contexts (Sarantakos, 2005; Cohen, Manion and Morrison, 2007). Yin (2009) also introduces the concept of *analytic generalizations* applied to theoretical propositions, and argues that although not to populations, case studies can be generalizable to theoretical propositions. Essentially this means that the generalizability of this study is not necessarily to other universities, but rather to theories about the nature of IoHE.

2.7 Ethics

This research fully complies with the American Educational Research Association (AERA) code of ethics. Anytime one deals with human participants, great care must be taken to ensure that no harm comes their way as a result of the research. In the case of this research, the unit of analysis is the university as a whole, rather than individual people. Therefore, the content was not deemed particularly sensitive or potentially uncomfortable. Furthermore, because the objective was to build a narrative around the university, the reporting does not reveal the names or titles of the individuals who participated in the research. Interviews were recorded, but electronic recordings, transcriptions and notes are stored in a password protected file on the researcher's personal computer. Only the researcher and his immediate supervisor have access to any material related to the interviews. The interview questions and a cover letter with an explanation of how their answers are crucial to this research, were sent to the respondents in advance to make sure that all the respondents understand the questions well and have enough time to consider whether they would be willing to participate. Informed and signed consent was obtained from the interviewees prior to any interview. Interviewees also had the option to withdraw from the study at any time during or following the interviews. All records will be destroyed within a period of 10 years. For the document review, as only publicly available documentation was analyzed, there were no threats to confidentiality related to that portion of the research.

3 Literature Review

This literature review chapter explores reoccurring and relevant themes related to higher education and its internationalization, with the aim of building a foundation for analysis of IoHE in the case universities. Essentially, this literature review, in addition to providing the foundation for the study, seeks to answer research question one:

> RQ1: What are the global trends influencing higher education generally and internationalization specifically?

To gain perspective, this chapter reviews key literature in two distinct but interrelated areas.

1. The role of higher education, with particular emphasis on the university, its relationship to the nation-state and major trends affecting the sector.
2. IoHE and its drivers, approaches and activities.

3.1 Higher education and the university

Because IoHE is understood as a means to achieving broader missions of higher education, any discussion of IoHE should be grounded in a thorough understanding of the purpose and functions of higher education. This section attempts to outline some of the essential theories on the broader functions of and trends affecting higher education. Higher education, defined as "education beyond the secondary level; especially education provided by a college or university"[1], is broad, and can range from short term vocational training to doctorate and post-doctorate study and research. In addition to educating students, institutions of higher education engage in research, service, workforce development, entrepreneurial activities, and

[1] https://www.merriam-webster.com/dictionary/higher%20education

play a central role in the production and dissemination of knowledge, innovation and technology. Given the breadth of the field, this research and subsequently the literature review focuses primarily on the comprehensive research university, although acknowledging that there are many other important forms of higher education.

3.1.1 Context

Higher education is generally delivered through universities or other types of higher education institutions (HEIs), such as institutes and colleges, which operate within the constraints of their local contexts. Similar names may mask very different realities across those different contexts (Geiger, 1992). Although some universities predate their current higher education systems, all universities are part of broader state, national, and increasingly global, networks and systems, which include a diverse array of government agencies, quality assurance bodies, service providers, research organizations, professional and academic associations and societies, publishers, and many others influencing the field.

According to Altbach (2007), "the complex interplay between national, regional and local realities, on the one hand, and broader international trends on the other is central to any effective analysis of the contemporary university" (p. xii). More than thirty years ago, the influential higher education scholar, Burton Clark (1987), advocated for using comparative perspectives to identify common attributes and differences among contexts. Even global trends affecting higher education, including internationalization, cannot be separated from the local contexts in which they occur (Yang, 2005; Rumbley, Altbach and Reisberg, 2012; Hunter, 2013; UNESCO, 2013). de Wit et al (2015) write:

> Any study on IoHE has to take into account the broad diversity, and identify and analyse the global, regional, national and institutional commonalities and differences

> in the development of internationalisation if it is to understand, influence and support the process of internationalisation in higher education. It is driven by a dynamic and constantly evolving combination of political, economic, socio-cultural and academic rationales (de Wit, 2002) that will take on different forms and dimensions both in the different regions and countries, and in the institutions and their programmes. (p.54)

Contextual factors can include history, geostrategic positioning, demographics, resources and economy, society and culture, national priorities, politics, regulatory contexts, position of the individual HEI within the national system, and many others. Contextual differences can influence an institution's motivation for and approach to internationalizing as well as the options it has available (Rumbley, Altbach and Reisberg, 2012; Hunter, 2013). Marginson, Kaur, and Sawir (2011) refer to this as *position*.

Additionally, for several decades now, universities, scholars and students have needed to balance local, national and increasingly international contexts and considerations (UNESCO, 1991; Marginson, 2010). Altbach (2007) suggests that as research universities are usually part of a larger system, they must stay grounded in their local community and its needs, as well as stay on top of global trends. Thus, there needs to be a balance of both local perspective and 'outward-lookingness'. In some cases, HEIs can be the only link between the domestic and international academic worlds, and facilitate access to knowledge and developments from other areas.

3.1.2 History

Universities, usually considered the pinnacle of higher education, are one of the most enduring institutions in modern human history. Most of the institutions across sectors that have continually survived over the last 500 years are universities (Kerr, 1963). The modern university finds its roots in different times and places, albeit some argue that all originated in the Western world (Ben-David and Zloczower, 1962; Perkin, 2006; Altbach, 2007; de Wit, 2012).

Diverse and unwieldy institutions with various missions and structures, universities play critical functions for both societies and individuals, and are typically understood as HEIs which have a strong research focus and are authorized to grant academic degrees up through the doctoral level.[2] In their seminal article, Ben-David and Zloczower (1962), open by defining universities as institutions that engage in teaching and research, and prepare students to become professionals, civic servants, scholars and scientists, noting constant tension about which of these responsibilities to prioritize. Barber, Donnelly and Rizvi, (2013) argue that the two essential outputs of a university are research and degrees, defending their exclusion of teaching by drawing a connection between degrees and learning. This seems tenuous, as it is not difficult to imagine learning without a degree, and conversely the award of a degree without much learning. However, Geiger (1992) notes that university's play an important role in validating knowledge through their power to award degrees.

Most features of the modern university, such as lectures, exams, degrees, and faculties have origins in ancient and medieval Europe. They transitioned from communities of masters and students concerned with the preservation and interpretation of knowledge to institutions emphasizing research and the creation of knowledge in service to the state in 19th century Germany (Kerr, 1963; Perkin, 2006). They flourished in the 19th and 20th century United States (US), which combined elements of several previous models, adding many of their own (ibid). Ben David and Zloczower (1962), refer to the US style as the *large-scale academic enterprise*; A view that, as we will see, Singapore adopted readily. Many see global research

[2] https://www.merriam-webster.com/dictionary/university

universities converging around the American model, or ‘multiversity’, largely popularized by former University of California Chancellor Clark Kerr in his 1963 “Uses of a University”. Kerr’s description came to be regarded as prescription by many (Marginson, 2008; 2016), although he was quick to point out that the ‘multiversity’ is a product of evolution rather than construction.

Most universities today are variations of the German, British, US or Japanese models (Altbach, 2007), with convergence around the American model over the last thirty years (Marginson, 2016). Altbach (2004) claims that there is no such thing as a truly Asian university, and all existing universities in the region are based on Western models. However, education in East Asia has deep roots going back farther than most western societies, and while modern universities in the region were mostly founded in the twentieth century, their sustaining traditions may be older than those in the West (Marginson, 2011). Nonetheless, higher education in East Asia is heavily influenced by the West and largely works within the Anglo-American paradigm (Ng, 2012; Ishikawa, 2014). This may be the result of imposed educational transfer in the former colonies to the willing adoption of western models as part of the modernization process in Japan (Altbach, 2007; Koh, 2011; Tan and Chua, 2015). In both cases, they have been an important part of the formation of modern nation states through preparing the labor force, social participation, identity formation of citizenry, and the production of national elites (Gopinathan, 2007; Mahbubani and Tan, 2015).

3.1.3 University structure and function

Central to Kerr’s (1963) ‘multiversity’ was the notion that modern universities have evolved into complex webs of internal and external communities.

> There are several 'nations' of students, of faculty, of alumni, of trustees, of public groups. Each has its territory, its jurisdiction, its form of government. Each can declare war on the others; some have the power of veto. Each can settle its own problems by a majority vote, but altogether they form no single constituency. It is a pluralistic society with multiple cultures. Coexistence is more likely than unity. (p. 36)

Kerr argued that among these varied communities, the modern 'multiversity' has not a single mission, but many competing visions bound together by a common name. Along with that name comes a standard of performance, historical legacy, governance structure, character of spirit, and reputation that hold together the various activities of this multitude of stakeholders. Kerr likens this complexity to that of a city:

> The idea of a Multiversity is a city of infinite variety. Some get lost in the city; some rise to the top within it; most fashion their lives within one of its many subcultures. There is less a sense of community than in the village but also less sense of confinement. There is less sense of purpose than within the town but there are more ways to excel…As in a city, there are many separate endeavors under a single rule of law. (p. 41)

Barber, Donnelly and Rizvi (2013) argue that rather than the communities themselves, the heart of a university is the structure of departments, admissions standards, tenure policies, facilities, and the interactions among the stakeholders. They argue that the exchanges between students and academics are core to the university experience. Schlemper (1991) concurs with the importance of interaction within the university, but adds that it must also maintain "a fruitful dialogue with the State, the productive sector and society as a whole" (p.83).

Altbach (2007) and Marginson (2008) also note that in addition to various structural characteristics, universities must structure and allocate educational and social opportunities and balance public and private goods and local, national and global agendas. While teaching, research and service may be the core missions, there may be many additional ever-evolving functions depending on their unique mix of history, organization and structure and reputation. Such functions may include preparing the workforce and acting as a gatekeeper of managerial and professional positions (Arum, Gamoran and Shavit, 2007; Green, Marmolejo and Egron-Polak, 2012), equipping increasing populations with productive higher order skills (Hunter, 2013), and services to society and communities, such as the general development and advancement of knowledge, as libraries, cultural centers and spaces for independent and critical thought (Altbach, 2007). These aspects are often difficult to measure and may not directly generate economic benefits.

Altbach (2007) also highlights common challenges faced by many universities, such as funding, commercialization, globalization, maintaining autonomy, accountability and academic freedom. He and others (Schapper and Mayson, 2005) note the deteriorating academic working environment due to less academic freedom, heavier teaching loads, and less influence on governance, and stress the importance of faculty to the higher education endeavor. While academics used to largely oversee university operations, as institutions become larger and more complex, they require more specialization to manage operations, and there is a natural tendency for professional administrators to garner more control over time (Kerr, 1963; Clark, 1998). Kerr added that although corporate models of management seem to make some sense in the current global context of competitiveness, they may have risks in the long term.

3.1.4 Public versus private good

Whether universities exist to serve mainly public (society) or private (the individual) goods is a matter of ongoing debate. Kerr (1963) assigned them a middle ground, saying that they are unique in being neither fully public nor private, and must simultaneously serve students, the state and industry. Burton Clark (1983) also argued that universities should not be evaluated as if they were corporate or economic systems, and that they bore responsibilities toward state, industry and academics. Geiger (1992) and Altbach (2007) also note that given their central importance to any modern knowledge-based society, universities have the responsibility to act in a public-spirited manner, especially those that receive public funding.

Barber, Donnelly and Rizvi (2013) note a recent shift towards rationales of private good. While most universities were founded in the 20th century to be regional or national institutions, they are increasingly operating in a global market, and are becoming increasingly less accountable to the state and more accountable to the market. Many (e.g. van der Wende, 2003; Sidhu, 2006; Marginson, 2017a) now acknowledge that higher education is shifting towards being viewed as more of a private than public good, as higher education becomes more responsive to industry needs and seen as an economic investment on the part of students.

This shift is linked to the spread of Human Capital Theory (HCT). HCT is one of the most well-travelled theories on education and economics. In basic terms, HCT suggests that investment in education will pay off in productivity and economic reward for both society and the individual. As students acquire the right educational attributes, the theory goes, success will automatically follow. Accordingly, since there is no limit to individual aspirations, until the point of saturation there is no limit to potential growth and no end to the social wealth that could be generated, and thus each additional student admitted is justified in economic terms. In this way, HCT positions higher education as essential to the economic success, while also promoting meritocracy. Despite much criticism, the theory holds significant traction in that it continues to influence behavior at both the individual and policy levels.

It is in this light that national legislative frameworks are deregulating, decentralizing and forcing HEIs to become increasingly accountable to the market (Hunter, 2013), and student tuition and other sources of revenue are accounting for increasingly larger portions of institutional budgets (Glass, 2015). Barber, Donnelly and Rizvi (2013), argue that more of the funding burden should be placed in the students as "a degree is a benefit both to the holder … and to the nation", however "getting the balance of funding appropriate to reflect these benefits is essential if funding is to be sustainable" (p. 2).

While nations' certainly need the innovations and skilled labor produced by universities, globalization complicates this dynamic, as university inputs and outputs (i.e. students and research) are increasingly not limited to the domestic sphere (Slaughter and Rhoades, 2004). Marginson (2014) argues that the concept of public good is shifting from the national to the global, but since there is no global state, global research universities become like independent agents working for global society rather than state institutions.

3.1.5 The state, the economy and the university

Most existing universities were created in the 19th and 20th century era of the nation-state, and were designed to play a key role in the construction of national identity and citizenship, as well as economy (Kerr, 1990; de Wit, 1998; Alexiadou, 2005; Hudzik, 2011). It is from such beginnings that the concept of internationalization emerges. Universities play an important role in serving the national public good and are largely funded at the national level. Despite increasing global functions, universities are still very much linked to, and often subservient to, the state through funding, regulatory controls, national polices and other mechanisms (Geiger, 1992; Scott, 1998). Yet, Kerr (1990) argues that because of their commitment to universal knowledge, universities are essentially international institutions, and although states increasingly tightened control and coordination of higher education during this period, they have also encouraged internationalization in both content and structure. There is some tension here. Unlike primary and secondary education, higher education typically has no national curriculum, and universities tend to be more open and cosmopolitan, naturally promoting skepticism, intercultural awareness, appreciation of context, and even secularity. However, there is often also strong government influence and oversight. In states where academic freedom is protected, higher education is distanced from state control and nationalistic agendas. Ironically, this can lead to a stratification in society, where those attending more years of state subsidized education can be more likely to question the state and hold dissenting views (Zamberta, 2005).

In East Asia in particular, universities were often created as means of translating Western knowledge to local purposes in an effort to ‘catch up’ with the West. In newly independent former colonies universities created by the colonial powers had an important nation building role. Governments used higher education as a way to both assert their independence and compete with other nations. Thus, an inherent international dimension of universities has long been used for nationalistic purposes. More recently, a stronger emphasis on international cooperation and exchange has evolved and internationalization goals have emerged at the state level, although usually justified in terms of national competition. Somewhat paradoxically, universities have come to be the state institutions that facilitate both nationalism and globalization. Schlemper (1991) also argued that universities can serve as one of the main mechanisms by which the state interacts with the international arena. Ilieva and Peak’s (2016) comparative analysis of national higher education policies provides clear examples of how national priorities and pressures can result in reform policies aimed at internationalization.

Marketization and massification, further explored in section 3.1.7, have influenced the relationship between the state and higher education, and universities have come to be seen in more economic and instrumentalist terms with close links between education and economic policy (Scott, 1998; Trow, 2000). Governments, especially ‘developmental states’, have become increasingly aware that economic growth and competitiveness are dependent on an educated workforce and the generation of knowledge and innovation, and are aiming to harness the productive capacity higher education towards such ends (de Wit, 1998; Alexiadou, 2005; Hudzik, 2011; Green, Marmolejo and Egron-Polak, 2012).

> Higher education plays a key role in contributing to national development through the training of human resources with advanced knowledge and skills, the ability to produce and disseminate knowledge, and the capacity to engage in scientific and technological research. Higher education produces leaders, thinkers and scientists. As world economies increasingly become knowledge intensive, knowledge, skills, innovative ideas and scientific thinking are becoming vital, and it is only through higher education that high-quality human capital is developed. (UNESCO, 2013b, p. 50)

Somewhat ironically, despite higher education being viewed as increasingly important, the last 30 years have seen a general retraction of the state from funding and direct management. Most states have deregulated and decentralized management and promoted greater institutional autonomy. Although the state’s role as a primary funder remains, it has in most contexts decreased significantly and looks set to continue doing so. The likely priorities for government spending are support for talented students in areas such as STEM, increasing equity and access, and research in fields crucial to the country's economy. Increasingly, governments use funding to incentivize or catalyze changes that the market left to itself would not bring about fast enough (Barber, Donnelly and Rizvi, 2013). These changing financial models have also resulted in new models of accountability and autonomy (Glass, 2015). Sidhu (2006) points out that while funding is still the most important tool with which the state steers higher education, many states are attempting to build a culture of entrepreneurialism in HEIs. This has led higher education to become increasingly accountable to the market and seen as more of a marketable commodity. Thus as HEIs have needed to strategically reposition themselves, they have become more receptive to globalization trends, and the infusion of an entrepreneurial culture (i.e. New Public Management principles) has led to an increased importance of research and innovation (de Wit, 1998; Alexiadou, 2005; Zamberta, 2005; Hudzik, 2011; Green, Marmolejo and Egron-Polak, 2012; Kell and Vogl, 2012; Hunter, 2013; Marginson, 2014).

Burton Clark (1983) developed a triangle coordination system to describe the relationship between higher education, the state and the market, concluding that most countries tended to align most closely aligned with one of these sectors (except Japan which had strong elements of all three). In his model, higher education plays a key role in innovation, technology and knowledge creation and transfer. This contributes to economic growth and job creation by providing students and faculty with new ideas, skills and entrepreneurial talent, and training and encouraging them to become entrepreneurs. Despite some issues, it is still seen as a dominant model (Marginson, 2016). One of the biggest challenges to the model is the blurring of lines in the new knowledge-based economy (KBE), as governments, the market and higher education all act on and influence one another, the distinctions between them become less obvious (Marginson 2003; Sidhu, 2006; Triple Helix Research Group, 2013).

Clark's model was the precursor for other important theories of higher education including academic capitalism (Slaughter and Rhoades, 2004) and the triple helix concept (Ranga and Etzkowitz, 2013). In these models higher education, especially research and development, plays an even more prominent role in innovation and economic development. As research competition increases, many governments have responded by shifting from institutional core funding to introducing specialized research funding programs. Some opt to use competition to drive differentiation and concentration in existing top universities, while others try to build new capacity in existing government selected institutions (Marginson, 2016). Such programs, such as Project 985, Brain 21, Top Global University Project, and Global Schoolhouse, are sometimes referred to as Research Excellence Initiatives (REIs) or Centers of Excellence (CoEs) initiatives (Glass, 2015), and usually aim to raise national capacity through talent development and recruitment and encouraging cooperation with industry. These initiatives can positively influence research and university management, and have other positive spillover effects, but can also create friction within the sector and between the priorities of the state and the institutions (Yang, 2005).

As a result of this process, national dimensions of higher education become increasingly referenced against global trends, indicators and benchmarks (Sidhu, 2006). League tables are the most obvious example. Since the 1990s, intergovernmental organization such as the World Bank, International Monetary Fund and United Nations have also pushed for marketization and international standardization as the path to development and human capital production (Coulby and Zambeta, 2005). As early as 1991, UNESCO (1991) advocated for internationalization as a way to ensure that higher education did not become entirely subservient to state governments and prioritize short term needs of society over long term benefits to humanity.

3.1.6 East Asian higher education

In a fascinating account of a pre-WWII month long academic seminar on higher education in Asia involving 66 educators and social scientists from 28 national/ethnic groups (Keesing, 1937), it is evident that the region has long been struggling with debates, strikingly similar to today's, around the purpose and role of modern higher education systems in society. The group outlined two basic approaches to higher education: creatively adapt to the world, or reshape the world. Long before globalization or internationalization, the participants visualized a future with far greater cultural integration and synthesis of segregating differences such as language and culture. This is evidenced by quotes, such as, "We must train our pupils for local life, but also train them to make an intelligent adjustment to surely increasing alien contacts" (p. 33), and "There can be only one culture in the future - a world culture" (p. 34).

Of course in Asia, as in other parts of the world, World War II drew deep divisions, forestalling these visions of an integrated future. However, considerable development and convergence can be seen in the region over the past 50 years. Japan was the first to advance and expand its higher education sector in the 1960s and 1970s, with Singapore, Hong Kong and Taiwan following in the 1990s, and China and South Korea shortly after (Altbach and Umakoshi, 2004; Marginson, 2016). Along with this expansion and development, the American model has largely come to replace the British as the most influential in the region. Kaneko (2004) asserts that that universities were critical in Japan's development and joining the industrialized world, but Altbach (2004; 2007) and Sidhu (2006) attribute post-war development in the region more to the availability of cheap labor and well developed primary education sectors. Higher education is seen as a priority only after a certain level of development is reached.

As economies became more sophisticated, wages rose, and the nature of the workforce changed (Altbach, 2004). Higher education expanded to meet the growing need, with created a virtuous cycle of further development and investment in human capital. In the early 1990s, governments began to realize the potential of higher education in the KBE and countries such as Singapore, South Korea and Malaysia began making significant investment (UNESCO, 1991; Altbach, 2007). Thus, higher education has been important for ensuring sustained growth once the economies reached a certain stage of development. To cater to their countries' economic needs and compete globally with other nations governments in the region have moved to expand university education, and enrolments have increased by over 50% in the last decade (Mok, 2016). Already Asia represents almost half of the world's higher education enrolments, and the majority of internationally mobile students, and is predicted to represent 60% of the world's population and 30% of its wealth by 2025 (Marmolejo et al., 2013). If China and India reach OECD average participation levels, they will have 3.5 times the number of college graduates as North America and the EU combined (Marginson, Kaur and Sawir, 2011). There remains little doubt of the growing importance of Asian higher education sector, and the region is rapidly assuming a larger role in the world.

Asia, although commonly spoken of as a region, is far too diverse to generalize. However, Marginson (2011; 2015; 2016) makes a case for an 'East Asian higher education arena', comprised of the 'Confucian heritage countries' of China (including Hong Kong and Taiwan), Japan, South Korea, Singapore, and to some extent Vietnam. Despite substantial differences, these countries, he argues, share common geography (except for Singapore), cultural, linguistic, historical, political and religious roots, a 'catch up' mentality evident in state policies and strategies, and all are 'highly developed knowledge economies' (except China, although it is on its way). Lee, Hung and The (2013) also group Singapore with the other East Asian countries as having similar dominant educational cultural and historical philosophies. Lee (2014) notes the considerable literature characterizing most East Asian countries as development states, inclined towards heavy state intervention rather than free market capitalism to attain economic development by fine-tuning macroeconomic policies to accelerate industrialization. Developmental states essentially infuse the political regime with professional bureaucrats to engineer economic growth.

To illustrate the conception of an 'East Asia' region including Singapore, the below graphic shows the trajectory of GDP per capita and life expectancy of the six countries and territories in the region from 1965 to 2015. The figure demonstrates that though at very different starting points in the mid-1960s, the 'countries' have moved in a shared direction along tight economic trajectories. At the same time it shows that Singapore has shared this economic development with the region, in contrast to other contexts in ASEAN (Association of South East Asian Nations).

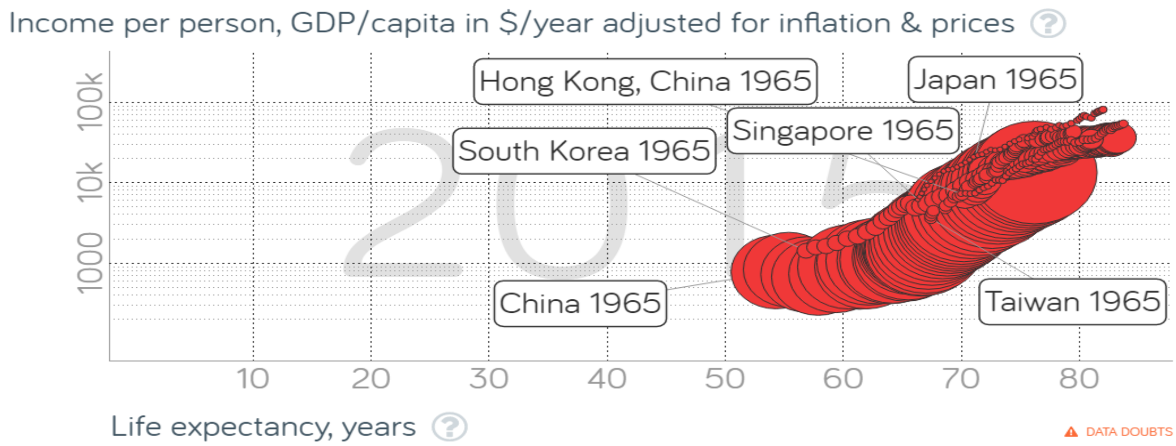

Figure 2. Changes in GDP per capita, population and life expectancy in East Asian countries from 1965 to 2015, highlighting the tightknit trajectories of the group. (Source: Gapminder.org, 2018)

Cummings (1997) developed the 'East Asian Approach' model for human resource development, which included: state coordination of education, research, science and technology, manpower planning, and job placement; emphasis on indigenous values; mastery of foreign technology; a high priority on universal primary with limited participation in tertiary education; and robust private funding. Marginson (2011) later argued that the region (including Singapore) held a distinctive 'Confucian' approach to organizing education, which includes strong national policy drivers, rapid growth of tertiary participation, intense national examination systems for entry, and high and growing public investment in research. He also notes (ibid; 2016) that the model may be further characterized by unequal participation, state limitations on institutional and academic freedoms, and a tendency for a few elite public research universities to sit atop a broad pyramid of mostly private providers. Several note that the traditional state control has been giving way to increased institutional autonomy as incorporation strategies are introduced to make universities more globally competitive (Mok, 2010; Yonezawa et al., 2014; Marginson, 2016). Due to the shared characteristics, Marginson and others make the argument that Singaporean higher education is more similar to the East Asian model than features found throughout ASEAN. Marginson's (2011a) description of the East Asian higher education model is worth quoting at length:

> The core of the model is the role of the nation-sate, which frames the examination system, steers the patterns of public and household investment and funds and drives the accelerated program of research. Selected state investment provides infrastructure and subsidizes tuition so as to push forward the boundaries of participation. Confucian traditions in education provide the essential cultural conditions that support the roles of state, household and examinations; while Confucian scholarship is the foundation of the respect attached to scientific research. Private household funding frees state resources for infrastructure and research. Examinations lock in the

> population, drive private household funding and legitimate the Model and the social competition that sustains it, on behalf of the state. (p. 607)

On the rising global influence of higher education in the region, he continues:

> This model is changing the global balance of power in higher education—because it works. Together private funding of tuition, public funding of research, and economic growth, enable the Confucian systems to lift mass participation, university quality and R&D all at the same time and at unprecedented speed. No other developmental model of knowledge economy is associated with progress at this rate. (p. 608)

3.1.7 Trends in higher education

Within the last few decades there are a number of clearly identifiable externally and internally driven trends impacting higher education globally. Different authors often assign different names to similar phenomena or discuss different phenomena that might be grouped in the same category. In general, the major trends affecting higher education can be grouped into several overlapping areas.

- Demographics changes, massification and increasing mobility
- The emerging knowledge economy/society and marketization
- Globalization
- Internationalization, which may be seen as a partial result of the above trends. As globalization and the fourth industrial revolution are closely linked, knowledge becomes global, and internationalization becomes a must for higher education.

3.1.7.1 Massification, demographics and mobility

Increasing demand for higher education is not a recent phenomenon. At the 1937 Summit on Asian Higher Education (Keesing, 1937), participants debated the issue of access and its challenges. Even then, there were already more students wanting higher education than the existing systems could accommodate. The group grappled with how (and whether) to provide higher education for the ever increasing numbers who wanted it. "What right have we to withhold from any group of people the larger heritage of mankind, and especially the linguistic and other tools with which they can dig into its treasures themselves?" (p. 62). They considered questions of admissions as well as what to do with an overproduction of graduates. Many at the summit argued that overproduction was not a concern because graduates create opportunities, not just take them, and an "overproduction of specialists will take care of itself. But there can never be an overproduction of truly educated people" (p. 144). Very similar arguments exist today.

Many scholars view expansion and massification as the defining and most significant feature of global higher education in the last 50 years (Geiger, 1992; van der Wende, 2003; Altbach, Reisberg and Rumbley, 2009; Altbach, 2013). Martin Trow (1973) described a broad pattern of development from ‘elite’ to ‘mass’ to ‘universal’ access in most countries, arguing that each transition altered the fundamental character of higher education; from shaping the ruling class to socializing masses. Often the US served as the global model in this regard, as it was the first to massify (Kerr, 1963; Trow, 1973; Altbach, 2007; Marginson, 2016). Today, most developed nations, including those in East Asia, have mass or universal higher education systems, with student populations ranging from a third to more than half of the relevant age groups (Arum, Gamoran and Shavit, 2007).

Massification is closely linked to demographic shifts, urbanization and the growth of the middle class taking place around the world (van der Wende, 2003; Economist Intelligence Unit, 2016). As more and more people believe that higher education is a path to upward mobility, and acquire the resources and agency to act on those beliefs, the demand for access and participation grows. As the middle class grows globally, families increasingly want college education, and are willing and able to invest heavily in it. They do this even without guarantees on that return on investment, and significant evidence to the contrary (Marginson, 2016). The current rise of inequality in the US and other countries with universal higher education suggests that in regard to upward mobility there are other factors at play besides productivity or education level. Nonetheless, the belief persists that it is simply economically better to have a degree than not, and governments typically have little choice but to respond to the increasing social demand.

In East Asia, as states invested in the secondary sector, infrastructure, governance reforms, teacher training, and financial supports for students, the expanding middle class began to seek social advantage for their children, resulting in further private support and expansion (Altbach, 2004; Marginson, 2016). Yang (2010) concludes that more so than state investment, the growth of GDP per capita has driven the expansion of higher education in the region, with a steep rise in the portion of costs covered by families. As individuals became expected and willing to shoulder a greater share of the costs, tuition and fees were introduced, and the demand-absorbing private sector grew (Altbach, 2013; Marginson, 2016). Chang (2003) and Marginson (2011a) also note the influence of Confucian culture in the willingness of East Asian families to supply a greater share of the cost than in other regions.

However, massification can also lead to inequality between and within countries (Marginson, 2016; Mok and Jiang, 2017). If public institutions cannot meet the growing local demand, often lower quality private (sometimes for profit) providers enter the market to absorb the demand, which can lead to an overall decline in quality and devaluation of degrees as well as the relative economic benefits of obtaining one (Sidhu, 2006). Massification may also lead to social and economic stigmas for non-degree holders, despite little evidence that degrees are necessary for their careers. It also can contribute to major shifts in the priorities of the majority of students who attend university, as increasing numbers tend to come in with employment orientations.

Such issues are further complicated at the international and global levels. As expansion increases, global phenomena such as the university league tables and the government REIs tend to concentrate resources at the top of higher education systems, thus widening the gap between elite and mass universities. This can also create intense competition for entry into the elite national institutions among foreign students. Within Asia, the combination of aging and shrinking societies with over capacity and young and growing societies with insufficient capacity, along with the increased capacity for mobility, has serious implications for the student make-up within universities and raises important questions regarding who universities should be serving and who should be funding them. The combination of oversupply of places in Japan and undersupply in China, for example, creates strong push and pull effects that will shape exchange in the region for some time (Hawthorne, 2012).

3.1.7.2 Marketization and the knowledge economy

> It is one of the unwritten, and commonly unspoken commonplaces lying at the root of modern academic policy that the various universities are competitors for the traffic of merchantable instruction in much the same fashion as rival establishments in the retail trade compete for custom. (Veblen, 1918 quoted in Bok, 2003, p. 1)

As illustrated by the above quote, competition among universities is nothing new. What is perhaps new in the 21^{st} century is the international dimension of this competition. As globalization increases global competition for research funding and talented students (and the revenue brought by international students), Harvard and Stanford begin to compete not just against each other, but against London, Melbourne and Singapore as well (Barber, Donnelly and Rizvi, 2013).

Universities have also long played an important economic role. Throughout most of the 20^{th} century, higher education fed into the domestic economy and contributed to national competitiveness. As education took on more of a role in facilitating and supporting the economic development of the state, market forces became increasingly influential (Mok, 1999; Chan, 2007). Since the 1980s, a sort of global higher education free market space has developed, with higher education as both a commodity and trader in the global knowledge economy. The World Bank's 1995 inclusion of higher education as a tradable service in the General Agreement on Trade of Services (GATS) formalized the connection between HE and trade (Banks and Bhandari, 2012).

Ross and Lou (2005) define marketization as the adoption of market practices and such criteria as affordability, efficiency, effectiveness, accountability, and customer choice. Mok (2005) identifies two major forms of marketization: educational institutions marketing their academic goods in the commercial world; and the restructuring of educational institutions in terms of business principles and practices.

In the knowledge economy, industries such as ICT, nanotech, legal, finance, marketing, and higher education generate knowledge which underpin production. This knowledge, which can be circulated globally almost instantly, becomes a tradable commodity and is sourced by business, industry and governments and fed into a cycle of innovation which increasingly intertwines knowledge and finance (Coulby, 2005; Coulby and Zambeta, 2005; Marginson, 2008). Universities play an important role in this cycle.

> The knowledge society depends for its growth on the production of new knowledge, its transmission through education and training, its dissemination through information and communication technologies, and on its use through new industrial processes or services. Universities are unique, in that they take part in all these processes, at their core, due to the key role they play in the three fields of research and exploitation of its results, thanks to industrial cooperation and spin-off; education and training, in particular training of researchers; and regional and local development, to which they can contribute significantly. (European Commission, 2003. p. 2 cited in Stier, 2004, p. 87)

As this trend continues, universities must increasingly integrate into the emerging global knowledge network to survive (Coulby, 2005; Sidhu, 2006; Marginson, 2008). Within this model, they have the multiple functions of consumption, production and dissemination of knowledge and the preparation of human resources capable of active participation in the knowledge economy.

In the first case, often referred to as 'academic capitalism', HEIs act as creators and dealers of knowledge (Slaughter and Rhoades, 2004; Naidoo and Jamieson, 2005). Knowledge is typically subject to free exchange, however, mechanisms such as industry transfer, citation indices, research rankings, and so on have assigned market value to knowledge and ultimately universities themselves. Thus, research becomes the university's most important deliverable, often at the expense of teaching and learning, and the resulting global competition and referencing accelerates convergence around Kerr's multiversity (Bok, 2003; Marginson, 2008). At the same time, high quality knowledge production can serve to attract more talent and enable a university to make significant contribution to the local economy which can further enhance the availability of resources and its ability to create more knowledge (Barber, Donnelly and Rizvi, 2013).

A strategy common in East Asia is increased investment in research and development related to science and technology. With the current exception of Japan (which does share the prioritization of science and technology over other forms of knowledge), growth in capacity, quality and collaboration has been much faster in East Asia than in other parts of the world (Hudzik and Stohl, 2012; Koehn and Obama, 2012; Marginson, 2016), and the region is assuming an increasingly important and influential role (Altbach, 2007; Cummings, 2014). In the first decade of the century, researchers in the labor force in Asia increased from 7 to 11% annually, compared to only 3% in North America and Europe. Research expenditures and publications also grew much faster in Asia (Hudzik and Stohl, 2012). Much of this growth is fueled by China, but there are similar trends throughout most of the region.

The other function of universities in the KBE is the production of capable human resources. Despite the increasing prioritization of research over teaching (Bok, 2003; Barber, Donnelly and Rizvi, 2013), there is increasing pressure on universities to equip large swaths of the population with productive higher order skills, such as ICT literacy, creativity and innovation, problem solving, research, teamwork, and intercultural competencies (Coulby, 2005; Arum, Gamoran and Shavit, 2007; Tan, 2010; Green, Marmolejo and Egron-Polak, 2012; Hunter, 2013). As expert knowledge becomes increasingly important to many types of work (Bok, 2003), governments and students both place greater demands on universities to upskill the workforce. This trend causes some tension between more traditional academic content and the greater demand for more application based higher learning, and universities are increasingly criticized for not providing students with the knowledge, skills and competencies needed for the world of work. Mok and Jiang (2017) highlight the graduate unemployment issues in several East Asian countries.

As noted at the beginning of this section, Mok (2005) describes the second impact of marketization on universities as the increasing influence on market practices on university governance and management structures. Many countries are reorienting their higher education sectors to depend less on state funding (although most public universities still derive the bulk of their income from the state), and produce a greater share of their own revenue (Altbach, 2007; Altbach, Reisberg and Rumbley, 2009). Thus, in the name of autonomy, efficiency and competition universities are often forced to adopt more corporate-like management principles and practices. As state support decreases, HEIs become increasingly accountable to the market and systems become more receptive to the infusion of an entrepreneurial culture (i.e. New Public Management principles), and they needed to strategically position themselves and become service providers with a responsibility to meet the expectations of their customers. Profile, reputation and branding become more important and require greater investment (de Wit, 1998; Alexiadou, 2005; Sidhu, 2006; Knight, 2008; Hudzik, 2011; Green, Marmolejo and Egron-Polak, 2012; Kell and Vogl, 2012; Hunter, 2013; Marginson, 2014). Schapper and Mayson (2005) argue that while NPM has introduced more effective and transparent performance management, the increased power of administrators has eroded the traditional faculty control of the university. Somewhat ironically, at the same time they are divesting, many governments are increasing accountability and quality assurance measures (Carnoy, 2000; Peng & Wang, 2008; Glass, 2015).

Many lament the ills of commercialization and the market approach, and warn that if higher education is treated as industry, the approach may conflict with the traditional ideals and values of academia, and the traditional trinity of teaching, research and service is called into question (Yonezawa, 2007; Knight, 2008). The incentives of commercialization do not always produce beneficial outcomes, and risks include undermining academic standards, damaging the academic community, risks to reputation, and administration more beholden to political and market forces rather than students and faculty.

Although vigilance is required to protect the public good missions of universities, there may be evidence that neo-liberal and marketitized approaches to higher education is in decline, and those states that have maintained high levels of investment in higher education are starting to see positive results. At the same time, the Word Bank’s inclusion of higher education in the General Agreement on Trade in Services (GATS) in the 1990s did not trigger the wholesale marketization some feared, and major commodification is mostly limited to for-profits (Marginson, 2008). Bok (2003) also argues that there may be various benefits for increased competition within the global higher education arena. The market approach might even have the potential to lead to a race into a new era where global competition drives innovation as well as unprecedented collaboration and exchange.

Many countries in East Asia have embraced the notion of global competiveness. This increasing competition orientation is evident in greater internationalization, commodification, prevalence of market/business language, convergence around education’s relationship to the economy, more choice, competition, deregulation, and increasing burden on the individual (Gopinathan, 2007). Thus, while the state remains the dominant power, the region is embracing market principles; although each country does so through its own unique historical, political, economic, social, and ideological contexts (Yonezawa et al, 2014; Mok, 2016). Thus, while higher education policy makers in East Asia remain interested in learning from and leveraging principles and practices from the West, they are also very much interested in maintaining identities that set them apart from both the West and each other (Rumbley, Altbach and Reisberg, 2012).

East Asia's increasing competitiveness is reflected in the steady rise of the region's top universities in the global league tables. Salmi (2016) notes that in 2007, Japan was the only East Asian country with a university in the top 100 of the Shanghai rankings, but by 2016, China and Singapore had joined the ranks. The same year, the four countries in the world with most additional universities in the top 500 were China, Australia, Saudi Arabia and Taiwan. However, Altbach (2013) suggests that culture and history may make further substantial improvements difficult, due to traditional academic culture and methods of teaching and research, hierarchical structures and affinity-based promotion, an immature graduate sector, and, for some, difficulties internationalizing. Altbach also notes the variety of competition strategies employed throughout the region. While Taiwan targets returnee faculty, Singapore and Hong Kong hire foreign staff, use English and largely copy western models. Singapore and China invite strategic branch campuses. Korea, China and Japan all launched national initiatives for upgrading their top performers.

3.1.7.3 Globalization

Globalization has no lack of interpretations and definitions. Knight (2004; 2008) describes globalization as a multifaceted process of increasing flows across borders of people, knowledge, technology, economy, ideas, values, and culture, resulting in a more interconnected and interdependent world, acknowledging that the impact on a country can widely vary. Paige (2005) uses Gibson-Graham's (1996) slightly more narrow definition of "a set of processes by which the world is rapidly being integrated into one economic space" (p. 121). Scholte (2005) understands it as the weakening of territorial constraints or buffers and an increased interconnectivity across all sectors, including economic, socio-cultural, political, and educational. Marginson (2008) writes:

> Globalization is the process of partial convergence and integration across national borders. Today's globalization is above all a product of the one world communicative environment that emerged in the early 1990s…The world is becoming one zone of association in which all human activities interface with each other and with a common store of knowledge. (p. 7)

Globalization can be seen as part of an historical continuum, a simple reversal of the inward-turning of 18th and 19th century nationalism, and a way to promote cooperation, interaction and democracy (Altbach and Knight, 2007). It can also be seen as uncontrollable, almost physical force creating dependency and threatening state sovereignty (Coulby and Zambeta, 2005). Kell and Vogl (2012) argue that globalization does not eradicate the nation state, it just alters the reality in which it exists, while Ma Rhea and Seddon (2005) hold that the state actually acts as a major mechanism through which globalization is introduced and advanced. Thus, globalization and nationalism may not be mutually exclusive, and some states may embed concepts of globalization in their national identities.

As Hudzik (2011) notes, some see globalization as a zero sum game, whereby global winning equates to local losing. Others (Zambeta, 2005; Altbach and Knight, 2007) highlight globalization's tendency to enhance pre-existing inequalities and concentrate wealth, knowledge, and power in already developed countries and systems. Aspinall (2012) suggests that there are multiple unevenly developed processes of globalization, and that it is important to distinguish between ideological claims and empirically verifiable change. Many warn of an overly neo-liberal view of globalization, although such a view has by now become fairly institutionalized. Scott (2010) argues that such a view may not necessarily be inevitable, and there may be paths other than current trajectory towards free-market capitalism, mass-media culture, global brands, and multiparty democracy, and the structural inequalities hardwired into this approach.

That globalization has a significant impact on the university is clear (Yang, 2005; Coulby, 2005; Altbach, 2007; Altbach and Knight, 2007; Marginson, 2008; Altbach, Reisberg and Rumbley, 2009; Hudzik, 2011; IAU, 2012). It touches all facets of higher education, and all universities must respond in one way or another. The globalization of higher education can be characterized by:

- Increasing flows of people, knowledge and institutions
- Increasing marketization and the emergence of a global higher education space (fueled and characterized by university rankings)
- Increasing communication, connectivity, integration and interdependence
- Increasing collaboration on issues of global relevance
- The spread of English
- Shift from local/national to global frames of reference

Hunter (2013) suggests that the biggest challenge facing universities today is redefining themselves in a rapidly globalizing world. Extreme pressures of globalization require fundamental shifts in strategic vision and operations (Hudzik, 2014). Success navigating these shifts depends on environmental awareness, institutional tools and resources and creative leadership that allow them to align a creative vision with their unique contextual factors. Actors responding to globalization essentially make theory reality by reinforcing it through their actions. Thus universities and scholars have some agency to shape the face of globalization (Sidhu, 2006). While universities try to free themselves from earlier models of cultural imperialism, students are exposed to 'global culture' and act as colonizing agents. As knowledge and culture become more international, people begin to inquire about events, histories, and methods from different perspectives and even partake in more immersive experiences (Coulby, 2005). Intercultural education may end up being one of the most positive benefits of globalization, and may give rise to new ways of thinking about the world.

3.1.7.3.1 Rankings and the rise of WCUs

Worthy of special note is the rise of global university rankings. Although national rankings had existed for some time, the Shanghai Jiao Tung University rankings appeared in 2003 as a way to measure how far Chinese universities trailed from leading universities in terms of research performance. Initially people distrusted rankings from China, but as a measure of research excellence, the methodology was fairly sound and improved in subsequent iterations. As others (i.e. Times Higher Education and QS) joined the ranking game, they became increasingly influential, and the term “World Class University” (WCU) spread (Marginson, 2016).

The myriad of issues surrounding the major global rankings are well documented. They ignore many of higher education’s missions and functions, overemphasize research and reputation, only include a tiny portion of the world’s universities, and there are many questions around their methodologies. Indicators the three major ranking bodies use to measure a university’s performance are listed in the table below. As a zero-sum game, as some rise, others are displaced, though there may be no actual decline in institutional quality. Criteria-based classifications would likely be a much more accurate and equitable model (Salmi, 2009). Furthermore, universities in the mostly Western developed nations have major inherent structural advantages, including the use of English, long well-stablished histories, wealth, positive immigration trends, academic freedom, and more experience with the concept of competition (Altbach, 2013). Yet, rankings continue to grow in usage and importance and have helped fuel convergence around the WCU model. While rankings are not entirely responsible for the "Americanization" of global higher education, they certainly helped legitimize and propagate the multiversity as the model of excellence (Marginson, 2008). For highly ranked universities, this model can create a virtuous cycle where reputation draws talent, which improves research, which generates funding, which improves rankings, and so on (Marginson, 2016). Unfortunately, this cycle may not to contribute to the other missions of a university (Rumbley, Altbach and Reisberg, 2012).

QS	THE	Shanghai
Academic reputation (40%)	Teaching (30%)	Awards (20%)
Research citations per faculty member (20%)	Research (30%)	Highly cited researchers (20%)
Student-to-faculty ratio (20%)	Research citations (30%)	Papers in Nature and Science (20%)
Employer reputation (10%)	International outlook (7.5%)	Papers indexed (20%)
Proportion of international faculty (5%)	Industry income (2.5%)	Alumni (10%)
Proportion of international students (5%)		Per capita performance (10%)

Figure 3: Indicators and weights measured in the three major world university rankings. (Source: topuniversities.com, 2018)

As WCUs tend to produce the most published research and train top scholars, rankings play an important role in their establishment at the peak of a global higher education system (Altbach, 2007; Tan, 2010; Yonezawa and Shimmi, 2015; Marginson, 2016). These WCUs are characterized by concentrations in STEM, attraction of top talent, global connectivity, and innovation (Salmi, 2009; Altbach and Salmi 2011). They also require a lot more funds and state of the art facilities, a favorable policy environment, direct governmental support, direct connection to world knowledge network, strong and visionary leadership, and internationalization strategies (Altbach, Reisberg and Rumbley, 2009; Marginson, 2016).

As thinking converges around this model, and research becomes increasingly important, it is no surprise that states direct their investments accordingly. Unsurprisingly many nations have made it a policy priority, and have adapted the WCU as the template for reform. WCUs symbolize economic status, research prowess and are a resource for social elites and help to legitimize the state as a national power. This may be especially true in East Asia, which has focused heavily on replicating non-indigenous forms of WCUs through government initiatives stretching back to the 1990s. The rise in output and quality of East Asian WCUs is only partly reflected in the rankings given the difficulty of displacing traditional leading universities (Marginson, 2016; Salmi, 2016).

Global convergence around the WCU model may serve to advance global research, but has downsides. It is not nuanced for each local context, may have negative effects on other sectors and/or forms of higher education, suppresses diversity, promote the decline of non-English languages, and discriminates against other forms of contributions (Marginson, 2016) Although lessons can be learned from the structures and operational models of WCUs (Salmi, 2009), they provide a very incomplete perspective of higher education. A balanced academic system is much more important in meeting the needs of a nation than a few highly ranked universities, and many nations may not need WCUs at all.

> Global higher education is a complex field in which institutions and national systems engage with each other in a lattice of relationships of cooperation and competition. Global rankings have radically oversimplified that field, normalizing it as a market competition between research universities and countries, stratifying it on the basis of the template of the American multiversity, and summarizing the complex activities of multiversities with a handful of ordinal numbers. (Marginson, 2016, p. 72)

As HEIs become increasingly integrated in a global knowledge and competition network, a two tier system seems to be emerging. The system is differentiated by those with global standing (i.e. ranking) and those with a more local focus (Hudzik and Stohl, 2012). Interestingly, Marginson (2014) suggests that this does not necessarily detract from the public good mission of universities. As the global system emerges, since there is no global state, HEIs become less arms of states than independent agents working for global society.

3.2 Internationalization of higher education

This section of the literature review attempts to locate internationalization within the wider global higher education framework described above.

The literature repeatedly points to the increasing importance of IoHE, and indeed it is identified as one of the major trends affecting higher education in general. According to Rumbley, Altbach and Reisberg (2012), “internationalization has been one of the most prevailing forces at work within higher education around the world during the last two decades” (p. 3). IAU (2012) states, “irrespective of contextual differences within and between countries, nearly all higher education institutions worldwide are engaged in international activities and are seeking to expand them. Engaging with the world is now considered part of the very definition of quality in education and research” (p. 2).

Internationalization has grown in scope, importance and complexity at both the institutional and system levels and is now a core concern of higher education policymakers. University strategic plans, national policy statements, international declarations and academic articles all point to the centrality of IoHE. There is a growing sense that IoHE has become an imperative, and ethos and mission now factor more into discussions (Knight, 2004; Stier, 2004; Green, Marmolejo and Egron-Polak, 2012; Hudzik and Stohl, 2012; Rumbley, Altbach and Reisberg, 2012; Ergon-Polak and Hudson, 2014). Wilson (2013) found university heads in Europe identified internationalization as the third most important change driver in past years. The 2014 IAU survey on internationalization (1336 HEIs in 131 countries) indicated that IoHE is growing in importance and a key concern of senior leadership, and that most had (53%) or were developing (22%) internationalization policies and/or strategic plans (Ergon-Polak and Hudson, 2014).

Media coverage and academic publications on the topic have also been on the rise (Stier, 2004; Rumbley, Altbach and Reisberg, 2012). Knight (2008) comments that, “the international dimension of higher education is gaining a higher profile in such policy arenas outside education as immigration, trade and commerce, culture, and economic development” (p. 17). Kuzhabekova, Handel and Chapman (2015) uncovered 2302 IoHE research related records from 3362 scholars at 1164 institutions in 92 countries published between 2002 and 2011, with a seven-fold increase in that period. The themes varied from international research on higher edcuation to research on IoHE to comparative research to research by transnational groups. Although the Western world dominated the conversation, the increase was global. de Wit (2013) also notes that graduate programs related to international higher education are also increasing.

Much of the growing body of literature on IoHE tends to fall in three main areas: debates on definitions and meanings, guidance for practitioners, and measurement and assessment. Interestingly, much of the work emerging from East Asia falls into the first camp, and there is relatively less written on application in the region. In general, the field as a whole still lacks common or dominant theoretical or methodological frameworks, and empirical research dealing with the actual collection and analysis of data is comparatively scarce. de Wit (2013) differentiates between comparative education, which he labels as a scholarly exercise, and international education, which is concerned more with policy and practice. Internal 'grey literature' conducted by universities for internal purposes may be considered an exception to this, but it is often difficult to access (Altbach, 2007), and can lack scholarly analysis and reflection.

3.2.1 History and definition of IoHE

The evolution of IoHE has been well documented, although perhaps from limited perspectives (de Wit and Merkx, 2012; de Wit and Urias, 2012; de Wit, 2013; de Wit et al, 2015). As early European universities predate most modern nation states, and consisted primarily of migrant students and scholars, some consider universities to be inherently international. As universities increased in the 15th century and functions and focus became more regionalized they became more localized, and then began to serve increasingly nationalist in orientation throughout the 18th and 19th centuries. From this period of 'nationalization' could 'internationalization' become possible.

Between the First and Second World Wars, there was an increased focus on international cooperation in higher education, mostly driven by peacebuilding and national security rationales. A number of international education organizations emerged, mostly focused on scholars rather than students, including IIE (1919) in the US, The International Committee on Intellectual Cooperation (1921), Germany's DAAD (1925), and British Councils (1934). After WWII and throughout the Cold War, national security and foreign policy issues such as intelligence gathering and soft power became central drivers of international higher education. In the later part of the 20th century, coinciding with the fall of the Soviet Union, the formation and strengthening of the European Union and the rise of Japan, neoliberalism gained a stronghold, national competition in higher education intensified, and internationalization activities and programs became more purposeful and organized and took on more economic rationales. Internationalization began to be seen as having a variety of benefits for institutions and systems, and varying context-specific approaches arose.

Much IoHE literature begins by noting in some form that ‘there is no agreed upon definition of internationalization’, and then goes on to quote Jane Knight’s 1993 "process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of post-secondary education" (p. 2). Knight (2004; 2008; 2012) periodically revisited and refined this definition, though its core remained consistent. Others (Harman, 2006; Deardroff and van Gaalen, 2012; Wachter, 2013; Kuroda, Yuki and Kang, 2014) have added their own definitions, but none directly contradict Knight’s, and it remains the most enduring. This speaks to Knight’s aim of creating a definition broad enough to be universally applicable, although it also raises some questions as to its utility. While it works well for defining the field of study, its broadness allows for considerable interpretation in practice. This is evidenced by the wide range of criteria used to evaluate IoHE (see Gao, 2015). Knight (2004) herself offers two interpretations:

> At the institutional level, policies can be interpreted in different ways. A narrow interpretation would include those statements and directives that refer to priorities and plans related to the international dimension of the institution’s mission, purpose, values, and functions.... A broader interpretation of policies at the institution level would include those statements, directives, or planning documents that address implications for or from internationalization... ranging from quality assurance, planning, finances, staffing, faculty development, admission, research, curriculum, student support, contract and project work, and so forth. (p.16)

The narrower interpretation emphasizes the traditional international activities of: international partnerships, student and staff mobility, internationalization of the curriculum, activities abroad, and so on. The adoption of English as a language of instruction or administration is somewhat of a grey area. Knight's broader interpretation, akin to Hudzik's (2011) 'comprehensive internationalization' (covered in more detail in section 3.2.4) or Hawawini's (2016) integration model, essentially shifts an institution's frame of reference and operational context from the local or national to the international or global. This broader view is closely linked to the conception of internationalization as the mechanism by which higher education responds to, deals with or takes advantage of globalization (Paige 2005; Altbach and Knight 2007; Hudzik 2011). Here internationalization affects the entirety of the university, whether explicitly or not.

Fundamental to many definitions of IoHE is the concept of process. This is important as internationalization does not necessarily lead to a state of internationalism. As Sidhu (2006) highlights, there is lack of consensus or set criteria for what makes a university international, and provides several interpretations of what the term could mean. Thus, it seems the process of internationalization is one without end, as universities must constantly evolve along with changing forms and frameworks of their environments (Wachter, 2013).

The term IoHE emerged globally in the 1980s, Specifically, in the Japanese context, Ebuchi (1997) traces the use of *daigaku kokusaika* (commonly translated as 'university internationalization) as dating back to a 1977 project initiated at Hiroshima University. He also notes a 1985 UNESCO forum on the internationalization of higher education in Asia. However, during that period the term mainly applied to institutional activities such as international studies, study abroad and international development work. As it expanded to the national/sector levels in the late 1990s, the actors and their agendas diversified and it became more conceptually complex (Knight, 2004). As a result, creating a conceptual model of IoHE is difficult, because the international dimension can relate to any and all aspects of higher education and be interpreted differently by different stakeholders. Yang (2005) shows that within a single university there can be very different interpretations. As such, many argue that rather than a goal in and of itself, IoHE should be seen as a possible means to achieving those diverse visions. Indeed, if it is regarded as a goal in itself, it may remain marginal and ad hoc (Deardroff, de Wit and Heyl, 2012). Ironically, de Wit (2013) attempts to revise Knight's definition to "a process to introduce intercultural, international and global dimensions in higher education *to improve* the goals, functions and delivery of higher education, *and with that to improve the quality of education and research*" (p.32, emphasis added). Buck Sutton, Egginton and Favela (2012) agree that internationalization as a process alone is not enough, and it should include a moral component. This leads to an ongoing debate in the field as to whether or not IoHE is value neutral.

Hudzik (2011) cites the NAFSA Task Force on Internationalization (2008) definition of IoHE as the "conscious effort to integrate and infuse international, intercultural, and global dimensions into the ethos and outcomes of postsecondary education. To be fully successful, it must involve active and responsible engagement of the academic community in global networks and partnerships" (p.10). This introduces the element of intentionality. Similar to the question of *purpose*, there is some disagreement as to whether IoHE needs to be *purposeful*. If so, then outcomes traditionally associated with internationalization, if not intentional, might be conceptualized as the globalization of higher education.

Globalization and internationalization are closely related temporally, spatially and socially, but are not synonymous, argue Brandenberg et al (2013). de Wit (2013) quotes Frans van Vught et al. (2002, p. 17) to illustrate the distinction:

> In terms of both practice and perceptions, internationalization is closer to the well-established tradition of international cooperation and mobility and to the core values

> of quality and excellence, whereas globalization refers more to competition, pushing the concept of higher education as a tradable commodity and challenging the concept of higher education as a public good. (p. 16)

Early on, van der Wende (1997) defined IoHE as “any systematic effort aimed at making higher education responsive to the requirements and challenges related to the globalisation of societies, economy and labor market” (p.20). This positions internationalization as *a response to* globalization. Knight (2004) views globalization as part of the environment in which IoHE is taking place, and others argue that while globalization is largely unalterable, internationalization is comprised of many choices within a variety of policies and programs responding to globalization (Altbach, 2007; Altbach and Knight, 2007; Altbach, Reisberg and Rumbley, 2009). Paige (2005) positions globalization as the world order and IoHE as creating an environment international in character. Banks and Bhandari (2012) note that as higher education increasingly uses internationalization to respond to globalization, universities themselves become actors and agents of globalization. Internationalization as a response to globalization fits nicely with Knight’s second more embedded interpretation of IoHE, which is more closely related to core university operations. In this view, systems and processes within the university are altered to better cope with the realities and requirements of the emerging global knowledge economy. While such changes may include the traditional activities associated with the first interpretation, they are at a fundamentally deeper level.

Recently, a possible third interpretation of IoHE has emerged. Hawawini (2016) argues that although previous definitions are useful starting points, they miss something fundamental by understanding it as a process of introducing something *into* the institution. He defines IoHE as:

> An ongoing process of change whose objective is to integrate the institution and its key stakeholders (its students and faculty) into the emerging global knowledge economy…[which] calls for changes in the institution's existing structure, operating modes, and mindset in order for the institution to join and contribute to the shaping of the global knowledge economy...It requires much more than injecting an international dimension into an existing static structure. (p.5)

Thus, IoHE enhances a university's ability to both benefit from participation in the global knowledge network and contribute to its development. This concept of integration may be only emerging now as the network itself becomes more mature and visible. Although it is unclear whether Hawawani himself realizes it, this definition may also help to resolve the issues of purpose and intentionality, as it gives direction for both.

3.2.2 Trends, drivers, rationales and approaches

Rationales for IoHE depend on a host of factors and have evolved over time. Just as higher education is affected by global trends such as marketization and massification, so too is IoHE. These trends, creating various push and pull factors, and can both influence and result from shifting rationales for and approaches to IoHE. Commonly (Altbach, 2007; Hudzik and Stohl, 2012; de Wit, 2013; Hudzik, 2013; Knight, 2013; Wilson, 2013) identified trends include:

- Shifting mobility patterns
- Regionalization
- Diversification of interpretations and activities
- Increased importance of ICT
- The emergence of a global research and knowledge community

- Increased government policy and intervention
- Shifting economic and funding models
- English becoming more of a requirement
- Greater quality assurance and control
- Increased importance of strategic thinking

These trends are largely the result of interactions between drivers, rationales, approaches, and the circumstances of particular local environments. Drivers, rationales, and approaches to IoHE can be easily confused and have many overlapping elements. Essentially ***drivers*** are understood as the external forces and trends pushing higher education towards internationalization. They may not be purposeful or grounded in any particular perspective. ***Rationales***, which are influenced by both drivers and local context, are the motives that individuals or groups have for internationalizing, and are very much grounded in diverse perspectives. ***Approaches*** are how individuals, institutions or systems go about the internationalization process, and are typically determined by a combination of context, rationales, individual agency and institutional circumstances. If IoHE activities are the 'what', then rationales describe the 'why', and approach is the 'how' (de Wit, 2013).

3.2.2.1 Drivers

Drivers are the external forces that incentivize governments and institutions to internationalize. Important drivers might include: increasing competition, changing funding models, increased labor mobility, regionalization, improving ICT, and so on (Knight, 2004, 2008; Hudzik and Stohl, 2012). For many universities, government policies and projects, often linked to improving positioning in the global league tables, are also major drivers (Lane and Owens, 2014; Ergon-Polak, Hudson and Sandstrom, 2015; Ilieva and Peak, 2016; Matross Helms and Rumbley, 2016; Salmi, 2016; Streitwieser and Ogden, 2016). Rankings themselves also serve as major drivers. Some explicitly include indicators tied to the numbers of international faculty and students, while some universities see internationalization as a means to improve their performance related to other indicators, such as research.

The emergence of the KBE and changing relationship between higher education and the state are also important drivers. As universities, especially WCUs, become more embedded in global markets, emphasis shifts from providing education to the local, state or national community to producing cutting edge research and patents. As such, they begin to open their doors to more international researchers and students who can aid in that effort. International faculty and students are also seen as a way to improve a university's production of human resources for the KBE. Often states directly encourage universities in such transitions, as higher education is seen as playing a more important role in increasing a nation's international competitiveness.

For many universities, their own governments act as the strongest drivers. Ilieva and Peak (2016) found that IoHE has become a policy preoccupation for countries around the globe, and that the majority of countries in the study made significant effort to spur IoHE by setting targets, committing resources, creating favorable policy environments, and including it in quality assurance mechanisms. Almost half of the countries examined had targeted funding schemes and large scale projects. Many national initiatives originated in East Asian and Nordic countries, although it is still too early to evaluate the effectiveness of many of these government initiatives, as impact can take a decade or more to manifest (Salmi, 2016). Typical government programs target 'excellence initiatives' aimed at high performing universities, student and scholar mobility, research collaboration, cross-border education, and strategic planning and management. Funding, policy implementation, policy alignment, and grounding in institutional priorities and realities are important considerations.

3.2.2.2 Rationales

As discussed earlier, universities are collections of individuals and cannot be separated from their contexts. Thus, external drivers are interpreted by these individuals who respond according to their particular context, and as a result do not impact all universities in the same way. As the IAU (2012) notes, IoHE is a dynamic process, continuously shaped and reshaped by the context in which it occurs. As context changes, so do the purpose, goals, meanings, and strategies of internationalization. de Wit et al (2015) note that higher education:

> Although increasingly influenced by and acting in a globalised context, is still predominantly defined by regional, national and institutional laws and regulations, cultures and structures. There is not one universally applicable model. Regional and national differences are varied and constantly evolving and the same is true within the institutions themselves (public/private, research/applied sciences, comprehensive/specialised, etc.). However, "as the international dimension of higher education gains more attention and recognition, people tend to use it in the way that best suits their purpose" (de Wit, 2002, p. 14). (p.54)

These 'purposes' loosely translate into the rationales for IoHE, and can vary depending on the perspective of the actor and their context. As universities are large complex organizations, and not single actors, their approach to internationalized is typically comprised of a host of competing rationales, although some may be more dominant. Leadership, students and faculty, and indeed even individuals within these groups, may hold different views (Altbach and Knight, 2007). A finance officer may be motivated by revenue, a provost by improving research output, and an admissions officer by improving international reputation. Thus, approach often emerges through negotiations between stakeholders against the backdrop of unique context.

Rationales outline the expected benefits or outcomes of IoHE and are reflected in policies and programs (Knight, 2008). Common rationales range from improving educational quality, increasing commercial potential and profit, contributing to national human resource needs, absorbing rising demand or promoting cross-cultural understanding (Altbach, 2007; Rumbley, Altbach and Reisberg, 2012), and are traditionally grouped in four categories: sociocultural, political, academic, and economic (Knight, 2004).

Stier (2004; 2010) argues that the above four groups of rationales mirror underlying educational visions and goals that affect beliefs and actions. He (2004) refers to these as ideologies, arguing that they are more complex than rationales.

> Ideology will refer to a set of principles, underpinnings, desired goals and strategies that structure actions and beliefs of international educators—administrative and teaching staff alike—groups, organizations or societies. Ideologies may be, partly or completely, conscious (e.g. as manifested in educational doctrines) or make up a set of taken-for granted assumptions about internationalization, manifested as an unconscious frame of reference for the individual. (p. 85)

Stier's three main ideologies of IoHE are idealism (IoHE is good per se and leads to a more peaceful world); instrumentalism (human resource development, facilitating flow of students, profit, economic growth, sustainable development, etc.); and educationalism (exposure to unfamiliar academic settings, practices, etc. enhances the overall academic experience).

Later Knight (2008; 2012) expanded her four categories to include human resource development, reputation management, income generation, strategic alliances, commercial trade, nation building, sociocultural development, student and staff development, and research and knowledge production. However, these additions could have been embedded in the existing model. She also began to differentiate between national and institutional level rationales, which is an important distinction. The model below merges and builds upon several of Knight's previous models, and is perhaps a clearer representation of the rationales and their gravitations. Emerging rationales are marked with asterisks. It is interesting to note here that institutions and governments often do not have the same rationales for IoHE, and we can see that institutions tend to hold more academic rationales while governments tend to hold more political ones. Such differences can have a significant impact in determining approach, especially in contexts where the state play a strong and active role, such as Singapore and Japan.

<table>
<tr><th></th><th>Institutional</th><th>National</th></tr>
<tr><td>Academic</td><td colspan="2">Intl dimension in research and teaching
Extension of academic horizon
Profile and status
Student and staff development*
Knowledge production
Institution building
International academic standards
*Quality enhancement</td></tr>
<tr><td>Economic</td><td>Financial incentives
International branding and profile*
Income generation*</td><td>Econ growth and competiveness
Labor market
Human resource development*
Commercial trade*</td></tr>
<tr><td>Socio-cultural</td><td>Intercultural understanding
Social and community development</td><td>National cultural identity
Citizenship development
Socio-cultural development*</td></tr>
<tr><td>Political</td><td colspan="2">Technical assistance
Peace and mutual understanding
Strategic alliances*
Foreign policy
National security
National identity
Regional identity
Nation building*</td></tr>
</table>

Figure 4: Representation of rationales for IoHE within the four broad categories and differentiated between the state and institutional levels. (Source: Author, drawn from Knight 2004, 2008, 2012).

Some additional rationales that others (Hudzik, 2011; Green, 2013; IAU, 2012; Jones, 2013; Ergon-Polak, Hudson and Sandstrom, 2015) have cited might include, preparing world conscious graduates, better connecting HEIs to the global knowledge system, interinstitutional cooperation, expanding access, and better contributing to the local community. Most can be relatively easily incorporated into the four abovementioned categories. Interestingly, the 2010 IAU survey had ‘improving student preparedness for globalized/internationalized world’ as the most important rationale. Yet unfortunately, despite the importance of learning outcomes, few universities internationalize through this lens (Green, 2013).

A key trend in IoHE over the last twenty years is a shift from socio-cultural rationales towards more economic rationales and commercial interests (Knight, 2004). The policies, plans and priorities of the key actors (i.e. universities, governments, international bodies, etc.) reveal the close links to economic competitiveness (Knight, 2008; 2012). International student recruitment, for example, has in many locations shifted from an aid mindset to ones of income generation and attraction of human capital. Brandenberg et al (2013) cite the emerging notion of comparative trade advantage in higher education, the Bologna process/harmonization, and rankings as further examples. IoHE itself may now be seen as a tradeable commodity, further shifting the traditional values of public and non-profit universities toward commercial and market-driven activities (Altbach and Knight, 2007; Knight, 2008). However, while profit-making rationales may seem pervasive and do dominate some discussions, they are of central concern in only a handful of countries. There has also recently been a negative reaction to overemphasis of the economic rationales, and too much commercialization is seen have a potentially negative impact on the quality of education and reputation of an institution (Kell and Vogl, 2012; de Wit, 2013).

3.2.2.3 Approaches

Rationales combined with circumstance determine approach to IoHE. Approaches can concern specific programs, projects or general policies, as well as the primary functions, activities, outcomes, and processes of IoHE. There is no single model or right approach, and they reflect values, needs, priorities, rationales and unique institutional context and circumstance (Knight, 2004; Nolan and Hunter, 2012). Approaches can also range from isolated and ad hoc to comprehensive and strategic, and there are surely more benefits to be had at the latter end of the spectrum. Important considerations related to approach include management and governance structures, leadership and vision, faculty engagement, policy support, resources, quality assurance mechanisms, commitment to local needs, and so on (Nolan and Hunter, 2012; Rumbley, Altbach and Reisberg, 2012). Importantly, it is not any one of these elements, but a pattern of association taking each into account (Hunter, 2013).

Several authors distinguish between approaches focused on the home institution and those that pursue external agendas (Knight, 2004; Jones, 2013; Hawawini, 2016). Some approaches aim to bringing the international dimension home and spread it through the local community, while others aimed to deliver elements of the home institution abroad.

Externally focused approaches, often referred to as internationalization abroad, include transnational education (i.e. distance programs and branch campuses), development projects, and sending students abroad. Knight (2014) notes an evolution in the concept of an international university moving from the traditional university model with partnerships, collaborations, and international students and staff to a transnational model with established offices/campuses abroad, and perhaps eventually to an entirely new model founded from cooperation between partners in different countries.

Approaches focused on the home institution, often called internationalization at home (IaH), attempt to focus on providing an intercultural and international dimension to the institution's offerings and internationalizing the learning experience (Knight, 2004; Paige, 2005). The presence of more international students and staff is not enough to internationalize the campus environment (Beelen, 2016). Such approaches consider curriculum and programs, teaching and learning process, research and scholarship, co-curriculars, extra-curriculurs, connections with local communities, foreign language requirements and intercultural competency policies (Knight, 2012; Ilieva and Peak, 2016). In the 2014 IAU survey, universities identified strategies, activities to implement those strategies, learning outcomes and assessment, the experience and expertise of staff, professional development, and international officers as key to IaH. Nearly 70 percent of survey respondents (triple the amount in the previous survey) considered the limited skills and involvement of their staff (i.e. limited experience, capacity, expertise, or engagement) among their top three obstacles to IaH (Beelen, 2016). While a third mentioned learning outcomes, these are difficult to implement at the institutional level, may be more meaningful at the program or course level.

More comprehensive approaches to IoHE are discussed in section 3.2.4.

3.2.3 Activities

Regardless of rationale and approach, internationalization typically manifests itself in the form of programs, projects and activities, which fall into a number of interconnected categories. These activities can be ad hoc and isolated or coordinated and strategic or some combination at different levels within the university. Within universities, IoHE activities generally fall into the following categories:

- Partnerships and collaborations with overseas institutions
- Bringing in international students and scholars
- Providing study abroad opportunities for domestic students

- Internationalization of the university's curriculum and program offerings, ranging from foreign languages to area studies to the infusion of international perspectives in regular course curriculum
- Overseas activities
- Changes to internal governance, management and support structures to better support international activities.

The following section will briefly touch upon the activity groups of partnerships, mobility, internationalization of the curriculum, activities abroad, and international reputation management.

3.2.3.1 Partnerships

Buck Sutton, Egginton and Favela (2012) argue that "partnerships constitute one of the most philosophically defensible and cost-effective modes of internationalization" (p. 157). de Wit et al (2015) call partnerships "a defining feature of higher education and an essential part of internationalisation" (p. 53). Welch (2018) speculates that "increasingly, innovation is going to be a matter of partnerships, across institutions and systems." Partnerships can be transformative for universities, enhancing research, student experience, professional training, public engagement, as well as internationalization (Koehn and Obama, 2012).

Partnership activities often include student and/or staff exchange agreements, research co-operation, joint curriculum development, joint or double degrees, short course programs, benchmarking, delivery of transnational education, joint bids for international projects, and development projects in a third country. They can exist anywhere from the individual faculty level to the entire institution or even the government level. Partnerships are particularly important for research universities aiming at world-class status, as almost all the most highly-cited research these days is the product of international partnerships rather than single departments (Barber, Donnelly and Rizvi, 2013).

de Wit et al (2015) warn of the danger of elitism which can favor the global North and exclude institutions and regions and create a divided global higher education sector. Universities that might significantly benefit from international collaboration, as well as make significant contributions, can be excluded due to location, financing, reputation or other factors. Hawawani (2016) also points out that joint ventures can operate in silos and have the potential of sheltering the university's core from internationalization.

3.2.3.2 Recruiting international students and scholars

For many, international student recruitment and exchange is *the* dominant feature of IoHE. Indeed, many conferences and events dealing with 'international education' are largely geared towards those working in exchange. Mobility itself contains considerable variation, and includes the recruitment of international students to degree programs, the recruitment of international faculty, student and scholar exchange on short or long term programs. Similarly, there are diverse rationales ranging from cultural exchange to developing a nation's human capital. Mobility itself is a broad and growing field of study, and will not be treated in great depth here.

Although estimates are imperfect, across all sectors and program types, students studying outside of their home country increased from around two million in 2000 to about five million in 2014 (ICEF, 2015). Although this growth is impressive, and has major implications for higher education globally, coinciding with the general trend towards massification, the percentage of international students globally has remained relatively consistent at around 2% (Scott, 2010). Although in real terms the number is likely to grow, the portion may actually decline as many developing countries expand and improve their systems (Rumbley, Altbach and Reisberg, 2012; Banks and Bhandari, 2012; Wachter, 2013). Wealthy English speaking countries tend to receive the majority of international students (Scott, 2010; Kell and Vogl, 2012; Altbach, 2013), but in recent years, intra-regional mobility and destination diversity has increased dramatically (Banks and Bhandari, 2012). By far, Asia dominates the mobility sector, primarily as a source of international students, but increasingly as a destination. From 1970 to the early 2000's Asia's portion of global tertiary enrollments grew from about 14% to about 50%, and the region represents the majority of internationally mobile students (Banks and Bhandari, 2012).

International students are by no means uniform, and can range from degree-seekers using higher education as a path towards immigration to those on extended holiday-like short term immersion programs. International students represent a wide variety of motivations and needs, and it can be challenging for universities to effectively create strategies and programs to cater to the full range. Nonetheless, it is important for universities to be clear about what types of international students they are interested in attracting, and their motivations for doing so, in order to recruit the right types and ensure they are well supported during their stay. For a university, international students can potentially generate revenue through tuition and fees, supply manpower needed for research, diversify the classroom experience and campus community, have some impact on global ranking, and can have wider economic and social implications for the surrounding community. As universities and governments become more sophisticated in their understanding of the motivations and needs of international students, as well as the potential short and long term benefits they can bring, and as the global competition for talent heats up and students become more selective, institutional supports for these students are gradually becoming more robust (Barber, Donnelly and Rizvi, 2013).

International faculty are also becoming increasingly important for many universities. This is again amplified by their inclusion as an indicator in several of the major global ranking bodies. As shown, research continues to assume greater significance for universities, and often they must look abroad to find the talent they need. As many of the most developed higher education systems are in nations with declining birthrates, bringing in foreign talent is often a critical part of maintaining the research capacity, as there is an insufficient domestic supply of academics and researchers. Many universities also rely on international faculty as a principle method of internationalizing their education and research profiles, as well as developing links with the faculty's home country. However, simply recruiting larger numbers of foreign passport holders is not sufficient. As Huang (2018) indicates, "to maximise benefits from these international researcher recruitment drives, countries need to develop clear and targeted strategies for the type of international faculty they want to recruit and create a conducive environment for them to be productive" (p. 1).

3.2.3.3 Providing international opportunities for students

In addition to accepting international students, many universities and governments prioritize sending their own students abroad to gain international exposure, global competencies, and develop connections with the host country. Some universities use study abroad programs as a marketing tool. Many believe that offering such programs are essential to adequately preparing graduates for the interconnected 21st century world of work (Ingraham and Peterson, 2004). However, Brewer and Leask (2012) comment that even substantial increases to international opportunities will not likely significantly alter learning outcomes for the majority of students, and stress the importance of internationalizing local curricula offerings as well.

Giedt, Gokcek and Ghosh (2015) provide a nice overview of the history of study abroad and its scholarship. Study abroad can contribute to intercultural learning and global awareness, foreign language acquisition, disciplinary learning, and other positive long-term impacts. In addition to formal study abroad programs, experiences can include work, volunteering, internships, and study trips. The field is diverse enough for Engle and Engle (2003) to call for a level based classification system incorporating length, language of study, and so on, noting the significant differences between study abroad programs.

More traditional forms of study abroad were popularized after World War I, but more recently, short-term programs have come to dominate the sector. Beginning in the late 1990s, as states and universities more widely began to see utility in study abroad, targets were set to increase the numbers of participating students. This targets led to the spread of short-term programs that could send students abroad for as low a cost and with as little preparation as possible (Engle and Engle, 2003). As the field has developed, universities are becoming increasingly sophisticated in better integrating programs into the curricula, as well as being more purposeful in orientations and assessments. Important factors central to successful study abroad programs include faculty engagement, academic advising, institutional support, and scholarships. With regard to the literature, large-scale survey and demographic research is fairly extensive, as is research on student learning outcomes. However, program assessment is an underdeveloped area (Giedt, Gokcek and Ghosh, 2015).

3.2.3.4 Internationalization of the curriculum and campus environment

As relatively few students participate in an international experience during their studies, many see internationalization of the curriculum (IoC), or the related internationalization at home (IaH), as the heart of IoHE (Paige, 2005). However, IoC may also be the most complex and difficult to implement activity associated with IoHE. Although learning about foreign content and practices can be traced back about as far as higher education itself, and in the modern era organizations such as the International Baccalaureate have been offering ‘international education’ for more than 50 years, Leask, Beelen and Kaundra (2013) trace the term IoC back to 1992. Leask (2009) defines IoC as:

> The incorporation of an international and intercultural dimension into the content of the curriculum as well as the teaching and learning processes and support services of a program of study. An internationalised curriculum will engage students with internationally informed research and cultural and linguistic diversity. It will purposefully develop their international and intercultural perspectives as global professionals and citizens. (p. 209)

Similarly, IaH is meant as a means to bring the international dimension of learning to all students on campus (Beelen and Jones, 2015). Hawawini (2016) also distinguishes between what he refers to as ‘reach’ and ‘richness’ in IoHE, with the latter focused on creating an international experience for the students on campus.

Although there are varying rationales for IoC (Brewer and Leask, 2012), preparing students for a globalized future is perhaps the most prominent.

> Universities have a social responsibility to prepare all graduates to live and work as responsible national and global citizens…In preparing students for their future it is important therefore that universities incorporate international and intercultural perspectives into the curriculum while recognising that as graduates, all students will have social and cultural as well as economic roles and responsibilities. (Leask, 2013, p. 91)

Leask (2013) argues that IoC should connect curriculum design with contexts and conditions within and beyond the discipline and develops global competencies in students, and should be informed by international research and address national and cultural differences. Core to IoC is assessment, learning and teaching, creating opportunities for all students, attention to informal curricula and extra-curriculars, creating opportunities for foreign and domestic student interaction, and so on (Deardroff and Jones, 2012). Explicitly stating learning outcomes and graduate attributes is also seen as essential, but there is not much literature on internationalization of learning outcomes (Jones, 2013).

International faculty, international students and study abroad can be important components of IoC, but are not themselves sufficient (Brewer and Leask, 2012). “There is little evidence to suggest that cultural diversity on campus results in, or even contributes positively toward, the development of intercultural or international perspectives in either faculty or home-campus students” (ibid, p. 252).

Both IoC and IaH require active participation from the faculty. Unfortunately, all faculty are not always willing to or capable of effectively bringing the international dimension into their courses. Appropriate professional development is critical in this regard (de Wit et al, 2015). Indeed, Brewer and Leask (2012) see faculty development, reward and recognition as key to the endeavor, and Leask and Bridge (2013) situated the disciplinary teams who construct curriculum at the center of the internationalization process. Motivating faculty can be one of the most difficult aspects of university management, and direction setting in regard to curriculum can have important implications for academic freedom. Brewer and Leask (2012) recommend ‘front-loading’ IoC by “requiring faculty to indicate in course planning and approval documents who course objectives, teaching, and learning will be internationalized and assessed” (p. 257). However, it may not be appropriate in every context for administrative oversight over the curriculum development process, and the assumption may be evidence of some cultural or contextual biases inherent in the concept.

3.2.3.4.1 English

Although de Witt (2011) stresses that the use of English itself does not represent internationalization, undoubtedly for many outside of the Anglophone world the increasing emphasis on and use of English represents a critical part of the internationalization process. It is becoming increasingly difficult to participate in the global knowledge network without a strong command of English. English taught programs in Europe more than tripled between 2002 and 2007 (Rumbley, Altbach and Reisberg, 2012), and several high-profile projects promoting the use of English have been seen in countries such as Korea, Japan and China as they strive to attract increasing numbers of international students and scholars and compete with the 'West'.

Although noting some of the benefits of English as a universal academic language, many scholars warn of the potential negative impacts of this trend. Altbach (2007; 2013) equates English to the Latin of the 21st century, and argues that while an international community of scholars is 'inevitable' and overall beneficial, local scientific communities and higher education systems and the diversity they bring must be protected. He highlights that the increased use of English can lead to the norms, values, methodologies and orientations from Anglophone countries dominating the academic discourse, and non-English knowledge, publications and interests can become subjugated. This creates inherently advantaged and disadvantaged systems in global network, evident in the global league tables. Gundara (2005) also warns that the widespread use of English is a threat to other commercial languages and linguistic systems. Similarly, Knight (2008) writes:

> Vigilance is needed over the increased use of English for information sharing and communication purposes and as a teaching language for international delivery. A worrisome issue is the loss of national languages as the medium of instruction in many smaller, non-English-speaking countries, especially in Europe. Furthermore, many of the electronic data sources and information are available in English only. (p. 8)

Given this, there is a concern that by internationalizing, HEIs in the non-English speaking world may eventually end up weakening their role in providing research and education aligned with local needs.

3.2.3.5 Activities abroad

Many universities pursue a variety of activities outside of their national borders. Such activities can range from branch campuses to research outposts to alumni offices. Literature reviewed did not contain much on the spectrum of offshore activities, aside from transnational education and online learning, which are emerging as richly researched areas, but it would be an interesting area for further study. Similarly, literature on why and how universities increase their physical footprint abroad is rather scarce. Universities themselves often justify such ventures as opportunities to generate revenue, establish bases to aid in the recruitment of international students, to support students and scholars while abroad, aid generating research collaborations, and to help stay connected internationally.

Offshore activities related specifically to the provision of education are often referred to as transnational education (TNE). “The ‘offshoring’ of higher education is most commonly achieved by outsourcing some aspects of education provision to a foreign partner, but increasingly universities themselves are investing in their own foreign campuses" (McBurnie and Ziguras, 2007, p. 1). UNESCO and Council of Europe define transnational education (TNE) as a types of higher education where the learner is in a different country than where the home institution is based (Knight, 2006). Under this definition, distance programs, and joint degree programs can be included, but the clearest example of TNE is the branch campus. Branch campuses are typically brick and mortar operations set up in another country that allows students to study and receive an accredited, or at least branded, degree from the home institution. Such institutional exports are not new. Colonial powers did it, and there was another wave during the Cold War. For example, US HEIs set up over 40 branch campuses in Japan during the 1980s. However, recently the sector has expanded and models have changed with new types of incentives. Most are still initiated by the exporter, but there some examples of countries, including Singapore the UAE and China, that actively invite branch campuses (Hawawani, 2016).

Online education is another way in which universities increase their presence abroad, although virtually. This often comes in the form of Massive Open Online Courses (MOOCs). de Freitas, Morgan and Gibson (2015) note the divided opinions on MOOCs, alternatively credited as game changers for higher education and simply the online provision of failed teaching models. In the 1990s, MIT and other American universities began working on open courseware, to make material accessible to wider global audiences. Over the next 20 years such initiatives grew in scope, significantly extending the reach of many universities. Stanford-born organizations Coursera and Udacity greatly helped to popularize MOOCs worldwide around 2012 (McPherson and Bacow, 2015). Hundreds of universities worldwide now have content on such providers as EdEx and Coursera. Americans have pioneered in this area, with somewhat slower uptake in Asia and the rest of the world. As a result, there are some issues around the Americanization of online learning (de Freitas, Morgan and Gibson, 2015). However, they (ibid) note, “it is easy to see the appeal of an education system that appears to promise higher education, for free, to an unlimited audience, serving international learners from all backgrounds throughout their lives” (p. 457). However, MOOCs still only represent a small fraction of online higher education (McPherson and Bacow, 2015). McBurnie and Ziguras (2007) note that pure online models are less attractive to students (who prefer face-to-face interactions) and to governments (concerned more with capacity building of the local system), and predict that distance education without a local presence will likely only occupy a small niche market.

3.2.4 Comprehensive internationalization and international strategy

While internationalization activities are often ad-hoc and uncoordinated, it is increasingly common for internationalization to be an integrated aspect of institution wide strategy and planning. Through interviews with university leaders throughout Australia, China and Singapore, Gao (2015) found that ‘comprehensive’ and ‘holistic’ are frequently used to describe deliberate, systematic and coherent institutional approaches that touch on policies, curricula, collaborations, and international perspectives for students and staff. The university leaders felt that internationalization helped to achieve academic excellence by recruiting capable researchers, generating impactful publications, preparing globally competent graduates, and gaining a competitive edge and reputation.

Comprehensive internationalization (CI) is an approach to IoHE that moves beyond seeing IoHE as a set of discrete activities and integrates it into the core institutional mission(s) (Hudzik, 2014). Closely tied to Knight’s (2004) broader interpretation of IoHE or Hawawini’s (2016) integration model, CI impacts all aspects of the university’s operations, and shapes its general orientation and frames of reference. Hudzik (2014) defines CI as

> The means by which higher education institutions respond to widening and more complex expectations to connect globally across all missions to better serve students, clientele, and society in a twenty-first century context. In brief, comprehensive internationalization sees to mainstream access of all institutional clientele to international, global, and comparative content and perspective. (p. 1)

Elsewhere (2011), describing it as:

> Commitment confirmed through action to infuse international and comparative perspectives throughout the teaching, research and service missions of higher education. It shapes institutional ethos and values and touches the entire higher education enterprise…[It] not only impacts all of campus life but the institution's external frames of reference, partnerships and relations. (p. 6)

The drivers and rationales are the same as for IoHE more broadly, however, CI shows a deeper commitment to embedding all aspects of the university in the emerging global knowledge network (Hudzik and Stohl, 2012; Hudzik, 2013; Brandenberg et al, 2013). Nonetheless, CI needs to be tailored to local realities and priorities (Hudzik, 2014), and thus there is no universal approach. Failure to respect the institutional context and organizational culture can put the entire endeavor at risk. Directions, priorities, policies, programs, and activities will all be influenced by local realities (Hudzik and Stohl, 2012; Ergon-Polak, Hudson and Sandstrom, 2015). This results in differences across HEIs, but Hudzik (2014) argues that there is a set of common aspirations inherent in CI:

- Mainstreaming internationalization and expanding faculty and student engagement
- Integrating internationalization into core institutional missions
- Expanding who supports and contributes beyond the international office

- Interconnecting activities to produce synergies across the institution

CI should be addressed on both the macro/strategic and the operational/programmatic levels, with long range planning combined with short and medium term goals, sequencing, prioritization, allocating resources, and action. Critical is communicating a well-articulated vision, garnering stakeholder buy-in, developing staff and faculty capacity, and identifying and removing barriers. Key to effective CI are:

- Leadership
- Internal and external buy-in and participation
- Appropriate resourcing and commitments (i.e. HR policies)
- Clear vision, robust strategy and measurable goals
- An outcomes orientation
- Consistent messaging (Hudzik, 2011; 2013; 2015; Hudzik and Stohl, 2012; Brewer, Charles and Ferguson, 2015)

Central to the concept is institutional strategy, and robust strategies can have a transformative effect on the university. Bartell (2003) suggests that university internationalization *depends* on institutionalizing a strategic planning process. However, this can be challenging. While some policymakers and practitioners believe in the transformational potential of IoHE, more often than not, IoHE is implemented as a suite of ad-hoc activities separate from or in addition to the main work of the university which seldom come together in a coherent strategy. Without a strategy, there can be a mismatch between aspirations, needs and resources, and well-intentioned activities can even do more harm than good. Even when part of an overarching institutional strategy, internationalization often lacks clear articulation of fundamental aspirations, means, motivations, and expectations, operationalization and measurement of goals, or strong links with budget and staffing (Rumbley, Altbach, and Reisberg, 2012; Altbach, 2013).

While there is no single approach, strategic planning for internationalization should consider institutional realities, alignment between the institutional, national and regional levels, geographic focus, awareness of changes in the world, a focus on outcomes, a commitment to contributing to global issues, focus on students, and continuous monitoring and evaluation (IAU, 2012; Huang, 2014; Huisman, 2013). In an AIEA commissioned report, Brewer, Charles and Ferguson (2015) enumerates the principles of successful strategic planning for internationalization as: generating a shared understanding, soliciting wide input, sharing leadership, establishing timelines, communicating regularly, focusing on student learning, looking for cost-neutral opportunities, integrating international dimensions in all strategies and work plans, and continuous monitoring and evaluation. Huisman (2013) found that relatively little academic literature exists dealing specifically with IoHE strategy, but concludes that as internationalization becomes more mainstream it will be thought of less as a distinct approach and a more integral part of the usual business of HEIs, and that by focusing on internal and external organizational challenges and realities, the factors of success for internationalization strategies can be determined.

Engagement is critical to effectively implementing internationalization strategy. Strategies should be embraced by leadership, governance, faculty, students, and all service and support units to be comprehensive. Engaging staff and faculty in internationalization is difficult and complex, but faculty are key, as they are the ones ultimately carrying out the work. Leadership must recognize the different cultures of different fields, how internationalization fits into any given area, and help faculty integrate it into their work (Hudzik, 2011; Hudzik and Stohl, 2012; Leask, 2013; de Wit et al, 2015). Reducing faculty barriers to international engagement requires that it be seen as an important criterion in promotion, tenure, and other reward decisions; that actual departmental decisions on these matters give adequate recognition; and that international engagement is seen as a core function not only at the institutional level but at the unit level. If overall institutional funding and recognition systems reward unit international engagement, then conditions improve dramatically to induce faculty engagement (Hudzik, 2011).

Senior international officers (SIO) are key to managing this process. This can go as high as the president or chancellor's office, can be at the vice level, or can be a director in a designated international office. SIOs essentially manage the process of planning and strategy, networking, gathering resources, creating buy-in, and monitoring and evaluation. They must be familiar with all possible avenues to internationalize the institution, be able to take advantage of opportunities when they arise, and be able to effectively assess the internationalization activities. They must articulate common goals/vision with a wide range of stakeholders, advise institutional leaders, international peers and policy makers, and develop partnerships that balance institutional interests with the wider goals of internationalization. While much of this work is policy related, SIOs must bridge policy and practice through a focus on key stakeholders, namely the faculty (Beelen, 2016).

Hudzik assumes strong and effective leadership capable of guiding the institution as well as governance structures that allow for change.

> Managing the interplay of the diverse interests and priorities of a comprehensive internationalization strategy becomes an organizational challenge, often requiring the establishment of institutional governance mechanisms to guide the process and mediate across interests...Organizational change in the form of increased bureaucracy

> may be a consequence of attempts to encourage and coordinate more complex and larger-scale forms of internationalization. (p. 39)

Such a view may be grounded in the North American context, but with the spread of New Public Management (NPM) it is becoming increasingly applicable globally, and is gaining traction in universities within Asia-Pacific.

Hudzik (2011) also notes a number of potential risks associated with comprehensive internationalization. These include: global homogenization, the spread of a cookie cutter approach, overuse of 'best practices' (rather than ‘model practices’), commercialization, preservation of status quo, self-satisfaction, and faculty pushback.

3.2.5 Assessment and quality assurance of IoHE

Monitoring and evaluation are critical to successful strategic planning for internationalization. Brandenberg et at (2013) point out that IoHE is often heavily dependent on government and industry support, and quality assurance helps to demonstrate the value add of international activities to stakeholders. As Hudzik (2014) notes, “without being able to establish some level of evidence about cause and effect there is no objective way to establish the outcomes, results, or impacts of international programming” (p. 106). But how can universities assess their internationalization efforts? Clearly defining outcomes and setting measurable goals, such as improved delivery of education, graduate competencies, enhanced research, financial benefits, or improved reputation, is important (Deardroff and van Gaalen, 2012; de Wit, 2013). Interestingly though, in the literature reviewed, there was a lack of empirical evidence linking internationalization to such outcomes.

Gao (2015) provides a thorough review of existing indicators for IoHE, noting that between the various instruments there are literally hundreds of potential indicators, although no single instrument has gained substantial traction. She notes that “as internationalization has moved from the margins of institutional interest to the very core, more sophisticated information and useful tools are therefore needed for mapping and measuring this phenomenon, especially in an international comparative manner” (p. 183). She argues that, acknowledging the emerging accountability culture in higher education, indicators help to provide reliable information to monitor and assess performance, reduce vagueness in IoHE strategy, and create a public profile in comparison to peers. However, issues related to existing instruments include inconsistent purposes, Western biases, insufficient practitioner input, lack of consensus, and a mushrooming effect creating an unmanageable number of indicators (ibid). Hudzik and Stohl (2012) also note that many of the existing instruments measure inputs and outputs, rather than outcomes, and that an overemphasis on quantitative measures is unlikely to produce real organizational change. Acquiring appropriate data can also be a challenge.

A brief examination of a few of the existing instruments can be instructive in highlighting what is considered important in IoHE. In 1990s, Knight and de Wit developed the *Internationalization Quality Review Process*, which covers policies, support structures, academics, grants and contracts, students, research and collaboration, and HR programs. This review process includes 10 categories along with several sub-indicators under each category. The key performance categories include:

1. University Leadership for Internationalization
2. Internationalization Strategic Plan
3. Institutionalization of International Education
4. Infrastructure – Professional International Education Units and Staff
5. Internationalized Curriculum
6. International Students and Scholars

7. Study Abroad
8. Faculty Involvement in International Activities
9. Campus Life and Co-Curricular Programs
10. Monitoring the Process

Years later, de Wit (2013) developed another IoHE assessment framework which included five standards with several sub-criteria under each.

1. Vision on internationalization
    a. shared vision
    b. verifiable objectives
    c. improvement-oriented evaluations
2. Learning outcomes
    a. intended learning outcomes
    b. student assessment
    c. graduate achievement
3. Teaching and learning
    a. curriculum
    b. teaching methods
    c. learning environment
4. Staff
    a. composition
    b. international experience and competence
    c. services to staff
5. Students
    a. composition

b. international experience

c. services

The European Consortium for Accreditation (ECA) (2015) also developed an assessment instrument, the *Certificate for Quality in Internationalisation,* that has five standards at the institutional level and an additional four at the program level. Each standard has a small number of sub-criteria not listed here.

1. Institutional level
    a. intended internationalization
    b. action plans
    c. implementation
    d. enhancement
    e. governance
2. Program level
    a. intended internationalization
    b. international and intercultural learning
    c. teaching and learning
    d. staff and students

In 2016, U21 attempted to rank a number of national higher education systems. Among the criteria they used to rank national systems was “connectivity”, which can somewhat serve as a proxy for internationalization. There were six criteria under the connectivity category which totaled 20% of the overall rating for each national system. Connectivity criteria included:

1. Proportion of international students in tertiary education (4%)

2. Proportion of articles co-authored with international collaborators (4%)
3. Number of open access full text files on the web, per head (2%)
4. External links that university web domains receive from third parties, per head (2%)
5. Responses to question ‘Knowledge transfer is highly developed between companies and universities’, asked of business executives in the annual survey by IMD World Development Centre, Switzerland (4%)
6. Percentage of university research publications that are co-authored with industry researchers (4%)

Some ranking bodies have also attempted to measure and rank universities on internationalization. Times Higher Education (THE) ranks WCUs according to internationalization as measured by the proportions of international students, international staff and journal publications with at least one international co-author and the university’s ratio of international votes to domestic votes in their Academic Reputation Survey.[3] Hawawini (2016) warns that the inward looking criteria used THE does not fully capture and HEI’s capacity to connect with and contribute to the global knowledge economy, and since the rankings may measure the wrong things, it may lead HEIs to focus on the wrong areas. More foreigners can be seen as more international without embarking on the more challenging and important process of connecting to the knowledge economy. He also points out that the most international HEIs in the ranking are in small rich English-speaking countries considered among the most desirable destinations for highly skilled workers.

[3] https://www.timeshighereducation.com/features/worlds-most-international-universities-2017

3.2.6 Negative consequences?

Hawawini's above point signals just one of the potential risks and negative consequences associated with IoHE. The 2005 IAU survey showed that survey respondents had an overall a positive picture of sustained importance of IoHE, but around 70% of respondents indicated that they believe there are substantial risks associated with it. The top three risks included commercialization/commodification, an increase in low quality providers, and brain drain. Interestingly these are more cross-border than institutional related issues (Knight, 2008). In the 2014 IAU survey the perceived risks had shifted substantially to international opportunities being accessible only to students with resources, quality control, and excessive competition. When pulling out the responses from Asian HEIs, the three main perceived risks were inequality, excessive competition, overemphasis of IoHE at the expense of other priorities, and pursuit of partnerships only for reasons of prestige (Ergon-Polak, Hudson and Sandstrom, 2015). Other adverse consequences of IoHE identified by IAU (2012) include: English and diminishing diversity of languages; cultural homogenization; homogenization of university models; brain drain; large scale student recruitment; domestic pushback; growth of TNE to the disadvantage of local HEIs; wrong motives for international partnerships; and asymmetrical relationships. The survey results reveal that IoHE practice is still largely traditional, leadership driven, focused on a mobile minority, input oriented, assigns high importance to foreign language learning, is costly, does not place academic staff at the center of internationalization and does not offer them structured support and professional development. Many universities may have acknowledged the shift in internationalization that has taken place during the last 15 years, but have not really acted upon it (Beelen, 2016).

Some (Deardroff, de Wit and Heyl, 2012; de Wit, 2013) point to the common misconceptions that higher education is international by nature, that students will acquire intercultural competencies simply by partaking in international activities, or that international students themselves are effective agents of internationalization. Others (Schapper and Mayson, 2005) go so far as to claim that IoHE is entirely driven by centralized corporate decision makers, and that any efforts to internationalize the curriculum erode academic freedom, but this is somewhat of an extreme view.

Much of the potential negative impact of IoHE comes not so much from internationalization itself, but rather its perceived association with western models of WCUs.

> The pursuit of a single model of excellence embodied in the notion of a "world-class university," usually narrowly defined as excellence in research, may result in the concentration of scarce national resources in a few or a single institution to the detriment of a diverse national system of higher education institutions, fit for diverse national purposes. (IAU, 2012, p. 3)

Potential negative effects of the WCU model include: sacrificing teaching and learning, reduced equality of opportunity, less diversity, and creation of parallel tracks to meet objectives rather than institutional reform (Salmi, 2016). The 'Americanization of higher education' discussed earlier, and along with it IoHE in general, leads many to criticize the western hegemony of concepts and methods (Brewer and Leask, 2012).

What may be the greatest threat of IoHE is the perception of and reaction to the sum total of these parts. If the negative consequences of internationalization are seen to be too great, or if it is seen to threaten critical and valued local or traditional components, this may lead to a major backlash against IoHE. If there is no quality assurance process in place, or if the process does not produce evidence that IoHE leads to intended outcomes, there is a distinct possibility that governments, academics and other stakeholders will revolt against it (Knight, 2013).

3.2.7 Internationalization of East Asian higher education

Given the long history of heavy foreign influence on higher education in the region (Altbach, 2004), it is reasonable to ask whether prevailing concepts around IoHE can even apply to the East Asian context. Clearly East Asian universities engage in internationalization activities, such as student exchanges, research partnerships and so on. Similarly, it seems East Asian universities do use internationalization as a means of responding to the emergence of a globalized KBE. Thus, the question becomes not whether IoHE exists in the region, as it seems evident that it does, but rather whether there is a form of IoHE unique to the region. Ng (2012) points to how East Asian HEIs largely work within Anglo-American paradigms, and IoHE policies are heavily influenced by the West (Chan, 2007; Marginson, 2008; Yang, 2002). Is this simply a process of replication, or is IoHE contextualized and recreated according to regional realities? Is IoHE a universal concept, or are there fundamental regional differences? Marginson (2008) muses:

> Will the rise of the research university in China, Singapore and Korea simply replicate the Anglo-American research university? Will it be a Western university with Chinese, or Singaporean, or Korean characteristics? Or will new forms of global research university appear that are hybrids of old and new, in the manner of Humboldt's innovation in Germany? Will East Asia and/or Singapore constitute a new and leading 'Idea of a University' for the first time in history? (p. 13)

Yonezawa et al (2014) note that as systems in the region move towards universal attendance, HEIs are augmenting international profiles by acting across borders, increasing student and faculty mobility, collaborating regionally, increasing QA measures, and overall reconsidering the public nature of higher education. These shifts are coupled with increases in foreign branch campus, the spread of EMI, and international partnerships forming at an impressive rate. Historically partnerships happened at the national level, but since the 1990s there has been an increase in institutional level collaboration, resulting from expanding demand and increase in global competition (Sidhu, 2006; Huisman et al, 2012).

There is some agreement that the main rationale for IoHE in the region is national economic competitiveness (Ng, 2012; Huang, 2015; Reyes and Gopinathan, 2015). Ng (2012) argues that in response to globalization, governments and HEIs pursue a form of internationalization characterized by “managerialism and marketization”, “economic utilitarianism” and “policy duplication” (p. 440). This has included importing and exporting systems and institutions, opening recruitment and academic offices abroad, increased partnerships, and governance and management reforms along market-oriented lines. The 2013 IAU survey showed significant variation in perceptions of IoHE between Asia (including Australasia and South Asia) and other regions. Increased student awareness of and engagement with global issues, improved teaching and learning, and strengthened research and knowledge production capacity were identified as central priorities, driven mainly by government policies and rankings. International student recruitment, faculty development and intra-regional partnerships were also seen as priorities. Major concerns included lack of funding, recognition of qualifications insufficient exposure to international opportunities and international opportunities being limited to too few students, excessive competition and prioritization of internationalization at the expense of other priories (Ergon-Polak and Hudson, 2014). That is not to say that all in the region view IoHE in the same way. Marginson (2016) notes that despite the overall shift towards neoliberalism in last couple decades, Korea and Japan still see IoHE as a means towards cultural exchange and foreign aid, as opposed to countries like Malaysia and Singapore which have more clearly articulated commercial purposes.

Perhaps the most characteristic aspect of IoHE in the region is the magnificent scale of student mobility. China is by far the biggest source of international tertiary students in the world. Most countries in the regions have formal plans to both attract and send more international students. East Asian students are also increasingly choosing other destinations within the region. Traditionally, mobility was a way to make up for inadequate capacity at home, but as capacity grows flows are already starting to change. The rapid economic growth in East Asia has facilitated both the expansion and capacity for higher education, as well as attention paid to the sector. In many countries, Asian students account for the vast majority of all international students, but as Marmolejo et al (2013) note, the region will not continue to accept the role of supplier of students for long. Increasingly Asian nations are hosting larger numbers of students from within and without the region.

Besides the increased mixing of students in the region, there may be other signs of more purposeful regionalization, with capacity, mobility and collaboration in the region developing (Yonezawa et al, 2014; Jain, 2015; Marginson, 2015). As governments are slowly relaxing control, there is increased collaboration at the institutional and departmental levels (Huang, 2014). The EU may help by providing models of regional collaboration, and encourage Asian nations to set up more formal pathways for student mobility, capacity building, and cooperation (Marmolejo et al, 2013). Several regional initiatives have emerged, such as UMAP (University Mobility in Asia and the Pacific) with its Credit Transfer Scheme among 29 member countries and regions; CAMPUS Asia; East Asian Brisbane communique; Asia-link; Vision Group Prospect report 2001; ASEAN +3; and the KL declaration. However, despite the high levels of student mobility, the further development of a regional higher education arena is slow going (Huisman et al, 2012; Yonezawa & Meerman, 2012; Byun and Um, 2014; Horie, 2015).

The spread of the use of English outside of Hong Kong and Singapore also should not be overlooked. When the University of Tokyo announced the launch of its first English-medium undergraduate program in 2012 it was a major breakthrough for the institution, but it did not raise much concern or debate. South Korea, Taiwan and mainland China already had major initiative in this direction underway. Culture and identity issues are clear concerns, but most of the region outside of Japan seems to take a more pragmatic view of English as the current means of staying connected to global research and business (de Wit, 2013).

Several authors (Ng, 2012; Altbach, 2013; Reyes and Gopinathan, 2015; Mok, 2016) warn of overly economic and functionalist approaches to IoHE. Altbach (2013) notes a number of potential drawbacks stemming from this over functionalist view, including both governments and students seeking lucrative careers overemphasizing science at the expense of humanities and social sciences, which produce the type of thinking necessary for a healthy society. He argues that faculty in these areas should be produced locally as it's important for them to have a local perspective.

Ng (2012) also argues for the need to work toward a more positive future by defining the real aims and missions of higher education in the internationalization process, and not letting the tidal wave of market forces diminish the cultural values and civic missions of higher education. Asian HEIs, he argues, need to guard against commercialization and recolonization in terms of knowledge and technology transfers, and enhance their engagement with and contribution to the wider community through such positive visions. Similarly, Mok (2016) argues that universities should not simply count as tools to meet economic demands and serve GDP growth, but also as places to cultivate students to become compassionate leaders with international and regional perspectives, broad-based education, and professional skills to handle increasingly complex problems or issues. Like Ng, he also calls for more international collaboration to explore such issues regarding HE from different perspectives.

Others (Ng, 2012; Ngai, 2012; Forestier and Crossley, 2015; Tan and Chua, 2015) warn of the dangers of uncritical borrowing without appropriate modification and contextualization, and argue for a more Asian approach to higher education. Ngai (2012) argues that “moving forward requires grads to think critically about current structures built on western models” (p. 371). Lim (2016) urges theories, perspectives, interpretations, and constructs emerging from western contexts to be re-contextualized through an Asian lens to offer new ways of looking at the world and history.

Through more local referencing, rather than continual comparisons to the west, East Asian HEIs can learn from others with similar experiences, trajectories, and/or structural locations, and understand themselves in ways that go beyond Western constructs. Globalization and perhaps most notably global league tables have led East Asian HEIs to compare, and indeed restructure, themselves not just against the West, but against each other according to homogeneous western-oriented standards (Mok and Cheung, 2011). This can be seen as contrary to the cosmopolitan multidimensional rationales for internationalization (Ng, 2012). Thus, it is not just about playing in an un-level playing field, as is often lamented, but about calling into question the entire game built on principles of competition and benchmarking. Ngai (2012) quotes Loveland (2007, p.18), “Development in Asia means moving 'from being passengers on the bus of globalization to becoming co-drivers” (p. 371), and adds that moving forward requires thinking critically about current structures built on Western models.

3.2.8 Gaps in the literature

As a dynamic and ever-shifting field, de Wit (2013) argues for a continual rethinking of IoHE. He notes the further influence of globalization, the changing international context of higher education, a movement away from Western colonial views, an increased emphasis on intercultural and *glocal*, and a shift from viewing IoHE as an end to means. To navigate this complex landscape, Altbach (2007) argues, thoughtful and competent leadership and policymakers need knowledge and expertise as well as data and analysis. Additionally, he notes that the “field would benefit from better links between institutional research and the broader research community” (p. 268). Streitwieser and Ogden (2016) argue that the increased need in recent decades toward internationalization has created new opportunities for IoHE scholar-practitioners, and professionals are increasingly required to have scholarly credentials, conduct research and evaluation, and even engage in various forms of teaching and service. They call for more study of these roles in more varied contexts.

de Wit (2013) laments a lack of attention to the program level in existing research and too much focus on inputs and pragmatic numerical outputs rather than outcomes. He calls for more non-Western standpoints, examining multiple approaches and paradigms, being more explicit about actors' motivations, more attention paid to faculty and students, better understanding of impact on students, exploring the link between internationalization and multiculturalism, and reinforcing that IoHE is not a goal in itself. Stier (2004) calls for more attention to the cooperation between different types of actors, inclusion and understanding of a greater diversity of perspectives, emphasis on content over form, exploration of motivations, freedom from government influence, and a focus on quality to benefit long-term impact and demonstrate positive results.

Picking up specifically on outcomes, Deardroff and van Gaalen (2012) point to the many gaps in research on outcomes assessment of IoHE. They encourage further research on the relationship between activities and goals, how processes can be shaped to lead to quality improvement, the effects of national and international policy on institutional internationalization strategy, outcomes in different contexts, building on theoretical frameworks from other disciplines, and more empirical research.

Naidoo and Jamieson (2005) identify two approaches to higher education research: theoretical frameworks positioning HEIs as an intersection of socio-economic forces; and frameworks that detach HEIs from their context in order to study their inner-workings. They argue that not enough attention has been paid to the *relationship* between macro forces and the inner workings. Nolan and Hunter (2012) agree that not enough is known about how internationalization as a change strategy takes place at the institutional level. They argue that by looking at different cases around the world, we can learn more about the relationship between institutional decision making and the context the institutions are situated in. Such shared experiences can help other HEIs in finding their own way forward. Yang (2005) also points to a shortage of empirical studies that examine the links between the international and local. Similarly, McBurnie and Ziguras (2007) argue that these is insufficient scholarship on not just how higher education institutions are receivers of globalization but their strategies to also act as agents.

Weiler (2008) also notes that there is a lack of comparative studies on higher education. This is especially noticeable, he writes, when compared to a field like political science, which has developed a rich body of comparative work and increasingly sophisticated methodology and theories. He argues that higher education research does not as a field make itself the subject of systematic and critical inquiry, and as a field of study is in need of significant further development. Kuzhabekova, Handel and Chapman (2015) cite Clark (1986):

> Cross-national comparison is particularly advantageous in uncovering the unique features and unconscious assumptions that possess our vision when we study only a single country, generally our own. The ‘hometown’ view has been particularly damaging in the study of higher education, since a large share of the literature has been written by Americans, and the U.S. system, in its fundamentals, is a deviant case (p 2). (p. 880)

This also speaks to the dominance of Western perspectives in the existing literature. Research and scholarship of IoHE is heavily influenced geographic location and local context (Harman, 2006). In analyzing the IDP database, Proctor (2016) found that over half of all international education related research published in English from 2011-2013 focused on a small number of countries and narrow range of topics in the Anglo world. Students were the most common focus, and case studies and interviews were the most popular methodology. Weiler (2008) also notes that IoHE research is uneven throughout the world, but notes a growing diversity and quality sources emerging from non-traditional locales. As an indicator, he notes that the 2008 issues of "Higher Education" had 43 articles from 20 countries from all continents, although largely still dominated by Western countries.

This study seeks to identify several of these identified gaps by pursuing a cross-case comparative analysis of two East Asian contexts that seeks to explicitly identify the links between external contexts and internal institutional activities.

3.3 Summary

To briefly summarize the key points from the literature review. Universities are communities of diverse stakeholder groups with diverse priorities and missions. Dissimilar to corporations, they do not exist for themselves, and have responsibilities to both public and private goods, and are generally beholden to both the state and their students. As national frameworks change in the 21st century so too do the environments universities operate in and the circumstances they operate under. Overall, as the role of the state recedes globally, universities are pushed towards the market. At the same time, they are pushed towards greater rationales of global not just national public good. That the state is receding might be somewhat less true in East Asia, as it continues to be the dominant force in higher education, but the relationship between the state and higher education is certainly evolving. Singapore and Japan are both interesting case studies of how governments attempt to use their higher education institutions to boost international competitiveness. In addition to globalization, higher education is increasingly influenced by both massification and marketization.

Internationalization is one way in which both states and universities respond to the trend towards a globalized knowledge economy. Depending on context and perspective there can be a variety of rationales for IoHE, and these can differ at the state and institutional levels. Regardless of rationale though, IoHE tends to manifest itself in several broad areas: student and scholar mobility, institutional collaboration, curriculum and educational programming changes, activities abroad, and greater attention to international reputation and competition. As universities partake in more activities in these areas, they tend to become more comprehensive and strategic in their approach to internationalization. While overall internationalization is recognized as a good thing, there are potential pitfalls and negative outcomes. These may be especially prevalent when economic rationales dominate. Some argue that IoHE within East Asia is too concerned with these rationales of economic competition. To understand more about these phenomena, the literature encourages further research which examines the practice of internationalization at the institutional level and relates it back to contextual considerations.

4 National Context

The following section provides a brief overview of the historical development of the higher education sectors in Singapore and Japan, as well as the national policy environment for IoHE in the two countries. Sources are drawn from both existing scholarship as well as policy documents and other primary sources. The information provided in this chapter aims to provide the necessary background to engage in the contextual analysis of the cases in Chapter 6. This chapter attempts to answer research question two:

RQ2: What is the national policy context for the four cases?

4.1 Singapore

4.1.1 Context

Singapore is a small relatively young city-state located at the cross-roads, both geographically and culturally of East and South Asia. A former colony of the British Empire, Singapore went through a period of instability following WWII resulting in an uncertain and involuntary independence in 1965. With an ethnic Chinese majority, there are sizable Malay and Indian ethnic groups making up about a quarter of the citizens, and non-citizens make up about 40% of the population. It is among the densest countries in the world, with a very low fertility rate and aging population, supplemented by considerable population of foreign labor, which doubled in size between 2005 and 2015 (Alfaro and Ketels, 2016).

At independence, Singapore had a rudimentary industrial infrastructure, relatively well-developed communications for the region, and played an important role in regional trade and commerce (Gopinathan, 1999). Location and labor were really its only major endowments. However, today it has one of the highest GDP per capita in the world at nearly $60,000, and according to World Economic Forum (2018), the highest level of human capital in the world. It also has one of the highest costs of living. The economy is characterized by direct government direction, a heavy dependence on foreign investment and an export economy aiming to become more innovation driven. Indeed, Tan (2004) argues that the two central features of higher education in Singapore are economic relevance and state control. Its very active and strategic government is able to quickly move considerable resources in a given direction, and since it is virtually a single party state, they are able to enact fairly long term strategy (Alfaro and Ketels, 2016). The People's Action Party (PAP), in power since independence, has focused primarily, and successfully, on ensuring survival, stability and progress through economic growth and development.

According to Castells' (1992) classification, Singapore is a developmental state, with the government consistently playing a significant role in the nation's socio-economic development, and maintaining legitimacy by sustaining economic development (Koh 2007, 2011; Tan, 2010; Gopinathan and Lee, 2011). Similar to Japan, Singapore is a planned rational political economy, characterized by the combination of state regulation and state direction to achieve certain national economic goals. One of the central functions of the state is facilitating industrialization and competition, and overall direction of the market (Gopinathan and Lee, 2011) There is a strong belief that the public sector must step in to correct market deficiencies.

At independence in 1965, then Prime Minister Lee resorted to a form of *connectionism* which related the heart (Singapore) to a new body (the world system; especially Japan, the US and UK), thus dealing with the core problems of resources and market. Multi-national corporations (MNCs) were invited to set up base in Singapore by providing an attractive tax climate and human resources, and have since been critical to the nation's economy (Goh and

Gopinathan, 2006; Lin and Lin, 2014). As explained by then Deputy Minister Goh Keng Swee in 1970,

> When foreign corporations bring their expertise, what we experience as a developing nation is a brain-drain in reverse....in the long term the scientific know-how and technological processes which we now borrow from abroad must in course of time develop on an indigenous base at our institutions of higher learning. (cited in Goh and Gopinathan, 2006, p. 22)

The revenue from MNCs was invested into education, training and R&D. Education, which enabled to country to supply higher levels of talent to the MNCs, and economic policy became increasingly intertwined (Chang, 2003; Lim 2006; Gopinathan 2007; Anwar, 2008; Sidhu, Ho and Yeoh, 2011; Tan, 2010; Lin and Lin, 2014). A successful model, this approach has resulted in a lack of local 'national champion' enterprises (Sidhu, Ho and Yeoh, 2011), which puts Singapore in a position of relying on foreign businesses rather than home-grown innovation and industry.

Until very recently the tertiary education sector was kept relatively small and highly differentiated. Although it has expanded considerably over the last decade, participation is still behind most developed countries at about 26% (Alfaro and Ketels, 2016), although many Singaporeans pursue degrees oversees. Additionally, as a state designed enterprise, enrollments and available places are largely determined by the state according to perceived needs (Chang, 2003). As economic shifted, HE policies are adjusted to support to support movement towards hi-tech industries and financial services (Altbach, 2004; 2007). Unlike many other developed nations, the government is currently investing heavily in its universities and continues to be the key financer (Sidhu, 2009).

The widespread use of English is also a major advantage for the country in its ability to work across borders. Since the 1980s, any education from the state is in English only, and it is promoted as language of economic opportunity, serves as a neutral bridge for different ethnic groups, and is necessary for higher education, career and middle-class life. In addition, citizens speak at least one other language (usually Mandarin), which helps in building connections throughout the region and maintain 'Asian values' (Morita, 2015).

> Singapore's bilingual policy is perhaps the most unique of its kind in the world. It is an East-West model which allows Singaporeans to attain the competency in the use of the English Language, the language of the so-called "West" and in the use of the Chinese Language (or other indigenous languages, such as Tamil and Malay), the language of the so-called "East". This approach is particularly useful for Singapore's business internalization strategy. (Goh and Gopinathan, 2006, p. 8)

4.1.2 Development

Tan (2006) identifies 3 phases of educational development in Singapore. S*urvival driven* from 1959 to 1978, with an emphasis on social harmony and producing trained workers; *efficiency driven* from 1979 to 1996, characterized by differentiating, fine tuning, upgrading and upskilling, and shifting attention to higher levels of education; and *ability driven* from 1997 until the time of writing, emphasizing more holistic education needed to succeed in a knowledge based economy. This phase was largely distinguished by the *Thinking Schools, Learning Nation* initiative. In 2012, the Ministry of Education (MOE) also noted a shift into a 'student-centric, values driven' phase, with a further emphasis on 21st century skills and dispositions such as adaptability and resilience (Lee, Hung and Teh, 2013).

4.1.2.1 Survival

Prior to independence, the school system was under-resourced, political, divided along racial lines, and had little capacity to contribute to socio-economic development (Kwong, Peck and Chin, 1997; Gopinathan, 1999). However, PM Lee believed that education had the ability to reshape and restructure society, and almost immediately began large-scale recruitment and training of teachers, the creation of a stratified secondary school system, universalizing primary education, and making bilingualism compulsory. Unlike its neighbors, Singapore opted to remain close to former colonial powers, and embraced multi-national corporations (MNCs) (Gopinathan, 1999; Sidhu, 2006), and promoted English as a way to stay connected to the world. From the beginning, internationalization was seen as essential to the country:

> While we strive for unity among our peoples we are in the happy position to state that we are building attitudes of internationalism. Singapore by its diverse racial composition is a microcosm of the world and therefore in the making of a good citizen we are also paving the way for a kind of world citizenship, the ideal of peace-loving nations of the world. (MOE, 1966, p.i quoted in Daquila, 2013, p. 631)

The pragmatic view of education as a vital social institution and critical to equipping students with the requisite skills and knowledge for the work and life in an international context was also prevalent (Tan, Gopinathan and Ho, 1997). PM Lee's pragmatism is also evident in the highly stratified education system, which he believed was important to spot and cultivate above average students to take on government positions and help lead society (Chang, 2003; Tan, 2006). According to the former PM Lee (1990):

> In any given society, of the one thousand babies born, there are so many percent near geniuses, so many percent average, so many percent morons. I am sorry if I am

> constantly preoccupied with what the near-geniuses and the above average are going to do. But I am convinced that it is they who ultimately decide the shape of things to come. It is the above average in any society who sets the pace. (p. 92)

As a result, Singapore's tertiary sector remained small and underdeveloped, compared to other 'Asian tigers', while emphasis was placed on the primary and secondary sectors (Gopinathan, 1999). Until the early 1990s, the National University of Singapore was more or less the only public university in the country, but was primarily a teaching institution (Tan, 2004). Technical training and development mainly took place within the polytechnics (Gopinathan, 1995).

4.1.2.2 Efficiency

The introduction of the New Education System (NES) in 1979 marked the beginning of the *efficiency driven* stage. In 1979, the tertiary cohort participation rate was about 5%, which sufficed for the economic model of the time. In 1980, the two existing HEIs merged to form NUS (delivering education in English), and the next year Nanyang Technical Institute (NTI) opened (also with English as the medium of instruction). Then Singapore's export economy was hard hit by the 1985 recession, which spurred some rethinking of economic structures and lead to significant expansion of the postsecondary sector (Kwong, Peck and Chin, 1997). The 1986 *New Directions* economic report advocated for more flexibility, creativity, lifelong learning, experimentation, and innovation, and the state readjusted its education system to better meet the demands of the globalizing KBE by expanding graduate education and research, and cultivating more creativity and critical thinking at the undergraduate level (Gopinathan, 1999; Mok, 2010).

The government realized that future development required local scientists and engineers. The 1986 report advised expansion of the higher education sector, and enrollments rose. Government expenditures on the universities also increased substantially during this period. However, the government made it's 'public good' view of higher education clear: "The government subsidizes the cost of training in the universities not to satisfy personal ambitions, but to meet the nation's economic and social needs" (Straits times, May 21, 1991 cited by Tan, 2004, p.184). Nonetheless there was still a shortage of skilled and managerial labor, and enrollments were substantially behind those of Taiwan and Japan (Gopinathan, 1995; Gopinathan, 1999).

In 1991, NTI merged with the National Institute of Education (NIE) to become the Nanyang Technological University (NTU). In addition, major revisions were made to university admissions systems, new research links were established with outside organizations, and research and graduate programs were expanded (Kwong, Peck and Chin, 1997). Furthermore, the new Strategic Economic Plan emphasized the use of global resources, global technology and global talent, and called for the assembly of an international advisory panel of academics from top universities; review committees visiting overseas HEIs; increased partnerships with overseas universities; inviting prestigious universities to set up branch campuses; 'Americanizing' local universities; increasing staffing exchanges; recruiting more international faculty and researchers; encouraging more local students to study abroad; and attracting a target 20% enrolment of international students (Tan, 2004). The rationales for this outward shift centered around further preparing citizens to succeed in the globalizing 21st century KBE (Sharpe and Gopinathan, 1996).

4.1.2.3 Ability

Two major events in 1997 mark the transition into the *ability driven* phase: The "Thinking Schools, Learning Nation" (TSLN) initiative and the global financial crisis leading to significant reforms to the higher education sector (Chang, 2003).

TSLN aimed further enhance competitiveness in the globalized KBE through decentralization, ICT, lifelong learning, shifting knowledge transmission to skill development, and strengthening student-centered pedagogy (Goh and Gopinathan, 2006; Tan, 2006; Koh, 2011). Interestingly, the initiative simultaneously promoted critical thinking and national education, attempting to give workers the skills needed to effectively participate in the future economy, but to do so more or less in service of the state (Koh, 2011).

Next, in the wake of the financial crisis, the Singapore 21 Committee report recommended that the higher education sector retool to generate new revenue and compete internationally, by improving research and development, encouraging entrepreneurism, and forming a regional education hub (i.e. the Boston of the East) through active pursuit of partnerships with top foreign universities. The close articulation between education, economic development and nation-building remained, as did the importance of labor force development and heavy reliance on foreign expertise and alliances. However, universities were now to become 'engines of entrepreneurship', research and innovation capacity took on new significance, and undergraduate education was broadened and admissions made more holistic (Kam and Gopinathan, 1999; Cheung and Sidhu, 2003; Gopinathan, 2007; Sidhu, Ho and Yeoh, 2011).

In 1998, the World Class University Program (WCUP) was launched by the Economic Development Board (EDB) to recruit 10 elite foreign universities within 10 years (ERC, 2003; Tan, 2010; MOE, 2012). At the time not yet regarded as a study destination by serious postgraduate students, this was an attempt at global reputation building even before global league tables. The first MOU (Memoranda of Understanding) was with the Massachusetts Institute of Technology (MIT), largely the result of high level government connections (Sidhu, Ho and Yeoh, 2011). That relationship eventually grew into a multi-faceted collection of joint ventures. The WCUP also represented a renewed emphasis on internationalization, and the local universities redoubled their efforts to promote Singapore's outward-looking-ness. The program was also meant to develop local capacity in a select few fields the government thought had potential, such as life sciences (Chang, 2003). Thus, as Singapore began to aspire towards 'global city' status, it aimed to diversify its portfolio beyond trading and logistics, and relevance and quality became buzz words (Gopinathan and Lee, 2011).

> Our vision, in shorthand notation, is to become the Boston of the East. Boston is not just MIT or Harvard. The greater Boston area boasts over 200 universities, colleges, research institutes and thousands of companies. It is a focal point of creative energy, a hive of intellectual, commercial and social activity. We want to create an oasis of talent in Singapore: a knowledge hub, an ideas-exchange, a confluence of people and idea streams, an incubator for inspiration. (Teo, 2000, para. 6 quoted in Gopinathan and Lee, 2011)

In 2002, the Ministry of Trade and Industry, seeing opportunity in the demand for higher education among the burgeoning middle-class in China and India, sought to build upon the WCUP, officially turn Singapore into an education hub, capture a larger share of the global higher education market, and increase education's contribution to the GDP from 2 to 5% (ERC, 2002; 2003; Tan, 2004; Waring, 2015). Thus, the Global Schoolhouse (GSH) Program became the overall policy framework for IoHE in Singapore.

GSH aimed to make Singapore an education hub in order to draw in foreign providers and with them talent, generate knowledge and innovation and thus high paying jobs, increase and improve offerings to local students, and build and strengthen international networks (Sidhu 2005; Lee, 2014; Tan 2016). To do this, GSH sought to continue bringing in prestigious foreign universities, triple the number of international students to 150,000 by 2015, recruit talented researchers capable of contributing to Singapore's knowledge economy, encourage more innovation, creativity and entrepreneurialism among local students, raise the capacity and reputation of national universities, and make improvements to the private sector (Yeo, 2003; Gopinathan and Lee, 2011; Sidhu, Ho and Yeoh., 2011; Daquila, 2013; Tan, 2016). International students in particular were seen to bring a host of spillover economic benefits in addition to tuition (Ng, 2013), thus the government implemented various scholarship and grant schemes.

GSH was meant to establish a three tiered system, with foreign providers at the top bringing in global talent to create knowledge-based industries and generate revenue and high paying professional jobs, public universities in the middle tasked with learning from and stretching themselves through engagement with the foreign universities, and private providers as a largely demand absorbing base offering differentiated opportunities (ERC, 2002). Local universities were meant to learn from their prestigious partners and 'stretch' themselves through engagement (Sidhu, Ho and Yeoh., 2011). NUS and NTU proved to be quick learners, and have now risen higher in the rankings than many of their partners.

The initiative was underscored by complementary policy reforms in research, urban re-development, taxation, immigration and intellectual property (Sidhu, Ho and Yeoh, 2011; Tan, 2016). Interestingly, rather than the MOE, GSH is owned and operated jointly by the Singapore Tourism Board (STM) and Economic Development Board (EDB) within the

Ministry of Trade and Industry (MTI), partly in order to leverage their existing extensive network of overseas offices. Quickly the Boards launched overseas education fairs and media campaigns, and hired hundreds of 'education specialists' to staff their overseas offices (Rubin, 2008).

Actively promoting partnerships and collaborations was another pillar of GSH (Gopinathan and Lee, 2011; Tan, 2016), and they have seen considerable success in this area, despite informal restrictions on academic freedom (Altbach, 2007). Offering a Western-style education with links to big-name institutions is key to Singapore's global schoolhouse strategy. Early on, partners were predominantly research intensive US universities (i.e. MIT, Duke, Georgia Tech, etc.), but recently the profile has begun to diversify. Examples of such partnerships include:

- Singapore Management University is modelled on the Wharton School of the University of Pennsylvania, whose deputy dean served as SMU's first president.
- Yale and NUS for liberal arts
- The Duke-NUS medical school
- The Singapore-MIT Alliance

Between 2005 and 2006, the government incorporated the public universities (Gopinathan and Lee, 2011), freeing them from their status as civil servants (Mok, 2010). The government continued to control most of the funding as well as appoint the leadership, but management was given considerable more autonomy and funding sources diversified (Tan, 2004). New quality assurance mechanisms were introduced, management structures were realigned, and the president was made the key decision maker with the aid of externals (Mok, 2010). Although the move signaled the increasing influence of NPM models, the motives were not entirely aimed at cost reductions, as state investment did not decrease. Rather it can be understood as an effort to introduce greater accountability, efficiency and responsiveness to the market, encourage an entrepreneurial spirit, and provide the needed flexibility and autonomy to recruit outstanding academics (Mok, 2010; Gopinathan and Lee, 2011; Waring, 2015). Unfortunately, interviews with faculty and staff revealed that they while they do feel more pressure, they do not necessarily feel more empowered since the change (Mok, 2010). Although the government ensures the universities are well-funded, they are expected to continuously refine management structures and operations (Gopinathan and Lee, 2011).

Overall, the autonomous universities, can be more accurately described as “state-funded, privately managed and publicly accountable institutions” (Ng, 2013, p. 282). Importantly, the shifts of this period should not be understood as neoliberal in the traditional sense, as the state has retained control through provide funding, performance frameworks, to appoint and remove Trustees, the disposal of the university’s undertaking or property, and any alterations to the university’s constituent documents. In particular, parliamentary acts make provision for the Autonomous Universities to deploy the resources only for those objectives agreed to by the Education Minister (Gopinathan and Lee, 2011). The government has stated that despite their autonomy, national universities must continue to fulfil their critical roles of training graduate manpower for Singapore’s economy (MOE, 2007). There seemed to be a desire to globalize Singaporean higher education without subjugating it to market forces (Sidhu 2005).

4.1.2.4 A fourth phase? Excellence driven

Throughout the 21st century, Singapore’s education has come to be considered among the best in the world, and NUS and NTU are now considered among the best universities in the region. QS has ranked both NUS and NTU just shy of the top ten universities in the world. As shown by the below graphic, in the last decade the higher education sector has also expanded significantly, with plans to increase participation to 40% by 2020 (Barber, Donnelly and Rizvi, 2013).

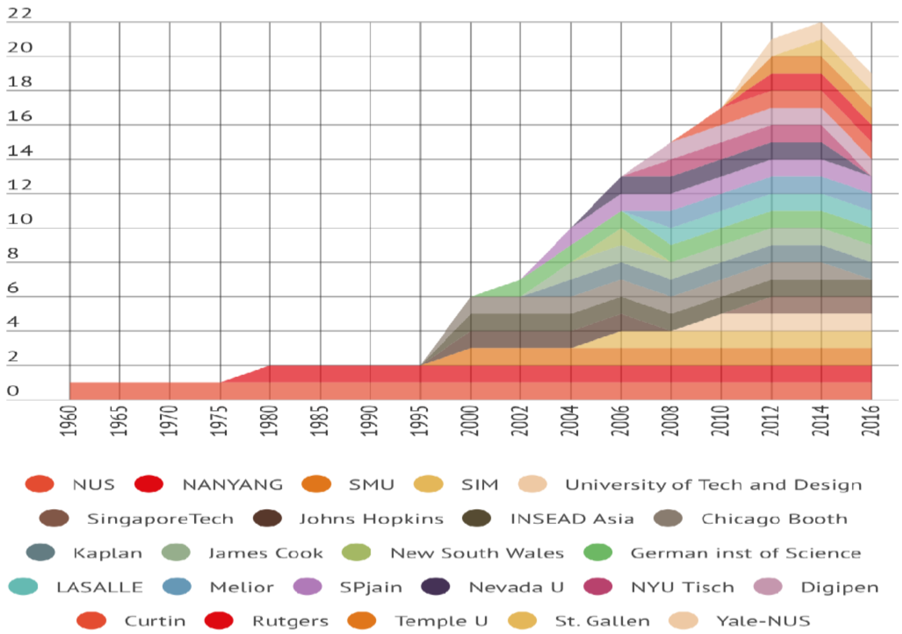

Figure 5: Growth of higher education providers in Singapore (Source: Alfaro and Ketels, 2016).

Although GSH has remained the overall policy framework, its rationales have shifted somewhat over its lifespan. Talent development has taken on greater importance and a broader definition. Attracting foreign talent, while still hugely important for the sector has been somewhat downplayed (Sidhu, Ho and Yeoh, 2011; Lee, 2014). This was partly in response to public demonstrations in 2011. Since then, the government has put greater emphasis on providing more and more diverse kinds of opportunities for local students and scholars. Similarly, conceptions of economic growth have broadened. In 2010, PM Lee stated Singapore's long term aim was to be among the most research-intensive, innovative and entrepreneurial economies in the world *in order to* create high value-added jobs and prosperity for Singaporeans (Gopinathan and Lee, 2011).

Another shift is the increased focus on raising the profile of NUS and NTU, which may be partly a result of several unsuccessful ventures with foreign providers. The state has used its influence and resources mediate on behalf of and provide assistance to the national universities, especially in developing international linkages and improving program offerings. In addition to their traditional educational roles, both NUS and NTU have come to be seen as major engines of the small country's push toward an innovation economy through collaboration with industry and applied R&D (Lin and Lin, 2014).

As the KBE continued to demand highly skilled labor, entrepreneurs and innovation, Singapore made heavier investments in its higher education sector, adding an additional $4 billion SGD twenty-year investment in 2010 (Gopinathan and Lee, 2011; Alfaro and Ketels, 2016). However, through such investment, the state has managed to turn higher education from expenditure to a revenue generator, with contribution to the GDP doubling from 1.9% in 2002 to 3.8% in 2007, before falling back to about 2.9% in 2014.

4.1.3 Capitalizing on globalization

Singapore is an interesting example of linking education and economic policy, and education has always been seen as key to nation-building and economic development (Tan, 2004; Sidhu, Ho and Yeoh, 2013; Marginson, 2016; Yin and Yin, 2014). The rationale for the strong link is simple: Singapore's only natural resource is human capital, and as a developmental state it must adequately manage that resource. However, this link may run deeper. The economic rational is also tightly connected to fear and anxiety over the state's collapse (Koh, 2011; Koh and Chong, 2014). The rhetoric of survival is used to constantly reinforce the importance of and support for state intervention, and the citizenry broadly accept state intervention in most aspects of life (Gopinathan and Lee, 2011). Unlike many of its Southeast Asian neighbors, this concern for survival led to state policy guided more by pragmatic economic development than ideological dogma. Since independence, there has been constant government rhetoric of vulnerability and the need to depend on the outside world for economic survival. This was Lee's connectionism mentioned earlier. This rhetoric persists today. In a 2013 speech by the current PM Lee: "Our economy is holding steady amidst global uncertainties. We are attracting more quality investments. Unemployment remains low…At the same time, other countries are rapidly progressing and catching up. We must stay ahead of the competition, and maintain our standing in the world" (quoted in Morita, 2015, p. 519).

The state uses such rhetoric to frame economic globalization in nationalistic terms. Chang (2003) characterizes the Singapore state as an influential actor capable of reconstructing values against a unique cultural backdrop and thus influencing that culture itself in order to guide the country towards post-industrial development. From independence, education was seen to have a particularly strong role in cementing a sense of national identity of harmony in diversity and values (Sidhu, 2006; Sidhu, Ho and Yeoh, 2011). To sustain economic progress, the state has now added global citizenship to the rhetoric, and attempts to merge economic nationalism and economic globalization by crafting a new identity for the model citizen: transnational, self-sufficient, innovative, entrepreneurial and committed to self-betterment. The state relies on such individuals to secure its economic future and survival (Sidhu, Ho and Yeoh, 2011). Survival now becomes dependent citizen potential to be innovative and entrepreneurial.

Through its education and economic policies, the Singapore government attempts to anticipate, influence, and take advantage of globalization by creating 'solutions' to make it work to its advantage, and partially justifies itself by successfully navigating globalization (Tan, 2010; Koh, 2011). Under the rhetoric of survival and vulnerability, the state periodically revisits and reinterprets the needs of globalization in order to consistently use it as a mechanism for generating new support for its reforms. The citizens are socialized to keeping up with globalization, and it is used as both a unifying force and driver of productivity (Mok, 2010; Koh and Chong, 2014).

Sidhu (2006) argues that Singapore is a good example of both agent and object of globalization, but that it attempts to leverage globalization on its own terms by taking advantage of the market without fully giving in to it. Without sacrificing the state control, the government has made use of market forces and market-like practices as tools, instead of committing themselves to the underlying philosophies of the market (Mok, 2010). It rejects the neo-liberal rollbacks of state, stays directly and heavily involved in policy making, and devours Western knowledge and practice while keeping individualism and Western culture partially at bay. It was adopted Western learning styles and 21st century dispositions while attempting to preserve its local values (Lee, Hung and Teh, 2013).

Even as it attempts to manage globalization, it was an early adopter of internationalization as a matter of national policy (Altbach, Reisberg and Rumbley, 2009; Alfaro and Ketels, 2016). IoHE can be seen as a natural extension of Singapore's historically multiracial society, bilingualism, outward-oriented policies, and constantly redeveloping education system (Daquila, 2013). For some years now Singapore has already had similar international student numbers to its much larger neighbor, Malaysia (Welch, 2014). Nonetheless, IoHE has intensified in recent years, with pushes to send more local students abroad, increased emphasis on facilitating interaction between local and international students, and expanding partnerships (Daquila, 2013). Freeman (2015), drawing on his own experience, wrote that the universities clearly reflect the international ethos of the country, citing the benefits the great diversity of staff and encountering worldly perspectives daily had for his own work.

4.1.4 Issues and critiques

Although Singapore is generally considered a successful model of higher education development and internationalization, it is by no means flawless. Tan (2016) points out that "right from its inception, the global schoolhouse initiative was plagued with various difficulties" (p. 30). The most visible of these may be the high profile withdrawals of a number of foreign partners, including Johns Hopkins University, University of Chicago, and New York University, among several others (Rumbley, Altbach and Reisberg, 2012; Daquila, 2013; Tan, 2016). Similarly, while Singapore has been successful in attracting talented researchers to its campuses, it has trouble retaining them, largely because of the pressure put on them to perform. As a result, there has been a slight shift from catching 'big whales' to developing promising young talent (Sidhu, Ho and Yeoh, 2011; Ng, 2013).

The state also saw considerable push back from its citizens in 2011. Criticisms that the government was prioritizing foreigners over locals led to the worst election results in PAP history, and forced the party to rethink its strategy, including the abandonment of the 150,000 international student goal and capping the number at the current level of the time (around 80,000) (Mok, 2016). In addition, the job seeking year after graduation granted to international students was abolished and several new public universities were opened to provide additional pathways for local students (Daquila, 2013).

At a deeper level, some raise questions about Singapore's overly instrumentalist approach. Reyes and Gopinathan (2015) say Singapore's efforts to capitalize on globalization by becoming a KBE have had mixed results at best, and have increased tensions, inequality and social consequences. Sidhu, Ho and Yeoh (2011) say the approach is more suited to a knowledge economy than a knowledge society allowing for the "reinvention of education as a welfare right and the recognition of knowledge rights as a basis for social inclusion and informed citizenship" (p. 13). They also note the increased tensions, inequalities and an over commercialization of research. Earlier, Sidhu (2006) noted that this approach has made local students unlikely to opt for truly transformative forms of international education unless it fits within the instrumentalist parameters defined by the state. Mok (2010) also found that academics feel considerable control from the state and are subject to accountability exercises and performance-driven evaluations.

The government's strong influence and control has its advantages and disadvantages (Ng and Tan, 2010). While government guidance and investment have accelerated improvements to the sector, some (Ng, 2013) wonder whether the economy is driving ahead of its learning maturity and whether the system sustain itself in the long run. Ng also notes that with the control comes conformity and passiveness, which can be a major issue for a country trying to promote innovation and entrepreneurialism. However, Chang (2003) notes that government control may be reaching he limit of acceptance, and there is evidence that the people are increasingly unhappy with the level of control.

Finally, Sidhu (2006) points out that Singapore's successes can be blinding to policy makers in other contexts, and warns that Singapore's model is not universally applicable. It is a result of fairly unique set of circumstances and a constant revaluation and repositioning within its environment.

4.2 Japan

4.2.1 Context

Japan is a relatively large island nation on the Northeastern rim of Asia with a population of about 120 million, although that is aging and declining. It is the world's fourth largest economy (as measured by GDP), if one counts the European Union as a single entity.

Although the GDP per capita is much more modest at #41, with neighbors Macau, Singapore, Hong Kong and Taiwan all ahead (CIA World Fact book, 2017). For most of modern history, it has led Asia in development, avoided colonization (although was briefly occupied by the US following WWII), and for a short period colonized large swaths of Asia. The country was physically and economically devastated after WWII, but quickly rose to become the second largest economy in the world and major influencer of business and culture throughout Asia. As recently as 2005, some still referred to the global 'triad states' of the US, the EU and Japan (Coulby, 2005). However, since the early 1990s, there has been little economic growth and a growing public debt that has become the largest in the OECD (as a proportion of GDP), resulting in fiscal policies closer to UK austerity than to investment-led East Asia (Marginson, 2016).

Demographic shifts are most likely to be Japan's most pressing challenges for the first half of the 21st century. By 2030, nearly one-third of the population is expected to be over the age of 65, with only one working adult per retiree. Peaking at 127.8 million in 2004, the population is projected to drop below 90 million by 2055, creating major economic and social challenges. Other developed countries face similar trends, but unlike Japan they supplement their workforce through immigration (Economist Intelligence Unit, 2016). Japan has a long history of being closed to immigration. Although foreign residents have roughly doubled since the turn of the century, they are still less than 2% of the population. Recent policy shifts are making immigration and permanent residency easier, but the government has signaled that it will not look to mass immigration to solve its demographic issues (Aspinall, 2012; Morita, 2015).

Japan was among the first countries to massify its higher education sector. With 782 universities (86 national, 90 local and 606 private) enrolling around 2.5 million undergraduate and 250,000 graduate students, Japan has one of the largest higher education systems in the world. However, the portion of graduate students is considerably smaller than other major developed economies. HEIs include 4 year universities, 2 year junior and technical colleges, and vocational schools, with transfer between the types fairly uncommon (Ishida, 2007). Japan's higher education sector developed ahead of the rest of the region, particularly in the areas of science and technology.

Deregulation started in the 1980s, but the government continues to play a strong monitoring and steering role and maintains relatively strict control of the sector (Ishida, 2007; Poole, 2010). Japan's system is very hierarchical, with a few elite national and private universities sitting atop a large base of lower quality private institutions primarily serving undergraduates (Umakoshi, 2004; Newby et al, 2009). Due to the demographic decline, the elites have been able to maintain their enrollments, but most of the sector, especially private insitutions, is under-enrolled (Horie, 2015). Relatively low tuition in the elite nationals also help them to attract top students (Kaneko, 2014). Higher education in Japan has a strong workforce preparation function with many companies and corporations recruiting directly from preferred universities. Nonetheless, due to the current undersupply of labor, Japan's graduate employment rate is at its highest point in history.

4.2.2 Development

Several authors have distinguished distinctive phases in the development of higher education in Japan. Kaneko (2004) argues the roughly 140-year-old sector can be divided into build up, integration, and post-war reform and massification phases. McVeigh (2002; 2005) argues that there are four post-war phases: democratization, expansion, quality improvement, and a second expansion. Ishida (2007) identifies four similar post-war stages, but with slightly different boundaries and terminology: initial preparation, first expansion, stability/stagnation, second expansion. Focusing IoHE, Ninomiya, Knight and Watanabe (2009) identify three major post-war phases: not particularly international and focused on improving Japan's global reputation, regional aid mentality, and quality improvement and national development. Considering these and major policy events, I argue that modern Japanese higher education has five distinct phases: Pre-WWII, post-war development (1945-82), regional leadership (1983-1992), the lost decade (1992-2004), and international competition orientation (2005-present).

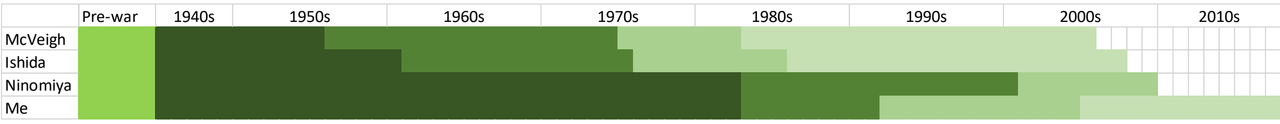

Figure 6: Summary of development phases in modern Japanese higher education (Source: Author).

4.2.2.1 Pre-WWII

Prior to the Americans forcing Japan open to trade and ending *Sakoku* (a period of self-imposed national isolation) in the mid-1800s, Japanese schools were mostly independent and there was no formal national system (Kaneko, 2004), although Japan already had a literacy rate as high as anywhere in Europe (Marginson, 2010). The Meji restoration used higher education as a tool to quickly transfer and apply Western knowledge. The Tokyo Imperial University, established in 1868, was initially created to serve the needs of the state (Cutts, 1997; Poole, 2010). Students were also sent abroad to learn from the West, and thousands of international scholars and advisors were invited to help develop the sector (Keesing, 1937; Aspinall, 2012). Within 30 years Kyoto, Kyushu, Hokkaido and Tohoku Imperial Universities were established to contribute to the country's modernization (Poole, 2010). The approach was essentially to import and translate as much knowledge and technology as possible, and it was not until later that universities began to create their own knowledge and scholarship (Cummings, 2014). Thus, from the beginning, higher education was part of a government led national strategy of national development, with internationalization and important component (Ota, 2012; 2014).

Avoiding colonialization, Japan was free to pick and choose which aspects of foreign higher education to adopt, and the resulting system was an amalgamation of mainly German and American models with a distinctive Japanese spirit and purpose (Keesing, 1937; Altbach, 2004; Kaneko, 2004; Okada, 2005; Aspinall, 2012; Ota, 2012; 2014; Cummings, 2014). As one Japanese scholar of the time put it: “Can we not eat meals from all countries, yet digest them in our own bodies?” (Keesing, 1937, p. 13). Though the content matter quickly became modern theory, the teaching and learning styles remained staunchly rooted in ancient Chinese tradition (Aspinall, 2012). The German concept of academic freedom, for example, was not imported (Okada, 2005). However, in the latter part of the 20th century, continuing today, the high level of academic freedom that faculty in Japan enjoy compared to the counterparts in many nations around the region is a key feature that sets them apart. Briefly, there was some consideration of making English the language of instruction, but this was rejected (Altbach, 2004).

The early 1900s saw major reforms to better align economic growth with universalization of primary education, the expansion of the higher education sector including increasing numbers of private and specialized schools, and standardized entrance requirements (Kaneko, 2004; Okada, 2005). Technical schools were upgraded and private providers became recognized by the government (Kaneko, 2004; Ishida, 2007). The period from the late 1800s through the 1930s also saw the establishment of the seven Japanese imperial universities, which include both Kyoto and Osaka. These seven universities remain among the most prestigious, elite and research intensive universities in the country today. Growth of the sector during this period was coupled with an inward-turning-ness (Aspinall, 2012). Public good remained the emphasis, as the universities of the time were "organized under special regulations for the purpose of instructing and investigating the principle and the application of learning useful to the State", with special emphasis upon "the building of personal character and cherishing the ideal of national consciousness" (Keesing, 1937 p.28). Universities also began to play an increasingly important role as hiring grounds for elite government and corporate positions, thus fueling student competition (ibid).

4.2.2.2 Post-war development

Following defeat in WWII, tasked with rebuilding the higher education sector (and just about all others), under the direction of US occupation powers, Japan established academic and vocational tracks, converted specialized schools into universities, financed a system of national universities, and expanded the private sector to meet increasing demand (Kaneko, 2004). Much of the upper secondary curriculum was also converted into 'general education' requirements during the first two years of tertiary study (Poole, 2010). As various types of HEIs were integrated into the university system, the sector quickly expanded, and by 1950 there were 201 universities and 149 junior colleges (Ishida, 2007). As the middle class grew, so did the system, and by the mid-1970s, there more than 850 HEIs and a 38% cohort enrolment rate, mainly in the private sector (Kaneko, 2004; Yamamoto, 2005; Poole, 2010).

During the same period, higher education was increasingly brought under state control, was increasingly focused on workforce development, and there were attempts to curb further expansion (Kaneko, 2004; McVeigh, 2005; Okada, 2005; Ishida, 2007). At the end of the 1970s the government began to cut back expenditures, and society began to shift toward social and individual well-being with increasing focus on quality of life and sustainability

(Kaneko, 2004; Cummings, 2014). During this period, Japanese students were sent abroad primarily to learn the skills needed to aid in reconstruction. As Japan rose economically, the emphasis began to shift towards to cultural exchange and providing aid to developing countries, mostly in Asia. There was no particularly strong openness or sense of 'internationalism' in the cosmopolitan sense (Ninomiya, Knight and Watanabe, 2009).

4.2.2.3 Regional leadership

By the early 1980s, Japan had secured its place in the world as a great economic power (Shibata, 2005). Many thought the Japan's economic success was a result of the education system, and there was keen interest to study the system. There was also a growing sentiment that Japan should more actively contribute to the international community. Thus, it began to adopt somewhat of an aid mentality toward the region. Until this point, the focus had been on modernization and reconstruction, but as talk of internationalization become more fashionable, Japanese higher education became somewhat more outward looking. At the same time, the Regan-Thatcher reforms had their influence, and managerialism began to seep into the system. In 1984, the Ad-Hoc council on Education called for *jiyuuka* (liberalization), *tayouka* (diversification) and *kokusaika* (internationalization) (Okada, 2005; Shibata, 2005). These ideals were consistent with what was seen elsewhere: increase consumer choice, shift responsibility from the state to individual, contribute to the global economic system, and increase international exchange.

The government seemed particularly enthusiastic about *kokusaika* (Shibata, 2005), and it has been a consistent theme ever since (Horie, 2015). The approach of the time was essentially PM Yasuhiro Nakasone's 1983 one-pronged strategy to increase international students from 10,000 to 100,000 by the year 2000 (Horie, 2003; Shibata, 2005; Walker, 2005; Goodman, 2007; Aspinall, 2012). The stated rationale at the time was to promote human resource development in the region (Walker, 2005; Ninomiya, Knight and Watanabe, 2009). About 30,000 were expected to be government-funded graduate students, and there was an explicit expectation that they would return home after finishing their studies (Walker, 2005). Nonetheless, the state also hoped that the international students would serve as a catalyst for reform and help improve Japan's academic reputation abroad, although the students tended to absorb Japanese academic culture rather than internationalize it. HEIs of the time found they were ill-equipped to deal with the increasing numbers of international students (Horie, 2003), which led to a long series of reforms aimed at improving this area as well as some tensions and resentment (Ninomiya, Knight and Watanabe, 2009; Horie, 2015).

This period is also marked by expansion and increased autonomy for universities, again with most of the growth in the private sector (Ishida, 2007). Many American universities also attempted to set up branch campuses throughout the 1980s, which was fairly unusual since both were industrialized countries (Altbach, 2007). There were over 40 at the peak, but almost none lasted until the turn of the century, due in large part to difficulties in permits and accreditation from the MOE, limited funding, poor management, over-estimation of marketability, shrinking pool of students, and local HEIs beginning to offer more overseas experiences (Goodman, 2005; Altbach, 2007; Newby et al, 2009). The Japan English Teaching (JET) program, established in 1987, also began to bring in significant numbers of native English speakers as language teaching assistants, as a way to appease American complaints of trade deficits (Aspinall, 2012), but again the impact of the foreign presence was limited. The 1980s also saw a significant rise in the number of Japanese students studying abroad, fueled in part by a perception that companies might be more responsive to overseas qualifications, a desire to escape 'exam hell' and the high cost of living in Japan at the time (Walker, 2005; Goodman, 2007). The financial crisis and demographic situation soon swung the pendulum back towards a preference for domestic study though (Walker, 2005).

4.2.2.4 The lost decade

The economic downturn of the early 1990s led many to start questioning Japanese models, and Japanese academics once again began to look abroad for examples of good practice (Walker, 2005; Goodman, 2007). Japanese universities had reached distinguished status in Asia through a strong protection of a national system based on local language and culture, but this strong national orientation was beginning to be seen as a weakness. Governance and management reforms were forced upon the national universities, although few understood how to effectively use their new autonomy and actual practice did not change much (Cutts, 1997; Poole, 2010). The traditional system where national universities prioritized national needs, the public universities local needs, and the privates responded to the market, began to break down (Eades, 2005).

There was also a growing sense that Japan needed a new type of graduate to meet the shifting demands of the globalizing KBE (Cutts, 1997; Newby et al, 2009). According to a 1996 Report of the Central Council on Education, Japan needed a freer educational environment to create critical thinkers, entrepreneurs, and independent decision-making (Aspinall, 2012). Accordingly, admissions practices began to reform, diversifying pathways beyond the traditional entrance exam being (Aspinall, 2005). To meet the demands of the emerging KBE, universities also began to more actively recruit foreign researchers and faculty (Ninomiya et al, 2009). In 1992 less than 0.6% of all full time faculty in the country were foreign, and the 45 national universities had none at all (Cutts, 1997), and the next 7 years saw a 75% increase in high skilled immigrants (Cummings, 2014)

Lastly, partly due to the Asian financial crisis, the government had considerable difficulty reaching its 100,000 international student target, and many students complained of discrimination, poor quality of private HEIs, unfavorable immigration, work and language policies, and other issues (Kinmonth, 2005). The target was finally achieved in 2003 due to relaxed immigration requirements and increasing demand in Korea and China (which accounted for around 80% of all international students) (Goodman, 2005; Shibata, 2005). Paige (2005) notes the overreliance on foreign students to internationalize the sector, without sufficient attention paid to other areas.

4.2.2.5 International competition orientation

From the early 2000s, the government began a long series of reforms and projects aimed at revitalizing and internationalizing the higher education sector (Newby et al, 2009). As globalization increased and Japan's recession dragged on, the sentiment grew that the higher education system was not meeting the needs of the country. In 2001, the World Economic Forum ranked Japanese higher education among the least responsive to the needs of the economy. Educational practices were considered archaic, IT usage and infrastructure underdeveloped, and the relationship between the state, academia and industry in need of reform (Bachnik, 2005; Goodman, 2005). The state viewed the sector as too important to the economy and workforce to leave direction entirely up to the academy (Newby et al, 2009), and introduced reforms focused on building stronger connections between higher education and industry, quality improvements with an emphasis on efficiency, meeting 'world standards', deregulation and incorporation, and revitalizing the workforce through increased numbers of international students and developing domestic global human resources (*gurobaru jinzai*) (Hatakenaka, 2005; Kaneko, 2014). Along with this came performance based budgets and increased quality assurance mechanisms (Yonezawa, 2010). Thus, this period is characterized by a self-development mentality against a backdrop of global competition (Ninomiya et al, 2009). Notably, outbound mobility decreased during this period, and between 1995 and 2009 Japanese students at Harvard University, as an example, went from the third largest group of international students to the twelfth (Banks and Bhandari, 2012; Aspinall, 2012).

Against this backdrop, and in response to initiatives throughout East Asia (i.e. BK21 in Korea, Projects 2011 and 985 in China, WCUP in Singapore, etc.), the government initiated a long series of competitive grant schemes to bring its 'top' universities up to the 'world's standard' (Harman 2006). The 2001 Toyama Plan aimed to support 30 top universities (Hatakenaka, 2005; Yonezawa and Shimmi, 2016). The 2002 Centers of Excellence (COE) upgraded this plan, focusing on select research programs in top universities' ability to generate academic capital (Eades 2005; Hatakenaka 2005; Yonezawa and Shimmi 2016). Subsequent iterations included the 21st century COE program, the Global COE program, and the World Premier International Research Center Initiative (WPI) (Yonezawa and Meerman 2012).

The 2004 "Third Fundamental Reform of the Japanese University System", the major policy initiative of the time, aimed to set higher education on a completely new track for the 21st century by incorporating national universities, introducing NPM principles, reorganizing and merging some HEIs, and raising select universities to 'world class' status (Eades, 2005; Goodman, 2005; Hatakenaka, 2005; Okada, 2005; Newby et al, 2009). The reform package also opened up the possibility of accreditation for branch campuses (Newby et al, 2009). According to the University Council's (2004) *A Vision for Universities in the 21st Century and Reform Measures*, the main aims of the reforms were:

- Enhanced learning and research ability
- More flexibility and autonomy
- Improved management and administration
- Establish evaluation system

Newby et al (2009) comment that although there was agreement on the need for change, there was a lack of vision of what it should look like, and "…the rhetoric of change has been accompanied by the reality of conservatism…creating a worrying policy vacuum, with an attention to means rather than ends" (p. 20). Indeed, while there was no organized opposition to the reforms, there were substantial criticisms from within the sector, including:

- Weak links between improving efficiency and education
- Increased government control through funding mechanisms, and reductions of academic freedom
- Changes too incremental, and funding inadequate, to bring about desired change
- Unfair rankings and distribution of resources
- Too strong a focus on the human resources production role of higher education (Hatakenaka, 2005; Okada, 2005; Yamamoto, 2005; Newby et at, 2009; Arikawa, 2011).

Adequate specialization and staffing to carry out the reforms was another major issue, as Japanese universities often lacked the hybrid individuals with expertise in multiple areas and universities were inexperienced in generating their own financial resources (Hatakenaka, 2005; Yamamoto, 2005; Newby et al, 2009; Poole, 2010). MEXT also had few individuals with proper strategic decision making capabilities equipped to direct the new systems and structures (Newby et al, 2009). Neither were the government or universities comfortable with bringing in external expertise as observed in Singapore. Traditional academic governance structures also left deans and presidents with limited power to direct change as intended. The strong hand of the state also created a sense of dependency within the universities. These challenges seemed seriously underestimated.

Poole (2010) lists several sweeping changes from 2005-2010, including a series of projects aimed at internationalization, as well as institutional review and learning outcome assessment. During this period, MEXT (2012) prioritized improving quality assurance and accreditation, enhancing the quality of undergraduate education, and improving international competitiveness. The 2005 Strategic International Headquarters (SIH) project aimed to foster international partnerships while improving the management and quality assurance of internationalization initiatives across nine themes in 20 pilot universities (Ashizawa, 2012; Ota, 2014; Yonezawa and Shimmi, 2016). This evolved into the five-year World Premier International Center Initiative (WPI) in 2007 (Yonezawa and Shimmi, 2016).

As the youth population continued to decrease, and the number of 18 year olds equaled the number of university seats in 2007, emphasis on recruiting international students increased (Poole, 2010). In 2008, PM Fukuda Yasuo called for the tripling of international students to 300k by 2020 as part of a joint endeavor by 6 ministries (Ishikawa, 2011). The plan had 5 main components: invite international students, improve admissions mechanisms, promote the globalization of universities, create more accepting environments, and promote the social acceptance of students after graduation/completion (MEXT, 2012, p. 17).

The dual goals of increasing the number of international students and fostering WCUs merged in the 2009 Global 30 (G30) initiative (Ishikawa, 2011; Ashizawa, 2012; Yonezawa and Shimmi, 2016). G30 meant to elevate international standing through mobility and networking and to make it more attractive and easier for international students and scholars to study and work at top universities in Japan, with a particular emphasis on English-medium (EMI) programs (Rakhshandehroo and Yamamoto, 2017). This was basically a revival of the unpopular 2001 Toyama plan under the guise of internationalization (Yonezawa, 2010). Universities who received G30 funding were expected to open overseas offices, create international support centers on campus, develop EMI courses, increase participation in study abroad, increase accommodations for international students, and improve interaction and cultural exchange between students (Lawson, 2012). English usage in particular was a major component of the initiative. Although a cornerstone of IoHE policy, G30 faced significant challenges. With a very short window to prepare applications, only 13 universities received funding, and the plans were not built on strong internal foundations of support (Ishikawa, 2011; Yonezawa and Shimmi, 2016). Many criticized G30's overemphasis on flagship universities, inadequate funding, and insufficient attention to Japanese students (Yonezawa, 2010; Ishikawa, 2011; Aspinall, 2012). Political changes also brought budget cuts later on in the project cycle (Kamibeppu, 2015).

To encourage more study abroad and the development of local *gorobaru jinzai*, several initiatives, such as *Global 30 Plus*, the *Reinventing Japan Project* and *Go Global Japan*, were launched in 2012. Go Global Japan encompassed 42 separate projects meant to help Japanese students overcome a perceived 'inward looking-ness' and "foster people with wide global perspectives who can tackle challenges and excel within the international arena, ultimately improving Japan's global competitiveness and strengthening its ties with other nations" (JSPS, 2016)[4]. Reinventing Japan encompassed 55 separate projects within three regionally focused strands (East Asia, US and ASEAN) aimed to encourage exchange through partnerships and credit recognition schemes with universities abroad[5]. Through these projects, government funding for IoHE tripled between 2009 and 2014 (Semba, 2014).

In 2014, the year after G30 funding ended, the ten-year Top Global University Project (TGUP) was launched. TGUP more clearly delineated internationalization and excellence,

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[4] https://www.jsps.go.jp/english/e-ggj/index.html
[5] http://www.mext.go.jp/en/policy/education/highered/title02/detail02/1373875.htm

and provided funding for two types of institutions: 13 to aim for top spots in the international league tables, and 24 to lead in internationalization[6]. The 37 selected universities represent about 20% (students/staff) of HE sector. TGUP is also more comprehensive than its predecessors in a number of ways, with added emphasis on hiring international faculty and improving institutional governance, administration and strategic planning (Horie 2015; Yonezawa and Shimmi 2016). TGUP was meant to change internal systems and challenged universities to transform themselves in more fundamental and comprehensive ways (Horie, 2015). Proposal evaluation committees did not necessarily take the perspective that higher targets were better, and looked for realistic ten-year reform plans. Indicators for success included diversity, mobility, support for student exchange, language, curriculum management, and international openness (admissions, calendar, etc.), although some express concern that such the indicators might result in government micromanagement and over-uniformity of approach to IoHE (Yonezawa and Shimmi, 2016).

4.2.3 Dealing with globalization

The government's approach to IoHE appears influenced by perceptions of globalization and Japan's position in the world. The Japanese world view is often expressed in terms of inside and outside and traditional forms of competition (Cutts, 1997; Marginson, 2010). Despite its international economic success, it is still fairly insular, has developed many of its systems and practices independently, and now finds itself struggling in an increasingly interconnected and interdependent world (Walker, 2005; Aspinall, 2012). Universities built specifically to serve the needs of the state are having to adjust to new 21st century needs and realities (Aspinall, 2005; McVeigh, 2005; Newby et al, 2009). At the same time, the business and industry sectors often publicly call for greater internationalization, yet continue with rigid practices

[6] https://tgu.mext.go.jp/en/

which hamper university efforts to more effectively integrate into global systems (Marginson, 2010; Lawson, 2012).

Globalization is often seen as an external process, and the dominant response is to defend national identity rather than embrace cosmopolitanism. Morita (2015) suggests that Japanese policymakers feel a lack of control over *gurobaruka* (globalization), but some ability to use *kokusaika* (internationalization), not to embody a spirit of interconnectedness, but to strengthen national identity and protect national interests in an international setting. The goal appears to be to internationalize as needed for economic success, while retaining as much traditional national identity as possible (Aspinall, 2012). Give workers competitive skills, but not the desire or ability to change entrenched systems. Yonezawa and Shimmi (2016) argue that there is an interesting paradox in Japan's response to globalization, and a mismatch between government rhetoric and actual objectives: “The tension between the desire for a global or cosmopolitan profile and the preservation of national identity-as well as between the drive in state policy towards efficiency and the decentralized nature of academic autonomy-are becoming more apparent” (p. 28). This tension is illustrated by the difficulties international students face in entering the domestic workforce, despite it being one of the key rationales for recruitment. Only a small portion, overwhelmingly Chinese and Koreans, stay on to work in Japan (Oishi, 2012). Hiring and recruitment practices are shifting, but the pace is notably slow. Even Japanese graduates from foreign universities face many barriers.

There also is a general lack of agreement on what IoHE is and how to use it, which creates a scattered and inconsistent policy environment (Goodman, 2007; Yonezawa, 2010; Susser, 2016). Aspinall (2012) identifies five government policy priority areas related to IoHE: ‘internationalizing’ Japanese students, promoting cooperation and collaboration, increasing student exchange, improving Japanese language education, and improving Japanese education abroad. Review of government initiatives and documents also reveals the objectives of: developing global human resources (*gurobaru jinzai*), raising university rankings, reforming the sector, addressing demographic trends and needs, enhancing government-industry-university partnerships, and increasing English proficiency and use.

Susser (2016) notes that because of this diversity in thinking around IoHE, the Japanese Society for the Promotion of Sciences (JSPS) has been reluctant to designate a standardized model, and various assessment instruments have been developed inside the country (e.g.. Ashizawa, 2006; Yokota et al, 2006; JSPS, 2010; NIAD-UE, 2013). Although there is a consistent theme of using IoHE to make Japan better understood and accepted by the rest of the world (Aspinall, 2012), there are competing visions and understandings beyond that, and little alignment between government and the universities. Despite the clear emphasis on international competition and workforce development, the universities see these aspects as only a small part of their missions (Horie, 2015). University adherence to government strategy seems almost coerced (Ota, 2012). Again using international students as an example, the government sets targets, but many national universities see them as an added financial and administrative burden, so progress moves slowly (Cutts, 1997; Ishikawa, 2011; Aspinall, 2012).

Additional significant factors are the shifts of Japan's position in the world and higher education's role in society and economy, leading Japanese higher education to shift from a rationale of aid to self-development (Ishikawa, 2011; Horie, 2015). Japan was once one of the largest contributors of aid to the region, often focused on higher education provision (Newby et al, 2009). However, while state investment in IoHE has increased dramatically, international aid fell by 50% from 1997 to 2014 (Horie, 2015). Resources have increasingly been directed at making Japanese universities more efficient and competitive, and using international students as a way to stimulate the domestic workforce (Ishikawa, 2011).

The conflicting attitudes towards greater international integration can be seen in the outcomes of several areas of IoHE. Several scholars also point to the lack of diversity among and support for international students. There are very different models and incentives between elite national universities and lower level privates (Goodman, 2007; Horie, 2015). There may also be too high expectations for international students to internationalize the sector without proper attention paid to building mechanisms by which they can influence the system and its participants (i.e. Japanese faculty and students). During the first decade of the 21st century, the number and portion of Japanese students studying abroad fell. Although it has rebounded somewhat in the last few years, there has been a shift towards short term study in neighboring countries (Horie, 2015). Barriers include employment, finances, and structural issues (i.e. Credits, staffing, etc.) (Lawson 2012). International faculty make up only a small portion of the sector (about 5%), and that portion decreases significantly at leadership levels (Horie, 2015). Despite stated intentions to recruit more foreign faculty, significant barriers remain, some structural and some altitudinal (Altbach, 2007; Aspinall, 2012). Huang, Daizen and Kin (2017) found international faculty generally fall into two categories: East Asians who received their higher degrees primarily in science and technology fields from Japanese universities (and teach mainly in Japanese), and Westerners, often on short term contracts, who are highly concentrated in humanities and social sciences, overwhelmingly received their degrees abroad, and are primarily used for language instruction.

The use of English is another example of the lack of agreement on the direction and nature of IoHE at different levels. While it is a clear policy preoccupation (Aspinall, 2012) many students and faculty resist the pressure to increase its use. For several historical and cultural reasons, English seems to occupy a unique place in the collective Japanese psyche, and is often viewed as a threat to national identity. Furthermore, Japan reached a high level of development without the use of English, so it has been difficult to change perceptions about the utility of the language (Yonezawa, 2010; Ishikawa, 2011; Morita, 2015). Nonetheless, the limited use of English affects the ability of local academics to offer courses to international students, collaborate with colleagues overseas or publish in international journals. Eades (2000) argued that Japan could be last non-English economy to still prioritize publication in own language. Things may be slowly changing though after more than a decade of large government initiatives. Japan now offers the fourth most EMI programs in East Asia (behind China, Taiwan and Hong Kong), mostly at the graduate level (Studyportals, 2017).

Worthy of special note is the role of rankings in Japan's national IoHE policies. Despite the biases inherent in the ranking methodologies, they are seen as an important indicator of Japan's standing in the world. Yet in spite of the rhetoric and initiatives, the relative standing of Japan's top universities has fallen compared to others in the region (Ishikawa, 2011; Yonezawa and Shimmi, 2016; Marginson, 2017). In 2004, the University of Tokyo's president called for an attempt to take the top position, but there has been no gain since. Nationally, an effective approach has yet to be identified (Yonezawa, 2010). Resourcing is probably the biggest issue, with the Japanese government simply not making the investment necessary for real gains. Japanese universities score particularly low on the internationalization indicators, and there does not seem to be a solid strategy or the political will to specifically address this. Most international students are not studying at the top universities, so have no impact on the rankings or their research productivity and profile. Yonezawa (2010) argued that Japanese universities are unlikely to dramatically improve their standing in the near future, and even if they do rise it will not represent genuine internationalization.

4.2.4 Critiques

While difficult to criticize the Japanese government for lack of activity, there are several often heard critiques of their approach. Newby et al, (2009) note a number of challenges for IoHE in Japan, including:

- Lack of overall policy frameworks and coherent strategy at the national and institutional levels
- Recognition and quality assurance issues
- Inadequate budgets and underdeveloped supports
- Impediments for foreign researchers wishing to make careers in Japan

The most significant of these may be the lack of an overall policy framework and comprehensive strategy (Newby et al. 2009; Ota 2012; 2014). As a result, efforts are ad-hoc, uncoordinated and lack sufficient infrastructure supports. Ota (2014) notes such an approach is no longer viable, pointing out that even relatively successful initiatives were bogged down by lack of strategy and prioritization, and that effective internationalization will require a more coordinated effort. Universities will need to move away from continually layering on new programs and activities without removing ineffective existing ones, and focus on an approach grounded in their university-wide missions, visions and long-term goals (ibid).

This will take considerable empowerment, which is another challenge, as neither the government nor the universities seem to want to completely let go of old ways (Horie, 2015). Several authors (Hatakenaka, 2005; Newby et al, 2009; Poole, 2010; Cummings, 2014) also note that management structures may not allow for more strategic and comprehensive approaches, particularly with the limited capacity of the President's office in many universities. Informal hierarchies where mid-level bureaucrats may wield more power than leadership may also inhibit change (Poole, 2010), and the Chair (*kouza*) system also limits administrative power (Cutts, 1997; Hatakenaka, 2005; Altbach, 2007; Newby et al, 2009). Cummings (2014) also notes that such slow moving internal bureaucracies make it difficult to efficiently restructure, create new program offerings, and quickly hire research staff. Cultural difficulties of incorporating innovators and change-makers in to traditional collective decision making process may be another inhibitor.

Many criticize the overemphasis on funding a select few universities, rather than the sector as a whole or those struggling at the lower end where it might have more widespread impact. “The internationalization of a wider range of education and research institutions must be pursued, as a nation, to stimulate domestic competition in the internationalization of the education system and Japan's society as a whole” (Yonezawa and Shimmi, 2016, p. 28). The hope is that reforms in top universities will trickle down to the rest of the sector, although a widening of the gap is a far more likely outcome (Horie, 2015).

Cutts (1997) and McVeigh (2005) argue that the traditional workforce development rationale for higher education is damaging. The hierarchical and stratified system creates a very narrow and self-reinforcing pipeline to power and influence (Aspinall, 2005). “As long as the university remains unreformed, the nation itself will lie in peril under the university’s informal authority to recruit and legitimate Japan’s leaders” (Cutts, 1997 p. 261). Higher education’s function in sorting human resources may also de-incentivize students to study and reduce the quality of learning (Ishikida, 2005; Lee-Cunin, 2005; Poole, 2010; Aspinall, 2012). These views are somewhat extreme, and while the system does have legitimate issues, Japan has not spiraled into economic devastation as a result of its higher education system, and still boasts several of the world’s top universities (Eades, 2005).

Other issues include the lack of quality English education, insufficient inconsistent funding making long-term planning difficult, lack of interest in international programs among Japanese youth, lack of attention to international benchmarks, the academic calendar and industry recruitment cycle, weak recognition of foreign credentials, relatively unfavorable conditions for foreign academics, restrictive government regulations, and overdependence on government direction (Altbach 2004; Newby et al. 2009; Economist Intelligence Unit, 2010; Ishikawa 2011; Lawson, 2012; Horie 2015). It should be noted, though, that in looking at the evolution of IoHE projects over the last 15 years, the government does seem to be aware of many of these concerns and has consistently added incremental measures to address them. However, general sentiment on the ground still seems to be that the pace of genuine reform is too slow.

5 The Cases

The following four case narratives are intended to provide an overview of the international activities, structures and strategies of the four case study universities. The narratives are by no means comprehensive, and meant to illustrate the level and nature of activity related to international strategy and planning, partnership development, international student and faculty recruitment and integration, the provision of study abroad opportunities, internationalization of the curriculum, activities abroad, and international reputation management. Given the scope and breadth of international activities at each university, this chapter does not engage in deep analysis of the activities and their implications. Rather, the chapter has two main aims. First is to provide institutional outlines in accordance with research question three:

> RQ3: What are the activities, strategies and structures related to internationalization at each case university?

Secondly, the chapter aims to provide sufficient evidence, when taken together with the national policy contexts, to serve as a foundation for further analysis and discussion in the following chapters. As such, this chapter should be viewed as a decontextualized representation rather than an academic exploration of the international activities, strategies and structures, of internationalization at the four cases. It is not the outcome of the research so much as much as the platform from which analysis and exploration will proceed. Interpretation and analysis is inherent in the process of developing this narratives, but as much as possible this was kept to a minimum and reserved for chapters six and seven. This chapter may, however, be of some use to practitioners who wish to gain further insight into how the case universities structure and manage their international activities.

The narratives were constructed from the review of institutional documents and other primary or secondary sources, as well as interviews from each university. They are a synthesis of thousands of pages of text, more than 30 hours of recorded interviews and dozens of hours of informal conversations and observations. Interviewee profiles are included in the table below. As much as possible, attempts were made to report the same kinds of data. However, given the differences in context, structures and programs between the cases, as well as the differences in availability and nature of reported information and the unique roles of each interviewee, the narratives are unique to the particular institution. It should also be reiterated that the below narratives generally reflect the situation through 2017, and there have been substantial developments at all four cases since.

NUS	NTU	KU	OU
Member of executive leadership team, citizen, long tenure[7]	Member of executive leadership team, citizen, long tenure	Member of executive leadership team, citizen, long tenure	Member of executive leadership team, citizen, long tenure
Director 1, Central administration unit, citizen, short tenure	Director 1, Central administration unit, non-citizen, medium tenure	Senior administrator, Central administration unit citizen, short tenure	Senior administrator 1, Central administration unit, citizen, long tenure
Director 2, Central administration unit, citizen, long tenure	Dean 1, Graduate school, non-citizen, medium tenure	Director 1, Central administration unit, citizen, short tenure	Senior administrator 2, Central administration unit, citizen, short tenure
Director 3, Central administration unit, non-citizen, long tenure	Dean 2, Graduate school, non-citizen, medium tenure	Director 2, Central administration unit/Research center, citizen, long tenure	Director 1, Central administration unit, citizen, medium tenure
Dean 1, Autonomous college, non-citizen, short tenure	Dean 3, Institute, citizen, medium tenure	Director 3, Central administration unit, citizen, medium tenure	Assoc Director, Central unit, citizen, long tenure
Dean 2, Autonomous college, non-citizen, short tenure	Dean 4, Institute, citizen, medium tenure	Dean 1, Graduate School, citizen, long tenure	Dean 1, School/Graduate School, citizen, long tenure
Professor, former central unit director, citizen, long tenure		Dean 2, Graduate School, citizen, long tenure	Dean 2, School/Graduate School, Director, College, citizen, long tenure
			Dean 3, Graduate school, citizen, medium tenure
			Professor, former center director, citizen, long tenure

[7] Short tenure: less than 5 years; Medium tenure: 6-15 years; Long tenure: 15+ years

5.1 The National University of Singapore

5.1.1 Introduction

The National University of Singapore (NUS) is the oldest, and was for many years the only, university in Singapore. Originating as a campus of the imperial British King Edward VII College of Medicine in 1905, it became a branch of the University of Malaya, then the University of Singapore, before merging with Nanyang University to become the National University of Singapore in 1980. Since, it has grown from a primarily teaching institution to a globally recognized comprehensive research university ranked among the top in Asia. There are 17 schools across three campuses, and many centers and institutes. Primarily an undergraduate institution, graduate students make up just over 21% of the 35,000 student body.

Ranked among the top 100 universities in the world, NUS has seen an upward trend over the last 10 years. Mukherjee and Wong (2011) and others (Mok and Tan, 2004; Salmi, 2009) compare this rise to its former counterpart, the University of Malaya, which is still largely considered a local institution with somewhat less international recognition. Wong, Ho and Singh (2007) call NUS "a case study of how universities in East Asia are responding to the globalization of the knowledge economy" (p. 941). During the late 1990s and early 2000s, in conjunction with national policy, the Harvard trained president began remodeling NUS into a 'Global Knowledge Enterprise', with the expectation that it would operate in a manner similar to Stanford and the Silicon Valley by driving innovation and entrepreneurship in key technology industries on the island (Tan, 2004; Sidhu, Ho and Yeoh, 2011; Waring, 2015; Reyes, 2016). This transition encouraged faculty and staff to be more entrepreneurial and innovative, build "borderless" departments and faculties, and produce globally savvy "citizens of the world" (Sidhu, Ho and Yeoh, 2011 p.33).

5.1.2 Leadership structure and make up

Incorporated in 2006, NUS is governed by an external board comprised mainly of ethnic Chinese Singaporean or Malaysian political appointees from local industry. The President heads the University, and chooses his or her own executive teams. The previous president, Tan Chorh Chuan (2008-2017), had been with NUS for more than 30 years before assuming the post. There are 14 executive level administrative units covering the various functions of the university. Of special note would be the University and Global Relations, NUS Enterprise and Endowment and Institutional Development units.

The executive leadership are entirely ethnic Chinese Singaporeans or Malaysians, and nearly all received their degrees from prestigious Western universities and/or spent part of their careers in overseas institutions. Thus, while the leadership make-up lacks diversity, it is comprised of individuals with first-hand experience from outside Singapore. Non-Singaporeans are more heavily represented among lower levels of leadership and administration. Nearly 25% of deans are non-Singaporean. However, as many Singaporean faculty have degrees or significant work experience from abroad, there is not a clear binary between ‘local’ and ‘international’. The presence of non-Singaporeans among the lower levels of university leadership does signal opportunities for foreigners to advance their careers within the university, as well as to exhibit some influence over the sections that they oversee. Former government employees also have a sizeable representation within the mid-level administration, which, according to one interviewee, is seen as important in balancing the academic and bureaucratic, facilitating implementation of government policies, and keeping a close and productive relationship between the university and the government.

5.1.3 International vision and strategy

The Western-educated President and Chairman of the late 1990s and early 2000s was influential in NUS's transition to a 'Global Knowledge Enterprise', emphasizing global engagement and the production of globally competent graduates (Wong, Ho and Singh, 2007; Sidhu, Ho and Yeoh, 2011; Reyes, 2016). In 2007, NUS introduced the vision of becoming "A leading global university centered in Asia, influencing the future", which continues to be the University's vision in 2017, and is widely visible throughout the university.

Figure 7: Photo of NUS's campus shuttle bus displaying the university vision, helping to demonstrate the prevalence of the vision throughout the campus.

This vision reconfirms NUS's global aspirations that were in place since the 1990s, but draws stronger regional connections by centering the University in Asia. The rhetoric surrounding NUS's position in Asia combines Western first world status, with 'unique' Asian context, positioning NUS and its students, as a bridge between Asia and the rest of the world. It also links NUS's national, regional and global roles (Xavier and Alsagoff, 2013). As one interviewee commented on the relationship between the simultaneous global and Asian frames:

> "On the one hand, our students are Asian, this is Asia, it's an Asian location. Our students come from a specific cultural context. And indeed from a specific education system. So they bring with them a certain prior knowledge, habits of mind, orientations, which are Asian, but then of course global. Singapore itself is kind of global in Asia…" – Director 3

The university's homepage expands upon its vision by stating that NUS aspires to be:

> …a vital community of academics, researchers, staff, students and alumni working together in a spirit of innovation and enterprise for a better world. Our singular focus on talent will be the cornerstone of a truly great university that is dedicated to quality education, influential research and visionary enterprise, in service of country and society.[8]

This aspiration reinforces the concept the university as a community identified in the literature review, and makes explicit reference to the three pillars of higher education (education, research and service). It goes further by introducing a 'singular focus on talent', as well as reconfirming the previous vision's commitment to becoming an enterprise, marking the perceived expanded mission of higher education in the 21st century global knowledge economy. The focus on talent and enterprise also reaffirms the state's priorities for the sector. Interviewees were also keenly aware of and reinforced the role NUS plays in attracting and developing talent, and have embedded it in the conception of excellence:

> "A good university is a good university because it is welcoming of talent, regardless of where it comes from." – Director 2

[8] http://nus.edu.sg/about

In terms of internationalization, Xavier and Alsagoff's (2013) concluded that NUS, as an institution, viewed it more of a means to strengthen economic reach and reputation, rather than enhance student learning. That the former are priorities for NUS is undeniable, but documents and interviews from this research found a consistently communicated rationale of enhancing student experience for many of NUS's internationalization activities. Such rationales were often linked to NUS's role in preparing Singaporean students to for future competition in a globalized economy. Of the importance of teaching, one interviewee remarked:

> "We want to encourage [faculty], and say listen, [teaching] is something that is valuable and you should devote your time to this…. Of course you should do your research. You can't run away from that. You are here because you are a discipline expert, and we want you to be a discipline expert, but at the same time, teaching the next generation is very very important. So we want to encourage that." - Professor

Underlying NUS's vision to becoming a 'leading global university" is the belief that only such a university could deliver the educational experience to enable graduates to effectively contribute to national development. Thus, interviewees emphasized the importance of teaching and learning, and some mentioned that in the push for 'world-class' status in recent years, NUS may have gone too far in prioritizing its research profile at the expense of teaching and learning. The University's educational mission was now re-emerging as a priority, with greater resources being directed towards developing a deeper understanding of educational excellence in the Singaporean context.

> "There is a deep commitment to education. A cultural commitment.... I think there is a cultural, a Confucian, respect for education in Singapore. In NUS there is also recognition that education is about much more than testing." – Director 3

In an effort to strengthen that commitment teaching quality has become more heavily weighted in tenure, promotion and salary, and feedback and evaluation systems are being updated and refined. NUS also allows faculty to attain tenure through an education rather than research track. To develop the understanding of teaching excellence, NUS relies heavily on international benchmarking and panels of international experts. This emphasis itself may also be understood as function of the University's close monitoring of international trends:

> "I think the University is thinking very seriously about teaching quality. It is part of an international climate with increased demands for accountability…So it is part of a trend. An international trend." – Director 3

In regard to internationalization strategy, NUS does not publish its strategic plan, so it is not possible to analyze how internationalization fits into the overarching institutional targets. However, the University and Global Relations (UGR) Office has published NUS's global engagement strategy in 2015. In developing the strategy, the UGR Office took general direction from the President and executive VPs, and then sought input from stakeholders throughout the university. The strategy has three main arms: education, reputation and research.

1) A leader in transformative global education (Next-generation NUS global education)
    a) Distinctive and impactful global programs
    b) Deep engagement with China, India & Southeast Asia
2) A leading global university recognized by all (Branding and positioning NUS as preferred international node)
    a) Strengthen branding through overarching NUS narrative
    b) Advance NUS as a thought leader
3) A hub for globally impactful research (Improving research communication)

   a) Communicating academic research to stakeholders and a broader audience

To realize the above aims, the strategy outlines three main areas of activities:

1) Distinctive and impactful programs
   a) Multi-institutional coherent and/or cohort programs
   b) Deeper and more structured academic and internship exposure
   c) Broadened cultural experience in at least two regions
2) Deepening ties with strategic partners
   a) Deep and multi-faceted collaborations
   b) Various types of education-, research-, and enterprise-related initiatives and degree programs
3) Deep engagement with China, India & Southeast Asia
   a) Targeted student recruitment
   b) Differentiated and coherent student mobility programs
   c) Strategic engagements with key partners
   d) NUS Asia Leadership Series programs to develop and enhance a pipeline of leaders for Asia.

Importantly, the strategy reinforces the same goals communicated in the vision: Leading, influence, global, and Asia. To achieve this, the strategy concentrates on partnership building, program development, student mobility programs, international recruitment, and communications and public relations. The clear regional focus also denotes the continued shift towards greater regional engagement that is communicated in the university's vision.

To guide its education, NUS has developed an A.G.I.L.E. framework (Academic; Global and experiential; Industry (and work) relevant; Lifelong learning; and Entrepreneurial). While this framework demonstrates that the University conceives of ‘global’ as a core element of its educational experience there are not set indicators for what that means (as discussed in section 5.1.9). Nonetheless to achieve the ‘global and experiential’ aspect of education, NUS aims to leverage: strategic partnerships with other top universities, international experiences (targeting 80% participation), joint and double-degree programs with prestigious overseas partner universities, and NUS Overseas Colleges program.

For research, NUS has identified eight strategic research clusters to pursue “globally competitive research with an appropriate Asian focus” (THE, 2017). These areas are meant to strengthen NUS’s position as a key hub of educational innovation, knowledge creation and application, and entrepreneurship. These research clusters are primarily to help the state develop leadership in key sectors, while the rationales maintain the consistent global and Asia rhetoric.

Individual schools and colleges also maintain their own visions, missions and strategic plans. Though developed independently, faculty leadership interviewed reported considering the University’s direction while developing their strategies and aiming for alignment. Evidence of this can be found in the annual reports for various faculties. The School of Science, as one example, emphasizes global collaboration, preparing future/global-ready graduates, attracting talent, and entrepreneurial contributions to local industry. Most of this alignment is generated through development of shared vision, rather than explicit requirements. As expressed by one interviewee of the nature in which school and university level strategies were aligned:

> “There’s a broad university framework, but there’s no mandate to say that each department has to follow, because the university recognizes that we are all different. And so they say, ‘you do what works best for you’. But the general philosophy is that

you must globalize, you must attract the top talents, and you must make sure that your students are prepared." - Professor

5.1.4 Management of international initiatives

NUS's SIO is the Vice President of University and Global Relations (UGR), who oversees UGR staff, the International Relations Office (IRO), and University Communication Relations. Though sharing leadership, the teams work fairly independently with clearly delineated areas of responsibility. The current VP of UGR, a role traditionally occupied by academic staff, assumed the role in 2014, having spent his entire 27-year career at NUS after obtaining his degree abroad, thus bringing a strongly local perspective to the role.

The UGR Office manages the strategic development of global programs and partnerships, develops the global strategies, and assists the president with global matters. UGR staff are organized by region, and work with existing and potential stakeholders and partners in their respective regions. They also focus on regional and global trends and make policy recommendations to leadership accordingly.

The International Relations Office (IRO), established in 1996, manages NUS's student exchange and overseas programs. IRO manages its own budget, but has performance indicators tied to MOE targets for partnership MOUs and study abroad numbers. The office's performance is evaluated by the VP, who then has it as a component of his annual evaluations. IRO's mission is to foster international partnerships (primarily with 'premier institutions') to enhance NUS' standing as a world-class university and 'choice destination for international students'. The office lists five strategic thrusts:

- **P**romote the NUS brand name internationally
- **R**aise the global awareness of NUS students and staff

- **I**dentify partnerships for a transformative global experience
- **D**evelop, with the support of faculties, international programs for students, staff and partners
- **E**ngage faculty and staff to enhance processes and services that facilitate international activities

Monitoring and evaluation of internationalization activities has been tied to numerical targets, but there is an expressed desire to shift to more qualitative measures. Interviewees noted the difficulties in doing so, and the lack of a measurable definition for what excellence in internationalization looks like. Another difficulty being that as a ‘leader in international education’, there are no established best practices to guide future direction. Thus, they rely primarily on in-house expertise to find better ways to evaluate their programs, and are experimenting with databases and different ways to measure indicators such as the longer-term impact of study abroad on student careers.[9]

International student recruitment and admissions at the undergraduate level is handed centrally, while schools manage graduate student recruitment and admissions. NUS Overseas Colleges (an entrepreneurial focused exchange program) are managed separately by the NUS Enterprise Unit. Schools and colleges organize and manage their international agendas and activities according to their own needs and structures. Some schools have vice-deans or associate-vice deans for international programs or relations, but not all. Most offer support services for international students and faculty. Faculty level research and academic partnerships are also managed at the school level.

[9] http://www.nus.edu.sg/global/docs/The%20Impact%20of%20Study%20Abroad%20on%20Graduates'%20Earnings%2027%20Dec%202016.pdf

5.1.5 Partnerships

Partnerships are the cornerstone of internationalization at NUS, and the foundation for many other international activates. NUS leverages partnerships to provide joint programs and degrees (and in several cases entire colleges), overseas opportunities for domestic students, to recruit international students and scholars, to enhance research output, and as a strategic reputation enhancement tool. Important benefits of partnerships are cited as exchange of ideas in strategic areas, leveraging partners' unique strengths, diversifying education and research, and creating opportunities that could not be achieved to the same effect locally. Partnerships are also seen as critical in providing sufficient overseas opportunities for the University to reach its target of sending 80% of undergraduates abroad.

Many partnerships are with well-known prestigious international organizations or universities, and some are quite longstanding. The NUS Law School, for example, had their first exchange partnership with Montreal in the 1990s, and by the mid-2000s had upwards of 50 partners. NUS now has over 300 university-wide agreements, including more than 130 joint, double and concurrent degrees with more than 40 partners. Faculty have also signed more than 3000 collaborative research agreements, and considerable cross-faculty interaction and exchange takes place without formal agreements in place. The aforementioned strategic shift from quantity to quality has placed current emphasis on building and developing existing partnerships and network participation rather than finding new partners. This is also seen in the global engagement strategy's focus on 'Deepening ties with strategic partners'.

> "I think this is a trend in global internationalization that in terms of study abroad, when there are partnerships, I think a lot of institutions don't just want sort of the swapping of bodies, but how can we deepen these partnerships?" – Dean 1

Faculty-level partnerships are logged in a database, which UGR staff can mine when considering university-wide agreements. If touchpoints exist with a proposed partner, then the unit works with faculty leadership to determine if there is sufficient support to warrant pursuing deeper engagement and a university-wide agreement. Such university-wide agreements allow faculty to start new collaborations with partners in research, education or exchange without the need to establish new agreements. As faculty are the ones who ultimately manage programs and relationships with institutional partners, their buy-in and ownership of the relationships is seen as critical to steering and managing partnerships. University-wide agreements typically are not pursued unless there are commitments from faculty members to support them. Involvement in developing and managing relationships with partners is not formally weighed in performance and promotion evaluations, but such activity may be unofficially considered if a faculty member is particularly proactive or successful in this area.

NUS makes a special point of publicly highlighting its many partnerships with prestigious highly ranked foreign institutions. Self-development is a clear rationale for its emphasis on partnerships, and NUS often positions itself in a learning role. There is an expressed view that partners should help foster a culture of excellence at NUS, and the University strategically targets leading centers or institutions when it wants to develop particular areas of education or research. The relationship with Harvard is one such example. NUS has borrowed practices and structures repeatedly from the US institution since as far back as the 1980s. As one administrator put it, NUS “sees itself somewhat as a disciple of Harvard.” However, as the director of the IRO office noted in a published interview, creating new collaborative models was preferential to importing foreign models[10]. In this way, NUS has

[10] citation

created several semi-autonomous schools and institutions in collaboration with prestigious international partners, including:

- Duke-NUS Graduate Medical School
- Yale-NUS College
- Lee Kuan Yew School of Public Policy with Harvard University
- Yong Siew Toh Conservatory of Music with Johns Hopkins University

Spreading NUS's expertise or making contributions to others is less of a stated priority. Although, partly in response to a growing sentiment that NUS should be doing more to help its neighbors, programs with more of a focus on regional development are emerging, such as the Programme for Leadership in University Management or Duke-NUS's new Global Health Program. There are also several joint programs with universities within Asia (primarily China), but the rationales for these are still communicated in terms of their benefits to NUS stakeholders.

Networks, such as *Universitas 21*, the Association of Pacific Rim Universities, the International Alliance of Research Universities, the ASEAN University Network, and the Asian Universities Alliance, are an important component of NUS's partnership strategy. Interviewees cited networks as allowing NUS to meet with multiple partners at once, thereby reducing travel time and cost, as well as helping leadership stay current on global trends. Hosting international meetings, such as the 2018 APAIE conference, is also seen as a good way to bring together many partners without having to travel and raising NUS's international profile. Several interviewees also noted that such networks were the main platform by which NUS 'gives back' by sharing its experience. For example, the NUS Law School helped create the Asian Law Institute in 2003, which is seen as a way to support the regional community by facilitating international exchange and sharing of ideas.

Large scale joint ventures such as the Duke-NUS Medical School and Yale-NUS College may be worth special note. These ventures were both initiated at the government level, but required substantial commitments from both parent universities. Both are autonomous schools affiliated to NUS with their own governing boards. Oversight tends to be shared between NUS, the Singaporean government and the respective American parent university. Government support and funding as well as deep commitment from the leadership of the US universities are seen as critical to the projects' success. Duke in particular involved high level staff in setting up the School, and Duke's medical school dean also served as dean for Duke-NUS in its first two years. This held both symbolic and practical benefits in terms of establishing the School.

> "I think there a couple reasons that the school has been very successful. One of the reasons is that Duke sent some of its best people here to be on the ground and live here from the very beginning…" – Dean 2

In both cases the style and structure of education came from the American side, with variations on delivery and content as appropriate to accommodate the local context. In Duke-NUS's case the entire preclinical curriculum model was imported, which gave Duke the opportunity to trial other modes of delivery. Local and regional demand are also considered important factors in the ventures' relative success. Some cultural differences and tensions were noted; such as issues with Duke-NUS's exams being too US-centric. An interviewee at Yale-NUS noted the challenges of introducing liberal arts education to the region and the need to be very proactive about creating industry pathways for graduates.

5.1.6 International Students

In 2017, NUS hosted about 9,000 (32% of the entire student body) international degree seeking and exchange students from 100 countries. About half of all international students are at the graduate level. There is a government mandated 10-15% cap on international degree-seeking undergraduates, but about 60% of all graduate degree seeking students are non-Singaporeans. Portions of international graduate students can vary significantly between schools, with the Graduate School of Law, at one end, with over 90% of its students non-Singaporean to the Medical School, at the other end, with only about 10% of its graduate students non-Singaporean. Although the portion of international undergraduate degree-seekers is capped by the government, high rates of student exchange contribute to the actual portion of international undergraduates on campus at any given time being closer to one in five.

> "One area to think about in that regard is that NUS has many short term exchange students. So the college feels extremely international and extremely diverse even though the vast majority of students would be Singaporean." – Director 3

International student recruitment at both the graduate and undergraduate levels is primarily about talent attraction and development. Increasing on-campus diversity is seen as an important component of the NUS educational experience, but it is a secondary rationale.

> "So this heterogeneity and diversity of the students...some of this is sort of talent capture, and finding talented people from outside of Singapore." – Dean 2

Many international degree-seeking students come on government sponsorship programs with bond them to stay on and work in Singapore after graduation, to ensure that the nation benefits from their acquired knowledge and skills. To help ensure that the university is recruiting high-quality international students who might make longer term contributions to the nation, merit-based scholarships and funding schemes are also available, as is financial aid for lower income students with need. Such scholarship programs are largely used to support recruitment from within the region.

Undergraduate admissions and recruiting is centralized. Admissions tend to be strictly academic aptitude based. There is a 10-15% track for more holistic selections, and a drive to consider other types of talent (consistent with the government direction discussed in section 4.1.2.4), but this is primarily reserved for domestic students.

> "We have to balance selectivity with providing opportunities for local students...At the same time, it is important that the industry norm, so to speak, is that good opportunities have a portion set aside for international students." – Director 2

Competition for entry into NUS from around the region is fierce, giving NUS the luxury of admitting only international students who are the top scorers in their respective secondary qualifications systems. A wide variety of secondary qualifications are accepted, with very clear and accessible details on the minimum entry requirements. Comparing diverse entry qualifications is facilitated by a history of tracking students with these qualifications on their performance while at NUS.

> "…we know that certain qualifications do better than others. They are more rigorous…. Our office does, as I imagine many admissions office do, a match of how these various qualifications do in terms of GPA [Grade Point Average]. So we have a fairly good idea which are the more rigorous systems." – Director 2

Although official figures are not available, the make-up in terms of country of origin of international degree-seekers at the graduate and undergraduate levels has remained broadly consistent over the last 15 years. While there are no set quotas, most students come from SEA, China and India, with Vietnam becoming an important emerging source. Sidhu, Ho and Yeoh (2011) found in a survey of international students at NUS that about 80% were from within Asia. Rather than purposeful strategy, this is more reflective of the pool of qualified applicants.

> "We're not saying, 'oh, we want this many Americans, we want this many Chinese'. It's where can we get great students." – Dean 1

There is though some effort to not to have any one group overrepresented. To increase applications from students from outside of the region, the central undergraduate recruitment office and the graduate schools do undertake targeted recruitment activities in Europe, the US and other areas. Interviewees did note the challenges of recruiting from these regions as students from those areas tend to pursue degrees within their own region. Some in the University feel that more could be done to raise NUS's profile as a choice destination for students from outside the region.

> "I think the challenge right now is to increase diversity a bit more." – Director 2

In terms of supports for international students, these are largely integrated into other student support functions. Except for one page dedicated to working in Singapore within the Center for Future-Ready Graduates' microsite, the NUS website listed no special services or supports for international students. To promote interaction between international and local students, NUS implements such measures as the purposeful mixing of campus residences, social functions and activities for international and local students to mix, buddy systems, and encouraging faculty to mix groups in the classroom. These measures are seen as not just supports for international students, but as a way to help prepare local graduates to work in international teams in Singapore's international business climate. The connection between bringing in international students and preparing local students is illustrated by the following quote by former President Tan:

> As a core differentiating quality, NUS students develop the ability to be effective across cultures. That means they not only understand other cultures, they are effective in them as well. To do this, we create many opportunities for students to interact closely with their peers from other backgrounds, countries, and cultures, both inside and outside the classroom. This translates into a strategy at NUS where we bring students from all around the world, so that they and the local students can interact together in academically meaningful ways. (quoted in Chow, 2013, p. 101).

5.1.7 International Faculty and staff

Just over 60% of NUS's 5000-6000 faculty and research staff are non-Singaporean. However, high portions of 'local' faculty have degrees or other significant experience within an overseas university, so there is not a clear binary. As just one example, of the twelve assistant professors in the School of Science's physics department, not one held a PhD from Singapore. University policy states that hiring is nationality blind, and interviewees repeatedly stressed that the main criteria for hiring was academic record and talent recruitment rather than any intentional effort to internationalize faculty. While there are university-wide hiring practices and standards, hiring is the purview of individual schools. Deans and other faculty leadership play an important role in recruitment, and these individuals often leverage their own international networks as an important recruitment tool. Hiring 'world-class' faculty was in and of itself also seen as a strategy to attract further international talent.

> "When you bring in good people, they are already working on world-class level projects. Working within their ecosystem. So we benefit by leveraging the external ecosystem they bring in. So we can become better. So the best attract the best." – Director 1

NUS maintains HR policies toward creating a welcoming environment for foreign talent and providing an environment that facilitates retention and encourages and productivity. However, as noted previously, the University does have some issues with retention, due in part to the considerable pressure put on faculty to be productive along certain pre-determined measures, such as Scopus publications.

The intense focus on talent and competition does leave some local faculty feeling marginalized and threatened, leading to some tensions. This is especially true for Singaporean academics who may have difficulties finding positions within NUS due to the very active international recruitment efforts. While higher portions of senior leadership and older tenured professors are Singaporean due to historical reasons, a much smaller portion of assistant professors are citizens.

> "In my time, if I'm a Singaporean, there weren't that many international people applying, so my chances of getting a faculty position with a PhD and some research experience were much higher than now. Now a Singaporean coming back with a PhD from an Ivy League may not get a job." – Leadership

At the same time, there are concerns at both the state and university levels regarding the supply of globally competitive local candidates. The desire to balance the roles of attracting top talent and developing local talent is increasingly becoming a concern. While the

University wants to recruit the best possible faculty, there is an important need to be mindful of national interests and succession planning.

> "[We] need to nurture local future generations. Now the competition is so high, they don't have the room to get in and to train and to grow." – Professor

5.1.8 International opportunities for students

As of 2017, over 70% of undergraduate students at NUS participated in at least one structured overseas experience at some point during their studies. There is a goal to raise participation to 80%, with one in three participating in a semester or year-long program. The Student Exchange Programme (SEP), which has agreements with more than 300 partner universities in over 40 countries, is NUS's largest overseas program. Nearly 2000 students participate annually. Nearly half go to Europe, with the remaining half fairly evenly split between the Americas and Asia-Pacific.

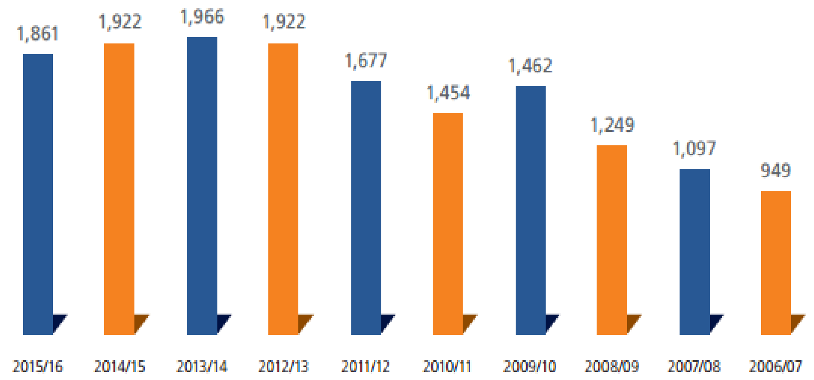

Figure 8: Growth of undergraduate student exchange program participation, 2007-2016 (Source: NUS, IRO)

In addition to SEP, another 2000 or so undergraduates annually take part in short-term programs. The majority of these programs take place in Western developed countries, but there are a growing number of short-term programs in Asian and developing contexts. For example, of 73 partner universities for summer programs, 40 were in Europe, Australia and North America, and 33 in the rest of the world. The Study Trip for Engagement and EnRichment (STEER) Program, has a somewhat different profile, focusing primarily on fieldwork in developing contexts.

> "You know study abroad, even though it is study, it's not entirely about the academics. We don't want you going to an institution somewhere and having a line between your dorm and the library and nothing else. We are trying to encourage students to think about study abroad not as a parentheses outside of their eight semesters...we are really trying to get them to think about it in an integrated way." – Dean 1

The NUS Overseas Colleges (NOCs) combine NUS's entrepreneurship and global agendas. Managed by the NUS Enterprise unit, NOCs provide opportunities for NUS students to study and intern at startup companies in global 'innovation hubs'. NOC alumni have gone on to establish more than 250 start-up companies, and are considered a significant influencer in Singapore's burgeoning entrepreneurial community.

Figures 9: Photo of signage on campus promoting NOCs.

Study abroad is actively promoted through events such as International Exchange Day and NUS Partners' Day, signage throughout campus, and a general culture where international exposure and experiential learning are communicated as being important. Some programs, such as the University Scholars Programme, require students to take a fully sponsored overseas credit bearing module.

> "I think from early on there has been a culture here where students do study abroad. We don't push them in the sense of, we don't say you're somehow deficient if you decide you don't want to.... we don't want you to feel like we're judging you if you decide not to go. On the other hand, if you do decide that you want to go, and you know the culture is one that encourages you to go, then yes, we're here, and we want to talk to you." – Dean 1

In exchange partners NUS considers student environment, institutional reputation, geographic diversity, academic and other study offerings, diversity of experience, mentoring opportunities, and course compatibility. The use of English, academic calendar, compatibility of standards and courses, and a general interest among students and their families make it easier to establish and maintain exchange partnerships. To facilitate study abroad, NUS has also revised curriculum models to allow more flexibility, introduced funding programs, and diversified program offerings. Scaffolding, orientation and debriefing are also seen as important to support the overall student experience.

> "Just taking people and plopping them down someplace internationally is not good internationalization. I think particularly when you're tying it back to the curriculum, you need to think about the pedagogy of what is it I want them to learn when they're

> not in the classroom. How can I design an activity or an experience that is going to get that knowledge done and how do I measure it?...I do worry that without scaffolding of international experience that you can have people just deepen their prejudices and deepen their stereotypes. So preparing them before they go, asking them while they're there and then debriefing them when they're back." – Dean 1

5.1.9 Internationalization of the Curriculum

Bringing the global dimension into the student experience is strongly communicated in NUS collateral as well as by the interviewees. Many NUS graduates are expected to enter into careers requiring significant international engagement, and NUS expressed a responsibility to adequately prepare them for this. This was often framed as preparing 'future-ready' or 'global-ready' graduates. The concept of 'future-readiness' is expressed in terms of competitive edge, adeptness to thrive in any environment, an understanding of the multiplicities and complexities of the world, appreciation and empathy for others, and a celebration of the benefits of diversity and difference. A number of speeches by the president repeat variations of these themes.

'Future-readiness' is understood to be developed through programs with a global focus and/or those developed in partnership with overseas institutions. The Centre for Future-ready Graduates (CFG), the recently revised the General Education (GE) curriculum, the Roots and Wings life skills program, and several other initiatives have some component aimed at preparing students for life in a globalized world. At one point, there was consideration to introduce a global studies module into the undergraduate degree requirements, but this was never implemented. Globally focused programming, along with study abroad opportunities, double/joint degree programs, international faculty and classmates are seen as the main means by which the curriculum is internationalized.

Although the overall student experience is highly internationalized, there are no explicit learning outcomes related to the global dimensions of ‘future-readiness’, nor is there a systematic approach to ensure that international perspectives are considered in curricula or assessment throughout the University. International faculty are assumed to bring with them knowledge of teaching and research in other contexts. Multilingualism can also aid in staying connected to practices in other contexts outside of Singapore. Formally though there are no supports specifically designed to help faculty incorporate and balance perspectives from local and diverse international contexts in course curricula. Similarly, faculty development programs do not specifically address practices related to managing large numbers of international students in the classroom or helping students to purposefully integrate their own international experiences into their coursework. As one interviewee expressed in regard to faculty development:

> “To be frank, we are not pushing internationalization. That’s not part of our agenda. We also don’t have a well-developed critical attitude towards internationalization, other than...to connect local practice with more international practices elsewhere.” – Director 3

International benchmarking of teaching practice is more common. NUS actively seeks out pedagogical practices from overseas, and brings in international experts to help define teaching excellence as well as to help peer-review the teaching-track tenure candidates. An Educator in Residence program also brings faculty from overseas universities to discuss pedagogical practices in their environments. Taking advantage of such programs is voluntary though, and one interviewee mentioned the challenges in engaging local faculty.

One interesting example of a redevelopment of program focus in light of global shifts, was the Law School’s decision to introduce comparative perspectives into the curriculum in the early 2000s. Although law is inherently a domestic field, as the nature of legal transactions and the work opportunities for graduates in Singapore changed, the previous focus on domestic law was felt to be inadequate, and they introduced comparative and international law modules, embedded international perspectives into different courses, and introduced courses related to different jurisdictions. In this way, the curriculum was internationalized specifically to address changes introduced by the increasingly global and international nature of the field.

> “So the whole idea is that a law education today has to be global in nature. Not just in terms of going and spending a semester or year abroad, but really in terms of your core training, your thinking, your skills, and then of course the contacts that you make, and so on and so forth. And beyond that, you need to understand the institutional and political culture of these other countries where you're going to be doing business.” - Professor

In terms of internationalizing the campus environment, the IRO has an internal unit responsible for ‘internationalization at home’, which organizes cultural events and activities as well as opportunities for local and international students to mix outside of class. NUS also regularly invites guest lectures, and hosts international forums, symposia, conferences, which are actively promoted around campus. There is also an annual international fair with cultural performances by students from different countries. Additionally, the 3 campuses collectively have over 50 eating establishments which serve a wide range of international cuisine from around the world.

5.1.10 Activities abroad

NUS's overseas footprint is somewhat small given its global ambitions. This may be in line with the focus on local development and capacity building. Of the few jointly-established overseas facilities, most are in China:

- NUS Research Institute (NUSRI), Suzhou Industrial Park, China
- Xiada-NUS Joint Life Science Laboratory with Xiamen University, China
- SONDRA Laboratory with Supelec, Onera and DSTA Research Alliance, France

NUSRI Suzhou is the first overseas research institute of NUS, and the very first research institute in China independently operated and managed by an overseas university. The goal is to reinforce the cooperation in science and education between China and Singapore, and promote more international research activities within Suzhou Industrial Park (SIP).

In addition to the NOCs, which provide educational and internship opportunities for NUS students, the NUS Enterprise run Block 71 in San Francisco was launched in 2015 as a co-working space foster closer ties between start-up ecosystems in Singapore and the US. Singapore tech companies can also use the facility, while US-based entrepreneurs and investors can use it as a resource to learn about Singapore and Southeast Asian markets. More recently, NUS has set up similar units in China and Indonesia, again demonstrating the shift towards greater regional engagement.

NUS also has a small online presence via several courses on Coursera.com. As these courses are limited to the Communications faculty, it is more likely a school level rather than university level initiative. Notably though, the courses deal with intercultural communication and global workplaces, signaling Singapore's emerging leadership in these areas.

5.1.11 Reputation management

Overall, NUS attempts to communicate an integrated and cohesive global ecosystem with itself at the center, and the University makes international brand management a priority. It is telling that the Office of University Communications sits under the UGR office. NUS branding and messaging is used consistently across different central administrative units as well as individual schools and colleges, creating a strong overall sense of shared direction. In a published interview, the IRO director commented on the lack of awareness about Singapore in the early 2000s, saying this was no longer a problem[11]. As one interviewee commented,

> "Nothing replaces building up your brand." – Director 2

Xavier and Alsagoff (2013) noted NUS's positioning of 'global' as a steps towards achieving 'world-class' status in its collateral. Similarly, this review found consistent referencing at both the institutional and school levels to the concepts of global and 'world-class', as well as leadership in Asia. International competitions and global rankings are used as building blocks to help the University achieve 'world-class' status, and NUS actively promotes its achievements. As one example, the first line of the 2016/17 Undergraduate Viewbook cites NUS's climb in the rankings. Despite the importance of rankings to NUS's strategy, most interviewees tried to downplay them, suggesting that focus should be on excellence above rank.

NUS's global character is also consistently communicated as evidence of its drive towards excellence. The University crafts an image of itself as global, thus allowing it to prepare students for a globalized world and economy. Such 'global-ness' is communicated through taglines such as, "National University of Singapore. Where the World Comes to You".

[11] cite

Global experiences and linkages are consistently and prominently communicated across NUS collateral. The 2016/17 Dean's Report for the NUS Business School, for example, prominently features international collaborations, and references 'building future-ready leaders armed with the skills for a world of constant change'. NUS's place in Asia is not lost in this global rhetoric, and the importance of Asia as a region is also consistently communicated. In this, NUS positions itself and Singapore as a lynchpin connects Asia to the rest of the world, as in the following quote, "East meets West excellently at NUS. No other First World university comes close in offering an Asian perspective on issues affecting 60% of the global population" (Undergraduate Viewbook 2016/17, p. 7).

5.2 Nanyang Technological University

5.2.1 Introduction

Nanyang Technological University (NTU) is a clear example of a young university taking advantage of the global knowledge network to quickly achieve global recognition. The Nanyang Technological Institute (NTI) was established in 1981 to train practice-oriented engineers for Singapore's growing economy. NTI was reconstituted and merged with the National Institute of Education (NIE) in 1991 to form NTU. The 'new' university immediately invited eminent international academics to come and review procedures and give advice. In 1993-4, it took over NUS's School of Communications, and contracted Cornell University to guide curriculum development. They also developed early links with the University of Michigan and Purdue University. Since then, NTU grown into a research-intensive university with 14 schools within four colleges and six autonomous institutes across a range of disciplines. Although similar in size to NUS (about 33,000 students), NTU has a heavier emphasis on science and technology, and about half of the student body is in the Engineering faculty.

Although most students are undergraduate (approximately 75% of the student population), NTU has become Singapore's most research intensive university, receiving the largest share of government research funding in 2017. Securing research grants and funding is seen as instrumental in attracting capable and productive international partners and faculty. As a result of this increased output, NTU has risen steadily across the major global rankings. Perhaps most notably, in the research-focused ARWU ranking, NTU rose more than 200 places within eight years. In 2017, it also held the top spot in Asia and the number 11 in the world for QS. These are significant achievements for a university with less than a 30-year history.

5.2.2 Leadership structure and make up

As with NUS, since incorporation in 2006, NTU is headed by an external Board and appointed President. With some exceptions, most notably the Swedish-born President Bertil Andersson (2011-2017), most of the Board and executive leadership members are local Chinese. At the Chair/Director level of central administrative units and at the faculty leadership level there is a greater presence of non-Singaporeans. For example, of the six school chairs within the faculty of Engineering only one is Singaporean (and one born in Malaysia prior to Singapore's independence). Often non-Singaporeans holding leadership positions were promoted from within the University. Again using the same group of Engineering chairs as an example, all have been with NTU for over ten years.

The founding President for both NTI (1981) and NTU (1991) was Cham Tao Soon, a local Chinese with PhD from Cambridge. In his book "The Making of NTU – My Story" (2013), Cham credits his experience abroad as well as the connections made during that time as greatly influencing his approach to building up NTU. Cham was given a high degree of autonomy by the state, in the name of efficiency, and pursued an agenda founded on engaging and learning from well-established overseas universities. He often leveraged his personal connections to bring in foreign expertise to help build up NTU programs.

Bertil Andersson became NTU's first non-Singaporean President in 2011, after serving as Provost for several years. Andersson continued NTU's strong drive towards internationalization, and specifically targeted recruiting 'world-class' faculty and scholars who could help quickly raise NTU's research profile. Non-Singaporeans also become more heavily represented in the university administration during his tenure, which may be due to a combination of NTU's rapid expansion and Andersson's prioritization of enhancing management capacity over preferential treatment for local academics and staff.

> "The first thing I did was to start to recruit top professors from all over the world, but I also terminated many professors' positions. It was a big transformation of the faculty." (President Anderson, University World News, 2017)

5.2.3 International vision and strategy

NTU has had an externally-oriented outlook since its founding, and prioritized development through strategic partnerships from its beginning. After its founding, NUT leadership almost immediately established the goal of becoming a top university in Asia, and within ten years had built a 'virtual network' of over 170 partners, actively recruited elite international scholars and was competing for prestigious international awards to help them reach this goal. This global referencing and strong international engagement continues to be viewed as foundational to NTU's approach. As expressed by President Andersson (2016), internationalization is "embedded in everything we do in NTU. It is part of our DNA"[12].

> "It just permeates through every aspect of what we're doing." - Director 1

NTU's vision is to become "a great global university founded on science and technology, nurturing leaders through research and a broad education in diverse disciplines". The concept of a 'great global university' was introduced with its 2010-2015 strategic plan. Embedded in this vision are concepts of greatness, global and leadership, as well as a stated commitment to NTU's focus on science, technology and research. This emphasis on research also came across strongly in university collateral. Developing NTU's research capacity is seen as the primary means by which the university is able to contribute to the development of priority industries for the state, attract talent to these sectors, and provide better opportunities to local students. Though not explicitly stated in its vision, NTU's position in Singapore and its view

[12] NTU OIA, 2016, p. 1

of itself as both ‘Eastern’ and ‘Western’ was also consistent throughout it messaging. Collateral simultaneously positions the University as an ‘Asian experience’ and ‘partner of choice’ in Asia for the West and as ‘Western engagement’ to Asian audiences. There is a particular focus on engagement with China, drawing on the Chinese heritage of the former Nanyang University.

NTU has 5-year strategic planning cycles (i.e. 2010-15, 2016-20, etc.) Although the plans themselves are not publicly available, press releases and annual reports make reference to the strategic aims of the plans. With regard to internationalization, the 2010-2015 plan emphasized international opportunities for students, recruiting international faculty, broadening curricula through learning experiences and compatibility with overseas universities, and guaranteeing campus housing for international students. The following 2016-2020 strategic plan did not include a separate section for international initiatives, but activities related to deeper regional engagement, study abroad, partnerships, and international faculty recruitment were seen as ‘enablers’ of broader university goals related to research and education. This approach to embedding internationalization in other strategic objectives is consistent with the recommendations Hudzik (20 15) makes for more comprehensive forms of internationalization. Specifically, the 2016 *NTU International Brochure* identified the following strategic objectives, which are fairly consistent with the traditional activities associated with IoHE.

- Growth of network of reputable partners
- Emphasis on faculty exchange and research collaboration
- Dedication to diverse and talented faculty
- Focus on attracting top students from around the world
- Continuous expansion of international opportunities for students

- Global curriculum that facilitates collaborative cross-cultural learning
- Cultivation of global alumni network
- High international visibility

NTU's research strategy also emphasizes developing partnerships and connections with international universities and companies, increasing joint graduate degrees and raising the 'global impact' of NTU research. Central to NTU's research strategy are the five 'peaks of excellence', which are interdisciplinary fields in which NTU aspires to develop global leadership while contributing to state economic and industry priorities. These peaks were introduced in 2010, and slightly revised in the 2016-2020 strategic plan. The five 'peaks' from 2016 are Sustainable Earth, Global Asia (revised from the New Silk Road Programme in the 2010 plan), Secure Community (from New Media in 2010), Healthy Society (from Future Healthcare in 2010), and Future Learning (from Innovation Asia in 2010). To help develop these 'peaks' and break down silos within the university to encourage more interdisciplinary research, the Interdisciplinary Graduate School (IGS) was created in 2011. By 2017, IGS had grown to over 400 PhD candidates doing research work related to one of these five interdisciplinary themes.

Individual colleges and institutes undertake their own strategic planning process. University leadership encourage faculty leadership to align individual plans to NTU's broad targets, and school-level strategies are monitored, but there are no formal requirements for alignment in place. The semi-autonomous National Institute for Education (NIE), for example, has an independent planning cycle, but while developing the Institute's latest strategy they conducted a mapping exercise to ensure general alignment within the wider NTU framework. As another example, the Nanyang Business School (NBS) closely aligns its vision and mission with that of the University, using many of phrases and keywords found throughout university-level documents. One interviewee commented that as long as their graduate school maintained a high level of performance, the University left them to set direction as they like, but noted a natural alignment between the directions of the school and university.

5.2.4 Management of international initiatives

NTU's SIO is the Vice President of International Affairs. Similar to NUS, the VP at the time of writing had spent his entire career at NTU, bringing a strongly local perspective to the role. The VP's office has two main units: The Office of International Affairs (OIA) and the Global Education and Mobility (GEM) office. The OIA, established in 1991, manages university-wide partnerships and networks, administration of joint programs, international strategy and operations, regional portfolios on current engagements and opportunities to inform internal strategy, monitors engagements and opportunities, and hosts international visitors. Division of responsibility of the nine staff is primarily by region. While OIA plays an important role in the administration of partnerships and joint endeavors, the content of these engagements remains the purview of the faculties and/or the VP of Research in the case of research partnerships. The GEM office oversees the design and administration NTU's inbound and outbound student exchange programs and other oversees educational offerings. GEM will also facilitate the co-design of special exchange and educational programs with overseas partners. Supports for incoming exchange students are also managed by GEM. Other international activities outside of the scope of these two offices are embedded in other work streams and budgets throughout the University.

International student recruitment and admissions at the undergraduate level are handed centrally, while the schools manage graduate recruitment and admissions, develop their own partnerships, and maintain significant autonomy in terms of starting, stopping, structuring their own international programs. Most schools or colleges do not have their own SIOs or international office, and management and administration of international activities is shared among existing administrative units.

5.2.5 Partnerships

NTI developed its first international partnership in the mid-1980s with Grumman Aerospace for a manufacturing research and design center. As mentioned in section 5.2.3, NTU has since pursued international partnerships aggressively. According to former President Cham, “We can’t afford to be world leaders in every area. We will be leaders in niche areas and we will achieve this by working with world renowned universities and good industry partners” (quoted in Leong, 2002, p. 2-7). One of NTU’s first large scale partnerships was a $20 million contract in 1996 with MIT’s Sloan School of Management to help rebrand the School of Accountancy and Business into the Nanyang Business School and to achieve international standing. There was opposition from several government ministers for the venture, but the partnership did achieve its goal of helping to raise NBS’s international academic profile, and the University saw a return on investment in an increased ability to attract talented faculty and students. Other early partners included Cambridge University, the President’s alma mater, and Imperial College London (ICL). The link with ICL has matured over the years, culminating in the 2017 establishment of a joint medical school. As of 2017, NTU has over 400 academic and industry partnerships. In particular, and in line with its emphasis on research and technology, NTU emphasizes its industry linkages with high profile companies.

NTU has, since its inception, leveraged these partnerships not just to develop its research and educational capacity, but also to enhance its international reputation and standing, as demonstrated in this excerpt from 2001: “An outcome of our strategic alliances with the best from around the world is our growing emergence as a premier university on the global academic scene” (NTU, 2001, p. 44). Partnerships are heavily emphasized in promotional material, especially those with industries. Stated rationales for working with international partners include enhance opportunities for 'global education' (e.g. joint degrees and dual programs), academic and research collaboration, securing funds from industry partners for 'world-class' research.

NTU pursues partnerships in both ground-up and top-down manners. Central units such as GEM play a larger role in seeking out and establishing undergraduate student exchange agreements, for example, while research-focused partnerships more often tend to emerge from existing faculty-level collaborations. Informal relationships of NTU faculty with their peers overseas, and high rates of faculty who have worked or received degrees overseas are viewed as critical in helping NTU develop international academic connections. The OIA maintain a database of faculty-level MOUs, which serves as a resource for providing evidence of existing collaboration when considering whether to pursue a university-wide MOU. As NTU has raised its international profile over the years, one interviewee noted that increasing numbers of overseas universities have approached them to develop collaborative agreements, and that the University tries to maintain a welcoming posture towards such interest.

> "I think over time NTU has developed this culture of being open to sharing...When we have other universities or industry or governments coming, we are open to sharing our experience…Ultimately maybe as a university…we are kind of driven by that innate curiosity to learn and share...We are in the business of generating and sharing knowledge." – Director

Partnerships may also be generated at the government level. As one example, an MOU between the Singaporean and Chinese governments in the early 1990s led to a program where NTU received students from and sent academics to China. This eventually grew into NTU's

Chinese Mayors Program. The government was also the driving force behind a partnership between NTU and ICL to create a new medical school to help further develop the nation's medical sector. This was part of a long-term strategy, as NTU first needed to establish a biological sciences department before proceeding to the development of a medical school.

Interviewees noted the importance of a sound strategy around and criteria for partnerships at both the university and school levels. Such criteria should consider status, expertise and location of potential partner, levels of faculty interest in pursuing the partnership, motivation for and potential benefit of the partnership, the availability of funding, and evidence that they could not achieve the same results without involvement from the potential partner. Another interviewee stressed the importance of considering the availability of internal or domestic resources before looking abroad. However, they also added that consistent international benchmarking was needed to help determine where performance levels should be pegged.

In terms of educational partnerships, NTU offers many joint or dual degrees with partner universities. Mostly concentrated at the graduate levels, in 2017 there were 26 joint or dual PhD programs. Many of these degree programs are housed in the aforementioned IGS. Both the dean of the school and the university president (both Europeans) were active in the development of these programs, and as a result of their own personal networks many of the degree partners are with European universities. For IGS, a large portion of the dean's role is to both foster these partnerships and develop the criteria for these joint programs in terms of course planning, mapping, assessments, and supervision.

Networks are also an important part of NTU's partnership strategy. In 2009, NTU led the creation of the Global Alliance of Technological Universities (GlobalTech), and is a founding member of the World Entrepreneurship Forum, a global think with over 110 members from 55 countries. As of 2017, NTU was a member of eight such large scale networks and associations. Networks were seen as an important platform for engaging with multiple partners simultaneously and raising NTU's profile.

5.2.6 International students

In 2017, NTU hosted about 6,700 international degree seekers students from more than 100 countries, split evenly between graduate and undergraduate programs. 27% of NTU's overall student body are non-Singaporeans, while roughly 70% of the graduate student body come from overseas. Portion of international to local degree seekers can vary between the different schools. NIE's graduate programs, which focus on preparing teachers for local schools is predominantly Singaporean citizens, while NBS's MBA program enrolls nearly 90% international students. Although official figures are not released, interviewees confirmed that China was the largest sender of degree-seeking international students. To cater to this market, NTU offers six graduate programs and several more short-term executive programs in Mandarin. After China, India and the ASEAN region are the largest senders of degree-seekers. For undergraduate exchange students on semester or year-long programs, Sweden is one of the largest sources of students, attributable to President Andersson's network in the country. The undergraduate admissions office as well as the individual graduate schools do partake in targeted recruitment activities outside of the region to try to further diversify the student body in terms of country of origin. At the undergraduate level, NTU accepts a wide variety of secondary qualification (including international qualifications such as the IB diploma), and clearly communicates to potential applicants the entry requirement for each qualification.

As one of Singapore's leading national universities, talent attraction is a primary concern for NTU, and the University produces attractive and engaging material to engage potential overseas applicants. This promotional material attempts to draw parallels between NUS, Singapore and Asia, drawing synergies between the three levels. In this way the University attempts to elevate the status of both the country and region, and position itself as the both a gateway and contributor to their rising status. Such material promotes the career prospects in Singapore and Asia, the diversity of opportunity available in the region, as well as 'selling-points' of the university to potential international degree-seekers, such as its international recognition, the availability of accommodations, award-winning campus facilities, opportunities to receive degrees from prestigious partners and the availability of scholarships and other financial support. At the PhD level, NTU offers considerable financial incentives for qualified overseas candidates:

> "When they come to us, they get the scholarship, and the tuition fees are waived, and they also get a little bit of extra support from us in terms of so that they can go to at least one international and one local conference over the course of their candidature. So they get a small bonus." – Dean 1

In addition to degree programs, NTU offers a variety of short-term programs for overseas students. These can range from executive programs targeting international business leaders to the GEM Trailblazer summer programs targeting undergraduate exchange programs. These Trailblazer programs promise to 'prepare global talents to be future-ready for the Asian century' through focus on Chinese language and cultural studies, entrepreneurship and innovation in Asia and success in the globalized marketplace. While there are clear financial incentives for the University to recruit students to such programs, there are also rationales of using international students to help change the campus environment as well as prepare local students for future international engagement.

> "Why do we have international students here? Not just because we need their talent. But because it helps to prepare the Singaporean students for the rest of the

> world, and the rest of their journey. So that value proposition needs to be internalized." – Dean 2

Responsibility for supporting degree-seeking international students is spread across central student support offices as well as support structures within the colleges and institutes, which are developed independently. The International Student Centre offers a range of services, supports, activities and programs, with a focus on activities which promote interaction and communication between local and international students. With government support, NTU also has a staff position dedicated to this function. One interviewee noted that Singaporean students who had been on exchange programs themselves served as a key resource for the university to help in integrating international students. As expressed by President Andersson (quoted in Chow, 2013) "I want NTU to be livelier, with a strong culture. I also wish to encourage close integration between our students who come from different countries."

5.2.7 International faculty and staff

As of 2017, close to 70% of NTU's 4200 teaching and research staff are international hires from around 80 countries. Many of NTU's Singaporean staff also have degrees or academic experience abroad, so there is not a clear binary between local and international. The particularly high portion of international faculty at NTU is a result of policies to proactively recruit internationally as well as the University's rapid expansion and inadequate supply of local academics to fill newly created posts. As NTU grew, leadership needed to make decisions about whether to bring in high caliber academics who had established themselves international and could help to quickly raise NUS's profile, or to make the investment in developing local talent and in-house expertise which could take 10 to 15 years. In most cases, as evident in the current faculty profile, the former was chosen. As part of a broad development strategy, early on NTU prioritized attracting high caliber faculty who could help raise the research and publication profile, as well as attract talent and funding and improve NTU's ranking. Sometimes entire departments were recruited from other universities:

> "One of the reasons the NTU has risen so fast in some of the key areas is because we were able to recruit not just significant individuals but almost entire groups for research or in related research areas." – Director 1

This strategy has resulted in somewhat of an overreliance on foreign talent, as well as some frustration among Singaporean academics. In an effort to develop greater numbers of local academics, programs have recently been established to encourage more Singaporeans to pursue PhDs as well as recruit Singaporeans who have established themselves overseas. Maintaining adequate numbers of Singaporean faculty in the humanities and social sciences, as well as national research priority areas, was viewed by leadership as particularly important.

Despite these challenges, international faculty are seen to contribute in ways beyond their own research. Various interviewees commented that international faculty tended to be more supportive of internationalization initiatives, better at developing connections with more diverse students, bring in new ideas and ways of working, and capitalize on their existing networks. In the opinion of one interviewee:

> "I would say the international faculty are better supervisors in general. That is a general statement. …There is a lot of pressure here in Asia. And this top-down mentality in Asia is an issue for the locals. Because they listen to the management. The European and American faculty do it as they have done it before. They don't bother so much about it. And they are focused more on the supervision. They are more serious in *that* respect." – Dean 1

NTU's practice of allowing foreign academics to be promoted to leadership positions throughout the university also enables the University to capitalize on the knowledge these individuals have of external practices grounded in the experiences successfully working in the Singaporean and NTU contexts. Such individuals are seen to help drive positive institutional cultural shifts as well as develop local capacity and administrative systems and practices.

In an effort to attract top external academic talent, NTU has invested heavily in campus facilities, and offer competitive salary packages as well as sizable research funding. The University also promotes Singapore's open business climate and immigration policies, the country's use of English, and the quality of life in Singapore to attract talent. Administration have also introduced structural changes, such as increasing tenure to age 65, in order to make their positions more internationally competitive.

Proactively offering seats and guest positions to foreign professors or those on sabbatical is another mechanism by which the University engages foreign academics. As one international faculty member relayed his story, he first came to NTU on a one year visiting professorship from his home intuition because it was easy to settle in Singapore for a one-year term, given the language, ease of transition, housing options, transportation infrastructure, and international climate. A positive experience led to recurring visits of increasing length, until NTU finally wooed him away permanently.

5.2.8 International opportunities for students

As of 2017, NTU sent more than 70% of undergraduates on at least one structured overseas program at some point during their studies. There is a target to increase participation to 80% of undergraduates going abroad by 2020, with one-third going for a semester or more. In

2017, NTU students were most likely to partake in exchange programs at universities in the UK, Sweden, the US, Canada, and South Korea. University-wide overseas programs include an exchange semester, industrial placements, research attachments, short-term immersions, sponsored participation in international conferences and competitions, and overseas community development projects.

Figure 9: Poster on campus promoting and overseas entrepreneurial study program.

The first exchange program (INSTEP), influenced by former President Chun's own overseas study experience, was introduced in the early 1990s. International internships and summer studies programs were introduced shortly after. Since that time, opportunities for overseas study and experience have expanded dramatically. By 2017, NTU had student exchange agreements with approximately 250 universities in 45 countries. The University also integrates overseas experiences into other areas of its courses and programs. As one example, the College of Engineering, which enrolls nearly half of NTU's undergraduate students, has an internship as a degree requirement, and the (representing about half of all undergraduates), requires an internship, and the College encourages and provides many opportunities for students to complete that requirement with an overseas company.

To facilitate such high rates of participation, NTU heavily promotes exchange programs, GEM fairs and overseas opportunities around campus. Financial aid, bursaries or loans are available, and graduate students may receive funding for overseas conferences or research attachments.

Figure 10: Signage on campus heavily promoting the GEM study aborad fair.

The rationales for such heavy promotion of study abroad and overseas experiences were that it fit into NTU's vision of itself as a 'great global university' by enhancing the student experience, promoting global citizenship and contributing to the University's service mission. The core driver, though, was that such opportunities for international exposure were seen as important for preparing graduates to join Singapore's internationally-oriented workforce, and preparing the student to succeed in the globalized 21st century.

> "If you look at what is happening in the 21st century, especially for Singapore as a small city-state, we need to be able to work with many diverse cultures and many of our Singaporean companies have business throughout the region. …And I think internationalization is very important to the survival of the city…we have to provide this kind of opportunity for our students" – Director 1

In terms of the actual mechanisms by which NTU is able to facilitate and support such high levels of participation, one interviewee commented that it was critical to first identify existing barriers, and then develop strategies to remove each of them. Ensuring that there is proper pre-departure orientation has proved important to ensure that students get the most out of the experience and to try to combat prejudices that can arise from exchange experiences.

> "If we don't prepare them properly, we give them a good orientation and get them ready to go and know what they can get out of the experience. Because it's not for everybody and everyone develops at different rates. So just because we as a university believe that everyone should have this type of experience, the impact and outcome is different for different students. And we're still trying to find ways to measure that." – Director 1

The matter of completing course requirements is another example. Students participating in semester or year-long programs must be able to gain credits towards graduation while abroad, requiring study abroad to be considered in the overall design of undergraduate programs. The introduction of electives helped to address this issue, but there is still an ongoing need to for GEM, the faculties and overseas partners to undertake course-matching aiming for at least a 70% overlap in content. Nonetheless, this can be a slow process and matching is not always possible. There are some plans to move into a more integrated program planning model in the future.

> "It can be a little disruptive to some of the students' course planning. Particularly if they have difficulty in finding matching subjects when going overseas." - Director 1

Such high rates of study abroad have also cause some tensions and resistance among faculty. Leadership reported needing to respond to faculty concerns and queries as the benefits of targeting such high rates of participation, given the difficulties it can introduce in course planning and students fulfilling degree requirements. Incoming exchange students can also be disruptive program and course design, especially when local students need seats in courses required for graduation. Positioning the experience as a professional requirement, such as the internship case for the College of Engineering, has helped to address these concerns. Several interviewees noted that international faculty can be more supportive of goal of sending students abroad, and having such high numbers of international faculty has helped to garner campus-wide support.

> "Because so much international faculty are here, they think it is the right thing to do; to have the global exposure. So we haven't really felt any pushback on this aspect." – Dean 3

The GEM office designs most of the university-wide exchange programs, especially at undergraduate levels. Colleges and Schools may also design and fund their own programs, while GEM plays a monitoring role. Ultimately, much of the responsibility for achieving the participation targets falls to the Colleges, requiring them to make staffing, budgeting and programming adjustments as the administration increases targets. Different faculties will approach increasing participation through programs that are suited to their particular missions and structures. NBS, for example, incorporates opportunities to work with industry partners overseas. The College of Humanities and Social Sciences (HASS) allows credit towards degrees for semester-long and five-week summer language learning courses. NIE allows teaching certificate students to fulfill a five-week teaching assistance program abroad as well as offering a Service and Leadership Training program in neighboring developing countries.

Figure 11: Poster encouraging NIE students to do their teaching assistantship abroad.

5.2.9 Internationalization of the Curriculum

IoC at NTU is conceptualized at the whole student experience level rather than the individual course level. The University references many of the same rationales and outcomes for IoC as the literature, such as internationally informed research and the development of international perspectives in students. University material cites the promotion of versatility, creativity, and social and intercultural competence to prepare students for the fast-changing global workplace.

> "For us it is not internationalization for internationalization's sake, but we believe in it because the 21st century world is extremely interconnected, and it's important for our students to get a global perspective." – Dean 4

However, rather than set policies and practices relating to course content and assessment, this is seen to occur through the high rates of participation in international experiences, the high ratios of international students and faculty on campus, and through programs with explicit global focus or those developed in cooperation with overseas institutions.

NTU's Teaching, Learning and Pedagogy Division (TLPD) hosts an extensive suite of online resources to clarify NTU's principles of teaching and assessment and provide guidance to faculty in a range of areas from course design to engaging students to assessment[13]. These resources are based on current and foundational international research, and TLPD cites its connections with premier learning and teaching organizations around the world (i.e. The Carnegie Foundation for the Advancement of Learning), noting how these connections support outreach, engagement and research. Characteristically, NTUs principles for teaching, learning and assessment are well benchmarked against international norms.

> "We very much keep abreast... I mean if you are a professor and you don't keep up with the news, then you are not a professor worth your salt. So we are very in tune with what goes on." – Dean 4

However, a thorough review of these resources reveals no suggested commitment to or guidance on purposefully incorporating or developing international perspectives through course design, curricula or assessment.

Through these measures Thus, rather than internationalizing the curriculum, NTU demonstrates a preference towards internationalizing the student experience. As mentioned earlier exchange and a multi-national climate are seen as important aspects of this. In regard to programming, globally-focused programs and interdisciplinary research and education are

[13] https://www.ntu.edu.sg/tlpd/tlr/Pages/Home.aspx

viewed as important components in this. Examples of programs with global or international themes include NBS's Cultural Intelligence courses, HASS's minor in 'Global Asia', or IGS's Sustainable Earth track. In addition, there are the programs developed jointly with overseas institutions, which are seen to be inherently international in perspective.

Several interviewees noted that the University was still searching for ways to evaluate the international dimensions of learning, and have conducted study visits abroad to explore other institutional models to this. However, an in-house set of principles has yet to be developed. The current thinking is that the best approach is to remain abreast of international developments related to practices in teaching, learning, assessment and research, as well as educational models emerging from different parts of the world. NIE is seen to play an important function in this capacity. Individual schools and colleges also maintain their own programs to encourage the international engagement of faculty. NBS, as just one example, provides frequent and flexible sabbatical and conference leave, and encourages faculty to serve as external examiners, journal editors and keynote speakers, and international research projects.

> "Apart from the virtual scans, there are also physical scans. Management and faculty are very well-traveled all over the world. We are a very porous country. You know, we organize many international conferences. So either we go out, faculty go out, or these people come in." - Dean 3

To help further internationalize the campus environment and student experience, NTU regularly hosts international conferences, and invites well-known academics and Nobel laureates to speak on campus. The Global Dialogue Program runs seminars and workshops on topics of global relevance. There is also a funding program to encourage and assist students in organizing international conferences and events. NTU also purposefully mixes residence halls between Singaporean and international students, and there are several student-run clubs and societies with global or international themes. The centrally located Global Lounge also provides both domestic and international students opportunities for interaction and to stay current on global events as reported by news outlets from different parts of the world. As is common in Singapore, NTU also provides a wide-variety of ethnic and international cuisine on campus.

Figure 12: Photo of the front of NTU's Global Lounge, situated in the center of campus.

5.2.10 Activities abroad

Though very internationally active in terms of partnerships and research, NTU has until quite recently maintained a small physical footprint abroad. Within the last five years, the University has opened offices in Shanghai, Beijing and Guangzhou, China to support activities for partners, alumni and potential students, as well as exchange and collaboration with Chinese partners in research, education, and technology transfer. In 2017, NTU helped to establish the Sino-Singapore Joint Research Institute in Guangzhou in partnership with South China University of Technology and the Guangzhou municipal government. Also in 2017, NTU partnered with the city of Haifa, Israel on an innovation center. The center is meant to nurture innovation and stimulate collaboration with industry and investors in Israel, facilitate research collaborations with Israeli universities and companies, serve as a site for internships for NTU students, and to help NTU ventures explore the Israeli market and capital opportunities. Several faculties and institutes, especially those related to geological and environmental sciences such as the Earth Observatory of Singapore, maintain research facilities abroad.

5.2.11 Reputation management

International reputation management is a core concern to university leadership and has been since the University's founding. This is evidenced by NTU's continued investment in partnerships and projects that are explicitly aimed at elevating its international profile and standing. High international visibility is also a core pillar in NTU's 2016-2020 strategic plan. NTU's international reputation management strategy is leverages its research intensiveness, international competitiveness and global nature.

The 'world-class' quality and global nature of NTU's research is constantly reinforced in its messaging. This is not necessarily unique for a global research university, but NTU actively positions its research profile as its core asset and includes research as a central component of its vision. Normalized citation impact scores (Thomson Reuters Incites), as well as citations per paper scores (THE), are viewed internally as important indicators of the quality of NTU research, and international publications are factored into the faculty promotion and tenure system.

The quality of NTU research is often communicated through its positioning in global rankings and other externally validated indicators. In this way, international competitiveness represents a second pillar of its brand. Rankings feature prominently in almost every piece of collateral published by the University. As one example, in the *NTU at a Glance 2017* publication, the first three points listed in the university profile section on the first page are: "Fastest-rising university in the world's top 50 - ranked 11th in the world, 1st among the world's young elite universities, and World's fastest-rising young university". Similarly, the 'about us' section of the NTU website has an entire page dedicated to NTU's standing in various international rankings.

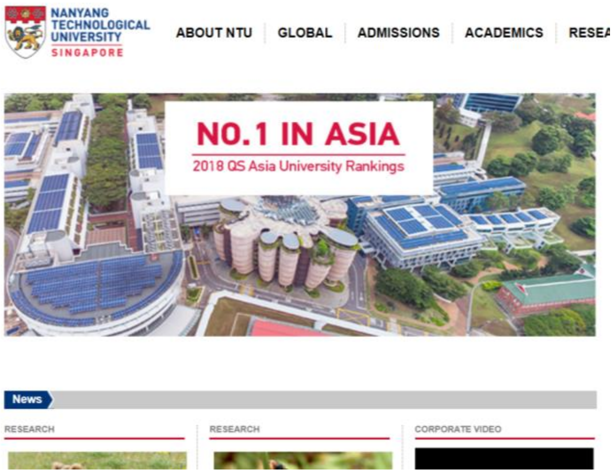

Figure XX: Snapshot of the NTU homepage (Accessed on Dec 1, 2017).

NTU also promotes an image of itself as a 'global' institution. This message is also continuously reinforced along with its research achievements throughout its promotional collateral. Similar to Xavier and Alsagoff's (2013) assessment of NUS, NTU links the concepts of 'global' and 'world-class', with the former as a step towards the latter. In an analysis of NTU promotional material, Teo (2007) also found that NTU's material often referenced global themes and made direct connections between the University and the global economy and workplace. As just one example, on the corporate information page of the NTU website[14] the words 'world', 'global' or 'international' appear 21 times, suggest the importance of these concepts to the university's brand.

[14] https://www.ntu.edu.sg/AboutNTU/CorporateInfo/Pages/Intro.aspx

5.3 Kyoto University

5.3.1 Introduction

Founded in 1897 (as Kyoto Imperial University), Kyoto University (KU) is the second-oldest national university in Japan, although several of its schools have traditions stretching back further than the University's founding. KU has an established history of research excellence, producing at least nine Nobel laureates. The 23,000 student body is majority undergraduate, but at nearly 44% graduate students, KU has the highest portion of graduate students among the four case universities. Since the late 1990s, partially in line with state-funded initiatives, KU has increased its emphasis on graduate-level activities and established several new graduate schools and programs, such as Human and Environmental Studies and Global Environmental Studies. As of 2017, KU has ten faculties, eighteen graduate schools, and over 30 affiliated institutes and centers. Nearly 28% of graduate and undergraduate students are enrolled in the Engineering faculty, which is nearly triple the size of the next largest faculties (Agriculture at the undergraduate level and Medicine at the graduate level).

KU is consistently ranked within the world's top 50 universities by AWRU and QS, and within the top 100 by THE. Of the three, KU is ranked the highest by the research-focused AWRU, indicative of KU's long history as a regional leader in research. Within Japan, many consider KU to be the most prestigious university after the University of Tokyo, and KU is known for having a strong sense among national universities of independence from state and societal influence. As stated by the KU president, "since its founding over 100 years ago, Kyoto University has sought to cultivate a spirit of autonomy, independence, and creativity"[15]. As a prestigious national university, KU attracts students from all regions of

[15] http://www.kyoto-u.ac.jp/window/en/message.html

Japan, but in addition to its national status and functions the University strives to maintain close connections to local Kyoto community and industry.

5.3.2 Leadership structure and make-up

KU is headed by a president and an appointed executive team. Since the late 1950s, most KU presidents have served for six-year terms, with the current President, Juichi Yamagiwa, assuming office in October, 2014. Incorporation of the national universities in 2004, and several policy measures and initiatives since, have strengthened the role of the administration to some extent. However, as presidents of KU are selected primarily through internal mechanisms, faculty have considerable agency to influence the selection of the president. This does not translate into a governing structure where the president needs to answer to faculty committees, per say, but it does indicate that faculty members have some agency to influence the selection of subsequent leaders who may be less or more inclined to continue or stall initiatives started under the former administration.

The president and most of the executive cabinet received degrees from KU and spent most of their careers within the University. Central administration director-level posts and faculty deans (typically elected to two-year terms), are also primarily Japanese nationals. Reaching a leadership position within KU does require a long and successful career with a high degree of international recognition, and in some cases members of the executive leadership team do have significant experience abroad (such as President Yamigawa's fieldwork in primatology). However, limiting leadership posts to those from within KU or other similar Japanese universities does suggest that those in leadership positions are not likely to have significant *first-hand* working knowledge of university governance and management structures and practices abroad. It is also likely to send a signal to present or potential international faculty that there may not be opportunities for advancement within the University above a certain level.

5.3.3 Vision and strategy

KU's mission is "to sustain and develop its historical commitment to academic freedom and to pursue harmonious coexistence within the human and ecological community on this planet". This mission rests on the four pillars of research, education, relationship with society, and administration. Under these pillars, the University aims to advance 'world-class' knowledge, integration of various perspectives into research, contributions to the world community, and foreign academic exchange. KU has also published what it refers to as a 'Future Paradigm', which emphasizes cutting-edge 'world-class' research, cultivating future leaders, and upholding academic freedom. In relation to this 'future paradigm', the KU website lists seven long-term goals:

1. Enhance the curricula and raise student mobility to foster cosmopolitan outlooks
2. Equip students with broad outlooks, academic sophistication, language proficiency, and specialized knowledge
3. Pursue the highest global standards of research and foster motivated, creative and internationally active researchers and professionals
4. Welcome diverse talent and create an environment that brings out their best
5. Encourage education and research that explores new fields by adopting flexible approaches to reorganizing existing and creating new centers
6. Collaborate across campuses and deepen connections with Kyoto communities
7. Develop and enhance services and support structures across the university.

KU is also currently operating under the six priority areas and accompanying objectives outlined in the 'WINDOW – A Vision for the Future', introduced in 2015. The President describes this vision as a set of principles to guide the reform process of the university, and the concept, "envisages the university as a "window" opening into society and into the world as a whole"[16]. WINDOW's six priority areas include: Student development; Internationalization and innovation; Sustainability; Openness; Resilience; and Gender equality.

Consistent across these missions, goals and principles are the themes of enhancing education, 'world-class' research, greater international engagement and exchange, and a greater openness and responsiveness to change. They also maintain commitments to the pursuit of new areas of knowledge and academic freedom. Embedded throughout are the University's stated rationales for internationalization, in particular, greater exchange of people and ideas, fostering broad and cosmopolitan outlooks, creating a more diverse, open and welcoming environment, and contributing to global issues of sustainability. As one interviewee described the attitude of the administration towards greater internationalization:

> "Promoting internationalization is a common issue for all universities in Japan. But it is particularly so for Kyoto University. So we have to accelerate some sort of internationalization. That was the common sense, the common idea of the headquarters." – Director 1

To achieve its missions and goals, KU currently has several strategies and plans in place, each introduced in a different year with varying timelines and targets. Several, such as the six-year mid-term plan and the Japan Gateway Project were introduced in response to

[16] http://www.kyoto-u.ac.jp/window/en/message.html

government initiatives or requirements. The baseline strategic plan for KU, as for most Japanese national universities, is the six-year mid-term plan required by MEXT. The 2010-2015 plan was broadly organized along the categories of education, research and management and operations, and included more than twenty points related to internationalization, such as:

- Fostering intercultural competencies and perspectives in students
- Expanding exchange, and creating more pathways and supports for international students and faculty
- Strengthening ties and with overseas universities and organizations
- Increasing standing as a world-renowned international research site
- Contributing to international society
- Developing overseas hubs for joint activities

In 2013 (half way through the mid-term planning cycle), KU introduced the '*2x2020*' strategic plan for internationalization, which is currently still technically in effect, but is no longer actively referenced by university members. *2x2020* aimed to double international indices in research, education and service, enhance KU's standing as a WCU, and achieve 'true internationalization' founded on 'numerical targets'. The strategy rests on three broad pillars:

1. Globally competitive top-class research, focused on international collaboration and talent attraction
2. Cultivating human resources with strong international skills, focused on attracting international students and enhancing opportunities for domestic students
3. Contributing to harmonious coexistence with the human and ecological community on this planet, focused on talent development and international cooperation

These pillars clearly communicate rationales of talent development and attraction, global competitiveness, international collaboration, and the goal of increasing the presence of foreign faculty and students. To achieve these objectives, the strategy sets a number of numeric targets aimed at internationalizing the faculty and student bodies, improving KU's ranking, increasing and strengthening partnerships, and developing infrastructure and management capacity for internationalization. As the below graphic communicates, advancing the process and scale of internationalization is positioned as a key enabler for the University to continue to fulfill its mission.

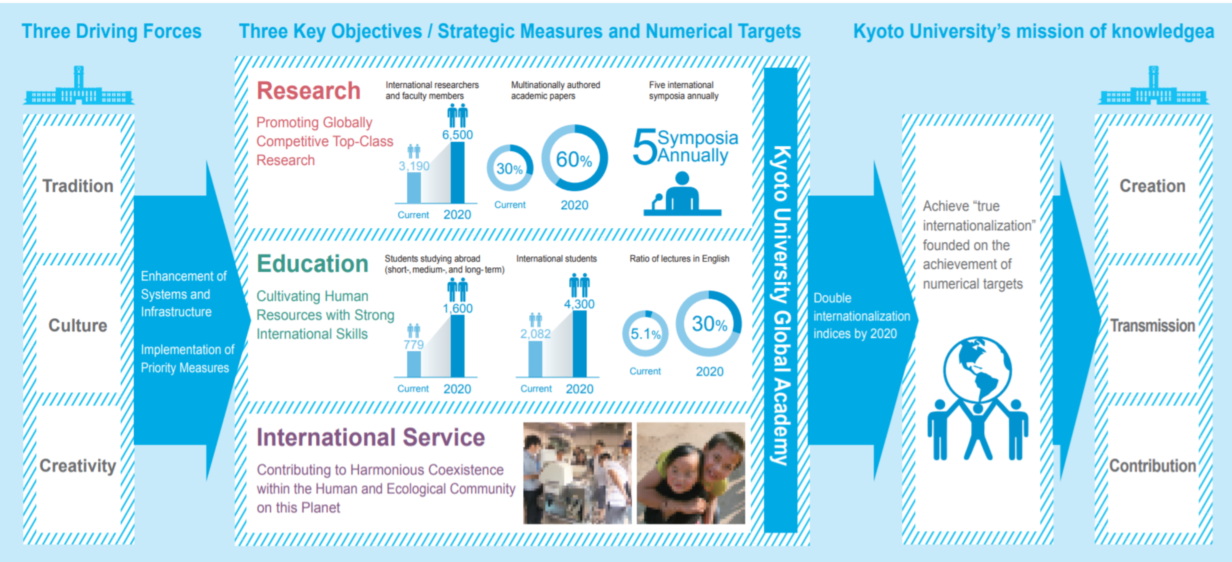

Figure 14: Model of the 2x2020 strategic plan. (Source: 2x2020 strategy pamphlet)

The following year, 2014, in response to MEXT's Top Global University Project (TGUP), KU developed the ten-year 'Japan Gateway Project' (JGP), essentially creating a new framework for the University's internationalization. Continuing with the previously established objectives of increasing exchange, JGP also aimed to combine reforms in six administrative areas related to internationalization (international recruitment, admissions, education, and overseas programs) with a focus on creating joint/double degree graduate programs in six fields KU felt it was internationally competitive in. The below graphic provides an overview of JGP's target fields for joint-degrees as well as six focus areas for international initiatives.

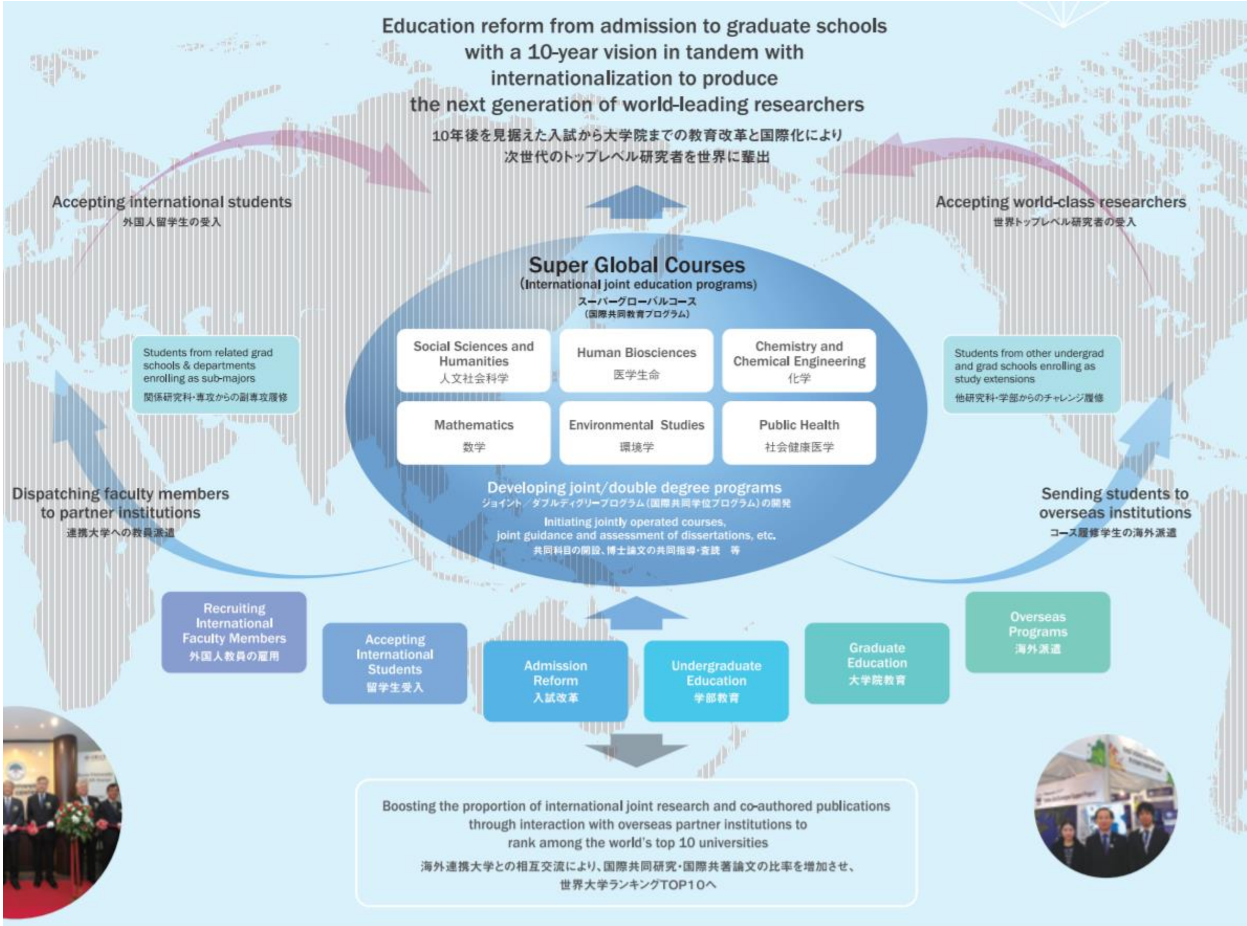

Figure 15: Model of the 2014 KU Japan Gateway Initiative (Source: JGI pamphlet)

In 2015, one year after the launch of JGP and one year before the start of the next six-year mid-term planning cycle, the aforementioned 'WINDOW' vision was introduced. This vision and its objective areas are broader than an internationalization strategy, but have a number of relevant strategic priorities related to developing global human resources (*gurobu jinzai*), creating a rich international environment, promoting research collaboration, establishing overseas research hubs, better international dissemination of research, and improving student interactions and intercultural engagement.

Figure 16: Graphic summarizing the 2015 KU Window vision (Source: KU website)

Next, in 2016, KU needed to draft a new six-year mid-term plan (2016-2021) for MEXT. Similar in organization and content to its predecessor, this plan contains discrete agenda items related to education, research and internationalization. The tendency towards numerical targets in the plan is broadly in line with the 'more is better' approach of the '*2x2020*' strategy', and introduces a number of new initiatives to help achieve set targets. Highlights of the plan include:

- Increasing international students via a new International Undergraduate Program (iUP) and new International Student Recruitment Office
- Increasing international faculty, outbound mobility, inter-university agreements
- Increasing undergraduate English-Medium instruction (EMI) courses to 400
- Increasing publications in world's top 5% journals to 800 per year
- Strengthening supports for inbound and outbound mobility
- Developing and expanding overseas offices

- Promoting international perspectives in the liberal arts education
- Training staff who can support internationalization

Finally, in 2017, KU was granted ‘Designated National University’ (DNU) status, which required yet another set of priorities and objectives. Again, while these priorities go beyond internationalization, there are a number of relevant objectives, such as enhancing international flows of knowledge and human capital, pursuing a global research agenda, and boosting international cooperation and collaboration.

By the end of 2017, KU was simultaneously operating under at least five separate independently developed strategies related to internationalization. There are shared themes running throughout each of these strategies, such as increasing international presence on campus, producing globally competitive research, and strengthening the University’s infrastructure for internationalization efforts. However, given the different targets, timelines and language between the strategies, it is understandable that internal stakeholders, particularly those outside of central administrative offices, may not feel a strong attachment to or sense of responsibility for any particular strategic objective.

One interviewee noted the difficulty in determining the extent to which such internationalization initiatives actually serve the mission of the University. This implies that while the University has been pursuing more, and more strategic, advancement of internationalization, as of yet the concept is not firmly embedded in the institutional mission and ethos. Many of the interviewees noted that the numerical targets were to respond to government direction, and did not represent a shared vision for the future of the University.

> “Concrete numbers, we don’t like it, but we are forced to write it down in many documents, like for MEXT. So we cannot escape it. Of course we try to show

> moderate numbers rather than challenging numbers...but so far, numbers are not so serious a matter for us.” – Director 2

In response to such sentiment, the International Strategy Office, after consulting with 25 different deans and chairs, is (at the time of writing) drafting a new ‘international concept’ for release in 2018. With no set targets, the new concept is meant to provide an overarching vision for internationalization activities related to education, research and social contribution, which internal stakeholders can use for guidance and support when initiating their own activities. The consultative development process served not only to inform development of the concept but also to help garner buy-in among faculty leadership. The concept aims to reposition internationalization from a goal itself to a means to help faculty and other stakeholders achieve their own goals.

> “It’s just a tool. It’s not a goal. If they want to do the kind of really good education for the sake of the students, then maybe international procedures are a good way for them. Maybe sending students or inviting international students is a good way to do it, but it’s not a goal. It’s the same for the research as well. So as a headquarters, when we say that we promote internationalization, what that means is that we support. We are going to establish a very efficient support system for schools and colleges when they want to promote internationalization as a measure to implement their goals.” – Director 1

Similarly, the concept aims to reposition central offices as providing international support services (e.g. international recruitment, managing housing, etc.), which can free faculty to focus on other areas.

> "If the headquarters can do these sorts of things as a sort of one-stop service, then that's very helpful." – Director 1

Even so, some faculties are resistant to have any involvement from the central administration, and prefer to completely manage their own international affairs. The schools and colleges have considerable autonomy, and gaining widespread support for initiatives can be challenging for the central administration. One interviewee likened it to a *shoutengai* (shopping plaza), where sometimes the shops coordinate and work together, but are independent and even may be at competition with each other. A prevailing and recurring theme throughout the interviews was that faculty could be 'encouraged' to align themselves to particular international initiatives, but not 'directed' to do so.

> "What the headquarters can do is just encourage, support, stimulate." – Director 2

5.3.4 Management of international initiatives

KU's SIO is the Executive VP for Gender Equality, International Affairs, and Public Relations. The VP at the time of writing had received her degrees from and spent her career within KU, however, had also regularly served as a visiting professor in the US since the 1980s. Though the VP oversees functions related to international affairs, KU does not maintain one central international affairs department, in the same way that it does for other functions such as general affairs, facilities, education or research. Responsibility for international activities is dispersed throughout different administrative units, each with different reporting lines. These include the International Strategy Office, the International Education Administration Office, the International Education and Student Mobility Office, the International Affairs Office, the Global Communications Office, and the Institute of Liberal Arts and Sciences. One interviewee noted that the University leadership are still considering the best approach and structure for organizing and managing areas of responsibility related to internationalization.

In 2015, committees for International Education and International Relations replaced the former Organization for Promoting Internationalization, and the Office for International Strategy was established. The strategy office oversees internal structures related to internationalization, overseas offices/activities, supports for schools and individual faculty in launching new projects or initiatives, and elevating various international metrics. The office has five staff, and approximately 50 jointly appointed staff from other university offices (e.g. the office of international exchange). ‘Full-time’ staff in the office also have commitments and responsibilities to other areas of the University. Discrete areas of responsibility for staff in these offices mal also lack clearly established parameters. Though University leadership share the commitment to accelerating internationalization, priorities and preferred approach can differ. As one interviewee responsible for an area of internationalization expressed it:

> “…I talked with several executive vice-presidents and also I met with the president...of course one of my questions was ‘what do I have to do?’ Everyone said something different. And I understood there is no common understanding of my role or the duties.” – Director 2

The same interviewee went on to note, that University leadership were gravitating toward a more shared and consistent understanding of what internationalization means for KU, the potential value that it may hold, and how to approach it. Examination of University documents produced over the last several years also suggests that the University is a more cohesive view of internationalization.

A number of other units are charged with supporting other areas and functions related to internationalization. With regard to faculty, the undergraduate student body and curriculum, the Institute for Liberal Arts and Sciences (ILAS) has provides undergraduate courses in English, recruits foreign faculty, and provides Japanese language training. In 2016, the former International Center was relocated to the new Education Center for Japanese Language and Culture housed under ILAS, in an effort to better integrate Japanese language and culture education, intake of international undergraduates, study abroad support, and other related activities. The Center for the Promotion of Excellence in Higher Education is responsible for using ICT to broaden KU's international reach and implementing educational reform and faculty development initiatives. The International Services Office provides visa, housing and other supports to international students and scholars.

Individual schools and colleges maintain their own offices, committees and structures for managing international activities, including partnership development, international student recruitment and admission and providing overseas opportunities for domestic students. Often the schools will undertake projects and initiatives aimed at internationalization with funding support from the central administration. As budgets are shrinking annually for all national universities, schools and colleges are increasingly incentivized to apply for these grants to maintain their programs, and the rates of application are increasing. Interestingly, it seems that the competitive grant scheme tactic used by the government to incentive the universities, though lamented by the university administrators themselves, has been to some extent replicated in the institutional management practices. Thus, similar to the university level, securing external funding may be a core driver of internationalization initiatives at the faculty level as well.

> "I think people are very enthusiastic right now, and becoming more and more. But before we had to increase to get the proposals from them. But now they are changing. Otherwise they don't have money, and they do need money." - Leadership

5.3.5 Partnerships

By the start of 2018, KU had 168 university-wide academic cooperation and exchange agreements with institutions in 50 countries and regions**.** Additional faculty-level agreements numbered close to 500. There are slightly more partners in Europe than in Asia (including Australasia), and together the two regions comprise nearly 80% of partners. The US, UK, Germany, France, China (including HK), and Indonesia are the countries in which the most partner institutions are located. Rather than a focus on partners' global rank, KU's partnership profile indicates a preference for targeting the most elite or prestigious universities across a range of national contexts. In this sense, geographic diversity and local prestige are positioned above global prestige.

In addition, KU established 113 university-wide student exchange agreements, and another 170 at the department level. The profile of student-exchange agreements is slightly different than the overall partnership profile, with more emphasis on Continental Europe, Asia and Canada. One administrator noted the difficulty of establishing exchange agreements with US universities, due to differences in tuition models and academic calendars.

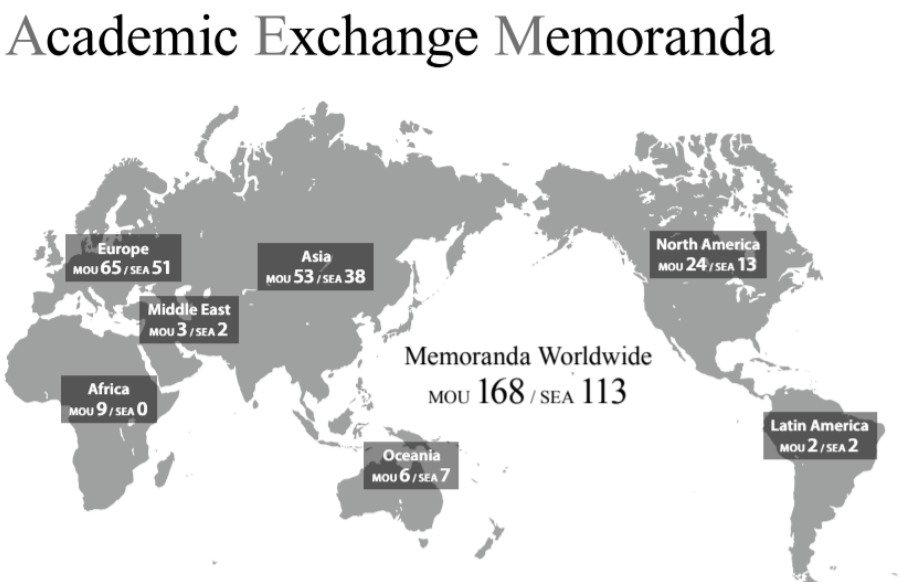

Figure 17: Map of KU's academic exchange MOU's and student exchange agreements as of May, 2017 (Source: KU website)

Though KU maintains many partnerships outside of the region, interviewees focused heavily on developing relationships within ASEAN, citing history, potential for opportunity, personal networks of faculty, and a general desire to strengthen ties with the region. There is a sense of mutual benefit with ASEAN, where KU researchers can have access to research opportunities there, while the ASEAN partners can benefit from the Japanese expertise. ASEAN is also emerging as one of the most important sources of graduate students for the University, and the partnerships are seen as a way to help build pipelines for ASEAN students into KU graduate programs.

Rationales for partnerships communicated in university collateral include enhancing research, mobility, technology-transfer, and opportunities to more widely share research outcomes. The reputation building and capacity developing functions of partnerships are overshadowed by a view of partnerships as a means to collaboratively contribute to global issues and initiatives such as the UN Stainable Development Goals (SDGs). Academics in some fields, such as agriculture, also viewed partnerships as a means to expand research agendas, as opportunities for research in Japan were limited or diminishing. Research on communicative diseases which were rare in Japan was cited as another example. One interviewee noted that other universities in the region, especially those in China, were becoming more proactive in trying to establish links with KU faculties, and that the faculties in turn are becoming more receptive to these entreaties and the potential for funding and other research opportunities they bring.

Separate offices under the VP of International Affairs manage university-wide academic MOUs and student-exchange agreements. However, most university-wide agreements are generated at the school level, with the central administration providing administrative support. To develop or expand a partnership, faculty must submit proposals to a university-wide ‘academic cooperation’ committee comprised of different faculty members and central administration staff. After considering previous records and nature of collaboration with the proposed partner, past and potential outcomes, and prestige and quality of the partner, members vote on whether to pursue an institution-wide agreement.

> “We have to have certain experience in particular universities. That is the collaboration and research and education. That is the base to choose. And also they have to have a certain level of research and reputation.” - Leadership

KU’s 14 double or joint graduate degree programs signal a particularly deep level of engagement with the partner providers. Most of these have evolved from strong and long-standing exchange and collaboration relationships, which requires widespread faculty support and maintenance within the school or college that maintains the partnership. One interviewee noted that it may be easier to gain consensus among the faculty in smaller schools.

> “Research collaboration is rather easy. Each professor can do that. But in the case of educational programs, it should be based on the MOU between institutions. So the small graduate schools have some advantage to make a consensus to promote educational programs with the different countries.” – Dean 1

Nearly all of these joint degree programs are with partners from within Asia, and several were launched during either the ASEAN phase of MEXT’s Reinventing Japan Program or as part of the JGP. Project funding is seen as particularly helpful in establishing joint degrees, as they require a substantial investment to establish, but can be maintained on a nominal budget.

International networks and consortium are an important aspect of KU’s international collaboration, and they are a member of six such networks, several of which with a strong regional or bi-lateral focus, such as AUN/ASEAN+3 UNet, HeKKSaGOn (Germany-Japan), and RENKEI (UK-Japan). Through its membership in these associations, the university participates in presidents’ conferences, symposia, workshops, student programs, and other projects. These networks are seen to help develop and expand cooperation, act as a bridge to wider society, focus the University’s international engagement, and facilitate contribution to global issues.

5.3.6 International students

In 2017, KU hosted 229 (1.7%) international undergraduate degree-seekers, 1448 (15.6%) international graduate degree-seekers and 431 ‘non-regular’ students. 80% of these students come from within the region (particularly China), 8% from Europe, and the remaining 12% from the rest of the world.

KU does not have a long history of actively recruiting degree-seeking international students, but as with many universities in Japan, government initiatives such as the 300,000 international student goal and the G30 project, along with demographic shifts, have spurred KU to more heavily prioritize international recruitment. The incentives for increasing international undergraduate students were found to be more external than intrinsic, and related to government evaluations and ranking metrics. For undergraduate degree-seekers in particular, several interviewees were skeptical that KU would recruit them at all if not for government encouragement. A lack of financial incentive, related to state polices limiting the amount of tuition the university could charge international students, and policies requiring that international students count towards overall undergraduate quotas are also disincentives. Attitudes of faculty towards international undergraduates may also be seen as a factor:

> “Frankly speaking, many, most of, faculty members do not like to accept undergraduate foreign students, even now.” - Dean 2

Nonetheless, KU now has a suite of attractive marketing and recruitment material in English and other regional languages, and is increasingly making its entry requirements and pathways more flexible. KU has also recently built new accommodations for the increasing numbers of international students and researchers. The University also makes scholarships available to international students, and the G30 undergraduate EMI program is tuition free.

Admissions guidelines and requirements for international students are clearly communicated on the website, with explicit mention of international qualifications such as the IB. However, most international undergraduate applicants still need to sit the Japanese national exam or separate exams administered by JASSO. There are separate entrance procedures for EMI programs, but these are limited in scope and do not admit large numbers of students. The new International Undergraduate Program (iUP) aims to further expand pathways for international undergraduate students via a special track that provides two and half years of EMI general education courses and intensive Japanese study to prepare students to complete their final two years of specialized study within a regular Japanese-medium faculty. If successful, it could serve a model for how KU approaches international undergraduate recruitment in the future, but not all are optimistic that reaching the requisite level of Japanese in two years is feasible:

> "The headquarters is expecting that the foreign students would speak Japanese after two or three years, but we are not so optimistic. Japanese language is a very heavy task for students...For graduate schools it is very common to take classes only in English and we can easily accept foreign students, but at the undergraduate level it's very challenging." -Dean 2

Admissions into graduate programs is more flexible and many schools admit on the basis of interviews and recommendations. While the overall portion of international graduate students is just over 15%, certain programs, such as the Graduate School of Global Environmental Studies, have greater international representation, with nearly half foreign students. Although one interviewee noted the current ease of getting government funding to support recruitment of international graduate students, there are also more internal rationales at the graduate level, such as Japan's shrinking pool of domestic applicants. Some faculty also view international graduate students as more motivated and serious than their domestic counterparts.

Language is seen as one of the most significant barriers to recruiting and admitting international students. To address this, significant resources are directed towards developing EMI graduate programs and courses and supports for non-Japanese speaking international students. The current mid-term plan sets the target of offering 400 courses in English. To help support international students after they enroll, the Education Center for Japanese Language and Culture within ILAS recently redeveloped a number of programs related to language training, tutoring and advising. Some schools also offer their own supports.

Figure 18: Photo of a flyer promoting use of the Japanese language study room

Integrating international and Japanese students was cited as another challenge. Again, language is viewed as barrier. Courses and programs also tend to be segregated by language. Particular labs or research centers may more actively facilitate interaction, but there are few university-wide programs in place to encourage interaction. One existing measure, based on recommendations from participating schools, is the *Wild and Wise Collaborative Learning Program* which provides mixed groups of Japanese and international students 17 short-term cross-cultural learning and research opportunities in Japan and abroad. These programs engage both international and domestic students in unique learning opportunities, but do not reach the majority of the student body.

5.3.7 International faculty and staff

As of May, 2017, 401 of KU’s 7,307 permanent (2%) and fixed term (15%) faculty and staff were international. The 2016 mid-term plan set the target of employing a total of 500 international faculty and staff by 2021. As hiring is the mandate of the individual schools and colleges, it can be challenging for administration to reach such targets, although several schools do also have their own initiatives to increase internal diversity. One pathway the administration does have available to diversify the faculty body is to reallocate seats held by retiring faculty members to roles which are supported by special project funds and set hiring requirements (i.e. female, below a certain age, or international). ILAS is the main mechanism through which this happens. This also allows ILAS to take over a greater share of the undergraduate teaching, and offer more courses in English. However, of the 73 faculty listed on the ILAS website, only 12 were non-Japanese and only five of those at the rank of associate professor or above. This practice also has implications for graduate programs and research, school budgets, and the integration of international faculty into the schools.

In terms of international recruitment, KU leadership interviewed cited difficulties in competing with other developed economies in terms of salary and package. Budgetary and government policy restrictions also prevent the University from offering competitive packages to particularly talented faculty or globally recognized scholars. There have been some increases to flexibility, but financial recruitment incentives tend to be limited to bonuses or other fringe benefits. Thus, the University targets academics at the beginning or end of their careers, given the difficulties in attracting those in the prime of their careers. Integration in the Japanese working culture and the inability to participate in administrative activities (i.e. committees, exam proctoring, etc.) due to language barriers were also cited as barriers to recruitment.

5.3.8 International opportunities for students

KU reported sending nearly 2,959 students abroad in the 2016 academic year. At the same time, the 2016 mid-term plan set the target of sending 1,600 students abroad annually on short, medium or long-term programs. The *2x2020* strategic plan indicated the number of students participating in short, medium or long-term programs in 2013 was 779. That nearly half of 2,959 reported figure are doctoral students suggests that the figure includes students who went overseas fieldwork or conference participation with university support. In the 2016 academic year, 584 KU undergraduate students were reported as going abroad in some form. If that number was evenly distributed amongst first through fourth year students (which is unlikely), approximately 17% of undergraduates would go abroad at least once within their four years.

Stated rationales for increasing study abroad participation, in addition to government incentive initiatives, include preparing more globally savvy graduates and facilitating intercultural exchange, which are key goals seen in KU's vision statements. The president has also cited the importance gaining international exposure, while acknowledging some of the barriers which exist:

> I believe that it is extremely important to offer our students opportunities to gain genuine international exposure during their time at Kyoto University. I'd like young people to take every advantage of such opportunities, and to develop their global potential by gaining first-hand knowledge of research conditions overseas…. As things currently stand, however, there remain a variety of institutional barriers when trying to collaborate outside the boundaries of graduate schools. In this sense, I think it would be better if we could become more flexible in future.[17]

To help facilitate exchange, KU maintains nearly 300 exchange agreements at the university and faculty levels. The University has also published a 40-page document providing students

[17] http://www.jgp.kyoto-u.ac.jp/en/interview/interview001/

guidance and a wealth of information on study abroad options and supports. Although semester and year-long exchanges are available, most students opt for shorter summer, winter or spring programs (focusing on English language, intercultural exchange, job training, project planning, leadership development, or community service) or overseas internships.

The university-wide John Mung Program (JMP), one of KU's largest study abroad programs, started in 2012, provides funding for study and research at some of the world's top universities (i.e. Oxford, Cambridge, Harvard). Its stated objective is to "encourage students to immerse themselves in different academic cultures and foster a generation of highly motivated and globally oriented human resources". JMP's Special Study Abroad Program appoints a small number of mostly graduate students to study and research in top-level universities, while the Short-Term Study Abroad Program provides language and culture oriented summer/spring programs at partner universities mainly in Europe and East Asia. Other university-wide international programs have in recent years increased considerably under various government initiatives (i.e. G30, TGUP, etc.), and are becoming more institutionalized. Individual schools also offer their own programs.

Most interviewees acknowledged the low motivation among students to study abroad, noting barriers such as the job-hunting season and the desire to stay close to and build relationships with their professors. Thus, short-term programs are seen as the one viable way to encourage international exposure.

> "So generally [students] are rather reluctant to go abroad and survive by themselves. So if we provide some opportunities for them to experience even the very short time, it can be helpful for them to go abroad in the future. So we started many short term programs." – Dean 2

5.3.9 Internationalization of the curriculum

In terms of IoC, developing the English capacity of students and faculty and increasing course and program offerings in English were the primary concerns. University vision and strategy documents emphasized education as a foundational responsibility of the University, and these documents set goals related to fostering broad, global and cosmopolitan outlooks, developing comprehensive education, strengthening intercultural competencies and perspectives, and cultivating *gurobaru jinzai* with strong international skills. However, these concepts generally have not been operationalized into concrete teaching, learning and assessment outcomes.

A number of individual programs do focus on global or intercultural themes and actively incorporate global and international perspectives into their curricula, such as Cultural Coexistence, Global Area Studies, and Global Environmental Studies. However, reach of these programs is not extended to the entire student body. ILAS, which has responsibility for providing undergraduate general education courses, provides over 300 courses in English as a way engender exposure to wider numbers of undergraduate students. There was an expressed hope that providing domestic students with the opportunity to take more courses in English would also provide more opportunities for them to interact with non-Japanese faculty and classmates, and thus gain more international perspectives.

With relation to faculty development (FD), the 2016 mid-term plan sets targets to increase the overall rate of participation in FD programs, but there are few programs aimed specifically at helping faculty to purposefully incorporate international perspectives into their curricula and assessment. The International Education Administration (IEA) room is listed as a resource to help faculty with international education, but services offered relate primarily to accepting and advising international students, sending domestic students abroad, or providing language support. Similarly, the ‘Mutual Faculty Development 2017’ brochure lists several faculty development symposia, consortia and seminars, but these did not include IoC-related themes, other than the use of English. The Center for the Promotion of Excellence in Higher Education also provides a wealth of online resources (in both English and Japanese) on class, curriculum and assessment design, but does not offer guidance or advice related to internationalizing (as defined by the literature) these elements, beyond helping faculty to offer courses in English.

International benchmarking related to pedagogy, course design and assessment was not reported to be common among faculty. Although the level of research conducted at KU requires faculty to remain connected to and abreast of international research and trends in their fields, these connections did not extent to educational practices and perspectives from outside of Japan. As one interviewee commented,

> “Accomplished researchers on this campus have their own personal disciplinary relations with universities and researchers outside of Japan...but as researchers, not educators. They don’t even know of their closest international colleagues how they teach or what they teach.” – Director 3

The promotion of the use of English for instruction was the major concern. When asked about measures to foster global competencies and international perspective taking in students, all interviewees focused on increasing the use of English. English was seen as the principle means of facilitating interactions with foreign ideas and perspectives, and the University has implemented several measures to raise both English competency and usage. For example, ILAS has a target to offer 30% of the undergraduate general education subjects in English. KU also offers a number of full EMI programs (all but one at the graduate level). Graduate EMI programs were reported as easier to deliver given the fewer course requirements, and the

English proficiency among graduate students being higher. However, regarding the growth of EMI offerings:

> "But only one project is growing. Not others at all. That means not many faculty members are enthusiastic to teach courses in English. That is a big problem." - Leadership

All interviewees cited the challenges associated with convincing faculty to teach in English. One interviewee commented that it was "impossible" to ask someone who has been teaching the same course for 20 years in Japanese to start teaching it in English. Younger faculty were seen as somewhat more willing and able.

> "As a headquarters we want to increase the number of degree programs conducted in English...but the difficulty is that the education is done at the faculty level. So the faculty cannot replace [existing courses] so soon. So it takes time. If we force them to change it drastically, for sure the quality of the education courses themselves is going to decrease. So we don't want to do that. So it's a dilemma that we have. But at the graduate level it's easier, because many parts of the education are already done in English." – Director 1

Several interviewees noted that domestic students, especially at the undergraduate level, were not sufficiently proficient to take advantage of courses taught in English, which raised questions regarding the level of investment the University should make in such courses. One proposed solution is to offer different content-focused classes targeting different levels of proficiency. KU also is increasing supports for students to prepare for English proficiency exams and raise their overall proficiency.

> "We have some sustaining capacity in welcoming even more international students. The real issue is we also want the Japanese university students to start taking those English taught gen ed courses in many areas, but they are avoiding of course. If there is a similar course taught in Japanese, they tend to go that way, because it's easier of course. So that's a challenge." – Director 3

Others have more confidence in the ability of the Japanese students, but note the lack of opportunity outside of the classroom.

> "Undergraduate students who join Kyoto University, we are sure that their English ability is not so bad, but for most students they don't have the chance to speak English on campus except in English class. It's something strange…Most probably the students who want to do it, they can find a lot of chance to do it. But most students are not interested, and they don't do it."– Director 2

5.3.10 Activities abroad

As of 2017, KU has two overseas branch offices (SEA and Europe) and maintains nearly 60 overseas research offices and facilities. Nearly all are 'field stations' maintained by individual schools, centers or institutes. Some of these sites date back quite some time, such as the Center for Southeast Asian Studies liaison office in Bangkok, Thailand, which was established in 1963. However, the majority of these offices (85%) were established post-2000.

Figure 19: Map of KU offices and research centers abroad (Source: KU website)

Overseas offices in Heidelberg, Germany and Bangkok, Thailand support international outreach activities, support KU researchers abroad, and develop activities that capitalize on the ‘distinctive qualities’ of each region. A third office in London closed in 2017, and there are plans for a North American Center in Washington, DC. KU also established a liaison office in San Diego, CA in 2017 to support research collaboration and dissemination, aid in recruitment, serve general outreach functions, and to help develop programs such as internships.

KU also maintains an active online presence through MOOCs and Open Courseware; an agenda which was advanced through TGUP funding. KU began using open courseware in 2005, and was one of the first in Asia to do so. Staff were eager to build the KU’s online profile when TGUP was introduced, and MOOCs were included as a core component of KU’s application. After receiving funding for the initiative, staff convinced the President to deliver one of KU’s first MOOCs, which proved instrumental gaining wider faculty involvement. Last year, KU and MEXT jointly made MOOCs a part of the permanent university budget, with the goal of positioning KU as a model in ICT usage for other universities in Japan.

> "Many departments' faculty members were thinking something like a MOOC was really a luxurious optional thing. And maybe just an SGU kind of thing. 'You know, we're not really part of that.' But when they found out the president is actually doing it, it turned many heads around on campus. 'Wow, this is mainstream.' So it was...I would say that was the largest impact. From there, it was no problem promoting MOOCs or having more departments involved…It was very effective sending out this passionate message, how education is important and how using technology in education to extend global outreach is possible. It's better than just a one-page press release or sending out a memo to the faculty. He's exercising and showing. 'I'm doing this because I like this'. This kind of leadership, I think we need a lot more in Japanese universities." – Director 3

5.3.11 Reputation management

Over the decades KU has built an international reputation as one of Asia's most research intensive universities. The University's long history of producing world-renowned scholars and Nobel laureates has served as the foundation for its international reputation. This high research output, as well as strong industry connections within Japan, have contributed to the University's consistent ranking among the highest in Asia and the world.

In addition to maintaining a high research profile, over the past decade KU has been steadily increasing international collaborations, presence at international events, and participation in high profile networks and associations. The University is also adopting more sophisticated approaches to marketing and brand management. They have made significant investment into website development (including a complete overhaul in 2014) and producing content in English, and are becoming increasingly consistent in their messaging.

Central to KU's international branding, in addition to the quality of education and research, is the University's contribution to global society and issues. While the University does not actively position itself as a global institution, per say, it does promote itself as a contributing member of global society, actively involved in addressing global issues, and "striv[ing] to contribute to the well-being of the world"[18]. In this way, KU develops its international brand through the themes of research excellence and social contribution.

[18] KU Introductory Brochure 2018

5.4 Osaka University

5.4.1 Introduction

Osaka Imperial University was established in 1931 after the Osaka Medical College added a school of science. Two years later a school of engineering was added, thus OU's history of strength in these fields. In 1949, Osaka Imperial University was converted to Osaka University and added schools of letters, law and economics. In 2007, OU acquired the Osaka University of Foreign Studies, becoming one of Japan's largest national universities. Today OU has 11 schools and 16 graduate schools and 26 research institutes and centers dispersed across 3 campuses in the outskirts of Osaka prefecture. Nearly 35% of OU's 23,000 students are at the graduate levels.

OU is recognized throughout the region for its strengths in life sciences and engineering, and is considered among the most prestigious universities in Japan. In 2018, Reuters ranked OU among the top 25 world's most innovative universities that do "the most to advance science, invent new technologies and power new markets and industries"[19]. OU's standing in the three major global rankings has varied over the past decade, reaching as high as #50 by QS in 2012, and as low as #250-300 by THE in 2017. Although OU has remained within the top 100 universities in the QS and research-focused AWRU for most of the past decade, it has seen a general downward trend across all three ranking bodies.

5.4.2 Leadership structure and make up

Along other national universities, OU was incorporated in 2004. The University is headed by a president and eight executive vice-presidents. For most of its history, OU presidents have

[19] https://www.reuters.com/article/us-amers-reuters-ranking-innovative-univ/reuters-top-100-the-worlds-most-innovative-universities-2018-idUSKCN1ML0AZ

served six-year terms, but between 2003 and 2015 the term was shortened to four years. The current president, Shojiro Nishio, assumed the post in 2015 for a six-year term. Having received his degrees from Kyoto University, President Nishio had been with OU for 30 years at the time of writing.

OU’s governance and administration structure is comprised of several administrative and advisory councils, and the University operates under a shared governance model which gives considerable direction setting authority to internal boards and committees. The eight executive vice-presidents oversee functions related to education, research, facilities, finance, personnel, gender equality, fundraising, and global engagement. All are Japanese (and all but one male), and though the team brings considerable experience from around Japan, all earned their degrees from Japanese universities and most have long affiliations with OU. Similarly, the 14 Vice Presidents, Executive Advisors to the President and Special Advisors to the President, the 15-member president selection committee, and the 52 deans and directors of schools, centers and institutes are all Japanese nationals. Although there are clear historical factors contributing to the limited presence of non-Japanese among university leadership, and while most members would have considerable international recognition and linkages, the leadership make-up does suggest that there would not be significant *first-hand* working knowledge of university governance and management structures and practices in other contexts, and that opportunities for foreign faculty to assume leadership positions within the University are limited.

5.4.3 International vision and strategy

OU communicates a number of guiding principles through various published charters, missions, codes of conducts, and educational philosophies. OU's motto, 'live locally, grow globally', introduced in the 1980s, serves as an encouraging reminder to the university community to build both local and global connections. According to its charter, in place since 2003, OU operates under 11 guiding principles, including conducting 'world-class' and fundamental research, delivering advanced and practical education, contributing to society and human rights, promoting dialogue and connectivity, continuous reform, and protecting autonomy. OU's mission is to provide "scholarship and training in order to become able to ascertain the essence of things". Additionally , the University's stated educational objectives aim to "nurture leaders of a knowledge-based society" by focusing on broad knowledge, a high degree of professionalism, international mindedness, design prowess, and a comprehensive worldview[20]. More recently, introduced with the 2014 *World Tekijuku Initiative*, OU has set the goal of becoming a "World-leading Innovative University".

These various visions and principles, though wide ranging, do demonstrate through such phrases as 'growing globally', 'world-class' and 'world leading' the conception of the University as a global entity. In addition, the educational objectives relate directly to OU's role in contributing to a 'knowledge-based society'. This theme of social contribution is also consistent throughout the University's documents. Importantly, international mindedness and a comprehensive worldview are positioned as key elements of an education that contributes to such a knowledge society. Though these principles do provide an overarching framework

[20] http://www.osaka-u.ac.jp/en/guide/announcement/objective

for the direction of the university, there is no single easily articulated vision statement which can serve as a guiding reference for all university activities.

Between 2014 and 2016, OU introduced several strategies, visions and initiatives related to internationalization, which were still in place by the end of 2017. As with all national universities, MEXT requires OU to submit mid-term plans every six years (2004-2009, 2010-2015, 2016-2021). As OU does not publish these plans in English, only the current 2016-2021 plan was translated for review. It is also worth noting, that OU had plans to revise its 2005 international strategy in 2013[21], but no plan was published. The work may have been postponed due to the announcement of MEXT's 2014 TGUP.

Thus, the earliest introduced international strategy still in place at the time of this study was the *World Tekijuku Initiative* launched in 2014 as part of MEXT's TGUP. *World Tekijuku* aims for OU to become a 'world-leading innovative university,' by expanding its contribution 'a flourishing and peaceful global society, born out of harmonious diversity' through fostering a 'spirit of free and open exchange', and cultivating leaders, researchers, technicians, and solutions to complex global problems. In doing so, the initiative aims to place OU among the world's top 30 universities by 2021 and the top 10 by 2031. The documentation related to this initiative demonstrates that included in OU's conception of 'world-leadership' is the element of contribution to global society and addressing global issues. As expressed by one member of the executive leadership team:

> "I think the role of universities should be larger than before. So in that sense, Osaka University is now working on the promotion of academic activities, of course. Research and education. But we are now trying to relate our outcomes to the solutions

[21] http://www.osaka-u.ac.jp/en/guide/president/2011_2013/edu

> to the social problems…The activity itself is academic, but we expect the outcome to relate to some solution to the problem.” - Leadership

World Tekijuku sought, in addition to increasing international activities, to enhance and strengthen university-wide planning and implementation of these activities. At the activity level, over a ten-year period, *World Tekijuku* called for numerical increases in international joint authorship, international students, Japanese students studying abroad, and joint and double degree programs. It also introduced a number of new initiatives to facilitate these increases, including a Multilingual Expert Program, university-wide AO admissions, a new four-term academic calendar, an ASEAN campus, new residences, and an ‘OU Global Campus’. The initiative called for the establishment of several new administrative and academic units to help manage these initiatives, including a Global Engagement Board, a Global Admissions Office, a Global Initiative Center, an Institute for Academic Initiatives, and a *World Tekijuku* Graduate School. The below graphics attempt to illustrate the relationships between the elements of the initiative and the university’s internationalization, reform and educational programs, showing that the developers of the plan clearly associated internationalization with insitutional reform.

Figure 21: Model of the 2014 *World Tekijuku Initiative* (Source: OU website)

During the process of developing *World Tekijuku* for the MEXT TGUP funding, in the name of efficiency and stronger managerial controls (which were themselves part of MEXT's rationales for the project), the administration of the time did not engage in as strong of a process of internal consensus building as had been customary for past initiatives at OU. As a result, while the University was awarded funding for the proposal and has made progress towards the objectives set forth in the initiative, it did not have strong buy-in or sense of ownership among internal constituents.

> "The things move forward in that direction. So it's not really ineffective or left alone or forgotten. It's just that it's a fairly mechanical process. A chunk of that is directed to this or that goal, and people are hired and given the responsibility to achieve this goal or that goal." – Senior administrator 1

As a result, the subsequent administration, which assumed post in 2015, while maintaining overall commitment to the strategic direction set forth in the initiative, embarked on a process of re-engaging with internal stakeholders regarding key issues in the plan. From President Nishio's 2016 new year's address:

> …we're steadily proceeding with the Top Global University Project Initiative in order to make the system for university globalization a solid platform. In particular, with regret that campus-wide consensus was not reached about application procedures, we will once again hold campus-wide discussions about the school calendar, measures for increasing the number of international students, and innovation of English education[22].

At the same time that OU was awarded TGUP funding for the *World Tekijuku Initiative*, the acting VP for international affairs began work on a new ten-year international strategy, released in early 2015. That a new plan was developed at this point indicates that the leadership at the time did not view the *World Tekijuku Initiative* as a whole-university internationalization strategy. The language in the strategy's introduction and summary draws heavily from OU's charters and guiding principles, and signals an increasing recognition of the role international reputation plays for universities aiming at 'world-class' status: "We plan to seize every opportunity to increase the university's presence in the international

[22] https://www.osaka-u.ac.jp/en/news/topics/2016/01/20160104_01

community so that Osaka University's international reputation will reflect its concern for world-class quality in research and education and its dedication to contribute to society, both locally and globally". The 2015 strategy included the following four goals and objectives with set numerical targets:

1. Train internationally minded human resources
    a. Increase international undergraduates and graduates, overseas research personnel and academic staff recruitment, participation in study abroad, and joint labs.
2. Strengthen informational outreach and enhance OU's global presence
    a. Strengthen and expand international public relations, international cooperation, the international alumni association, and collection and dissemination of research.
3. Participate in and contribute to the international community through partnerships and collaboration
    a. Cooperation and collaboration with international institutions, developing nations and international industry.
4. Improve the governance of international strategy implementation
    a. Establish the Institute for Global Initiatives as the international relations office, expand overseas offices, improve housing facilities, encourage English on campus, and improve cultural and linguistic competency of administrative staff.

The following year, 2016, OU separately submitted the next six-year mid-term cycle (2016-2021) to MEXT and introduced the '*OU Vision 2021'*. The mid-term plan, in terms of internationalization, aligns to the existing directions set in *World Tekijuku* and the 2015 strategy, but contains fewer specific numeric targets than the previous mid-term plan. Diversity and creating a more opening and welcoming environment were key themes running throughout the plan, and the University established objectives related to accepting more diverse students and seeking diversity in research and intellectual collaboration and co-creation. The plan also acknowledges OU's regional base and aims towards international standardization to better promote exchange, strengthen public relations and research dissemination, and make contributions to the world.

To coincide with the new mid-term cycle, in 2016 OU also introduced *Vision 2021*, which established five broad principles of 'openness' to aid the University in a process of 'self-reform' and to develop "a global campus in which diverse, outstanding people and wisdom intersect". 'Openness' is expressed as "individuals and organizations sharing a common foundation, competing and building together, overcoming internal and external obstacles, and collaborating to create new knowledge and lasting impact for society"[23]. That *Vision 2021* is not an international strategy in itself, but centers so strongly on the concept of openness, exchange and global contribution helps to demonstrate the importance of international engagement in the leadership's vision. *Vision 2021* does not introduce any new numerical targets, but consists of 5 pillars with a number of focus areas. The vision, consistent with previous plans and initiatives, set objectives related to increasing 'diversity', strengthening PR and international compatibility, producing 'world-class' research, and social contribution. Pillars of the vision:

- **Open Education** – Develop critical thinking, transcultural communicability, and design prowess. Responsive undergraduate education, motivating graduate education, internationally compatible education, admissions reform, and diverse learning

[23] https://www.osaka-u.ac.jp/en/oumode/OU_vision_2018/open2021

- **Open Research** - Contribute to the resolution of worldwide issues and the growth of society by evolving into a world-leading comprehensive research university. International foundations for research, address misconduct, develop world-class research centers, ‘interdisciplinarity’ and ‘datability’, researcher training, and joint-use facilities
- **Open Innovation** - “Industry-university co-creation” to create new social values, develop new technologies and services, and extend collaboration. Promote ‘OU-style’ comprehensive industry-university co-creation, research commercialization, leverage local medical networks, and investment projects.
- **Open Community** – “Live locally, grow globally”, and create opportunities for a diverse range of knowledge and people to meet, collaborate, and develop new values. Community-university co-creation, global networks, sustainable campus, and new PR initiatives.
- **Open Governance** – Encourage self-reform of internal stakeholders, and promote effective management, planning, consensus building and transparency. Transparency, balancing leadership and consensus, gender equality, diversity sensitivity, managerial capacity, and safe, comfortable and sustainable education and research environment.

Individual schools and colleges, as with most national universities, have a high degree of autonomy and direction setting authority. Schools and colleges, which are headed by rotating elected deans and several boards with various areas of responsibility, maintain discrete missions (most were reviewed and revised 2013-2014) and visions. The broad goals and principles embedded in these missions indicate movement towards greater international engagement. Often these goals contain the same language of ‘world-class’, global contribution and increasing diversity. However, interviews revealed that it is not common for the schools and colleges to develop specific strategies related to internationalization, nor did they actively engage in a process of mapping their activities against University-level strategies. OU maintains an evaluation system to monitor the performance of the schools and colleges, and annually the schools submit a report and receive a ‘grade’ for their performance. However, interviewees at the school level where not clear on how their data were weighed in the evaluation criteria, nor whether international activities factored into the evaluations. Additionally, it is common for units and faculties within the University to undertake MEXT funded projects, which may have their own specific targets, timelines and reporting requirements. As one interviewee expressed it,

> “We don’t care about the policy of Osaka University Headquarters. We independently do many types of activities.” – Dean 1

5.4.4 Management of international initiatives

OU’s SIO is the Executive Vice President of Global Engagement and Student Support. Similar to the other SIOs in this study, the current VP, who assumed the post in August 2017, had spent most of his career with the University. Prior, he headed international affairs within OU’s Graduate School of Engineering Science. Notably, OU’s previous two SIOs served relatively short terms (two years and one year respectively), and thus were not able to oversee completion of initiatives began under their tenures. As a result, the VP’s office current priority is to oversee completion of projects initiated by the predecessors.

Management of international initiatives and functions at OU is spread across a number of offices and centers. Individual schools and colleges also manage many of their own international affairs. Central structures for internalization have undergone several changes in recent years. The previous administration attempted to centralize existing board/committee led oversight by bringing strategy and planning activities under the Institute for Academic Initiatives created as part of the *World Tekijuku Initiative*. However, under the current administration, the internationalization related functions placed under the Institute have been decentralized and distributed amongst various Executive VP offices. The former board for international affairs (which had been disbanded under the previous administration) was also reinstated. At the end of 2017, the faculty-led Center for Global Initiatives (CGI), Center for International Education and Exchange (CIEE), and Center for Japanese Language and Culture (CJLC) have primary responsibility for many of OU's internationalization related strategies and activities, with the International Affairs Department (*kokusaibu*) serving an administrative support function. The Executive VP of Education and Admissions also oversees projects and offices related to G30 and TGUP and the Center for the Study of Higher Education and Global Admissions (CHEGA).

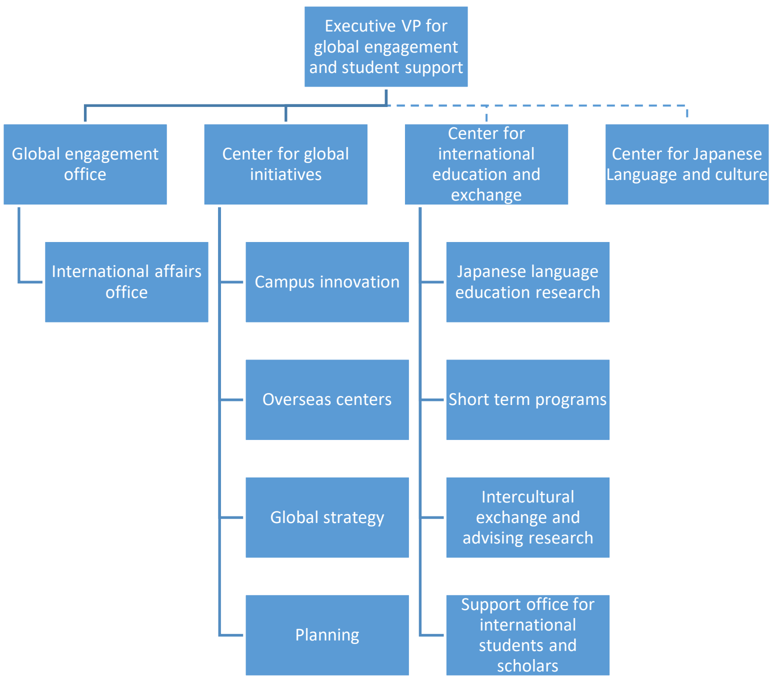

Figure 22: Organizational chart for centralized internationalization units under the VP for global engagement (Source: Author)

CGI, established in 2016 and reorganized in 2017, combines the functions of the prior Global Collaboration Center and the Office for the Promotion of International Strategy, with an expanded mission and stronger focus on engagement. Specifically, CGI has mandates to:

1) Expand and improve overseas centers, international agreements, and promote researcher and student exchange.
2) Strengthen collaboration with ‘Global Knowledge Partners’ to mutually increase competitive strength and produce positive results in specific exchange programs.
3) Establish an overseas campus.

To achieve these goals, CGI has four divisions:

- A Planning Unit responsible for monitoring international trends, managing international collaborations and supporting executive leadership in international matters.
- A Global Strategy Unit responsible for international strategy, international PR, monitoring international agreements, and collaborating with Global Knowledge Partners.
- An Overseas Centres Unit responsible for overseas research collaboration, supporting educational and exchange activities abroad, international recruitment, and promoting collaborations with overseas organizations.
- A Campus Innovation Unit responsible for aid projects with JICA, overseas campuses, international industry-academic-government collaboration, risk management, globalization-related education and research, and overseas fieldwork and internships.

The Center for International Education and Exchange (CIEE), established in 2010, is tasked with caring for incoming and outgoing exchange students. CIEE supports international degree-seeking and exchange students through language training and support services, while advising domestic students on study abroad opportunities. While technically under the VP for Global Engagement’s office, as a faculty-led center, it operates autonomously. CIEE is organized into four teams: Japanese Language Educational Research supporting international students; Short-term Programs for incoming students; Intercultural Exchange and Advising Research supporting outbound students; and the Support Office for International Students and Scholars. In addition to CIEE, the Center for Japanese Language and Culture (CJLC) also provides Japanese language programs for international students, as a legacy program from when the Osaka University of Foreign Studies provided language training for international degree-seeking students on MEXT scholarships.

While not a central administrative unit, but a consortium of OU schools, the Center for the Advancement of Research and Education Exchange Networks in Asia (CAREN), established with MEXT funding in 2014, oversees OU’s EMI graduate programs. CAREN was created to help existing and future EMI programs pool knowledge and resources and coordinate outreach efforts. The administrative office sits within the School of Engineering, but supports EMI graduate programs for all participating schools. CAREN also promotes and supports the development of double degree programs at OU. Initially, CAREN targeted establishing 15 double degree programs by 2019, but by the start of 2018 they had reached 21. In addition to EMI and double degree graduate programs, CAREN aims to:

- Learn about curricula and education environments abroad
- Establish common entrance examination systems for international programs
- Enhance living conditions and support networks for international students

- Develop international opportunities for Japanese students
- Support development of e-learning and distance learning resources
- Plan and support relevant international workshops and symposia
- Establish an alumni association

Each school also has its own faculty committee for international affairs as well as an administrative office to support international students and activities. The faculty committees for international affairs are part of the existing shared governance structures typical among Japanese national universities, where faculty members share oversight, steering and administrative duties. As the members for these committees are rotating, motivations for initiating projects or committing to targets can be low. There is no standard format for the international offices, and the individual schools and colleges organize and staff them according to their own needs. Such offices may encourage interaction between local and international students, provide language and other services for international students, administer international partnerships and faculty exchange, manage short-term programs, and provide other supports and functions. While coordination between the school level and university-level international offices is limited, with overlapping duties between them, the school-level offices often have a stronger focus on supporting students academically.

5.4.5 Partnerships

Partnerships are an important component of OU's internationalization strategies. By the end of 2017, OU had more than 120 university-wide academic agreements (103 of which were or included student exchange agreements), and nearly 600 agreements at the faculty level. Student exchange partners were slightly more concentrated in Asia than the overall partners profile. Germany, the US and China were the three countries with the highest numbers of partners. University-level partners are primarily prestigious institutions throughout Asia and

Continental Europe, and upper-tier institutions in the UK and US. There are few partners from South or Central Asia, Africa, the Middle East or Latin America.

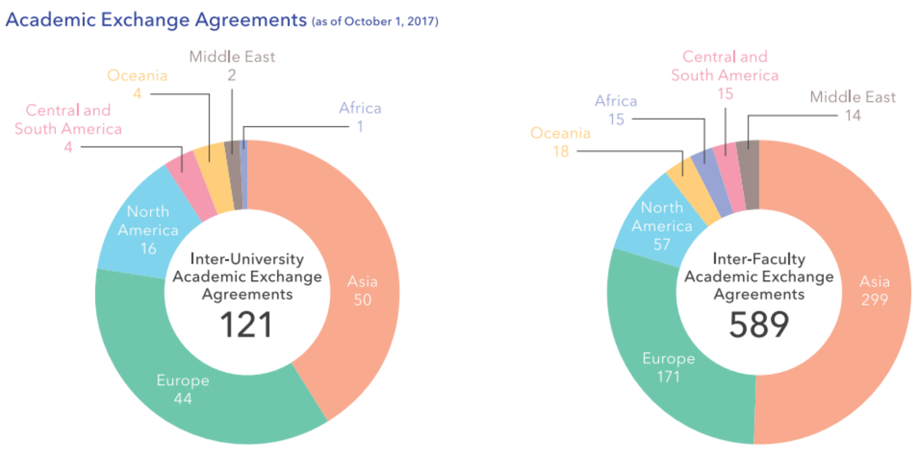

Figure 23: Geographic distribution of university level and faculty level academic exchange agreements (Source: Portrait of the University: OU Prospectus 2018, p. 5)

Documents and interviews did not reveal a strong self-development rationale for working with partners, in contrast to many other universities in the region. While OU actively pursued partnerships and publicized its level of international collaboration as an indicator of its global connectedness and social contribution, the University does not actively leverage the prestige of its partners as a means to elevate its own reputation. Nor did it approach partnerships with the express intention of leveraging the partners' expertise to develop its own offerings for students. Rather, partnerships were viewed primarily as a means to promote exchange and collaborate on research to address global issues. There was a strong overarching social contribution rationale for international collaboration communicated by both university documents and interviewees.

In line with this rationale of contributing to global-scale issues, research collaboration, often in the form of international joint labs, are a core component of the University's approach to partnerships. University strategies set specific targets related to the increases in the numbers of joint labs, and by the end of 2017, OU had nearly 45 such joint labs operating. Notably, these joint initiatives are not permanent establishments but limited term (two to seven year) ventures set up to undertake specific research projects. The overwhelming majority of partner institutions for these joint labs were prestigious institutions in Europe and North America, suggesting that in terms of research collaboration, OU does seek out partners with established reputations for excellence.

The rationales for, and thus the profile of partners, for educational collaboration are somewhat different. Double degree programs can be viewed as one of the deepest forms of academic collaboration, and by the end of 2017, OU offered 28 double degree graduate programs. Of these 28, one was with a partner in Australia, one in Germany and one in the Netherlands. The remaining 25 were in partnership with Asian (primarily ASEAN) universities. This profile suggests that rather as a means of enhancing its own graduate programs, OU views these joint programs as a means to develop stronger relationships with universities in the region and recruit graduate students from the region.

Most interviewees mentioned a desire to strengthen connections within Asia, and ASEAN in particular. OU's Thailand office and 'ASEAN campus' initiative are further evidence of this regional focus. Activity in ASEAN is seen in terms of a long-term strategy of investing in the development of the region to build a strong foundation for future collaboration. In relation to developing partnerships in ASEAN, one interviewee commented:

> "I think investment for the future is very very important." – Dean 1

Another interviewee relayed the story of a program from the 1970s which sponsored students from SEA to earn degrees at OU, and now that these alumni are in leadership positions in universities throughout the region, OU was able to capitalize on the existing ties to develop institutional linkages. This highlights the potential of international exchange to result in long-term outcomes which may take several decades to manifest.

Although the University set targets for increasing the number of partnerships, interviewees expressed a desire to go beyond traditional models of research collaboration and pursue deeper forms of collaboration.

> "The current dean of course understands the importance of this kind of partnership, but our dean actually now wants to have *'real'* partnerships." – Professor 1

'Global Knowledge Partners' are one means by which the University pursues these 'deeper' partnerships. University collateral states the desire to work with such knowledge partners to form interdisciplinary research groups to contribute to global issues such as the UN's SDGs. One example, and perhaps OU's most multi-faceted international engagement, is the relationship with the University of California (UC). In 2014, the UC Education Abroad Program established an office on the OU campus to strengthen collaboration and exchange between UC's ten campuses and OU. Activities include academic, staff and student exchange programs, EMI classes conducted by UC faculty at OU, data collection and sharing, and collaborative events. OU also actively participates in several international networks and associations as part of its 'Global Knowledge Partners' framework. Of these, two have an Asia-Pacific focus, two are bi-lateral networks with the UK and Germany, and one is a global network. Networks are communicated as an important means for the University to promote its leadership in particular fields in terms of addressing pressing global issues.

In regard to the management of university-wide agreements, for most MOUs requests for an agreement must come from at least two faculties, preferably in different disciplines. On rare occasions, senior leadership may pursue particular partnerships, but it is not the norm. Once a request is made CGI looks for evidence of past collaboration, facilitated by a university-wide database of faculty-level agreements. If warranted, proposals are reviewed and voted upon by the international strategy board. Prior to 2017, there did not appear to be an explicit strategic institutional approach to partnership development, other to increase the number. However, several MEXT initiatives introduced since 2011 have encouraged partnership development in certain geographic areas, and OU initiatives, such as CAREN, have received funding for targeting particular locations. As of 2017, CGI's Global Strategy Unit is now responsible fostering more strategic relationships.

5.4.6 International students

OU reports hosting 2,480 international students in 2017 (this includes degree seekers and those on short-term courses), an increase of 209 over the previous year. This figure includes 365 undergraduate students, 771 master's students, 732 doctoral students, and 612 research students not formally enrolled in a degree program. International students represent approximately 2% of total undergraduate, 16% of master and 23% of doctoral students. 81% of international students are from Asia, nearly 10% from European countries, and the rest of the world comprises the remaining 9%. International students are concentrated in science and technology related departments, particularly those offering EMI programs, although particular non-science graduate schools, such as the School of International Public Policy (OSIPP) also have significant international student representation.

World Tekijuku set a target of attracting 4,000 international students annually by 2023, while the 2015 international strategy targeted increasing international undergraduates and graduates to 10% and 25% of the respective student bodies by 2020. Proactive recruitment of international students, through such means as EMI degree programs, began in 2009 with the

G30, and OU has since invested in expanding EMI programs (at the graduate level), increasing outreach and recruitment efforts and creating more flexible entry pathways. Fall entry, conversion to a quarter system calendar and development of short-term non-degree programs have also helped to accommodate international students. Short-term programs, primarily aimed at undergraduates, include the OU Short-Term Student Exchange Program (OUSSEP) with partner universities, the research focused FrontierLab@OsakaU, several Japanese language immersion programs, and a program to prepare Korean students for science or engineering faculties. The FrontierLab@OsakaU program has been particularly successful in attracting students from countries where undergraduates do not customarily participate in research.

Although there is an observable trend towards more sophisticated recruitment efforts, and as of 2017 several central administrative units have begun coordinating and enhancing efforts, OU's approach to marketing towards prospective students can be considered *laissez-faire.* In the sentiments of one interviewee who formerly served in a recruitment capacity:

> "Frankly speaking, for those students wanting to study abroad in Japan, say Thai students for example, Osaka University, Kyoto University, Tokyo University, Tohoku University, they are the same. They look into our websites and they pick one of the famous universities in Japan." – Professor 2

There are examples of good practice in student marketing and recruitment collateral, but these are embedded in an overall environment which does not facilitate the conversion of prospective international applicants. For example, while the University invested in the development of an attractive international admissions microsite[24], the English version of the

[24] http://www.osaka-u.ac.jp/sp/whyou/

University's admission page[25] (which is itself a list of 71 links) does not link to the microsite. This suggests that although some units have begun developing material to help the University reach its recruitment targets these remain ad-hoc, and as an institution OU has not yet embraced the ideals of competition within the international student market.

> "Osaka University, we rank pretty high in Japan. So we attract quite a large number of the domestic students still. So in terms of internationalization, we don't really need to increase the number of international students, because we attract enough domestic students already. I have to say that most of the professors don't feel that they really need to make a change right now. Maybe in the near future, but not right now." – Senior Administrator 2

The challenge of reforming university-wide recruitment and admissions practices is compounded by the fact that both undergraduate and graduate level admissions policies and decisions are made at the school rather than the university level. As a result, CHEGA, which is tasked with university-wide admissions reform, must convince each individual school and college to consider admissions reforms. This has proved to be an incremental process resulting in uneven reforms across the university. Nonetheless, OU is proceeding with reducing requirements for international undergraduate applicants to sit Japanese national exams or travel to Japan for interviews. However, in trying to establish more flexible entry pathways for international applicants depending on their intended program of study, one interviewee noted an array of options that may be difficult to navigate for potential applicants without individualized attention and support:

[25] https://www.osaka-u.ac.jp/en/admissions

> “Each college has, I would say, including graduate levels, maybe 10 college admissions pathways. So it goes crazy. For example, English-medium programs, local student AO, recommendation admissions, regular admissions for international students, Japanese Programs, MEXT student pathways, returnees…”– Senior administrator 2

The University maintains a number of layers of support for international students once they enter. However, the provision of supports to help students navigate complex systems and procedures (often available only in Japanese), rather than reform of those systems, does call into question its long-term commitment to creating an open environment as promoted in *Vision 2021*. Nonetheless, CIEE and the CJLC both offer a variety of Japanese language programs targeting different groups of international students, with some schools and colleges offering additional language supports. Schools also provide international graduate students with tutors to help them adapt to the new linguistic and academic environment. There are both university and school level supports to assist with arrival procedures, housing and job hunting. OU also has plans to open a 2,600 unit ‘Global Village’ mixed housing facility to accommodate larger numbers of international students and faculty.

Figure 24: Photos of CIEE's information board in front of the Information Room for International Students

OU strategies reference creating an environment promoting the interaction, collaboration and mutual growth of international and local students. However, facilitating interaction remains a challenge. Courses and programs are often, by necessity, segregated by language, thus limiting interaction within the classroom. Graduate programs which require lab work may have higher levels of interaction, but these only impact a portion of students, and less so for those in EMI programs. Additionally, the calendar for joining clubs and circles is strict and the process difficult to navigate for newly arrived international students, and apart for some common spaces set-up to encourage interaction, such as the Global Commons section of the library, there are few university-wide activities or opportunities to encourage interaction. Individual schools, though, do offer a variety of welcome parties, cafes, study groups and buddy programs to facilitate interaction.

Figure 25: Photo taken at the Graduate School of Human Sciences 2017 new international student welcome tea party (Source: Graduate school of Human Sciences Office of International Exchange Bulliten, 2018 edition).

5.4.7 International faculty and staff

As of 2017, 10.5% of OU's 3095 total faculty staff were foreign[26]. Proportionately, foreign faculty are less represented at higher levels, and generally absent among university leadership. By way of example, in the Applied Physics department one of the 15 full professors is non-Japanese, while two of the eleven associate professors are. Of the 14 Japanese professors, all received their degrees from Japanese national universities, and half from OU. Similarly, in OSIPP, one of the 15 full professors is non-Japanese, while two of the four assistant professors are. However, half of the 14 Japanese professors held degrees from overseas universities. The difference in degree profiles between the two examples can be understood as a reflection of the differing nature in content of the two fields and OSIPP's requirement for faculty to teach courses in English, but it also signals the agency of individual schools in determining faculty profiles in accordance to their needs.

As with most universities, faculty recruitment and hiring is conducted at the school level, limiting the potential of central administration to introduce specific measures to increase the hiring of foreign academics. Thus, dissimilar to international students and partnerships, OU strategies do not set explicit target numbers for the recruitment of international faculty or Japanese academics with degrees from or work experience in overseas institutions. The 2015 internationalization strategy does, however, state that the "university ultimately aims to increase the percentage of international human resources to 15%", but does not set a discrete timeline. Rather, OU plans and strategies emphasize creating a campus environment more welcoming and supportive of diversity (expressed in terms of culture, language and gender). This translates into objectives related to the flexibility of salary policies and the campus linguistic climate. The *Vision 2021* plan also includes language related to encouraging a

[26] https://www.topuniversities.com/universities/osaka-university

cultural shift on campus to be more accepting of diversity. To help increase faculty and researcher diversity, without influencing hiring, OU also leverages programs and projects to increase exchange and connections with researchers abroad, such as inviting visiting professors and establishing joint labs (see section 5.4.5).

Interestingly, in relation to the role of OU's overseas centers in attracting talent, the rationales described for talent attraction (in both the English and Japanese versions) suggests a conception of foreign talent attraction not so much in terms of attracting talent from around the world to become a permanent part of the university, but rather as attracting diverse talents to collaborate with and further stimulate OU's 'own researchers'[27]. Another indicator that the University has not fully internalized the rationales of long-term integration of foreign faculty is the lack of Japanese language programs and supports for international faculty. Such programs could not only help to facilitate the integration of larger numbers of foreign faculty and lessen the burden for administrative staff who may be required to guide non-Japanese speakers through policies and procedures, but it could also facilitate larger numbers of international faculty delivering lectures in Japanese, thus widening the opportunities for students to engage with diverse perspectives and pedagogies.

5.4.8 International opportunities for students

Both *World Tekijuku* and the 2015 international strategy set the target of sending 8% of students overseas by 2020. In 2017, 1707 (7.3%) OU students (890 [5.8%] undergraduate and 817 [10.1%] graduate students) went overseas in some capacity. The 2017 figure is a 5% increase from 2016. Overall, 33% went to Asia, 31% to Europe, 20% to North America, and 16% to the rest of the world. The most popular destinations for undergraduates were

[27] https://www.osaka-u.ac.jp/en/international/action/branch.html

Australia, the US, China, and the UK. For graduates, the most common destinations were the US, China, Germany and Thailand. The differences in destinations, in consideration of OU's research partnerships, suggest that while undergraduate often go abroad for cultural and linguistic (primarily English) study tours, graduate international experiences are linked to research and field work.

Communicated rationales for increasing the number of students going abroad include developing "global viewpoints and ability to understand different cultures and speak with people of the world"[28], and so that students may "learn about the world's diversity and to prepare them for global participation"[29]. To facilitate and support students going abroad, OU has signed 103 exchange agreements with overseas universities, and CIEE holds an orientation for interested students at beginning of each year, a study abroad students network meeting, and seminars for how to manage health and other risks while abroad, as well as provides counseling and consultation services. Language tutoring programs focused on raising student TOEFL scores also exist. The University has also introduced several scholarships and financial aid programs. The Global Collaboration Center (GLOCOL) and the OU Sumino Isamu Foundation for Fostering Global Talent, for example, provide financial aid for going abroad.

However, despite such incentives and supports, interviewees noted that students remain reluctant to go abroad, and scholarship programs receive few applicants. One university-wide scholarship received only five applications. Job hunting and the academic calendar are cited as the biggest obstacles. Undergraduate course requirements, especially in the sciences and engineering faculties are also viewed as prohibitive. In an effort to address these barriers, OU

[28] http://www.osaka-u.ac.jp/en/guide/president/2011_2013/edu_research/view
[29] https://www.osaka-u.ac.jp/en/international/action/strategy

has developed several short-term programs, and introduced a four-term academic calendar in 2017 to increase flexibility in course planning.

Until recently, OU's approach to sending students abroad has been more focused on advising and providing information to interested students, rather than encouraging the larger student body to consider overseas experiences. As an example, there is a marked shift between the eight-page study abroad brochure published in 2017 to the 51-page comprehensive guidebook published in 2018. In addition to much greater depth, the 2018 guide takes an active tone of encouragement compared to the more passive tone of information provision observed in the 2017 document. The 2018 version also includes previous student experience as a way to actively promote exchange programs.

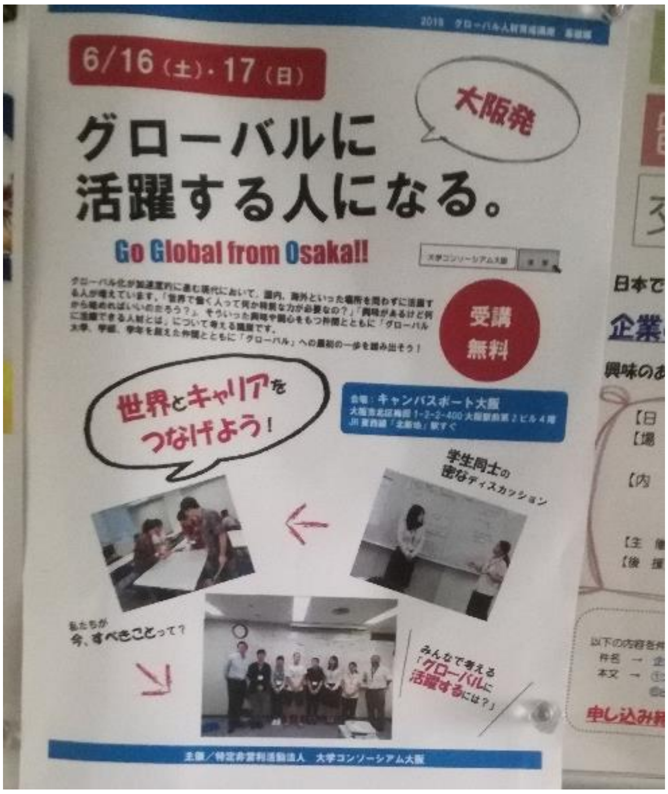

Figure 26: Flyer promoting a study abroad orientation

5.4.9 Internationalization of the curriculum

Communicated through its guiding principles, OU seeks to offer an education that broadens perspectives and viewpoints, nurtures globally-minded leaders, and develops transcultural communicability. Under the Open Education pillar of *Vision 2021*, fostering these traits are positioned as enabling the University to fulfill its mission of contribution to society by developing individuals capable of addressing global issues. However, at the time of writing, these broad goals had not been operationalized into specific university-wide learning outcomes, nor explicitly embedded in pedagogical and assessment practices. At the same time, low numbers of participation in overseas experiences, international faculty and international students, suggest that large portions of graduates will not have been directly exposed to different national or cultural perspectives unless these are purposefully embedded in course curriculum.

The Center for Education in Liberal Arts and Sciences (CELAS) is responsible for the design, development and implementation of general education and supports faculty development (FD). General education is delivered by faculty from the various schools, while CELAS develops and coordinated requirements. There is one general education course on 'international liberal arts' that aims to '*hone skills for the internationalization era*' through study of the origin of languages and theories of '*Japan in the world*'[30]. CIEE also offers an intercultural communication course to graduate students, but participation is low. The Multilingual Experts Program, introduced in 2015 as part of *World Tekijuku*, has five programs combining foreign studies and liberal arts programs, but the reach of the programs is limited to 117 students. Other initiatives include plans for an interdisciplinary 'Graduate School for International Co-Creation', and the 'RESPECT' multi-school five-year combined

[30] Translated by author from: http://www.celas.osaka-u.ac.jp/education/courses/

MA/PhD Japanese-medium course for multicultural innovation. Some individual schools and colleges also deliver their own programs meant to encourage global perspectives, such as Human Sciences' critical studies in co-existence, Engineering's global architecture, or Economics' global management programs. However, such programs reach particular groups of self-selecting students, rather than the entire student body.

The Department of Teaching and Learning within CELAS has responsibility for FD programs. Of the 14 activities the department lists as its responsibilities, none are related to promoting IoC as defined in the literature (e.g. Leask, 2009). According to several interviewees, many OU faculty can have difficulties accepting and working with the increasing numbers of international students and colleagues. As of writing, the University had not yet introduced specific FD programs or initiatives to support faculty in making such adjustments. Occasionally, CIEE faculty members will work with other faculties to bring different perspectives into particular courses, but this is not widespread or systematic. One dean interviewed did mentioned occasionally bringing in personal connection to lecture on intercultural relations and dealing with cross-cultural barriers.

There were FD programs aimed at developing the use of English among faculty, and increasing the English proficiency of faculty and staff was a common theme running through documents and interviews. Overall, EMI courses and programs were viewed as the primary means of internationalizing the University's curriculum and education, although not all shared this view:

> "I think internationalization is not to teach skills, skills in English, skills in debate, conversion, presentation, and so on. But I think more fundamental things must be addressed." – Dean 2

Nonetheless, expanding EMI programs and courses is a priority at the University and in some cases individual school levels. The faculty of Engineering, for example, has plans to introduce EMI tracks in each of its departments by 2020. Initially, many of EMI programs were closed to regular degree domestic students, but in 2014, OU opened EMI courses to all students to improve their reach. However, though all students are allowed to take courses within EMI programs, participants remain primarily international students or 'returnees'. Again, this limits the potential impact of such programs on the larger student body. Language proficiency is seen as the biggest barrier to increasing participation in EMI courses among domestic students.

Interestingly, several graduate schools (i.e. OSIPP and Human Sciences) have opted not to offer full EMI graduate programs, but provide enough EMI courses and supervision in English for students without Japanese ability to complete degree requirements. In OSIPP's case, this was born out of special funding from MEXT to increase exchange with ASEAN. As the School began implementing the program in 2011, it realized the need to better integrate and support international students, given the climate in the School at that time:

> "OSIPP is supposed to be a leading institution in advancing globalization and internationalization of education and research on this campus…Despite this name, International Public Policy, not very much was international in this graduate school, as you can imagine. All the classes were taught in Japanese, and most of the teachers were Japanese, and most of the researchers wrote in Japanese, and the students were mostly Japanese." – Dean 2

As a result, the School set about developing English-taught courses, eventually offering enough for students to fulfill degree requirements entirely in English. Benefits of this 'informal' blended model, over a recognized EMI program, were cited as not needing to meet university requirements, facilitating interaction between international and Japanese students, and encouraging Japanese students to raise their English proficiency. As expressed by one interviewee:

> "Our position in OSIPP, is we don't separate, and we accept only English speaking students and they can do the program without any problem. We teach in English, we supervise in English, and we have study sessions in English...If we have to create a separate English program, for example...then the demand from the university is that we should have a fixed number of students. *Teiin*. Well, we have no problem with that, but it's very odd. So we prefer going our own way…It's very flexible here, and we want to keep this flexibility." – Dean 2

5.4.10 Activities abroad

OU's global footprint includes four overeas centers for academic initiatives, ten department level centers, an emerging ASEAN campus, numberous research bases, and the beginnings of an online presence through platforms such as EdX. OU also plays a role in the developmet of overseas joint-Japanese insitutions such as Egypt's E-JUST, Malaysia's MJIT, and Vietnam's VJU.

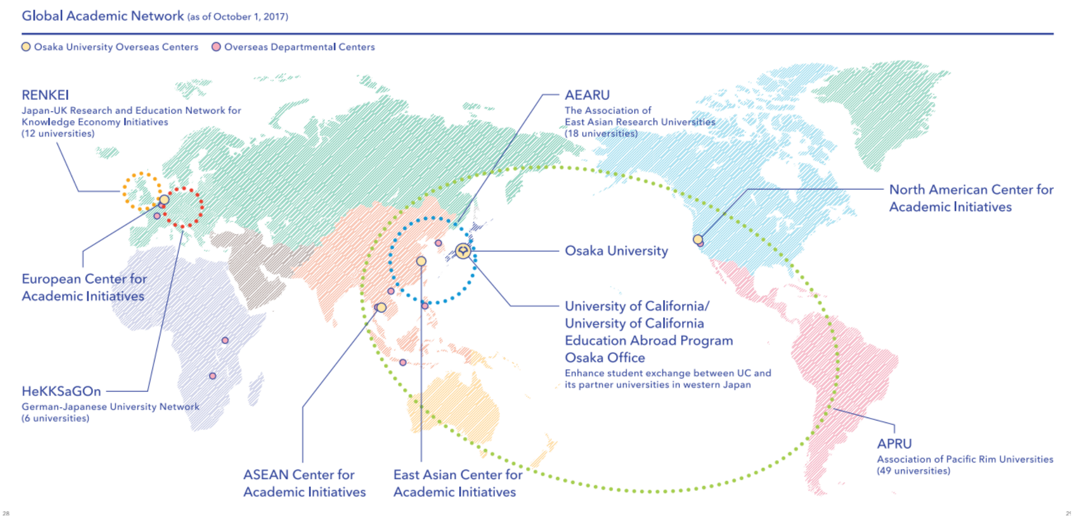

Figure 27: Graphic showing OU overseas centers as of October, 2017 (Source: Portrait of the University: OU Prospectus 2018).

The four overseas centers in San Francisco, Groningen, Bangkok, and Shanghai were established to support students and researchers abroad, and serve as bases for activities in their regions. They achieve this by collecting and sharing information to facilitate student and faculty exchange, broadcasting guest lectures, collecting and disseminating research results, and serving as a base to conduct student interviews, alumni activities and other PR initiatives.

OU's 'ASEAN campus' is its largest overseas initiative. Initially, the University explored establishing a full branch campus in the region. However, due to a number of constraints, primarily financial, OU developed a unique alternative. Though referred to as a campus, the initiative is a network of multi-purpose (though primarily concerned with research and graduate education) offices housed within partner universities in Brunei, Indonesia, Thailand, and Vietnam. There are plans for further expansion into the region by 2031. Dissimilar to the financial rationales for many branch campuses in the region established by Western universities, OU's stated purpose is to encourage educational and research collaboration in the region, promote cooperation between local industry and Japanese firms, and to serve as a pipeline into OU for students in the region. ASEAN was selected because of the perceived opportunities create perceived synergies between OU research expertise and regional needs.

5.4.11 Reputation management

Improving the University's international standing and reputation features prominently in OU's strategies. Enhanced PR is a goal underneath *Vision 2021*'s open community pillar. Strengthening informational outreach activities is one of the 2015 international strategies four main goals. In the concept for the Co-Creation Bureau introduced in 2018, public relations feature in a cycle of design, coordination and management. The University's website and promotional also make consistent statements aimed at boosting its image and brand. In terms of brand development, OU collateral positions research excellence, co-creation and social contribution as core pillars of the University's brand. Through this, it seems apparent that university management believe reputation management is increasingly important for the institution.

However, while progress has been made in recent years, this has not resulted in a deep and wide review of and comprehensive and strategic approach to brand management. As one example, despite a downward trend in recent years, OU is still ranked among the best universities in the world, but its global standing is not as actively promoted as in the other case universities. In the 2018 University Prospectus, for the purpose of illustration, awards given to individual researchers occupy all of page six, while OU's global rank is listed under 'research outcomes' on page 15. There is also an overall lack of coordinated effort to ensure consistency in branding and messaging throughout the University's website and promotional material. Similarly, there is no visible purposeful strategy in place for what web pages are translated into English. Rather there is evidence of years of layering additional pages and microsites without coordinated consideration of user experience. Isolated examples of excellent and effective communications practices are embedded in an overall environment that is difficult to navigate, thus considerably lessening their potential impact.

6 Cross-case analysis

The following chapter begins the process of moving back up from the details of the internationalization-related activities of each case to broader analysis and discussion of the relationships between the institutional approaches to internationalization, contextual factors and broader global trends. The chapter begins with a comparative analysis of approaches related to the pre-established activity areas of partnerships, international students, international faculty, study abroad, internationalization of the curriculum, activities abroad, and international reputation management. From there, it moves into a more general discussion of the cases' approaches to international strategy development and how these approaches relate to context, global trends, individual rationales and agency, and institutional circumstances. This analysis is then used as a platform to discuss wider implications for the conceptualization of IoHE as a response to globalization as well as scholarship related to IoHE in East Asia (inclusive of Singapore as established in section 3.1.6).

First, it is worth highlighting the similarity between within-country cases and the significant differences between countries. This is not to diminish the important within country differences between cases, but does suggest the particularly strong role of context. The 2018 Times Higher Education (THE) ranking indicators can help to quickly illustrate this point. Although there are numerous documented problems with the ranking methodology, the below graphics demonstrate clear differences between the two contexts. The scores themselves are not important, but the tight grouping and similar shape of the Japanese cases and Singaporean cases in comparison to each other is notable.

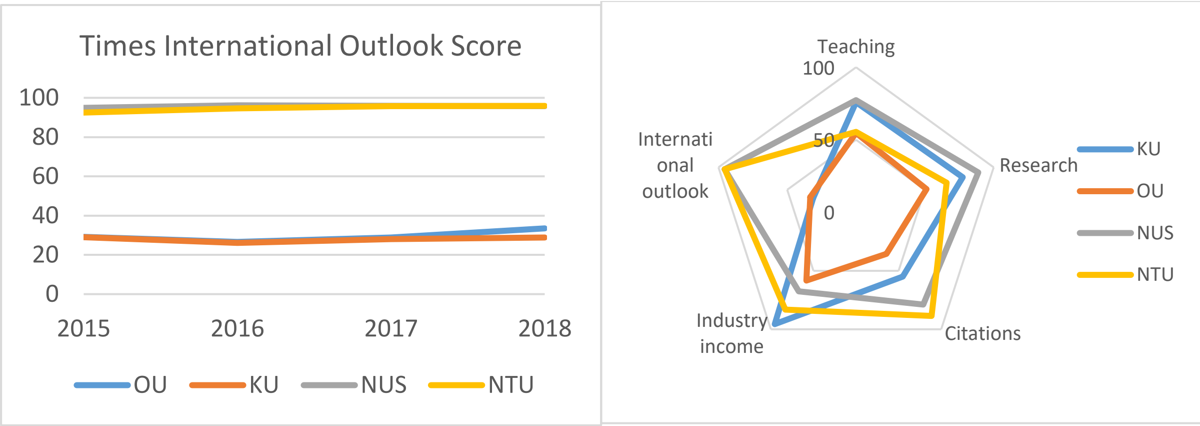

Figure 28: Indicator scores for each case from the THE rankings. The chart on the left shows the 'international outlook' scores over a period of four years. The chart on the right shows the scores for each indicator from 2018. (Source: Author created from THE data).

Such clear differences between the profiles of elite national universities in two economically developed 'East Asian' nations suggest that national context has a strong influence. The above case narratives and following cross-case analysis support this assertion. As such, the below analysis often refers to the Singaporean cases as a group and the Japanese cases as a group, focusing on the differences between the two contexts. While there are important within country differences, and these are explored where appropriate, one of the key findings from this research is the discrepancy between the two contexts. Thus, the below analysis often focuses on these differences in relation to important contextual factors.

6.1 Internationalization activities

6.1.1 International collaboration

As discussed in the literature review, international partnerships are essential for universities in the 21st century (Barber, Donnelly and Rizvi, 2013; de Wit et al, 2015). They have the potential to enhance research and education, and can bring a host of other benefits (Koehn and Obama, 2012). Though higher education is becoming an increasingly competitive market-like space, universities are less restricted by the rules of the market than industry, and their missions are broader than pure competition. As such, universities are somewhat unique in their potential for collaboration on addressing global issues. Although there are differences in approach, all four cases very actively collaborate internationally. This research identified six overlapping types of partnerships, which can take place at the individual, departmental, school/college, institutional, or state levels:

- Student and scholar mobility and exchange
- Educational (e.g. joint/dual-degrees)
- Research (e.g. joint-labs)
- Industry (e.g. funding, internships)
- Associations and networks
- Institutional co-creation (e.g. Duke-NUS, Yale-NUS)

At the national level, Singapore has an overarching policy framework that explicitly supports partnerships, and in many cases funds them directly. As a small trading nation, partnerships are seen as necessary and natural in the Singaporean context. The government is particularly welcoming and encouraging of partnerships that contribute to the national development rationales for IoHE. As such partners, at both the national and institutional levels, are often invited (and financed) specifically to help develop local programs and capacity. As an example, both NUS and NTU participated in state-orchestrated large-scale joint ventures (i.e. Duke-NUS, NTU-ICL, SMART).

There were no such government led large-scale joint initiatives with the Japanese cases. The Japanese government does have projects in place to encourage partnerships (i.e. Re-inventing Japan), but these favor measures to strengthen exchange or regional network building rather than developing programs within Japanese institutions. Similarly, the current oversupply of higher education providers in Japan suggests that attracting foreign providers into Japan will not be high in the government's agenda in the near future. At the case level, as neither KU nor OU are in a stage of growth, working jointly with foreign providers to develop new schools or programs is unlikely to play a central role in institutional strategy.

All four cases mentioned international collaboration in the visions and strategies, but the Singaporean cases had clearer strategies at both the institutional and school levels. Most of the schools and colleges examined in the Japanese cases did not have explicit strategies tied to partnerships. An interviewee at NTU highlighted the importance of having complementary strategies at both levels that set general guidelines for why, with whom and under what conditions to pursue agreements. These guidelines existed for all four cases at the university level. Considerations when pursuing partnerships included need, 'fit', location, cost and availability of funding, reputation and expertise, opportunities for students, and language.

In general, challenges to partnership development included funding, language barriers, imbalanced partnerships with one-way student flows, difficulties in matching coursework and credits, and dealing with foreign bureaucratic systems and calendars. Some interviewees noted challenges in establishing partnerships in particular locations. For example, a competitive mindset made it difficult for Singaporean universities to partner with institutions in Hong Kong. The Japanese cases noted difficulties in establishing exchange agreements with the US due to differences in tuition and other factors.

All four cases managed exchange, educational and research partnerships separately, and primarily relied on individual faculties to manage relationships after signing university-wide MOUs. Thus, all cases looked for evidence of existing collaboration before considering university-wide agreements. This was typically facilitated through databases which tracked ongoing faculty-level agreements. Interviewees repeatedly stressed the critical role faculty play in both developing and maintaining partnerships. Personal connections of leadership also proved to be a critical factor in developing partnerships.

All four cases had strategic objectives to increase the number of partnerships, however, interviewees at all four cited inactive MOUs and a desire to expand and deepen existing partnerships rather than continue to pursue new ones. Indeed, this was among the strongest similarities across the four cases. In all cases, partnerships were recognized as a critical part of the higher education endeavor going forward, and all wanted to move into deeper and more expansive partnerships. This may signal a shift to a new way of thinking for the universities, and could be the early stages of a new era of collaboration in the region.

Interviewees on the Singaporean side cited bandwidth as a significant challenge in maintaining such large numbers of partnerships, and saw networks as an increasingly effective means to reduce travel time and costs and engage with several partners at once. Networks were also seen as a way to ‘give back’ by sharing their experiences and developing partners with different types of educational experience for their students. The Japanese cases also demonstrated the value they placed on networks, but their rationales were more related to the opportunity to work on large-scale collaborative initiatives or to fulfill their national roles in fostering bi-lateral ties with other nations.

For the Singaporean cases, partnerships form the foundation on which many other activities rely. NUS and NTU primarily viewed partnerships as tools for self-development, leveraging them to effectively build up their own faculties and programs. At NTU in particular, partnerships were critical in rapidly expanding course offerings and raising the University’s research profile. Partnerships are explicitly used to develop strategic areas of interest, improve research, expand educational offerings, enhance reputation, diversify the undergraduate population, provide opportunities for students, secure funding, attract external expertise, and recruit faculty and students. Thus partnerships are typically pursued when the universities feel they have something to gain. The capacity building of others is less of a priority, though there are signs that this is changing. As such, they have primarily targeted prestigious Western institutions, but are now moving towards deeper engagement with Asia, and China in particular, in light of ongoing changes in the region, as well as changes in their own standing.

The Japanese cases developed robust research profiles and educational programs primarily during the 20th century without as much international collaboration. Thus, while KU and OU each maintain over 100 institutional partnerships, they are not as central to the work of the universities as in the Singaporean cases. Similarly, though student exchange has been steadily increasing, there is less demand from Japanese students, and less pressure to maintain high numbers of exchange agreements. The Japanese cases also do not tend to rely on their partners' brands to increase their international reputation or recruit international students to the extent that the Singaporean cases do.

Overall, the Singapore cases are somewhat dependent on their partnerships to maintain their educational offerings, research activities, and international (and national) standing. The Japanese cases are more independent in this regard and freer to develop partnerships with less of a competitive mindset. As a result, although the Japanese cases do tend to partner with elite universities in a given country, they work with a wider more balanced portfolio of countries, with less emphasis on the 'West' and more involvement in developing contexts; particularly within the region. This allows the Japanese cases to view partnerships in more mutually-beneficial or even altruistic terms, whereas the Singapore cases are forced to consistently ask 'what can we get out of this?'. This social responsibility rationale does not squarely fit within the overly economic self-development rationale for IoHE that the literature identified as characteristic of HEIs within East Asia (see section 3.2.7), and may be related to KU's and OU's status as more mature institutions within the region.

Interestingly, in the varied partnership profiles, we can observe different sides of the relationship between mobility and institutional collaboration. The story relayed by one OU dean of leveraging former international students to develop relationships in ASEAN (section 5.4.5) helps to demonstrate how attracting international students and scholars can strengthen future international connections. Conversely, that leadership in the Singaporean cases often used their personal connections from their own studies abroad to develop relationships with Western institutions shows the potential impact of sending students abroad. This observation also helps to demonstrate the importance of personal connections and the often long-term nature of university partnership development

Joint and dual degree programs help to clearly illustrate the different perspectives on partnerships in the two contexts. NUS has over 100 joint and double degrees (13 at the undergraduate level), with 44 partners in 13 countries. Not one is in ASEAN. The Japanese cases offer far fewer such degrees (all at the graduate level), and almost entirely with partners from within the region. Thus in Singaporean context, joint/double degrees primarily serve to benefit Singaporean students by offering them credentials from mainly prestigious Western universities. For OU and KU, while the smaller number of such programs may be limited to government restrictions, the partner profile suggests that the degrees are less for domestic degree seeking students, and can be understood as serving the functions both developing stronger research partnerships within the region and attracting international graduate students from within the region.

The different nature of joint/dual degrees in the two contexts can also be understood as a function of the local market. In Singapore, degrees from prestigious overseas universities are still highly valued in the market, and are often seen as superior to degrees from local universities. In addition, graduate degrees are often an advantage in the professional sector outside of academia. In Japan, however, degrees from top domestic universities such as Kyoto and Osaka are typically valued above foreign degrees, even those from the world's highest ranking universities. Therefore, there is relatively less market value or incentive for OU or KU students to want or need an association with a foreign institution. Nor are domestic students likely to pursue careers in countries where such dual degrees might be more valuable. Thus, local contextual factors, such as industry demand, may have a significant effect on the nature of such collaborations.

From the above, two broad rationales for partnerships can be observed: self-development and cooperative contribution. The Singaporean cases favored the former while the Japanese cases the latter. Yet, both rationales are important, and all four cases should consider the benefits of balancing the two. It is critical for universities to strive for excellence and continuously seek ways to improve their education and research. Partnerships can have a host of benefits in this regard, and these should be maximized. At the same time, global research universities have an important service mission and should utilize their capacity to contribute to the global public good (see Marginson, 2016). Partnerships are an effective medium by which universities can collaboratively address issues more effectively than they could independently. Thus, universities should pursue partnership strategies that incorporate both aspects. On one hand it is reasonable and necessary to ask 'what can we get out of this?', but universities must also ask 'what are we able to contribute here?'. Doing so should lead to a virtuous cycle whereby universities are continuously improving their capacity to make more meaningful contributions to the global public good.

6.1.2 International students

International student profiles are another area of differentiation between the two contexts. NUS and NTU have similar student profiles, as do OU and KU. The Singaporean cases have larger portions of international students (including degree-seeking and exchange students) at both the undergraduate and graduate levels. All four cases have larger portions of international graduate than undergraduate students. Undergraduate degree-seekers at NUS and NTU are restricted by government caps (see section 4.1.4). KU and OU on the other hand have received government funds to create more pathways for international undergrads, but due to contextual limitations they have been unable or unwilling to admit large numbers. In addition to the language barrier, faculties have little incentive, financial or otherwise to increase the numbers of degree-seeking undergraduate students, and somewhat contradictory government regulations require that international degree-seeking students be counted in the overall student quotas, thereby reducing seats for domestic students.

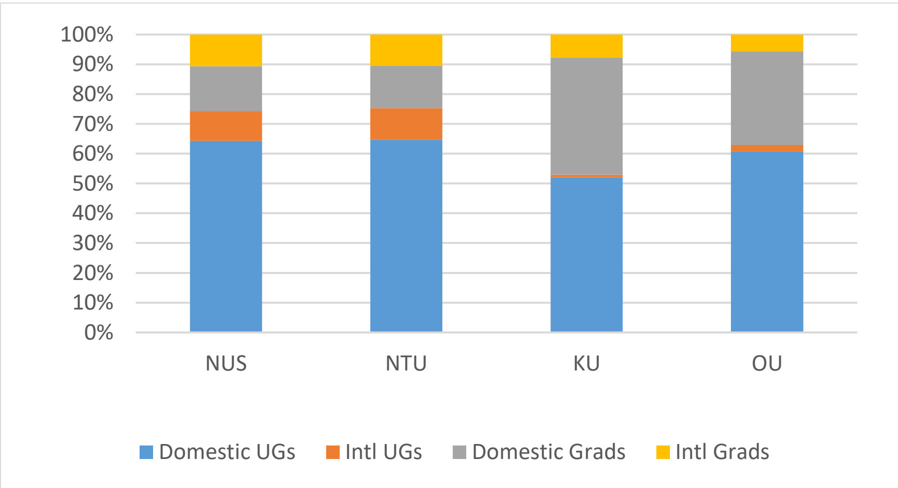

Figure 29: Relative portions of domestic and international graduate and undergraduate students. (Source: Author created from QS data[31])

[31] https://www.topuniversities.com/qs-world-university-rankings

Knight (2009; 2012) notes that many nations have moved from an aid to a human resource development and income generating mindset. Both the Singaporean and Japanese states promote student and faculty recruitment as national talent development strategies, and view international students as a way to supplement manpower (research and workforce) while building international connections. Despite the shared goals, there are contrasts in approach and types of international students sought between the two countries. While NUS and NTU echoed the state's human resource rationales, this was not necessarily the case in the two Japanese Universities.

Singapore's view of IoHE primarily as a talent development strategy is well documented (Ng, 2013; Lee, 2014; Sharma, 2017). International faculty and students are typically brought to enhance institutional capacity and advance the medium and long-term economic interests of the city-state through research and innovation production and contribution to the workforce. Diversity and introducing varied cultural perspectives are seen as added benefits, but not the main drivers. After the 1997 financial crisis, Singapore attempted to capitalize on the rising demand in China and India, increase its share of the global student market, widen its potential pool of talent, and increase the contribution to the nation's GDP (Tan, 2016). Within the universities, while international students can be an important revenue generator, they tend to be thought of in terms of broader economic contributions beyond the university budget. Then there are the added benefits of talent retention, forming international connections with those who return home and take on leadership positions, and greater diversity on campus. At the same time, local students and scholars are forced to compete with this foreign talent, which creates significant and perhaps excessive pressure, but is seen as necessary to enhance local capacity and competiveness.

> "Why do we have international students here? Not just because we need their talent. But because it helps to prepare the Singaporean students for the rest of the world, and the rest of their journey." – NTU Dean 2

Despite increasing economic rationales within the Japanese government (Ishikawa, 2011; Marmolejo et al, 2013; Horie, 2015), the case universities do not generate significant additional revenue from degree-seeking international student fees, and retain much of the aid mentality of the 1980s. The human resource rationale, while present in rhetoric, was not particularly strong in the structure of their programs and supports, nor did it come across in the interviews. Although maintaining graduate enrollment numbers appears to be increasing in importance as a rationale at the school level. At the undergraduate levels, while private universities may depend on international enrolments, this was not the case for OU or KU. Interviewees were aware of the recruitment and tuition practices in places like Australia and Malaysia, but seemed to regard it as a sort of very foreign educational business model, with no real consideration that it could work in the Japanese context. Some also expressed doubts that Japanese universities had the ability to compete in the international student market at that level.

> "In my opinion, we do not have the power in the international market to collect enough numbers of foreign students." – OU Director 1

Government regulations also prevent the cases from increasing degree-seeking enrollment numbers or altering student/faculty ratios to help offset the additional administrative costs. Supports to maximize the likelihood that international graduates would remain and work in Japan were also not as strong as they might be if the universities were driven by rationales of retaining international students in the domestic workforce. Several interviewees expressed the sentiment that the government had set targets without adequately facilitating pipelines for such numbers of students. Several interviewees commented that, despite recent improvements, many Japanese companies were still reluctant to hire foreign students, especially those with insufficient language proficiency.

> "At that time they [the government] did not understand the real situation in Japanese companies. Japanese companies are not as internationalized as Japanese universities, so they are not so eager to accept international students without Japanese ability." – KU Dean 2

Language is an important factor in the cases' ability to attract and integrate international students. While the use of English in Singapore is a major pull for international applicants, it is a significant barrier in the Japanese context. One could speculate that were English the *lingua franca* in Japan, it would be among the most popular destinations in the world for international students. As it stands, for those without a high level of Japanese proficiency, pathways into the Japanese universities are restricted, especially at the undergraduate levels. In OU's case, the freshman intake into EMI undergraduate programs is less than 40 students per year. Although KU's new iUP seeks act as a pathway for non-Japanese speakers into undergraduate study, it is yet untested and several of the KU interviewees were skeptical that students would be able to acquire sufficient Japanese proficiency within two years. At the graduate level, EMI programs are expanding and quickly becoming a key mechanism by which the cases recruit international graduate students. This approach does raise some issues regarding the ability of the international graduate students to integrate into Japanese society and workforce longer term. While both cases invest in Japanese language training for international students, it may not be sufficient to bring students to a level of proficiency that would allow them to enter the workforce, especially within the relatively short window of a two-year graduate program.

The four cases are similar in how they leverage their surrounding region, and China in particular, as the main source for international students. This is by no means unique. Apart from those in a handful of countries (e.g. the US and the UK), most universities attract international students from within their regions and/or primarily from China. Despite much rhetoric on the Singaporean side about attracting 'the best and brightest from around the world', the high numbers of international students are not necessarily reflective of increased diversity (Kell and Vogl 2012; Anderson 2014). While the government does not release official numbers, this is verified through the interviews and observations on campus. Similarly, diversification of international students for the Japanese cases has meant attracting more from central and southeast Asia, rather than outside the region. In both contexts, this is more likely attributable to external factors, given the increasing demand for higher education throughout the region and the lack of interest or incentives for North American or European students to pursue degrees outside of their regions.

> "What we noticed is that you've got to be very aware of the local conditions. A lot of the education in European countries...is almost free. So they just don't have a tradition of going elsewhere. They don't go outside at all." - NUS Director 2

The Singaporean cases, and their respective schools, have strategies in place to both capitalize on these external realities and diversify through targeted recruitment activities. Similarly, the Japanese cases use their overseas offices to aid in recruitment from different regions, and in practice focus heavily on building pipelines in ASEAN, such as the dual graduate degree programs.

Undergraduate recruitment is centralized in the Singaporean cases, while it is the remit of the faculties in the Japanese cases. In the latter, it is far more complex to introduce admissions reforms, set institution-wide policies and targets, and centralize recruitment. Even in cases such as KU's iUP, there is no guarantee after the first 2 years of the program that the students will be admitted to their respective faculties. Pathways and admissions criteria into the Singaporean universities are also clearer and easier for the students to understand. The Japanese cases, in trying to find workarounds for inflexible admissions policies and systems, may have gone too far, creating an overly complex admissions environment for applicants to navigate. The Singaporean cases are also more sophisticated in comparing different entry qualifications and monitoring their performance.

Both NUS and NTU invest substantially in attractive marketing and recruitment material, promoting their programs, research, international rankings, partnerships, faculty and campus environment, as well as Singapore's advantages (i.e. its reputation as a business and financial center, use of English, job prospects, and attractive living environment). In this regard, KU is somewhat more sophisticated in its marketing and recruitment efforts than OU. Nonetheless both could do more to more persuasively promote their many positive points. In both Japanese cases, though, there is a clear trend towards greater sophistication in this regard over the last decade. Fees generated from international enrollments, which are higher in the Singaporean context, may have a significant impact on the cases' ability and motivation to invest in international marketing and recruitment.

The Singaporean cases also appear to be more purposeful in their efforts to promote integration and interaction between local and international students, needing to both retain international students into the workforce and prepare local graduates for internationally oriented careers within Singapore. To promote local and international student interaction, the universities, in partnership with the MOE, have administrative staff tasked with student integration, purposefully mix residence halls, and have activities and mentoring/buddy schemes to facilitate interaction. The shared use of English also makes it considerably easier for NTU and NUS to support students in this regard.

Precisely because of the language barriers in Japan, which leads to most courses segregated by language, OU and KU should continue to consider more purposeful and robust strategies to promote student integration and interaction. The challenge in doing so is not unique to these cases. There is abundant literature pointing to the challenges of fostering engagement between international and domestic students, and the conditions needed for positive student experience need continued exploration (Kudo and Hashimoto, 2011). Both KU and OU often reference the need to develop more inter-culturally competent graduates. Yet the reality is that most will go on to domestically oriented careers, and thus motivation to increase interaction can be low for both the local students and university administrators. It should be noted that individual staff and faculty within KU and OU go to great lengths to support international students, but these supports are often at the personnel rather than institutional level, and the supports could be more systematic.

Given the diversity of student types as well as educational program options, it is important for universities to be clear about their reasons for attracting international students, and to build programs and practices that purposefully contribute to those ends. Clear rationales and strategies for the recruitment of different student groups, and supports to help them towards identified ends can be helpful in this regard. If the goal is to grow graduate and research programs, then the strategies should focus on attracting students who can support and contribute to faculty research. If the goal is to help domestic students gain exposure, then systems and structures should be established to ensure interaction between foreign and domestic students. Simply setting goals to increase numbers without be clear as to what function the students are meant to serve and consideration of how to enable them to best serve such functions is insufficient.

6.1.3 International faculty and staff

NUS and NTU are between 60% and 70% international faculty, and a very large portion of ‘local’ faculty have degrees and experience from abroad. In contrast, OU and KU had approximately 10% foreign faculty, and a much smaller portion of Japanese faculty hold degrees from outside of Japan. Government incentives since 2013 have raised the portion of international faculty in the Japanese cases. NTU’s higher portion of international faculty is most likely a result of its rapid expansion and the past president’s pro-active international recruiting. Because the Japanese universities are not in a stage of growth, to hire a foreign faculty, they often must replace a domestic one, so changes happen slowly. At the same time, the central administration has little influence over hiring decisions within the schools and colleges. KU has tried to get around this by reallocating headcount from within the schools to other centrally managed units within the university, such as the ILAS. However, as discussed in section 5.3.7, this practice has its own set of issues. Apparently OU is considering a similar strategy, but is cautiously watching KU to see how it plays out there first.

University leadership on the Singaporean side is somewhat more diverse (there are virtually no non-Japanese among KU and OU leadership), but it is still predominantly local Chinese. In many cases, non-Singaporeans holding senior positions were promoted from within the university, which shows how non-restrictive tenure and promotion can help to diversify the institution’s core leadership, bringing both internal and external perspectives which the university can benefit from. At the same time, it demonstrates to other international faculty that there is growth potential, thus encouraging longer-term commitment. Although not the focus of this research, it is worth noting that the profile of domestic leadership and faculty, being predominantly ethnic Chinese, may not adequately reflect the ethnic diversity of Singaporean citizens.

On the Japanese side, there are a number of barriers for international faculty to climb the ranks into university leadership. This may be partly reflective of the tenure based promotion system in Japan, where most leadership have spent many years within the university. The Japanese cases are also far less likely to recruit externally for vacancies at more senior levels. Some interviewees were doubtful that there would be any non-Japanese in senior leadership positions at either of the universities anytime in the near future. At the same time, the Japanese leadership in place often do not have direct experience of how things operate in other contexts, which can inhibit the introduction of good practice from the outside.

Singapore has a number of natural advantages in recruiting foreign faculty, including the use of English, a welcoming cosmopolitan environment, the ability to offer attractive packages (thanks largely to generous government funding), and greater flexibility in hiring procedures and setting HR policies introduced since incorporation. In addition, international faculty are seen as a critical component of a larger ecosystem and virtuous cycle. They are brought in not only for the ranking metrics and the research they produce, but because they tend to keep abreast of developments in their home countries, aid in partnership development, diversifying the campus and learning environments, and can serve as a recruitment tool for other quality faculty and students. One NTU interviewee stressed the importance of convincing oneself of the value proposition for diversity, continuing that recruiting a couple key senior faculty can have positive knock-on effects at the lower levels.

When examining some of the strategic models developed on the Japanese side, such as OU’s World Tekijuku Initiative, it is clear that such holistic thinking about the benefits of international faculty exists, but it does not seem to permeate the institutions or translate into actual practice. The universities may recruit from abroad, but strict policies related to packages and titles as well as linguistic issues can make it difficult to attract quality candidates. At the same time, the concerns many Japanese academics have regarding the ability of foreign faculty to integrate and contribute to school management can introduce barriers in getting international applicants past faculty senate votes.

One drawback of such high portions of international faculty in the Singaporean cases, is a lack of development of internal talent and an overreliance on foreigners who may not have the long-term investment in Singapore’s future. At the same time, it can cause tension and frustration among local staff. Leadership, somewhat more so in NUS than NTU, were keenly aware of this issue, but struggled with striking the right balance between institutional development and local capacity building and succession planning. Although nationality is not weighted heavily in hiring, all else being equal interviewees expressed a preference to hire Singaporeans. There are also long-term strategies in place at the government and institutional levels to promote more local PhDs, such as a senior tutor program where students are sent abroad for their PhDs under bonds to return to work in Singapore. However, the universities are not mandated to hire these returnees, and often competition for faculty positions is stiff.

Japan also suffers from dwindling numbers of local PhDs, but as KU and OU sit near the top of a very large domestic higher education sector, it is relatively easier for them to fill their ranks without turning to international candidates. Indeed, international candidates may be seen as less preferable in many instances due to potential language barriers that may limit their ability to teach in Japanese or fully participate in committee meetings and other administrative duties.

Looking further at the contribution and impact of international faculty would also warrant further study. Although beyond the scope of this research, the evidence suggests that in the

Singaporean cases, international faculty make a significant contribution to teaching and research. It is possible that they are overall more productive than local faculty, although this would need to be verified. It is not clear what sort of impact international faculty and researchers have in the Japanese cases, and whether their productivity is at the same level, above or below the Japanese faculty on average. If productivity is lower, then that would call into question the benefits of international recruitment, and such metrics should probably factor heavily in any future strategies. Additionally, it should be explored whether there are particular barriers that might inhibit international faculty contributions and whether these can be addressed. Similar to international students, it is important for universities to be clear on why they want international faculty, and then to appropriately value them and give them the tools and supports needed to make the contributions to the institution that they were brought in for. More is not necessarily better, but it is advisable for any university with global ambitions to have a solid core of faculty members, including those in leadership positions, who can bring an outside perspective.

6.1.4 Study abroad

All four cases have continuously cited increased participation in overseas experiences as a key priority over the last decade. NUS and NTU have managed to raise participation among undergrads dramatically over the last two decades, moving from targets of 50% in the early 2000s to targets of 80% participation today. OU and KU have both expanded program offerings and funding, but have made more incremental progress in increasing participation, and struggle to send more than 20% of undergrads abroad. In all four cases, for the majority of participating students, the overseas experience is short-term, although the portion is somewhat larger in the Japanese cases.

In Singapore, the high participation rates may be attributed to a combination of natural contextual facilitators, a strong commitment from university leadership and effective strategies for increasing participation. Singaporeans students in general are culturally more interested in and accustomed to overseas educational experiences. This is evident in the historically high rates of local students pursuing degrees abroad.

> "A typical New Zealand kid would find it unimaginable to spend about $20,000 to come and study in Singapore. A Singaporean kid, a bright kid, a sizeable number of them would not find it unimaginable to go to the US and spend $50,000 US apiece. Traditionally. You know we've been doing this for a long time….It's not such an unimaginable idea for a Singaporean kid to go to the US *for the experience*. They might even go to a University of Texas-Austin, which is a good university, but not necessarily ranked higher than NUS, pay more, and for the experience. Partly because that has been what Singaporean kids have been doing for a long time. A lot of high schools have encouraged it." – NUS Director 2

Members of the university communities have a deep commitment to the benefits of study abroad, citing the need for local students to gain exposure, preparation for careers in international industries, bringing more international perspectives into the classrooms, and helping to develop strong ties with partner universities. This commitment runs so deep that some faculties will encourage their own local undergraduates to pursue advanced degrees abroad.

> "We actually don't encourage our graduates to do a Masters with us. We tell them, 'look, you've had four years with us, you want to do a Masters, go elsewhere.' So again the messaging is go abroad, get different exposure, a different education, different experience, and then come back." – NUS Professor

To facilitate and encourage participation, both NTU and NUS heavily promote opportunities around campus, maintain large numbers of exchange agreements, offer diverse opportunities, and have funding programs in place. Both universities have proved willing to make internal structural and programmatic changes, such as the introduction of electives, to help facilitate exchange. The baseline criteria for exchange agreements are use of English (to ensure students get the most out of content while earning credit abroad), accreditation, and the ability to match courses. To tie study abroad into each university's enterprise agendas, the respective relevant units also offer programs embedding students in start-ups in entrepreneurial 'hot spots' around the world. Overall, both cases are attempting to make study abroad an integral part of the overall educational experience.

> "We are trying to encourage students to think about study abroad not as a parenthesis outside of their eight semesters...we are really trying to get them to think about it in an integrated way." – NUS Dean 1

Challenges of such high rates of exchange include program and course matching, disruptions to course planning, monitoring and evaluation, and measuring the quality of international experience. Interviewees at both universities noted the desire to and the challenges of shifting to more qualitative indicators. However, neither yet systematically integrates international experiences into programming or teaching and learning, nor is it an explicit component in faculty development.

> "So just because we as a university believe that everyone should have this type of experience, the impact and outcome is different for different students. And we're still trying to find ways to measure that." – NTU Director 1

The situation in Japan is different. Language is again the most easily identifiable hurdle. For full semester or year-long exchange, students need to be able to effectively engage in coursework and receive credit from the host institution. Most Japanese undergrads do not have the language proficiency to engage in semester or year-long credit bearing exchange, unless it were a language-learning based program, which may make completing degree requirements difficult. The Japanese academic calendar is also not conducive to longer-term exchange. Beyond this, nearly all interviewees cited a general reluctance or lack of interest in study abroad among students, as well as structural barriers such as the job-hunting season and the desire to stay close to and build relationships with their professors. According to interviewees, even those completing graduate or doctoral degrees generally will not consider further study, post-docs, or first posts abroad for fear of not being able to rejoin the academic workforce in Japan.

> "Parents and teachers are all very protective to the Japanese students. So they are grown up under such kind of situation. So generally they are rather reluctant to go abroad and survive by themselves. So if we provide some opportunities for them to experience even the very short time. It can be helpful for them to go abroad in the future. So we started many short term programs. I think they basically have a very strong intention, a hidden intention, to go abroad and study abroad, even though they don't like to study English." – KU Dean 2

There are, however, universities in Japan that have cultivated significant levels of study abroad, so it is possible. The barriers need to be identified and addressed individually, and resources need to be directed towards creating a cultural shift on campus where such experiences are celebrated and respected by students and faculty alike. Though both KU and OU have considerable numbers of agreements, programs and supports in place, as of yet, neither has embarked on a widespread internal campaign to change student attitudes. However, increasing EMI offerings and encouraging local student to take classes with foreign faculty and peers, as well as offering diverse short-term programs are viewed as steps toward long-term strategies to increase future participation. OU's move to introduce the quarter system into the academic calendar in order to increase flexibility in course planning is also worth note and indicative of a broader commitment to enhancing external alignment and engagement.

Perhaps the most important step in encouraging greater study abroad participation rates is encouraging a university-wide culture that values exposure. Once this is in place, it is a matter of ensuring that students have adequate opportunities and supports. It is also important to provide a diversity of opportunities that can appeal to varying student interests, capabilities and circumstances. Finally, students should be adequately prepped to make the most out of the experience, and then given opportunities to integrate their experiences into their learning after they return.

6.1.5 Internationalization of the Curriculum

Some (e.g. Paige, 2005) place IoC, or "the incorporation of an international and intercultural dimension into the preparation, delivery and outcomes of a programme of study" (Leask, 2009, p. 209), at the heart of IoHE. Internationalized curricula, pedagogies, assessments, learning outcomes, and extra-curriculars should consider and encourage new ways of thinking, teaching and learning, address the cultural construction of disciplinary knowledge, actively engage with diverse cultures and perspectives, and develop intercultural understanding (Brewer and Leask, 2012; Deardroff and Jones, 2012). IoC may be the most complex and difficult to implement aspect of IoHE, and given concerns of academic freedom, university-wide learning outcomes can be difficult to enforce. Leask and Bridge (2013) argue that faculty engagement is paramount to effective IoC, and that although foreign faculty may be helpful, it requires participation from all faculty. They give the specific example of Japan as a place where marginalized foreign faculty can have a limited impact on curriculum development.

NTU and NUS primarily rely on their very internationalized environments, faculty and student bodies, as well as programs based on or in partnership with overseas institutions to internationalize their curriculum. Singapore's historically small domestic publishing sector also helps to keep their faculty reading and publishing in international journals. As is common in Singapore, both universities offer a wide variety of cultural activities, dining options and so on. They both also purposefully mix student residencies. Programs with an international or global focus, or those aimed at 'future-readiness' and its embedded 'global-readiness', are also widespread.

However, few supports are in place to ensure that faculty are equipped to explicitly integrate international perspectives and pedagogies into the classroom. Nor is internationalization considered in teaching evaluations. Additionally, although international experiences are considered a signature part of the NUS and NTU experiences, there is no systematic approach to helping faculty incorporate the students' international experience into their coursework, nor is there training for faculty on how to deal with students' departure for a semester or more. This suggests that the cases are not internationalizing their curriculum according to specifications for IoC identified in the literature. It might also be noted that the forms of IoC identified in the literature are too narrow in definition and there are important questions regarding how purposeful IoC actually need to be in a sufficiently internationalized learning environment.

Both OU and KU have specific goals in their visions and plans related to enhancing the global perceptivities and competencies of their graduates. Both are increasing the number of courses and programs with a global or international focus, but the process of introducing new programs is somewhat more complex and slower moving for Japanese national universities. EMI programs at the graduate level in particular, as well as those in collaboration with other universities in the region, are also increasing. However, the objectives related to increasing students' global competency rarely seem to be operationalized beyond general targets to increase international metrics. Conversations with interviewees regarding how curriculum, pedagogy and assessment were purposefully and systematically internationalized rarely moved beyond the provision of more courses in English and raising the English proficiency of domestic faculty. Most felt that improved English competency would be the most important step helping faculty to engage more with non-Japanese resources and perspectives. Again, there seems to be significant variation between different schools and colleges, with some embracing such ideas and practices more than others. Overall though, the experience of these two cases supports Huang's (2006) conclusion that although there has been increased emphasis in Japan on creating programs for broadening international perspectives, IoC tends to be geared more towards providing content for foreign students than reforming content for domestic students. Kudo and Hashimoto (2011) also note although Japanese universities are increasingly conceptualizing themselves as windows to the world and Asia and old national universities, such as OU and KU, are more internationalized than other types of HEIs, little attention has been paid to IoC beyond EMI and foreign faculty, and faculty and staff development in this area is under-researched.

IoC may indeed be the most complex aspect of IoHE. All four cases struggled with purposefully integrating such perspectives into their teaching and learning. The highly internationalized environment in Singapore may raise some questions about the need to explicitly do so. On the other hand, they may have reached a saturation point in terms of foreign presence and need to begin to consider new content-based forms of internationalization. Even in such highly internationalized contexts, students and faculty alike would no doubt benefit from actively and purposefully considering their own perspectives and those of others. Faculty development is key to this, and should be a cornerstone of any university's strategy if they have set objectives related to fostering broader international perspectives and competencies in their students.

6.1.6 Activities abroad

International reach is one area where the Japanese cases were more active than the Singaporean. Both OU and KU maintained a number of overseas offices and research centers, and had ambitions to further expand these. OU's emerging ASEAN campus is a good example. The Japanese cases' overseas activities can be tied back to their longer more established histories as elite institutions in the region and the government prioritization of increasing international presence and reputation. More recently, an active presence in ASEAN is seen as very important in helping to build pipelines for students from the regions into graduate programs at KU and OU.

Singapore is one of the world's largest importers of TNE, but until recently there has not been much attempt to expand their physical presence abroad. Though they are quite active in sending people abroad, publishing internationally and working to improve their international reputation. When they do establish overseas programs, such as the NOCs, it is generally with the focus of providing overseas opportunities for their own students, although there is certainly a desire to develop stronger ties in those entrepreneurial centers. NUS and NTU may not need overseas offices in the same way that KU and OU do because they can rely on the overseas offices set up by the STB to do much of the work that the Japan cases' offices do. The relatively less overseas activity may be related to the relative youth of the universities, their only recent emergence as ‘WCUs’, and the self-development approach to internationalization, which is more interested in leveraging what can be found abroad to improve their own standing, rather than exporting their offerings. There are signs that this is beginning change, as both universities are beginning to expand operations in China in particular in efforts to both develop stronger linkages in the country and take advantage of entrepreneurial opportunities there.

In general, TNE may be one of the most contested areas of IoHE. The benefits for both the senders and receivers are often called into question. However, when based on sound rationales and well executed, such ventures can be very successful. Given the limited availability of resources though, universities interested in expanding their physical presence abroad should deeply consider the return on investment and seek out creative models for achieving their stated ends.

6.1.7 International reputation management

A distinct aspect of higher education internationalization, or perhaps more accurately globalization, is the emergence of an increased awareness of and attention to one’s reputation outside of their own country. As states push universities to diversify their revenue sources, universities become increasingly accountable to the market, more receptive to the infusion of an entrepreneurial culture, and increasingly focus in international positioning. Profile, reputation and branding become more important and require greater investment (Alexiadou, 2005; Knight, 2008; Hudzik, 2011; Green, Marmolejo and Egron-Polak, 2012; Kell and Vogl, 2012; Hunter, 2013; Marginson, 2014). Rankings are the most visible manifestation of this, and perhaps its strongest driver, but it goes well beyond rankings. International reputation affects a university’s ability to engage internationally on almost every level. For highly ranked universities, this model can create a virtuous cycle where reputation draws talent, which improves research, which generates funding, which improves rankings, and so on (Marginson, 2016). Unfortunately, this cycle may not to contribute to the other missions of a university (Rumbley, Altbach and Reisberg, 2012). All four cases included improving their international reputation and enhanced PR and communications as strategic objectives. As several of the Singaporean interviewees indicated, brand is critical.

The below charts show the relative performance of the four cases on the three major global rankings over the last six to eight years. THE and QS are heavily influenced by international reputation, while ARWU limits criteria to those related to research. The higher rankings of NUS and NTU in the THE and QS rankings help to demonstrate the effectiveness of their international brand management. However, the substantial rise of NTU in all three rankings, but ARWU in particular, signals how increased international reputation can help to underpin efforts to attract talent and funds which can improve performance in research and other areas. OU on the other hand, which arguably has the least sophisticated mechanisms for reputation management, has been losing ground in all three rankings.

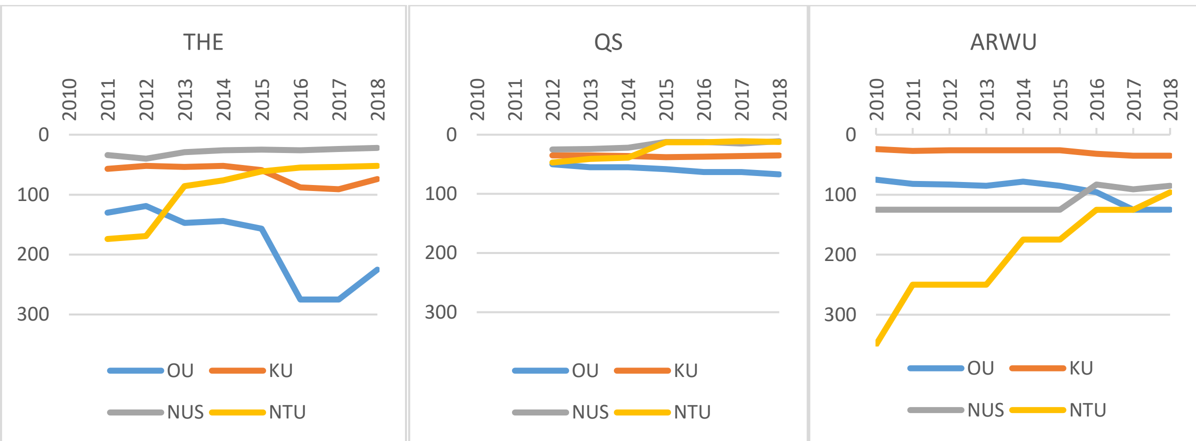

Figure 30: Relative performance of the four cases in global rankings over time (2010-2018). (Source: Author created from data available from the THE, QS and ARWU websites)

Interestingly, while the Japanese government makes performance in the global league tables an explicit national policy agenda item, Singapore only references bringing in ‘world-class universities’. Nonetheless, ranking performance is clearly important to NUS and NTU as well as the state. Most NUS and NTU interviewees tried to downplay the importance of rankings, and suggested the first priority should be on being a good university, and to them that meant being a global university. Yet, Singapore’s national universities have proven themselves masterful at the ranking game.

This success may be indicative of a much smaller sector with less competing demands and greater ability to concentrate resources and create buy-in among faculty. The Singaporean cases may also have the additional motivation of having their degrees and offerings ‘externally validated’, which is not as important in the Japanese context. In Japan, domestic competition and perceptions of quality are often more important than international rankings in determining a university’s relative prestige and helping graduates find domestic jobs. Therefore, it seems evident that the Singaporean cases would make a more serious investment in climbing the rankings. International talent are seen as critical to this exercise, and resources and environment are in turn viewed as critical in attracting talent. However, the impact on global reputation and research output in international journals of attracting (and paying handsomely for) big name universities and scholars, and the much more conducive language environment should not be overlooked.

Japan’s larger sector, history of research in the private sector, language environment, less favorable conditions for foreign faculty, and composition of international students work against its universities’ ability to climb in the rankings. Japanese state leaders have signaled their view of rankings as important through initiatives such as G30 and TGUP, which explicitly aim to place selected universities near the top of the rankings and reclaim Japan’s status as top in Asia. However, similar to other Asian societies, academics in Japan (whom often have more agency than in other East Asian contexts) have been somewhat critical of and resistant to this approach (Mok, 2016). One KU interviewee noted that such government initiatives are insufficient to displace any of the world's top ranked universities.

In general, the Singaporean cases have done a masterful job of marketing the unique elements of Singapore and their programs. The Singaporean universities are unquestionably good at self-promotion. Their messaging was tighter, their brochures cleaner and glossier, visions were more clearly articulated, and there were more consistent views expressed across the interviews. That does not necessarily mean the education or research is better, but the exercise of crafting the messaging, getting institutional buy-in, and consistently staying on message has helps to internalize the rhetoric communicated in the messaging, which can lead to the natural infusion of intuitional goals throughout everyday activities. This process of brand creation and management seems to have helped the universities more clearly define themselves and what they want to be and more effectively move in that direction.

The Japanese universities are moving in a similar direction, but seem to be several years behind. Overall, strategies and visions are becoming less complex and more integrated. There is also a growing recognition of the importance of brand management for the 21st century higher education endeavor. That is not to say that all are in favor of such shifts.

> "For me it is not good. Because we are not salesmen. I believe that we are supposed to create something important for the society." – OU Leadership

Although both OU and KU (KU in particular) are becoming more sophisticated in their approach, this sophistication is only just emerging, and both have a great deal of as of yet unlocked potential in promoting the many positive aspects of their institutions as well as the

Kansai region. This may be due in some part to the historical lack of competition. Whereas even though the Singaporean cases historically had no domestic competitors, from the beginning they had to compete internationally to retain their own domestic students.

Publishing may be another important consideration in the cases' international standing. With a small domestic publishing sector, academics in Singapore have few choices other than to publish internationally in English, and indeed international faculty are often recruited specifically for this purpose. Japan on the other hand, has a strong tradition of domestic publishing in Japanese (Yonezawa, 2010). Furthermore, doctoral research and dissertation examination also tend to be in Japanese. Thus academics in the Japanese cases have a viable alternative to international publication that does not exist in the Singaporean context. This may have some advantage for the domestic dissemination and consumption of research, but works against internationalization. For international faculty, Huang, Daizen and Kin (2017) point out that foreign academics nationwide in Japan are typically either of East Asian origin with PhDs from Japanese universities who have a strong command of the Japanese language, or those Westerner in origin, many of whom with only a Master's degree, who primarily teach in language-related fields. This is less so the case at elite national universities such as OU and KU, but at a national level, this indicates that international faculty may not contribute to a university's international publication profile in proportion to their total numbers, as the former group may publish in Japanese and the latter group are more likely to publish in low impact fields (if at all). Without changes to the domestic systems of research, publication and international faculty recruitment, it will be difficult for Japanese universities to improve their international publication standing.

International brand management has become essential for all global research universities in the 21st century. It underpins their ability to attract foreign talent and partners, and can influence their position in the global league tables. As such all four cases have made it a strategic priority and are increasing investment in this area. Branding though goes beyond websites and marketing material, and requires attention and effort across the board to consistently raise the institutional profile abroad. It is important for universities to promote and leverage the unique strengths of their surrounding areas as well.

6.2 Institutional approach to internationalization

In an attempt to answer research question four, this section begins to pull together the context, rationales and activities at each of the four cases to develop a theory of institutional approach to internationalization.

> RQ4: How do the activities, strategies and structures at each case university translate into overall institutional approach, and how is approach related to global trends, national context, individual rationales and agency, and institutional circumstances?

Altbach (2007) suggests that “effective analysis of the contemporary university” depends on an examination of the relationships between local context and circumstances and broader global trends (p. xii). As the above cross-case analysis attempts to demonstrate, in all four cases, the activities described are the result of a combination of rationales and strategies in response to the opportunities and challenges presented by global trends, but interpreted through and bound by local and national contextual factors and circumstances.

The following section attempts to relate the observed institutional approaches to internationalization to individual rationales for internationalization, contextual factors, and global trends. The rationales that individual stakeholders have for IoHE form part of a complex web of interaction with the agency these individuals to drive or inhibit change and the unique circumstances of each institution. The outcome of this interaction is overall institutional approach to internationalization. Approach can fall along a spectrum of comprehensive and strategic at one end, ad-hoc and uncoordinated at the other, or some combination of these at different levels within the university. It should be noted that an internationalization strategy does not necessarily equate to a strategic approach to internationalization. In short the following sections attempts to analyze the factors and processes that influence the development of the global/international visions, strategies, and activities which collectively comprise each case university's approach to internationalization. This process is represented in the below model.

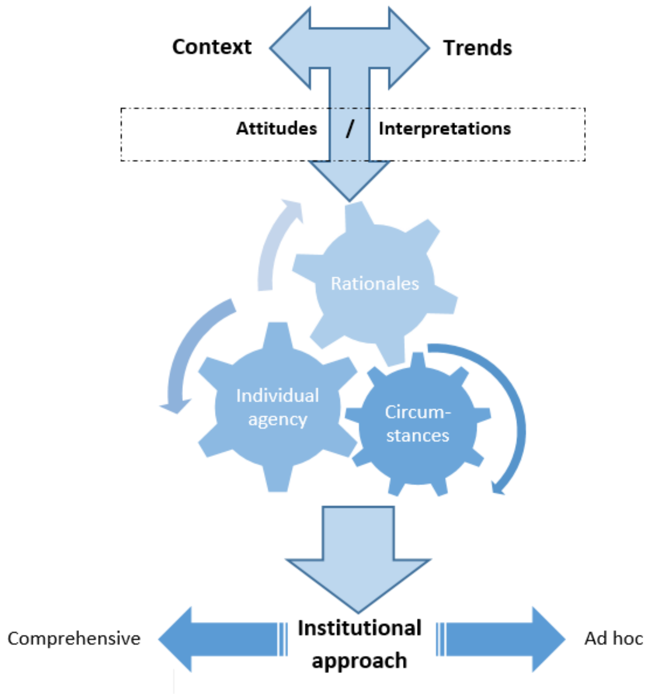

Figure 31: Visual representation of how context and global trends are interpreted by individuals to form rationales for IoHE. These rationales then mix with the individual agency of stakeholders and institutional circumstance to determine the overall institutional approach to internationalization (Source: Author)

6.2.1 Understanding the context

Contextual factors include history, geographic location, demographics, economy, society and culture, national priorities and policies, regulatory environments, institutional position within the national system, and many others. Differences in context influence a university's missions, visions, approaches and activities, as well as the options available to them (Rumbley, Altbach and Reisberg, 2012; Hunter, 2013). NUS and NTU cannot be separated from the global and economically driven outlook of the state any more than OU and KU can be separated from their linguistic environment and national corporate hiring cycles. While impossible to adequately explore all of the contextual factors that influence approach to internationalization, this section seeks to highlight a few of what emerged as the most salient factors affecting the two contexts.

While there are important within country differences between the cases, the strikingly similar approaches found within county, and differences between countries, signal the strong influence of context. Indeed, the differences between the two contexts call into question the credibility of Marginson (2011a) including both Singapore and Japan in his model of 'East Asian post-Confucian' higher education (as will be further discussed in section 7.1.2).

Singapore's cosmopolitan environment, use of English, and generous government financing impact the universities' ability to engage internationally. Furthermore, the country's internationally-oriented approach to development fosters a mentality of engagement. Cultural aspects such as Singapore's high tolerance for ambiguity (Hofstede Insights, 2018), due to its history as a multicultural trading nation, may also help to remove some of the common barriers to more comprehensive approaches to internationalization.

> "I don't think NTU and NUS could have done what they have done without the explicit openness of the country." – NTU Dean 2

Japan on the other hand has a long history of linguistic independence, and strong domestically developed traditions of governance and management, as well as transitions from university to work. The large and robust domestic market also makes it somewhat less of a priority (compared to Singapore) for Japanese students, universities and companies to deeply engage internationally. At the same time, both the literature and documents reviewed in section 4.2 and the evidence from the two cases point to a warier and more cautious attitude towards globalization and the benefits and risks of global engagement.

6.2.1.1 Language

In considering the factors that influence both the national and institutional approaches to IoHE, perhaps the strongest is language. Although de Witt (2011) stresses that the use of English itself does not represent internationalization, undoubtedly for many outside of the Anglophone world the increasing emphasis on and use of English represents a critical part of the internationalization process. It is becoming increasingly difficult to participate in the global knowledge network without a strong command of English. The linguistic environment touches on nearly every aspect of a university's approach to internationalization, and dictates where and how resources must be directed. Language affects the ability of the cases to develop partnerships, promote student and faculty exchange and recruitment, and curricula offerings.

Reaching a middle class lifestyle in Singapore would be nearly impossible without proficient English. Japan achieved high levels of economic development without English, and its business sector does not particularly value English proficiency (Morita, 2015). In addition, the Japanese domestic market is large enough to support research and publication in Japanese

(Yonezawa, 2010), and many academics resist the pressure to publish in English. Singapore's small domestic publishing sector and use of English as the language of education fosters international publication. Multilingualism also fits well into the cosmopolitan identity the Singaporean state attempts to craft, whereas a host of historic, cultural and political factors work against the use of communicative English in Japan (Aspinall, 2012; Morita, 2015). Singapore has a 50 plus year history of promoting multilingualism, although they too have faced challenges. On the Japanese side, improving English usage in universities has become a major policy preoccupation for MEXT within the last ten years, with considerable resources directed towards this end. Whereas the former British colony can focus attention and resources elsewhere. The Japanese cases also have an inherent risk, especially in arts, humanities and law, of weakening indigenous language and culture by overemphasizing English. Similar risks may also exist in Singapore, and the relationship between the state's multilingual policies and the internationalization of its higher education sector may be an interesting area of further exploration.

Language is also an important factor in the ability of international students to stay on and work after graduation, which is a primary state-level rationale in both contexts. It also impacts the ability of international faculty to integrate into their institutions and participate in governance and administration. Increasing numbers of EMI programs in Japan mean that while they are able to attract more international students, larger portions of them do not acquire the language skills needed for the workplace, and the economy loses the chance to capitalize on the training that the universities provide. Some faculty members are beginning to be more proactive about engaging Japanese companies and working to create pipelines, but this is still developing.

6.2.1.2 Resources and funding

Funding may be another of the most critical contextual issues influencing approach to internationalization. While several of the interviewees in Singapore referenced being quite well supported financially, nearly all interviewees in the Japanese cases complained of budgetary limitations. Salmi (2009) argues that high levels of funding are key to developing a WCU. On the other hand, while proper allocation of resources is essential, some argue that large budgets are not needed for comprehensive internationalization (Hudzik, 2014).

It is clear that NUS and NTU both use attractive salary packages and research funding to recruit 'world-class' academics, scholarships to attract student, and invest heavily in their facilities to provide a comfortable environment in which to live, study and work. As such finances underpin and support their internationalization activities.

In the more financially austere environments of KU and OU, funding clearly weighs heavily in the minds of those within the universities. Such constraints may inhibit the universities' ability to start new programs and projects, engage in large scale PR initiatives, or more actively and effectively recruit international academics. However, funding may not be as related to the more core endeavor of creating a cultural shift on campus where internationalization is seen as an integral part of daily activities rather than adding additional layers of activities and projects that require additional funding. Nor would it prohibit the cases from more actively seeking out examples of effective cost-neutral forms of internationalization from different contexts.

6.2.1.3 History and development

History and stage of development is another significant contextual factor. Compared to the more mature Japanese higher education system which has what Hudzik (2014) refers to as the "drag of mature experience" (p. 83), Singapore (and several other East Asian nations) benefits from a ‘late development effect’ allowing for somewhat easier adaptation of good practices from other contexts to build systems more aligned to the 21st century global KBE. NTU in particular has since its founding been able to build almost entirely from the ground up in the connected internet age. The University has not needed to re-orient itself to the rapidly changing global environment, as many older universities around the world are having to.

Japanese national universities in general have longer standing systems and traditions in place, and are struggling with reforming entrenched bureaucracies. This is complicated by the fact that these very same processes are in part responsible for the Japanese higher education system’s rise to favored status within the region during the 20th century. Overall, this suggests that it may be easier to internationalize relatively younger universities. This is an interesting observation given that many of the recognized ‘World-class Universities’ are among the oldest institutions in the world.

In addition to the developmental history of the universities, the stage and history of internationalization itself is also important. Although the Singaporean cases have shorter histories, they have longer track records of international engagement, making it difficult to compare the cases at a single point in time. In terms of international engagement, the NTU and NUS of the early 2000s might be more akin to the OU and KU of today, although changes to local and global contexts over the last ten to twenty years have been significant.

6.2.1.4 Domestic sectors

Size and complexity of the country’s higher education landscape also plays a role. Singapore’s small size has allowed its government, until quite recently, to concentrate attention and resources almost exclusively on NUS and NTU. Thus, its size may be a direct contributor to its ability to develop two WCUs so rapidly. If the country were ten or twenty times the size, it is questionable whether they could have simultaneously developed a few WCUs while managing a quality system that met the needs of a much larger population. Many countries around the world are struggling with this very issue. NUS and NTU also were able to develop in a relative vacuum of domestic competition, and thus were able to dominate the nation's research funding while focusing almost exclusively on international competition. This has also enabled the state to craft policies and initiatives specific to the needs and capacities of the two universities. Thus, the state and the universities have been able to more effectively coordinate and align efforts than might have been possible in a larger system.

OU and KU sit near the apex of a large and complex higher education sector, which faces a shrinking pool of students and decreasing government funding. However, as they do sit toward the top, they are among the most assured of applicants and government funding, and perhaps the least incentivized to change. Their positions of domestic prestige also mean that they have an underdeveloped sense of competition at both the domestic and international levels, though this is certainly changing. At the same time, government initiatives and policies are not tailored to the two universities and must accommodate for a much larger sector. This may contribute to the development of strategic plans that are not entirely suited to the realities of the universities.

Japanese norms and practices related to the transition from university to work also influence the cases' approaches to internationalization. Japan's academic calendar, which is inextricably tied to corporate hiring cycles, can serve as one example of how the highly structured and interdependent nature of Japanese social practices, which evolved along lines not necessarily compatible with dominant world systems, can influence the extent to which the individual universities are able to integrate into global systems. The need for undergraduate students to focus on job hunting in their third year as well as the corporate preference to hire and onboard in the spring have major implications for student participation in exchange programs. While academic calendars in any national context have considerable influence on how society organizes itself, and changes requires a considerable amount of social and political will, in the Japanese case it would require a massive shift on the part of a business sector known for rigid adherence to fixed processes.

A move on the part of a Japanese university to significantly alter its academic calendar in line with global norms would disrupt this domestic corporate hiring cycle. Single institutions are also limited in their ability to influence the national corporate structures and culture. As one interviewee at OU expressed it, “If the companies don’t change, nothing will change”. Indeed, there are those within the system who favor altering the calendar in line with global standards, and KU did make some movement in that direction, but the embedded job hunting culture made it unrealistic and the idea was abandoned. While not insurmountable, the current calendar impedes the cases’ ability to recruit and admit international students, send and receive students on semester/year-long exchange programs, and to send and receive visiting professors. Accepting exchange students is easier than sending, as the universities can create their own short term programs, but partners in other countries are less likely to develop programs to accommodate the Japanese calendar.

The above is by no means an exhaustive list, but the hope is that it sufficiently demonstrates the powerful influence of context while highlighting just a few of the more salient factors. In light of this, it is critical for policymakers and institutional leadership to be knowledgeable of and deeply consider such factors when considering practices and approaches from abroad and developing their own internationalization strategies. Such factors also play in important role in determining how individuals interpret and respond to global trends, as discussed in the next section.

6.2.2 Interpreting trends

Global trends such as marketization and globalization do not affect all countries and institutions in the same way. As demonstrated above, a host of contextual factors intervene and influence perceptions of and reactions to these trends, which in turn influence the trends themselves. Thus, just as global trends and local context cannot be separated, neither can exist independently of how individuals perceive them. These perceptions serve as the driving force behind the rationales individuals may have for or against course of action such as internationalization.

6.2.2.1 Globalization

Globalization, for example, is viewed and interpreted differently by those in the Singaporean and Japanese contexts. Whereas the Singaporean state positions globalization as the best path to its own development, policymakers in Japan often express a view of globalization as a risk-filled external force needing to be mitigated. Marginson (2010) suggests that Singapore effectively imagines a global world where systems are shared between a multiplicity of actors, of which the nation-state is one, whereas Japan, despite the rhetoric of super global universities and global human resources, for the most part still imagines the world in inter-national terms. While global systems cannot entirely be ignored, there is still an inherent sense of competition between nations that hampers effective integration into global networks. This is of course not true for all actors, but even the proponents of globalization or internationalization in Japan recognize that all sectors of society may not be as willing to embrace it. In the words of one interviewee,

> "My own belief is that internationalization is absolutely necessary… We can't finish any work now in Japan alone. Because everything is now global and international. All issues. So if you want to tackle such issues, and if you want to be a member of the international community, which is globalizing rapidly, then there is no choice but to make it more of a daily reality. So this is not only about the university, but about the whole of Japan. And because I work in the university environment, I try to do it here. But there is a limit that one university can do. For example, we produce the globalized students, but the Japanese society, the Japanese companies, the Japanese public institutions, are they ready to accept these people? It's a question. If they don't then these students will go out and find jobs elsewhere." – OU Dean 2

Globalization is a complex multifaceted process that touches on nearly all aspects of society, economy and culture. As such, it is difficult to discuss all the ways it is related to higher education in the case countries, but by taking one function of higher education (i.e. workforce preparation) as an example, we can consider how the differing interpretations of globalization can affect this function.

In Singapore, the distinction between the global and domestic economy is blurred. The two are intertwined, and there is a need to prepare students to participate in the global economy and workforce *in order to* contribute to the domestic one. There are underlying assumptions that students may pursue careers anywhere, that this is ultimately a good thing for the Singaporean economy, and that it is important to prepare them adequately. Furthermore, because of the international nature of the local job market, local graduates compete with talent from around the world for domestic jobs. This requires the universities to prepare globally competitive graduates for even the domestic market.

In the Japanese cases, generally speaking, there is little sense of responsibility for preparing students for careers outside of Japan. They may want to prepare globally savvy workers for Japanese companies with the hope that they might enhance competitiveness in the global marketplace, but working culture will remain primarily Japanese. At the same time, Japanese university graduates primarily only compete with other graduates from within Japan. Those from elite institutions, such as OU and KU, typically do not need to compete with graduates from elite institutions abroad for domestic jobs. These differing views on the world of work that the universities need to prepare their graduates for have clear implications for the type of education they provide as well as for the need to create other opportunities for international exposure (i.e. study abroad, an international climate on campus, etc.).

6.2.2.2 Massification

The current global trend towards massification also affects Singapore and Japan in different ways. Japan was among the first countries in the world to massify its higher education sector, and while participation rates continue on an upward trend, overall enrollments are declining due to the shrinking population. Other East Asian contexts either already are or will soon face the same phenomenon, while China and other parts of Asia are trying to keep pace with rapidly expanding demand. Singapore has until fairly recently kept an elite higher education system, but in the last ten years has also felt the need to respond to domestic need and demand by expanding its higher education sector.

Both governments are interested in attracting increasing numbers of international students to their shores, but in 2011 Singapore had to downplay its efforts in the face of domestic opposition, while Japan overall still has many available places to fill. Singapore's expansion of the sector can also be seen in part as a response to increasing regional not just domestic demand. NUS and NTU have had to respond to simultaneous calls to expand and increase the quality of their programs and research profiles while protecting opportunities for domestic students. Thus, after the imposition of the caps on international undergraduate degree seekers, both universities further prioritized graduate programs and international recruitment leading to nearly half of their graduate student body coming from overseas. At the same time, they have been able to grow their graduate schools and research profiles, and thus offerings available to domestic students, precisely by bringing in large numbers of international graduate students. OU and KU have also focused on graduate students. While there is no formal cap on undergraduate places, government regulations require seats for international undergraduates to be reallocated from domestic students, which would be politically very unpopular given the intense competition for entry among domestic students. Thus, the cases leave the role of integrating international undergraduate students to other universities in the sector and focus responding to increasing regional demand for graduate level education.

Both contexts take advantage of the increased demand in the region, but in slightly different ways. All four cases receive the vast majority of international students from within the region, and most notably China. Singapore also takes in considerable numbers from South Asia, which is a growing but not a major source for Japan. Both contexts are also increasingly targeting Vietnam in an effort to capitalize on increasing demand there. NUS and NTU have been able to capitalize on the regional growth as both as a source of revenue and as a source of human resources. In the Japanese cases they have made a significant contribution to keeping established centers of research afloat.

6.2.2.3 Marketization

The trend toward marketization has certainly affected state policy and institutional practice in all cases, but to different extents and in different ways. There are two basic forms of marketization: the emergence of a global marketplace for higher education, and the reform of higher education management and governance along market principles (Mok, 2005). Barber, Donnelly and Rizvi (2013) note that while most universities were founded in the 20th century to be regional or national institutions, they are increasingly operating in a global market, and are becoming increasingly less accountable to the state and more accountable to the market. This is not quite the case for these four universities. While they certainly are becoming more responsive to the market, as national institutions their accountability remains to the state. It is the state that drives them towards marketization, and if anything this increased their accountability to the state rather than the market. Despite its increasingly global functions, overall higher education is still very much linked to, and in many cases subservient to, the state through funding, regulatory controls, national polices and other mechanisms (Geiger, 1992; Scott, 1998).

While the Japanese government incorporated its national universities two years earlier than Singapore, it cannot be said to have resulted in significantly greater autonomy for the universities given the audit culture that has emerged. Singapore's developmental state certainly has in no way left its universities to the whims of the market, but although it retains significant direction setting authority it has provided the university leadership with more freedom to determine their own operations and structures. The Singaporean cases have also more wholeheartedly embraced the emerging global higher education marketspace and aligned their governance and management structures along more corporate NPM principles. This may be at least in part attributable to their close association to American higher education enterprises such as MIT and Harvard since the 1980s and 1990s. At the same time, given the top-down leadership structures in Singapore, faculty have less governance control and agency to resist direction set by administration. NUS and NTU also came of age, as it were, in an era where global competition was already becoming a reality, and thus perhaps it is more natural for them to adopt views and practices accordingly.

KU and OU have much longer traditions of academic governance, and many in the universities were not in favor of the move towards incorporation. Indeed, at least some interviewees indicated that their fears of an audit culture have been realized. As one interviewee expressed it, rather than the culture of 'publish or perish' found in many universities throughout the world, academics in Japanese national universities were suffering from a culture of 'apply or perish'. Although it has been more than 14 years since incorporation, OU and KU are still tightly confined by state regulation and steering through reporting and financing mechanisms. At the same time, faculty autonomy inhibits the adoption of more market-oriented management practices. As an example, OU's former president attempted to administer the university in a more top-down corporate fashion, and though the initiatives of this period may have merit, the approach was unpopular among faculty and led to visible resistance, demonstrating faculty agency to influence institutional approach. Discussion of the relative benefits or drawbacks of academic versus administrative authority is beyond the scope of this research, but it is interesting to note the tension and potential effect on a university's approach to developing and implementing an international strategy. While NTU and NUS may be able to develop and implement strategies more quickly and effectively than the Japanese cases, there are important issues related to faculty satisfaction and retention (Mok, 2010; Sidhu, Ho and Yeoh, 2011; Ng, 2013). The Japanese cases have been able to largely protect traditional forms of faculty governance while for the most part maintaining significant levels of research output and graduate production. However, limitations on efficiency improvements in the cases contributes to a slower pace of change and development.

From the above discussion, we can see that similar global phenomena manifest themselves differently across contexts. This reinforces the concept identified in the literature review that analysis of such global phenomena must always be grounded in local realities. These different manifestations of global trends will also influence how individuals within different contexts will interpret and respond to them, as discussed in the next section.

6.2.3 Rationales and individual agency

IoHE as a concept, similar to the above global trends, can be interpreted differently depending on the local context and actors. However, IoHE is different in that it is also, at least partially, a response to the above trends. As such, how the above trends are interpreted help to form the rationales for internationalization, which then intersect with other factors to determine institutional approach. As many note (e.g. de Wit, 2002), IoHE is not an end in and of itself, but a tool that can be used to a variety of different ends. Thus, the particular ends that individual actors hold, often in response to their interpretations of the above trends influenced by their own contextual environments, intersect to create their individual rationales for IoHE.

6.2.3.1 State, institutional and individual rationales, and aligning the three

In the Singaporean cases, the utilitarian view of IoHE identified in the literature as characteristic of the region (Ng, 2012; Huang, 2015; Reyes and Gopinathan, 2015) appears dominant. Both the state and case universities held strong economic and political rationales. The universities (NUS in particular), consistent with the rationale model outlined in section 3.2.2.2, also held strong academic rationales of using internationalization to enhance the educational experience. Although even these were underpinned by a broader objective of contributing to national economic prosperity. Rationales were often expressed in terms of talent attraction, research and educational excellence, reputation management, and preparing students for an internationally-oriented workforce. Although seen as a benefit, international*ism* was not considered the primary goal of internationalization. There was a widely-shared belief that internationalization was a prerequisite for excellence, and thus was natural and inevitable in the Singaporean context.

> "In a sense, internationalization is sort of the icing on the cake. It's nice to have, but your core function is still to educate your students and do your research. All these things are extras. Of course they help, but none of them are necessary things that you have to do. So we have to be very selective in what we want to do, because they all take resources and time." – NUS leadership

The Japanese government, in response to its own perceived national interest as well as in answer to external calls for greater internationalization, has since the late 2000s introduced a series of IoHE projects and initiatives. As a result, OU and KU find themselves under considerable external pressure to become more 'international', but there is not a strong shared sense of exactly what that should look like (see section 4.2.3). A brief excerpt from KU President Yanagiwa (2014) provides some insight into the conflicted nature of KU's attitude towards shifting external demands and its responsibilities to both the needs of the state and its own traditions.

> Our world is currently experiencing a number of rapid changes that would have been unimaginable in the 20th century…. Universities need to think seriously about what they stand for in these turbulent times. Meanwhile, the Japanese government is working with universities and industry to promote the cultivation of global human capital, and calling on universities to implement reforms designed to raise their competitiveness internationally. Kyoto University now needs to identify how best to

> respond to the demands of government and wider society while remaining true to its founding spirit[32].

Internal rationales are also often not well developed, since projects are often in response to external incentives. One KU interviewee noted the need for more consensus around the context under which education is internationalized, not just among higher education, but other sectors of society such as industry and taxpayers. For both OU and KU, academic and socio-cultural rationales for internationalizing were commonly voiced.

> "We believe that such kind of activity will give us new ideas, new perspectives, new approaches in our research and education. And that is what we want. So promoting international activities is a kind of one path to develop research and education." – KU Director 2

However, the extent to which those in the universities actually approach research and education from an international perspective is questionable. For example, when comparing the overarching visions related to IoHE and the actual targets and objectives set (more so in the earlier developed plans), there is a sense that the authors believed that raising international metrics would lead to an educational experience which develops students' ability to function and lead in an international climate. Yet there were few explicit attempts to link these back to actual teaching and learning practice. Nor were there strong mechanisms put in place to assess outcomes. Thus, the international activities are not directly tied to the expressed rationales.

[32] https://www.kyoto-u.ac.jp/en/about/president/

> "Internationalization, research and education [are] still not totally merged yet." – KU Director 2

At the same time, there is a disconnect between the government level and institutional rationales. This is not a new revelation. As Horie noted in 2015,

> This empowerment of higher education practitioners is important in terms of yet another challenge, namely bridging the gap between government and educational institution rationales. Both share general values in terms of internationalization, but their focuses are not the same. The government highlights economic development, but the institutions perceive the core value of internationalization as self-advancement, including quality improvement of teaching and learning, research, services, and governance and regard the production of the workforce required by society as only one aspect of its role. This gap should be bridged through vigorous debate among policy-makers, international education experts, and other stakeholders in order to implement the ambitious internationalization policies in pedagogically meaningful ways. (p. 238)

This causes some tensions in that the institutional strategies for internationalization are often developed in response to government competitive grant schemes such as TGUP and G30, and thus are based on what the universities believe the government will fund rather than on internally developed rationales for internationalization. For example, when the G30 project was introduced, there were rumors that unless there was an undergraduate EMI course it would be very difficult to get funding, and leadership had to coerce reluctant faculties to undertake take the initiative. Even those in leadership positions can be skeptical, with one executive-level interviewee questioning the value of educating undergraduates in English only to have them go find jobs in the EU or US.

As a result, government funding becomes a key driver of internationalization, and projects are implemented in ways that do not necessarily work towards the ends they are ostensibly meant to. Significant portions of the time and energy of those responsible for planning at the case universities is directed towards responding to government calls for proposals and reporting on funded projects.

> “Internationalization has a lot to do with starting new projects.” – OU Senior administrator 1

Additionally, although there is a sense that internationalization is inevitable in the 21st century, given the historic elite status of the Japanese cases, many internal stakeholders believe that domestically developed excellence is entirely possible, and there is not the strong association between internationalization and excellence that exists in the Singaporean context.

Interestingly, despite Singapore’s more economic rationales, due to an environment conducive to heavy international engagement and integration and effective strategies, international*ism* has become somewhat of a natural byproduct, even though it is not a primary rationale. In line with the more socio-cultural rationales for IoHE, the Japanese cases are more prone to rhetoric related to the benefits of IoHE to humanity and global society. There is a stated desire to foster internationalization as a path towards greater diversity, harmony and meaningful contributions to the world. However, such ends are more difficult to operationalize, making it challenging to set meaningful strategic objectives and align activities, increasing the risk of introducing less effective strategies. This highlights the importance of clearly articulating a vision of what internationalization looks like in the particular university context, and developing objectives and strategies that clearly and measurably contribute to this vision.

6.2.3.2 The influence of individual agency on approach

The importance of individual agency and decision making is clearly evident in all four of the cases. Universities are complex organizations comprised of different groups and individuals, and the choices that certain individuals make can have a significant impact on institutional direction. There are numerous examples at each case of directions accelerating, changing or reversing depending on the individuals with decision making authority. These differing perceptions play a strong role in shaping the university vision and general framework under which internationalization is enacted.

Disciplinary perspectives can also have an impact. As one KU interviewee expressed, fields such as agriculture were prime for more international engagement. Given the decline of such industries and research opportunities domestically, it was natural for them to seek out research sites abroad while sharing the knowledge and experience they have gained over the years with those in less developed contexts. The increasingly global nature of questions around environmental change and food security also pushed those in the discipline towards greater internationalization.

As another example, in NTU's case it is clear that President Andersson's experience outside of Singapore strongly influenced his international approach to running the university. Not only did this manifest itself in the high numbers of international faculty, but also in the high rates of student exchange with Sweden. For OU, the pushback against the former president's management approach at least in part led to the subsequent administration deemphasizing numerical targets connected to IoHE. At KU, one interviewee noted that there may be an opportunity for some major shifts at the University in the near future, as a group of more progressive faculty are beginning to take on leadership positions. However, they also noted that the Japanese style of promotion with age meant that there would only be a small window before this group retired. These, and countless other examples within each case, help to illustrate the roles individual agency can have over intuitional direction. The last example from KU also helps to demonstrate how such individual agency can be bound by institutional circumstance.

6.2.4 Institutional circumstances

Individual agency while important is also confined by a university's unique circumstances. Institutional planning is grounded in and bound by institutional mission, funding models, student make-up, disciplinary focus, policy context, governance and management structures and a host of other factors. Marginson, Kaur and Sawir (2011) refer to this as the university's 'position'. Moving a university towards a more global frame of reference, regardless of the rationales for doing so, must appropriately acknowledge one's starting point as well as limitations and opportunities provided by one's circumstances. As just one brief example, the disciplinary focus of the university may impact approach to internationalization. NTU's more concentrated focus on science and technology likely contributes to its stronger emphasis on industry and research partnerships, whereas NUS's more comprehensive offerings in the social sciences, humanities, and liberal arts requires more local expertise which may affect the profile of the faculty body.

The following sections discuss two major interrelated areas of institutional circumstance; one primarily external, the other primarily internal. Government policy and activity can have a major impact on the choices universities have available to them. Similarly, the university's internal governance and management structures can have a strong influence on how leadership set and enact strategy. Such circumstances can enhance or check the agency of individuals throughout the university to move things in a given direction.

6.2.4.1 National IoHE policy environment

The state, especially developmental states such as Singapore and Japan, plays a major role in determining the circumstances under which the universities are able to engage internationally. As discussed in section 3.1.5, understanding the relationship between the state and higher education is paramount to understanding any activity in the higher education sector. While states are bound by contextual factors shared with the universities, they are also actors contributing to the circumstances in which the national universities operate. The policies and approaches of different government ministries and agencies, which may not always be consistent, towards higher education generally and IoHE specifically can have a major influence on institutional approach. Marginson, Kaur and Sawir (2011) note that for ‘lucky’ universities, citing Singapore in particular as an example, global strategies may be fostered by government policy.

In both Singapore and Japan, the state plays a large and active role in higher education generally and in internationalization policy specifically. That does not necessarily mean that the state and universities view and approach IoHE in the same way, as noted in the previous section. Alignment can fall on a spectrum at different times and with regard to different aspects. In general, though, the Singaporean cases exhibited greater alignment between state and institutional rationales and approaches. There was more discord on the Japanese side, with the universities feeling pressured or restricted by state policies. This may be compounded by less alignment and coordination between different government bodies and policies on the Japanese side

The most significant point of divergence in state approach to IoHE is perhaps the commitment to a long-term and integrated policy framework in Singapore, compared to a more incremental and evolutionary project-based approach in Japan. This may be reflective of the different policy making environments in the two countries.

Singapore's long-standing quasi-authoritarian regime is able to set long term objectives and move significant resources across all sectors towards those ends. Singapore's GSH is supported by complementary policy reforms in urban re-development, taxation, immigration and intellectual property (IP) (Sidhu, Ho and Yeoh, 2011; Tan, 2016). The Singapore government also seems more comfortable with and capable of manipulating public support around its policy goals.

The Japanese government's approach to internationalization is somewhat less straightforward and does not lie within a single policy framework (see Newby et al, 2009). Although there seems to be clear agreement on IoHE's importance as a policy issue (MEXT, 2012; Aspinall, 2012; Horie, 2015), there is less consensus on what internationalization (*kokusaika*) actually means and how it should be used in the Japanese context (Yonezawa, 2010). Japan's more fluid and competitive political environment makes it difficult for policy makers to guarantee significant resources far into the future and to move multiple policy areas simultaneously, as demonstrated by the cuts to the G30 and TGUP initiatives midway through their lifespans. Many of Japan's policies emerging from other ministries do not necessarily support MEXT's internationalization goals. There are signs that other industry and government sectors are beginning to align themselves, such as the desire to retain more international students for the workforce, however this still has some way to go. The government may also be more influenced by public opinion, and has more stringent budgetary constraints compared to Singapore. The result is a fragmented policy environment comprising a variety of very different initiatives under the banner of IoHE.

The political structures and climate in each country influence internationalization within the cases. The Singaporean state remains heavily involved in university operations by setting overall national direction and priorities and then investing heavily in areas that support those priorities (Mok, 2015).

> "If a minister has gone abroad and found something quite exciting, they will come back and say, 'What about our local research? What does it tell us?'… The Ministry supports us with very generous grants as well. They are all rigorously, and also internationally reviewed." - NTU Dean 3

Large scale partnerships such as Duke-NUS, Yale-NUS and SMART are examples of such state direction and intervention. Such projects often serve state rather than university strategy, and demonstrate how the universities themselves are conceptualized as tools of the state. When the government aims to develop a particular area of research or style of education in the country, it leverages its control over the universities to realize that aim. As a result, despite their labels as autonomous, they are subject to government control through such means as seats on the boards. Similarly, interviewee's indicated that the state's interests are generally considered when planning. As former NUS VC Lim Pin put it, "In practical terms, this meant that the University, in terms of it policies, orientation and emphasis, would be closely linked to national requirements" (quoted in Lee and Yong, 1996, p. 196). NUS and NTU are both keenly aware of their roles and responsibilities to serve national priorities, and global engagement is explicitly seen as an effective means of doing so. "NTUs national orientation can able be seen in the everyday activities" (Leong, 2002, p. 5-18).

NUS leadership have publicly expressed how the University's focus on self-development has allowed them to develop the intellectual resources and capacity to lead and contribute at a global level, but the imperative is to use such expertise to address challenges important for

Singapore. Leadership at both NUS and NTU have expressed themselves as engines of the country's drive towards an innovative, entrepreneurial and cosmopolitan ecosystem. Rhetoric is consistent at the state, university, school/college, and even individual interviewee level. As just one example, consistent with the state's strong rhetoric of survival (outlined in section 4.1.3), in a 2016 speech, NUS President Tan went so far as to liken NUS's need to stay alert and responsive to global changes to the complete annihilation of 16th century Indigenous South American populations (who were not at the forefront of technological advancements of the day). This strong rhetorical tool and vivid imagery positions 'keeping up' and staying globally competitive as the University's and nation's only means to survival.

However, rather than overly prescriptive policies that may not translate effectively at lower levels, the state shows a preference for broad policy direction, allowing the universities autonomy within a set framework to pursue internationalization strategies that best suit their capabilities and circumstances. Interestingly, this was also cited as the preferred internal management approach by several interviewees. Allowing the universities more flexibility in hiring practices and tenure systems in order to attract top faculty is one example. At NUS, filling senior administrative posts with former government bureaucrats was seen was a way to facilitate alignment to national vision. In turn, members of the university communities kept state interests in mind when planning. Importantly, the dialogue flows both directions.

> "It doesn't happen explicitly, but because we are so deeply tied to the state and deeply tied to the interests of Singapore, it's always in the back of our minds. And it just so happens that it does fit quite well with the university's mission and vision…To their credit as well, the state does consult with us, and discuss with us, and take a lot of our feedback into account when they are developing policies and strategies around

> education, higher education, research, and even internationalization." - NTU Director 1

There are sometimes tensions, as with the need to strike a balance between local needs and global aspirations, and be mindful their roles as national universities serving the local population. Sometimes government direction setting and political priorities can change faster than university programs (especially research intensive ones) are able to respond. NTU's Peaks of Excellence, for example, may take several years to get set up and recruit sufficient numbers of researchers and PhD students, who then need to be supported throughout at least four years of study and research. If the MOE deprioritizes an area one year, what should be done with the commitments set in place under the previous peak? One NTU interviewee also commented that the MOE does sometimes have a tendency to micromanage, dictating specific target around student numbers, for example. He was quick to acknowledge though, "that is Singapore, and how they like to do it."

Japan developed a robust and domestically self-sufficient higher education sector early on, but now that nationalistic approach has come to be seen as weakness by many (e.g. Newby et al, 2009). The emergence of a new global knowledge society and economy with English as the *lingua franca* is forcing the state, somewhat reluctantly, to internationalize in order to stay competitive (Poole, 2010; Ishikawa, 2011; Yonezawa and Shimmi, 2015). Thus, the incremental approach to IoHE by the Japanese state might be interpreted as a desire to hit on the minimum amount of internationalization needed to revitalize society and the economy, while protecting as much of Japanese identity as possible, and may not signal a genuine commitment to the stated rationales for reform. As Yonezawa and Shimmi (2015) note, "the tension between the
desire for a global or cosmopolitan profile and the preservation of national identity… are

becoming more apparent" (p. 28). Nonetheless, although the Japanese government's approach is more fragmented, considering the individual policy initiatives collectively, four broad aims can be identified: fostering highly ranked WCUs, increasing the number of international students and scholars, developing stronger regional partnerships, and producing *gurobaru jinzai* for the twenty-fist century global KBE.

However, the fragmented nature in which these aims are pursued, can make it difficult for the universities to align themselves. Both KU and OU are locked into several different government-mandated planning and reporting cycles, face annual reductions in budgets, and are forced to submit detailed proposals to receive funds for institutional improvements and internationalization initiatives. In addition to the six-year "mid-term" planning cycle, there is a separate seven-year accreditation cycle, and special projects and initiatives that require additional proposals and reporting. It is not clearly communicated how internationalization factors into these various evaluations, and special project funding application cycles often do not provide enough time for the universities to develop proposals with widespread institutional buy-in. So there are tensions between impact and significance and meeting government mandates. There is also a general sentiment within the universities that government initiatives are developed without proper consultation with the sector, and thus set unrealistic targets.

> "For the TGUP, Super Global, the government set by themselves. They don't care about the universities' situation. They just only check the request from the outside or the ministry. So from the industry, or from the cabinet, or from the external specialists. So the target is from the outside, so it is very high from the standpoint of the universities. So I think most of the universities cannot attain their target numbers.

> Especially the number of the foreign students and the foreign faculty." – OU Director 1

The Japanese cases have continued through several years of restructurings, but there is a stated lack of teamwork, having the right people in the right place, and fostering vision and innovation. One interviewee commented that for the government the focus seems to be on making new plans rather than monitoring and maintaining commitment to directions set in existing initiatives. As the state does not send a strong message of commitment to assessing and achieving the actual outcomes of implemented projects, some within the universities feel it is difficult to know where to focus attention, energy and limited resources.

> "Direction of the Japanese government is not consistent." – OU Director 1

Another interviewee commented that even some within MEXT are now saying they insisted on too many diverse projects and goals, and are reviewing their approach, although it is unclear what the future direction will be. MEXT does have a practice of occasionally placing officials within university offices for two to three years. This can lead to a better understanding of internal environments, cultures and constraints, and then bring those perspectives back to the ministry. It can also be helpful for the universities to develop direct lines of communication within the ministry. Perhaps such practice could be increased in the future to help generate greater alignment at the state and institutional levels.

As mentioned previously, resources (i.e. funding and time) clearly weighed heavily on the minds of most interviewees at KU and OU. Many complained of being insufficiently resourced to fulfill government project/program objectives. Indeed, Japan is among the lowest of all OECD countries in public spending on higher education. The current annual state reductions to national university budgets is prompting the universities to consider other ways to think about internationalization initiatives other than as an expense.

> “Maybe the cause is in ourselves. But we are undergoing a severe budget cut. And we don’t have the financial resources to promote the projects. So in that sense we should consider something like the virtuous cycle.” - OU Leadership

However, overall interviewees perpetuated a view that internationalization was something that required additional resources. At the same time, the universities are bound by bureaucratic policies and regulations which prevent them from launching programs in a way that that could potentially be cost-neutral or even revenue generating. The inability to charge higher tuition for international or special programs is one example. Overall, interviewees expressed a sentiment that the universities were limited in their ability to change their own situation.

> “It’s very hard to do entrepreneurism in Japanese higher education as everything is controlled and financed by MEXT.” – KU Director 3

Notably, many of the universities’ internal administrative units are funded by MEXT projects grants, and thus report to the government rather than university leadership. This introduces several challenges for long-term institutional planning. Permanent staff may be hired as part of temporary projects, which has implications for long-term staffing budgets and staff specialization. Even the continuation of awarded funds is not guaranteed over a project’s lifetime, as demonstrated by the 30% decrease in TGUP funds from 2018. Not only does this create difficulties in completing projects already underway, but causes some confusion among stakeholders regarding the importance of internationalization, and may cause them to be wary of wholeheartedly committing to initiatives. Such cuts are often not the result of reversals within MEXT, but come from conflicting inter-agency priorities, such as the Ministry of Finance.

Overall, government policies and practices (especially with regard to university autonomy and financing) can have a heavy influence on an institution's circumstances. This in turn has implications for the nature of projects and activities related to internationalization and how those in the universities conceptualize such activities in terms of the institution's core activities and budgets.

6.2.4.2 Governance and management structures

While governance and management structures are not necessarily directly related to a university's level of internationalization, based on the evidence from these four cases, it has some impact on how internationalization strategies are developed and implemented. Strong central leadership is an underlying assumption in Hudzik's (2015) model of comprehensive internationalization:

> Managing the interplay of the diverse interests and priorities of a comprehensive internationalization strategy becomes an organizational challenge, often requiring the establishment of institutional governance mechanisms to guide the process and mediate across interests …Organizational change in the form of increased bureaucracy may be a consequence of attempts to encourage and coordinate more complex and larger-scale forms of internationalization (ibid, p. 39).

Less centralized universities may still be able to effectively and comprehensively internationalize, but the process of moving the university in a shared direction is likely to be considerably less straightforward. Indeed, following along Kerr's (1963) metaphor of a city, it would be akin to a mayor or city council rallying a city around a shared set of ideals. Not impossible, but requiring a significant PR campaign. Kerr (ibid) also noted, however, that although corporate models of management seem to make some sense in the current global context of competitiveness, they may have risks in the long term. Thus, strengthening central controls in the name of internationalization should be weighed against possible long-term outcomes.

In the Singaporean cases, the presidents answer to external boards, and promotion systems are determined by KPIs set by the university administration. Deans and faculty leadership are appointed by university leadership, allowing administration to promote and put in decision-making positions people who have shown themselves aligned to the university's strategic direction. This model also gives faculty leadership considerable authority to move the schools and colleges in particular directions, without necessarily needing the prior approval of faculty. This allows for a certain degree of efficiency. Individual schools and institutes maintain significant autonomy in terms of starting, stopping, structuring programs, but the central administration has some recourse if there is a lack of movement towards set objectives.

There may also be a cultural element at play. Singapore is considered to have a relatively high power distance dynamic and respect for hierarchy and leadership (Hofstede Insights, 2018). The combination of this cultural element, the relatively centralized and top-down management structures, and the high levels of international faculty, may make it easier for the leadership to pursue an international agenda. Local faculty on one hand may be less likely to (and have less agency to) resist directions from leadership, and international faculty may be more supportive of such initiatives as they themselves are international agents. They may also be less inclined towards resistance in acknowledgement of their 'non-local' status. The impact of international faculty on a university's ability to internationalize could be an interesting area for further study.

The Japanese cases have much stronger academic governance. Most leadership have spent most if not all of their careers in their respective universities, and for the most part have risen through the ranks based on length of tenure, achievements and the support of their peers. Individual schools and colleges have a very high degree of autonomy, and if they choose not to align themselves with particular university-wide targets, the central administration has little recourse. Deans of individual schools and colleges are elected internally, usually for two year cycles, and the commitment of a particular school or college may change with the election of each new dean. Although the deans do not have the same agency to steer the schools in the same way that they do in the Singaporean context. Thus, the university's central administration must constantly work to gain widespread support from an ever changing faculty leadership. A particularly interesting insight came from one interviewee who explained that people in administrative roles within the universities' central units need PhDs not for the requirements of the job, but to gain the respect of the faculty they must work with.

This system is considerably more democratic and ensures more distributed leadership, and may be preferred from an academic governance perspective. Nonetheless, such diffused decision making can make medium to long term strategic planning a more complicated endeavor. One interviewee noted that it is easier to get consensus around international projects with a smaller group, so small schools may more effectively internationalize than larger ones. At the same time, there were cases of large schools, such as OU's School of Engineering, taking a leadership role in international activities, such as CAREN. This speaks to the agency of particular faculties to align themselves to greater or lesser extents with internationalization priorities or to set the priorities themselves.

This governance system also results in a situation where faculty may be elected by peers to leadership positions based on research achievements rather than management competency. Management structures among central administrative units can also be unclear compared to the more fixed corporate structures and reporting lines in Singapore. Accountability for reaching objectives set by the strategic plans was difficult to determine for both the Japanese cases. The distributed nature of international activities, without it necessarily being embedded within all university functions, makes it difficult grasp the extent and nature of activities taking place, let alone monitor and evaluate. It also has some impact on consistency of messaging and coordination of efforts and resources across different sections and levels of the universities.

While there is no judgement as to which forms of institutional governance and management is better for a university in the near or long term, it does seem evident that such structures impact how a university develops an approach to internationalization. Thus, we can see how circumstances from both within and without the university can play a role in determining the options that are available in terms of internationalization.

6.2.5 Summary

This section has attempted to use examples from the cases as well as the review of the national IoHE contexts to illustrate the process through which institutional approach to internationalization is determined. Global trends and contextual factors intersect and influence the rationales that individuals form for internationalizing. These rationales, which can vary from group to group or individual to individual, are limited or enhanced by the agency of the particular individual to act on or influence institutional structures, strategies or activities related to internationalization. This is further complicated by the unique circumstances that surround each institution. It is in this environment that university leadership develop institutional strategies for internationalization. In light of the ideas and insights presented in this discussion, the next section moves on to explore process of international vision and strategy development and implementation.

6.3 Strategy development

From here, in an attempt to answer research question five, the study continues into a discussion of what the available evidence suggests about internationalization strategy development and implementation for universities.

> RQ5: Based on the literature review and the experience of the four case universities, what can be learned about internationalization strategy development?

This section will explore the process by which the cases to greater or lesser extents embed internationalization into the institutional missions and create overarching vision related to internationalization. Next it examines the role of strategy in achieving those visions in each of the cases. Finally, the section moves into a discussion of facilitating internal support for and alignment to the international vision and strategy.

6.3.1 Vision and mission

Having considered various contextual factors, global trends, rationales for IoHE, and institutional circumstances, we can begin to move on to the process of developing institutional vision and strategy and generating internal alignment. It within these different environments and sets of circumstances that university leadership attempt to craft a vision for the university and how it relates to the rest of the world.

Establishing an institutional vision for global engagement and tying internationalization activities to existing institutional missions are two of the most important considerations in developing a comprehensive approach to internationalization. The literature repeatedly makes the point that international activities should be viewed as means to achieving other institutional goals, and if they are not, they will remain marginal and ad-hoc. Hudzik (2014) argues that for a comprehensive and coherent internationalization strategy, internationalization itself needs to be integrated into the “core institutional ethos, values and mission” (p. 1), and cannot be seen as separate to the main work of the university. If internationalization is not embedded into the institutional vision and strategy coherent, purposeful and achievable ways, there will likely be a mismatch between aspirations, needs and resources.

The Singaporean cases have crafted visions (closely aligned to that of the state) of themselves as global actors, have articulated clear messages around their global aspirations, and have effectively capitalized on their context to support their visions. They adhere to a corporate model with a clear raison d'être. While NUS and NTU are still complex universities with varying and conflicting perspectives, priorities and approaches, sitting at the top is an ever-present rhetoric of ‘global engagement for national development’. Excellence within a global frame of reference is an integrated part of the universities’ visions, and the evidence suggests that strategies such as partnerships, international recruitment and study abroad play an important role in achieving those visions of excellence. The close association between global and excellent is summarized by one interviewee’s comment:

> “Any good institution today is going to be a globalized institution.” – NUS Professor

The deep and pervasive rhetoric of internationalization was evident throughout university documents, and interviewees were supportive of the endeavor. This does not mean that internationalization was universally supported throughout the institutions, and tensions do exist. Nonetheless, overall, university leadership appear to be succeeding in effectively communicating clear visions and creating enough institutional engagement and buy-in to move towards those visions.

The Japanese cases are more similar to Kerr's city-like 'multiversity', with many competing visions and missions. Despite the overwhelming influence of the state, power within the universities is more distributed, and priorities can vary widely between groups. These groups also have more agency to resist central direction when it suits them, and push and pull in various ways. Partially as a result of this, institutional visions are less consistent. At the same time, though the Japanese cases were incorporated earlier, they have somewhat less experience with and more resistance to NPM practices and management styles. Interviewees expressed a distaste for semi-corporate exercises such as internal communications campaigns. For a host of reasons, as evidenced in previous sections, OU and KU were slower and have perhaps been more reluctant to buy into and push towards greater global engagement. However, analysis of the evolution of their respective approaches to internationalization reveals that they are consistently becoming more holistic and purposeful in their thinking about internationalization and more comprehensive in their approach.

Vision 2021 and *WINDOW*, while both still are fairly detailed strategic plans themselves, attempt to move away from the previous sets of numerical targets while communicating much simpler overarching concepts resting on a manageable number of broad pillars. The same pattern of development is visible in KU's move towards an umbrella 'international concept'. The overarching themes of 'open' and 'window' also suggest a commitment to engagement and serving as links between Japanese and global societies. However, a clear concise easily articulated and grasped vision of the university's future self that internal stakeholders can rally around is still underdeveloped in both cases. If the government does not shackle them to another set of overly prescriptive project requirements before the time TGUP expires in 2023, both cases may be well positioned to craft global visions and accompanying strategies to carry them forward under a more cohesive and unified banner.

6.3.2 Strategy Development

While vision is critical to more comprehensive forms of internationalization, a realistic and effective strategy should be in place to realize that vision. For successful strategic planning, Brewer, Charles and Ferguson (2015), quite similar to Hudzik (2014), encourage generating widespread understanding, input and participation with regular communications, establishing timelines, focusing on students, looking for cost-neutral opportunities, infusing internationalization into other plans and strategies, and continuous monitoring and reviewing. Interviewees at NTU cited the importance of support and engagement of university leadership and state policy makers (including funding agencies), a focus on long-term ROIs and balancing the speed of progress with long-term stability, and mindfulness of those who may have different views on globalization and internationalization. Several at NUS noted the importance of a commitment to a vision and goals, with wise and appropriate resourcing in accordance with that vision and circumstances. Appropriate resourcing was a key theme across all four cases as well as in the literature (e.g. Hudzik, 2014).

> “You need to allocate resources.” – NUS Director 2

While international strategy should set objectives, a laundry list of targets to reach within set timeframes does not necessarily equate to effective strategy. If the vision is the destination, a strategy can be likened to a compass that guides the university community towards that destination. It does not necessarily need to plot a detailed course. However, it should be clear how it contributes to the vision. The NUS vision, for example, encompasses the ideas of leadership, influence and Asia. Accordingly, its global engagement strategy explicitly addresses these three points through objectives related to programmatic excellence, thought leadership, deeper regional engagement, and branding and PR. Similarly, NUS positions talent as the ‘cornerstone’ of its definition of a ‘great university’, and this focus is clearly visible across the expressed rationales for many of its international activities. KU’s future paradigm, on the other hand, outlines several long-term goals which have the potential to serve as a strong foundation for direction setting within the University. Unfortunately, it is not immediately clear how these goals relate to the Japan Gateway project, the WINDOW vision, the current mid-term plan, or the DNU concept. It is likely that the long-term goals are an amalgamation of priorities from these other plans, but the simultaneous existence of multiple strategies detracts from the university’s ability to focus energy, resources and messaging around any one.

This complicated web of overlapping strategies related to internationalization is largely, but not entirely, the result of external government requirements and initiatives. The below figure outlines the various project and planning cycles implemented by MEXT and the Japanese case universities, demonstrating a series of overlapping strategic frameworks that KU and OU simultaneously operate under. OU is somewhat better at aligning its own planning cycles to those required by MEXT.

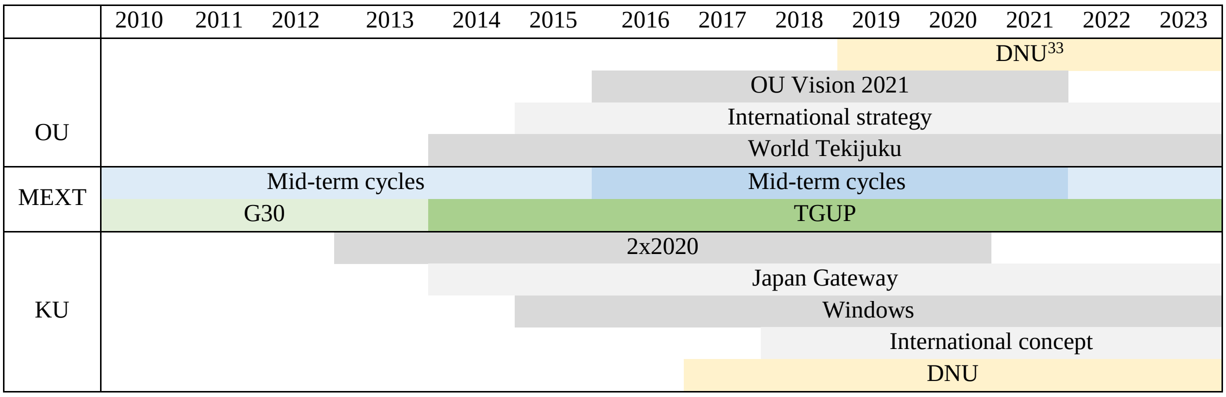

Figure 32: Current strategic frameworks within the Japanese cases and major MEXT planning requirements (Source: Author).

The earlier identified structural and contextual barriers to internationalization that the Japanese cases face are then compounded by the need to respond to government projects that may not adequately consider the institutional circumstances of the universities. As a result, proposals may not direct attention and resources to the areas where they could be most effectively utilized or areas where they might receive the most internal support. Both KU and OU have spent considerable time and energy creating these various plans and strategies, often in response to government funding initiatives. However, interviewees within both cases expressed dissatisfaction with existing strategies, especially the older but still current ones heavy in numerical targets. The literature is also critical of approaches to internationalization driven by numerical targets. One OU interviewee cited time and the continuous adding of more and more internationalization projects contributing to an overall sense of fatigue as one of the biggest challenges to effective internationalization at the university.

> "International affairs, it should be more fun, I think. And there are people who are interested, but it's just so much workload. And there has to be a general sense of

[33] OU was granted DNU status in October 2018, and this is not represented in this research. It was briefly included here just to help demonstrated the complexity of the strategic planning environment for each university.

> accomplishment. There is a general fatigue of internationalization all over the world now. And we are feeling that in a different sense, but the global sense of fatigue of internationalization will definitely come to Japan, I think." – OU Senior administrator 1

They went on to call for a creative approach to reduce and prioritize projects, reduce workloads, and improve quality. Despite the dissatisfaction, leadership interviewed did not feel they had the agency to completely abandon previous plans before they expire. Thus even as leadership gain a more sophisticated understanding of global engagement and how to achieve it, and strategic planning capacity improves, the result is often half measures that attempt to bridge past commitments with what the leadership would really like to do moving forward. The OU 2015 internationalization strategy is a good example. From the beginning it was conceived of as a way to tie together, synthesize and repackage past strategic objectives rather than chart a new path forward.

The above system also translates into the more complicated management structures for internationalization. Compared to the relatively straightforward structures in NUS and NTU which primarily consisted of an SIOs office with units for partnerships and planning and another for exchange related activities, both KU and OU had an array of different offices and committees, sometimes with shared responsibility, for international activities. This contributes to a confusing landscape with a lack of accountability throughout the institutions. It also serves to separate the international element from the day to day work of the university.

Effective strategies should also regularly monitor internal and external shits. As priorities, positions and trends change, an internationalization strategy must adapt to the new realities. As IAU (2012) notes, IoHE is dynamic and its purpose, goals, meanings, and strategies are continuously shaped and reshaped by changing contexts. What worked well before may not continue to do so. For years NTU and NUS increased their numbers of international faculty, students, study abroad and partnerships. With some notable and important exceptions, this approach served them well, but it is not sustainable, and now the rhetoric at both universities is shifting towards ‘deep’, ‘differentiated’ and ‘multifaceted’. Similarly, in light of shifting global dynamics, both NUS and NTU are now targeting greater regional engagement. Thus, an effective strategy can help get to where you want to go, but once you get there, a new strategy is needed to reach the next stage.

> “You’ve got to assess at what stage of growth you are.” – NUS Director 2

To appropriately respond to external shits, both vision and strategy should be informed by leadership who stay current on global trends. International benchmarking is critical to a university’s ability to stay competitive (and to contribute to its nation’s competitiveness) in the globalized 21st century KBE. Overall, the Singaporean cases seem more accustomed to international benchmarking, often facilitated by the high numbers of international faculty. In the Japanese cases, while internal stakeholders may be aware of practices in other contexts, far fewer (especially at the leadership level) have direct first-hand knowledge and lived experience of operating in other contexts. Thus they are less likely to attempt to implement practices learned elsewhere.

A strategic framework for internationalization should also be flexible enough to allow individual units to respond to such external shifts. Over-commitment to predetermined targets or overly rigid policies which lock individual actors into set courses can make it difficult to quickly respond to external changes, and can cause overcorrection at the onset of new planning cycles. Again, university leadership must strike the right balance between providing direction and allowing individual agency to make decisions that contributes to a nimbler system of constant correction and optimization that allows internationalization initiatives to stay relevant, appropriate and effective. The below graphic illustrates this visually. If the light blue external lines represent gradually shifting contexts, and the dark blue inner line represents university strategy, we can see that a nimbler and flexible strategy (as in the case on the left) allows the university to more effectively respond to shifting contexts, whereas over-commitment to direction in case on the right leads to strategy that is at times not optimized to context.

Figure 32: Visual representation of different strategic approaches to responding to external shifts. The figure on the left represents a flexible strategic framework that allows for responsiveness to external change. The figure on the right demonstrates stricter adherence to set targets which over time may become less optimized to context. (Source: Author)

In addition to external responsiveness, more comprehensive forms of internationalization should horizontally align activities within the university. This can be more implicit than explicit, but should be observable in the rationales for discrete areas of activity (i.e. partnerships, international recruitment, etc.). Partnerships, for example, can be a core component of a university's strategy to climb the global league tables, even though they are not themselves an indicator. They can help to build institutional reputation, enhance research capacity, and attract talented faculty and students which then contribute to ranking. Thus, these potential benefits should be considered in an effective partnership strategy. OU's deep relationship with the UC system is a good example of leveraging one particular relationship towards multiple ends. In this way, comprehensive internalization becomes a web of interconnected activities supporting the overall university missions.

Creating strategic frameworks that effectively enable horizontal alignment and the various units of a university to work towards similar ends is a complex and not necessarily an explicit process. Leadership will not have the ability to coordinate at all levels. They should set the overall direction, build the framework that determines how to advance in that direction, ensure supports and resources are in place to allow movement in that direction, and create an institutional culture where individual rationales and agency align with institutional ones. Even then, there can be challenges, as communicated by one interviewee from NUS, who stressed the importance of continuous communication (another of Brewer, Charles and Ferguson's recommendations for effective strategy development).

> "What is especially hard for this center is not only the vertical alignment between senior management down to the [Center] and then down to the faculty, but also the horizontal alignment, because there are various different initiatives, and they're not all being coordinated in ways that are productive. So lack of communication is an issue, I think. Not being on the same page, not speaking the same language around education, perhaps." – NUS Director 3

Finally, internal stakeholders must also be empowered to make decisions and improve efficiency within structured limits. As one OU interviewee expressed it, for a research university, going international is an intrinsic thing. Meaning that those within the university need to understand and feel some responsibility toward and ownership over the internationalization strategy. Indeed, first on AIEA's aforementioned list for successful strategic practices is creating widespread understanding and engagement.

6.3.3 Building internal alignment

Faculty and staff engagement, although often difficult and complex, is critical to internationalization strategy, as ultimately faculty have responsibility for carrying out most activities. The importance of faculty buy-in and support was stressed repeatedly in the literature and by the interviewees at all levels. This may be an even more important factor in universities with strong traditions of faculty governance.

Internal alignment is important to international strategy for two reasons. One, it needs to be considered in the development of the strategy itself, as it is a critical component of effective strategy development. Not appropriately including internal stakeholders in the strategy development and/or not taking into consideration the internal mechanisms needed to enact the strategy can damage the entire process. This was evidenced by the reported alienation of OU faculty toward the development process of the *World Tekijuku* initiative. It was also a lesson KU's international strategy office heeded in the process of developing the new international concept. Secondly, if sufficient effort is not spent in engaging internal stakeholders in the implementation of the strategy, and they are not given the tools and motivation to effectively contribute, it can also hamper the process. This may be especially critical among faculty leadership, as communicated by one NUS interviewee:

> "Essentially a university succeeds or fails at the department level, it seems to me. With the heads. If they buy into university priorities, then things will happen. If they don't, there are problems." – NUS Director 3

Although the Singaporean cases had stronger central controls, those interviewed at the school level felt empowered to pursue the university's strategic objectives in the they felt best fit their individual schools, as long as there was general alignment to direction. Furthermore, the evidence suggests that even autonomous institutes and colleges (i.e. NIE or Yale-NUS) aligned themselves to both national and university direction when developing their own strategies. Of course this has much to do with funding systems and other steering mechanisms built into the governance and management structures, but overall there was a shared commitment to the set direction. This was facilitated by dialogue across the various levels, and the reward and promotion systems also work to foster alignment of faculty leadership over time. To promote CI, Hudzik (2014) also recommends drawing clear ties to promotion, tenure, and other reward systems at both the institutional and unit levels.

One NUS interviewee noted that there are inevitably tensions among faculty and those not supportive of internationalization, but the buy-in of faculty leadership is created over time. It is a long journey to become a dean, and the promotion process helps to ensure that faculty leadership are aligned to university priorities. Another interviewee at NUS, however, noted that it is not always easy to align priorities with those of the university, especially when leadership change direction without wide consultation. Again there is an inherent tension between efficiency and responsiveness and engaging the campus community that leadership should be mindful of.

The schools and colleges in the Japanese cases had a much higher degree of autonomy, and in some cases very long histories and traditions of their own. As a result, a greater degree of variation can be seen in their alignment not just to university direction, but in terms of branding and administrative practices. Even within the schools, due to committee structures, and perhaps Japanese styles of decision making, it is not always clear who the decision makers are. As such, much greater attention needs to be paid to engaging all faculty, not just those in leadership positions. As mentioned previously, one central administrator at OU noted that as a key reason why all the members of their unit all had faculty titles though their roles were entirely administrative.

> “That is why all of our staff have PhDs…Here in Japan, those kind of people who are involved with the reforms, for example internationalization, education reforms, college admissions, we all are treated as a faculty member, right? I believe that the reason we are all treated as a faculty member is that we have to be equal to all of the faculty members who make decisions. Otherwise they don’t listen to us.” – OU Senior administrator 2

In the Japanese cases, there are fewer mechanisms by which university administration can influence internationalization at the faculty level. Thus, a first important step is to create a cultural shift to engage faculty in the internationalization process. However, OU and KU’s earlier strategies seemed to operate under an assumption that the cultural shift would take place *as a result of* the targets being reached, without adequately acknowledging the need to for faculty engagement to achieve those targets. OU’s *Vision 2021* does introduce some language addressing this issue, which is a positive step.

Interviewees at KU and OU repeatedly affirmed that while faculty were ‘encouraged’ to internationalize, there were no strong structured incentive systems in place. Furthermore, government regulations made it difficult for the universities to pursue types of internationalization that might come with their own incentives for faculty. As long as such structures are in place, the universities cannot be expected to make quick progress towards internationalization goals. On the other hand, the shared governance may help to prevent the university from moving too quickly without sufficient faculty support, which can prevent problems down the line. However, it can also mean that faculty acting in their own interest (i.e. less workload) or those who have yet to acknowledge the changing times can slow down processes that may be beneficial for the university community.

> "Not so many professors are interested in these kinds of activities, so it's tough." – OU Professor 2

That being said, interviewees at both KU and OU indicated that there was a significant core of faculty who do want to be more international, want to be more competitive, want to be more internationally recognized, especially in the sciences, but they are tired of doing things for competitive funding. This suggests the importance that the rationales for internationalization can have on university leadership's ability to develop strategies that will resonate and be effective at the lower levels of the university where it counts most.

Engaging and aligning faculty is critical to the internationalization process. Not effectively addressing this component early on in the strategy development phase can have serious implications for the success of the strategy and the internalization of internationalization at the university.

7 Conclusion

Nolan and Hunter (2012) argued that not enough is known about how internationalization as a change strategy takes place at the institutional level, and advocated for looking at different cases around the world to learn more about the relationship between institutional decision making and the contexts the institutions are situated in. This project has attempted to do just that.

This cross-case analysis has sought to explore the approach to internationalization of four case study East Asian national universities in Singapore and Japan, and how that approach relates to their unique contexts and circumstances as well as broader global trends. By presenting evidence from each case, couched in a thorough review of their national IoHE policy environments, this research has hoped to highlight some of mechanisms by which internationalization strategies are used towards broader institutional visions and goals.

The cases help to demonstrate the powerful transformative potential of international activities such as partnerships, and may encourage a more interconnected global higher education network where universities around the world leverage one another's strengths. At the same time, they illustrate several potential tensions related to the process of internationalization, and drive home the importance of a coherent vision, effective strategy and adequate resourcing. Contextual factors were also shown to weigh heavily on nearly every element of internationalization, from attitudes toward globalization to international recruitment strategies to administrative structures.

The cross-case analysis revealed striking within country similarities between the cases, which signals the importance of the shared contextual factors and institutional circumstances such as governance and management structures. Environmental factors such as language and culture influenced both state and university level rationales for internationalization, and the state's approach was shown to have a very heavy impact on the university's ability to craft a global vision and internationalization strategy. This then had knock on effects for how the universities approached various international activities such as partnerships, student exchange, and so on.

The Singapore cases were overall more ‘international’ than the Japanese cases, although this tells us little about actual approach and its effectiveness in achieving institutional goals. In the Singaporean case, international engagement is so embedded in the day to day environment that it would almost seem strange if the universities were anything other than globally engaged. This is not to say that either NUS or NTU have reached the end of their internationalization journey. Reaching saturation points in terms of international faculty, study abroad and so on, has not signaled the completion of the internationalization process. Rather the priorities shift from quantity to quality, and both universities are now beginning to embark on the discovery of what ‘quality’ internationalization actually means.

Although both NUS and NTU are in an advanced stage of internationalization, they should not serve as architypes or blueprints. Both have room to improve in supporting faculty in dealing with the challenges of such high rates of exchange. More could be done to integrate students' international experiences into programming and curricula. There are also important philosophical questions about their approach, which includes asymmetric partnerships favoring prestigious Western institutions, a siphoning of human resources from the region, an emphasis on competition over collaboration, and perhaps insufficient attention paid to developing domestic resources. The long term implications of such practices should be thoroughly considered by both national and institutional policy makers. Nonetheless, it does appear that both NUS and NTU have been able to leverage greater international engagement to enhance research performance, expand program offerings to students and improve their international standing, which in turn better enables them to fulfill their national roles and responsibilities. They have also positioned themselves as key nodes connecting people and ideas from the Eastern and Western arenas, and thus serve an important bridging function.

The Japanese cases are starting from far stronger domestic orientations, and a number of internal and external factors cause the re-orientation to more global frames of reference to go at a slower pace. This research has identified many significant barriers to internationalization in the Japanese context, and the steps OU and KU have taken to implement more comprehensive approaches to internationalization should be applauded. It is also clear, however, that a key driver for internationalization at the two cases has been government initiatives. That is not to say that internal rationales are absent. However, it does mean that strategies are not well aligned to university needs and circumstances. Importantly, both universities had strong internal rationales of contributing to the global public good, and if the universities were able to develop more effective strategies for achieving this, both local and global society could see real benefits. Unfortunately, as of yet the world has no good benchmarks or indicators for the contributions universities make to global society.

Moving forward, both KU and OU should craft clearer visions of what global excellence means given their unique contexts, circumstances and goals, and how internationalization fits into those visions. These value propositions need to be generated internally and engage faculty in a way and at a level that they have not yet done. It is also clear that moving forward will not be about adding on more layers of internationalization, but embedding it in the missions and the ethos of the universities. Again, this may be a new undertaking as Japan grapples with coming to terms with its place in a globalizing world. The solutions will require reforms that go beyond international offices, and beyond the universities themselves. It is perhaps too early to hypothesize what the outcomes of their increasing international engagement will be, but the prospects for developing new models of intraregional collaboration, the increasingly close ties with ASEAN, and the reforms to internal management structures and practices encouraged by internationalization are exciting possibilities.

From the above, this research concludes that context and global trends intersect and are interpreted and influenced by the attitudes of individuals to form rationales for IoHE. These rationales then form part of a complex web of interaction with the agency of those individuals and the circumstances of the institution. The outcome of this interaction is overall institutional approach to internationalization, which can be comprehensive and strategic or ad-hoc and uncoordinated, or some combination of these at different levels within the university. The approach to internationalization should ideally be underpinned by a university vision and strategy for realizing that vision. However, the ability of university leadership to develop a coherent vision and strategy can be influenced by a host of internal and external factors. Similarly, the ability to enact a strategy depends heavily on the engagement of faculty in the pursuit of the vision and the alignment of their own activity to the direction set by the university. The end result will determine how effectively a university is able to develop and implement a strategic vision of internationalization.

While none of the four cases can serve as blueprints for other universities in the region, the hope is that by providing such windows into the actual practice of internationalization, they may help to generate new ideas and perhaps be instructive in how others might leverage their unique contexts, avoid common pitfalls, or create more efficient systems to help them more effectively internationalize to support their institutional missions.

To conclude, the remainder of this chapter will briefly touch on what the experiences of the above cases suggests about the conceptualization of IoHE as a response to globalization, as well as the implications for the notion of an ‘East Asian’ approach to IoHE. Finally, limitations of this research and potential areas for further study will be addressed.

7.1.1 IoHE as a response to globalization

The discussion in this section begins to answer research question six:

> RQ6: What do the experience of the four cases, and the accompanying cross-case analysis suggest about the conceptualization of IoHE as a response to globalization?

As discussed in the literature review, globalization and internationalization are often confused, but a key differentiator is the positioning of internationalization as a response to the trend towards globalization (van der Wende, 1997; Knight, 2004; Banks and Bhandari, 2012; Brandenberg et al, 2013). IoHE can be understood as the way in which universities adapt to the new realities of the globalizing 21st century, and in doing so become actors and agents of it themselves. In this way IoHE “calls for changes in the institution’s existing structure, operating modes, and mindset in order for the institution to join and contribute to the shaping of the global knowledge economy” (Hawawani, 2016, p. 5). Within these new global structures, in order for universities to effectively achieve their traditional missions of research, education and service, and respond to the demands of their students and the state, they cannot ignore the international dimension. As Hudzik (2014) notes, universities must “respond to widening and more complex expectations to connect globally across all missions to better serve students, clientele, and society in a twenty-first century context” (p. 1).

That IoHE serves as a response to globalization is evident at the state level in both Singapore and Japan. Although the two states take differing approaches to IoHE policy, both are attempting to adjust their local systems in response to the opportunities and threats of the globalizing KBE. As developmental states, both must ensure economic development to maintain their legitimacy, and both tie education closely to economic development. Thus, as the economy internationalizes, so must higher education. This is particularly visible in the human resource development rationales of each state. Indeed, Singapore's GSH is viewed as a talent development strategy (Rubin, 2008; Ng, 2013). Traditionally, higher education in Singapore was to provide ***trained*** labor for 'export' to the locally based MNCs, while Japanese HEIs were meant to sort and identify highly ***trainable*** labor for domestic industry (McVeigh, 2005; Sakamoto, 2006). Because of the changes in the type of labor needed for the global knowledge economy, both countries now require new kinds of graduates capable of operating internationally and generating wealth through innovation. Both states turn to IoHE to help them both train and attract the type of talent they believe they need to stay competitive in the global economy. The Singaporean state more willingly embraces globalization and crafts a national identity that fits within a globalized world view, building strong links between economic globalization and nationalism (Koh, 2011; Sidhu, Ho and Yeoh, 2011). Japanese policy makers, on the other hand, seem to see globalization as an external threat and take a more cautious stance (Marginson, 2010). Japan's previous methods of economic development are increasingly called into question in the face of new global realities, and the state is forced to, somewhat reluctantly perhaps, turn to internationalize to stay competitive.

Similarly, the case universities use internationalization as a direct response to globalization, albeit in very different ways. As discussed in section 6.2.2, this can manifest itself very differently depending on context and circumstances. For NTU, it has meant using partnerships and international faculty to build itself up in a global era. OU's conception of their ASEAN campus not as a brick and mortar project, but a permanent research and educational presence in universities throughout the region helps to break down barriers not just between Japan and ASEAN, but within ASEAN itself. NUS's inclusion of 'global-ready' in its 'future-readiness' paradigm for student learning is revealing about its view of its own role in preparing local students for the realities of the 21st century. Even KU, perhaps the wariest of external influence, responds by attempting to position itself as a national leader in the use of ICT. These are just a few of many examples of how the case study universities use international activities to respond to the changes brought on by an increasingly globally connected world.

The findings support the assumption that IoHE is more than integrating international dimensions into the functions and delivery of higher education. In these cases, it serves as a means by which the states and universities reorient themselves towards more global frames of references. The universities have by no means abandoned their traditional national roles. Indeed, this function may have even strengthened in some respects. However, what it means for a national university to serve the state in the 21st century has been fundamentally altered. Global engagement becomes one of their primary means of doing so, and in this greater engagement the universities also come to serve the global public good as well. Without going too far, it may be that the universities are becoming nodes in a global network which serve to strengthen the connections between national interests and global interests, and perhaps have the opportunity to create new types of synergies for the local, national and global going forward. Interestingly, this interpretation serves to reinforce Knight's (2004) well-worn definition of IoHE. In the same article she defines the 'purpose' of higher education as "the overall role and objectives that postsecondary education has for a country/region" (p. 12). It does seem from this research that the process of internationalization can be understood as a combination of the state *repurposing* the universities and the universities *repurposing* themselves in order to play new roles and fulfill new objectives in response to the shifts that globalization brings.

7.1.2 The case for East Asian higher education

This section provides some discussion, that with further study, can begin to answer research question seven.

> RQ7: Does the cross-case analysis support or detract from the theory of a shared model or characteristic of IoHE in East Asia?

Marginson (2011a) argues that East Asia, including Singapore, shares common cultural, linguistic, historical, political and religious roots, a "catch up" mentality in state policies, and similar economic development trajectories. Lee (2014) writes that the developmental state is also a characteristic of the region, including Singapore. Higher education in the region is characterized by strong national policy drivers, rapid growth of participation, intense national examination systems for entry, and high and growing public investment in research concentrated in a few universities (which are blends of Western and post-Confucian models) while private investment supports the access base (Marginson, 2011; 2016). Gopinathan (2007) also noted a wave of reforms in the region mostly directed at global competiveness through internationalization, marketization, and deregulation.

While the cases in this research do not necessarily directly contradict the above model of higher education in the region, very different traits were observed between the two ‘East Asian’ contexts. In both, the developmental state was shown to be the dominant driving force. The general notion of public investment in a select few universities which sit atop a base of private providers also held true, although in Singapore’s case the private investment was often offshore. However, trends of participation and public investment were very different between the two contexts. The interviews at NUS and NTU noted being well supported by the state, while the Japanese interviewees all complained of funding woes. Governance and management structures were also drastically different, as was the linguistic environment. Unless one takes a very broad view over a fairly long historical timeline, it is difficult to argue that both Singapore and Japan fall within the established 'East Asian higher education model'. The nature of the reforms described by Gopinathan, though, were evident in both contexts. Where similarities do exist, the limited scope of the research makes it difficult to ascertain whether or to what extent the similarities are tied to their location in the region. That being said, comparing the Japanese and Singaporean contexts with those outside the region is beyond the scope of this research. Without such comparison, it would not be possible to definitively establish whether these contexts do share enough similarities, in comparison to contexts in other regions, to support the East Asian post-Confucian model.

Can it be said that there is a form of IoHE common and unique to the region? There is considerable agreement in the literature that the main rationale for IoHE in the region is economic competitiveness (Ng, 2012; Huang, 2015; Reyes and Gopinathan, 2015). Ng (2012) argues that in response to globalization, IoHE in the region is characterized by managerialism and marketization, economic utilitarianism, and policy duplication. Perhaps the most characteristic aspect of IoHE in the region is the magnificent scale of student mobility. Marginson (2016) notes that despite the overall shift towards neoliberalism in last couple decades, Korea and Japan still see IoHE as a means towards cultural exchange and foreign aid, as opposed to countries like Malaysia and Singapore which have more clearly articulated commercial purposes.

This very brief outline points to a number of readily apparent similarities and differences between the two contexts in regard to IoHE. In line with previous findings (Ergon-Polak and

Hudson, 2014; Ilieva and Peak, 2016), IoHE in both contexts entails state-directed strategies towards quantitative international student targets and developing ‘word-class universities’ as determined by global rankings. For both states, IoHE can be seen as a response to globalization, and while rationales of cosmopolitan internationalism and intercultural understanding are not entirely absent, economic competitiveness and workforce development appear to be much stronger rationales at the state level, confirming the assessment of much of the previous literature (e.g. Ng, 2012; Huang, 2015; Reyes and Gopinathan, 2015). However, while the Singaporean cases saw general alignment between national and institutional rationales, this was much less so the case in Japan, where national and institutional level rationales differed considerably.

To develop its system, Singapore is more willing to bring in foreign expertise and positon itself as learner. Indeed, despite its small size, Singapore hosts one of the largest number of branch campuses in the world. Such an approach might have been more difficult had Singapore already had a robust sector for the branch campuses to compete with. Japan is more focused on developing its own capacity rather than inviting foreign providers into an already crowded market. Indeed, while not an intentional government strategy, over 40 US branch campuses introduced in the 1980s and 1990s have since shut down largely due to unfriendly national policies and lack of demand (Goodman, 2005; Altbach, 2007; Newby et al, 2009). Thus, there are clear differences in approach, despite the similarities in rationales.

The rationales of ‘world class’ status and human resource development seen in each case fit with how others have classified the utilitarian nature of IoHE in the region. Some (Ng, 2012; Reyes and Gopinathan, 2015) see this overly functionalist view as a weakness, and encourage a more inclusive model of a knowledge ‘society’ rather than just ‘economy’. Yet given the historically state directed economic and social role of higher education in the region, perhaps it is natural that IoHE policy continue in that vein. If the result is greater national and regional prosperity, it is understandable that the governments would gravitate towards such rationales. However, while NUS and NTU have been transformed into revenue generators for the state through greater internationalization, it remains to be seen whether KU and OU will act in the same capacity for Japan.

If IoHE can be understood as a process of reorientation in response to the emerging 21st century globalized KBE, then the process must be inherently tied to the initial orientations. The differences in orientations between the two contexts throughout the later part of the 20th century make it difficult to directly compare the process of *reorientation*. One might expect to find a sort of convergence to deal with the new shared global realities. In all four cases we can observe a general trend toward becoming more ‘international’, but what that looks like has been shown to be quite context specific.

Interestingly, though, there was no clear evidence that any of the cases were basing their approach to IoHE on Western models. The Singaporean cases, and perhaps to a lesser extent the Japanese as well, may look west for educational, research and management practices, but not necessarily for guidance in internationalization. If the approaches to internationalization are indeed the result of local factors, then this may be suggestive of new operating paradigms emerging from the region. While all four cases were interested in engaging with the West, and the Singaporean cases built many of their own programs based on western models, their approaches to IoHE were mostly products of their own contexts and circumstances.

The cases appear to be actively developing their own capacity to generate answers to globalization. As this capacity is further developed, there may be a continued trend away from looking west and more interregional exchange of ideas and models. However, this would need to be coupled with greater evidence of institutions and systems within the region influencing one another. KU and OU's greater engagement in ASEAN, and NUS and NTU with China may be suggest that this is occurring, but further exploration of regionalization is warranted. Ten years ago, Marginson (2008) mused whether the rise of East Asian higher education would for the first time generate a new understanding from the East rather than replicate Anglo-American models. Although just only emerging, it appears that there may be a slowly rising tide of such a regionally developed understanding of IoHE.

7.1.3 Limitations and areas for further study

There are numerous limitations to this study and its methodology.

While case studies can tell us a great deal about the experiences of individual institutions, the findings are difficult to generalize out to other contexts or even other institutions in a similar context. The cases are neither representative of similar types of universities throughout the region, nor of the different types of higher education institutions in their own countries.

Because this research examines four separate cases in two national contexts, it was not possible to explore the individual cases at the same level of depth as a single case or even cases within the same context. This means that important considerations in each institution were missed or not discussed. However, the comparative approach allows us to highlight similarities and differences between the cases in ways that studying a single case or context would not allow. The goal is more to identify areas of importance for similar institutions in diverse settings or dissimilar institutions in similar settings to consider when developing their own internationalization strategies.

Similarly, this research deals with several very large intersecting themes (i.e. higher education; globalization; the knowledge economy; East Asia; Japan; Singapore; organizational management; policy formation; and internationalization). As such, the exploration and depth of analysis of each of these areas is quite shallow compared to more disciplinary work limited to fewer themes. There are many important considerations in each area that were beyond the scope of this dissertation. Thus, the real area of focus is not any one theme, but rather the nature of the intersections between them. Bringing these interactions to light in relation to each other has the potential to paint a different type of picture of the observed phenomena (IoHE) than more strictly disciplinary work might. Nonetheless, it should be acknowledged without the invaluable disciplinary work that preceded this study, such an approach would have been impossible.

Data for this study was limited to scholarship, policy documents, promotional and other types of material produced by or about the cases and interviews with senior administrators and faculty leadership. The interviews in this research are limited to a small sample of perspectives of one stakeholder group in each university: administrative and faculty leadership. Thus, there are several important stakeholder views and voices that are not well represented in this study. Student perspectives in particular are critical to truly understanding the outcomes of internationalization efforts, but they were beyond the scope of this research. Any future work building from this should most certainly incorporate a broader range of perspectives. However, limiting discussion to the perspective of one stakeholder group does allow for focus on how that stakeholder interprets and implements IoHE. The intent was not to detail all IoHE aspects and activities, but provide sufficient overview by which to engage with some of the larger concepts surrounding IoHE, and the data proved sufficient to engage in such discussion.

My own limitations in terms of experience and understanding of higher education models around the world quickly emerged as another limitation. I often found it difficult to consider whether the findings were indeed somehow unique to the circumstances and contexts under study, or if they were shared more broadly with institutions in other contexts. Naturally, such depth of understanding is beyond the scope of this research, but it does underpin the need for a lifetime of study and experience needed to properly understand and analyze global trends in higher education.

Finally, my limited ability to access Japanese language texts is also another major drawback. I have attempted to address this issue by incorporating Japanese language documentation from the universities in the analysis, but the research would have been significantly enhanced by greater language proficiency and the ability to incorporate a wider range of literature and sources.

For Japan and Singapore, an in-depth observation of two of their key institutions from an outsider with some first-hand knowledge of the environments can be a valuable tool for self-reflection. Furthermore, the direct comparisons against universities in the partner country can highlight points that may not be so obvious in an exploration without the comparison. For other universities throughout Asia, such examination and insight into the practices of four of the well-accomplished universities in the region may hold some valuable lessons for their own development Nonetheless, this research represents just one small brick in the foundation of understanding needed to guide higher education in the region and beyond toward better practice.

With this in mind, using this research as a starting point, there could be much value in applying the same methodology to other universities and contexts throughout East Asia. Such research would allow for broader comparisons and deeper understanding of the nature of IoHE and higher education in the region. This would also help to provide better insight into whether a unique regional model does in fact exist. It may also help to reveal other salient contextual factors that can impact approach to and delivery of IoHE.

Similarly, future research should consider different perspectives as well as contexts. The outcomes of this research could have been very different if the interviewees were assistant professors, students or administrative staff. As such, it will be important to bring in these voices in the future to gain a more accurate and holistic picture of not just the process of internationalization, but its impacts and outcomes.

Finally, this research took fairly broad strokes in examining the individual elements of internationalization. Equally insightful research could have been done looking at just partnerships and collaboration, or international student recruitment, or internationalization of the curriculum, or a host of other areas. Indeed, in terms of informing practice, deeper exploration of particular issues could prove very useful for practitioners in the field. Going forward, more research into these practices is warranted.

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