

MAPPING THE BORDERLAND OF THE KNOWLEDGE SOCIETY:
STRATEGIC GLOBAL PARTNERSHIPS AND ORGANIZATIONAL RESPONSES OF
UNIVERSITIES IN TRANSITION

PETER SZYSZLO

*Thesis submitted to the Faculty of Graduate and Postdoctoral Studies in partial fulfilment of
the requirements for the degree of*

DOCTOR OF PHILOSOPHY

Globalization and International Development



uOttawa

© PETER SZYSZLO, OTTAWA, CANADA, 2018

TABLE OF CONTENTS

Thesis Abstract	iv
Acknowledgements	vi
List of Tables	viii
List of Figures	ix
CHAPTER 1 INTRODUCTION	I
1.1 Aims and Research Question	4
1.2 Context	5
1.3 Problematic	10
1.4 Guiding Assumptions	15
1.5 Contributions	16
1.6 Structure of the Thesis	17
CHAPTER 2 CONCEPTUAL FRAMEWORK	19
2.1 Globalization	22
2.2 Internationalization	24
2.3 Knowledge Society	28
2.4 Knowledge Economy	30
2.5 Internationalization through the Lens of Institutional and Organizational Change	33
CHAPTER 3 METHODOLOGY	41
3.1 Research Design: Case Study	41
3.2 Research Questions	44
3.2.1 Selection of Location and Universities	45
3.2.2 Doctoral Schools	53
3.2.3 Demand-Side Drivers	57
3.3 Data Collection	59
3.3.1 Fieldwork	59
3.3.2 Interview Methods	61
3.3.3 Documentary Evidence	64
3.3.4 Researcher Positionality	66

3.4	Data Collection Methods	70
3.4.1	Semi-Structured Interviews	70
3.4.2	Documentary Analysis	76
3.4.3	Data Analysis	77
3.5	Applying the Conceptual Framework for Data Analysis	80
3.6	Transliteration and Translation	84
3.7	Ethical Considerations	85
3.8	Procedural Challenges and Limitations	87
CHAPTER 4	KYIV-MOHYLA ACADEMY	91
CHAPTER 5	KYIV POLYTECHNIC INSTITUTE	168
CHAPTER 6	TARAS SHEVCHENKO NATIONAL UNIVERSITY OF KYIV	232
CHAPTER 7	ANALYSIS AND FINDINGS	277
7.1	Organizing Principles of Internationalization	278
7.2	Rationales	281
7.3	Strategies	292
7.4	Outcomes	306
CHAPTER 8	CONCLUDING SUMMARY AND OBSERVATIONS	314
8.1	Advancing a New Conceptual Model for Internationalization	316
8.2	Internationalization Discourses in Context	318
8.3	Reconciling the (Post-)Soviet with the Global	319
8.4	Emerging Geographies in the Europe of Knowledge	322
8.5	Future Areas of Research	325
REFERENCES		328
APPENDICES		
Appendix 1: Interview Schedule (English)		349
Appendix 2: Interview Schedule (Russian)		353

THESIS ABSTRACT

Globalization has motivated universities to calibrate institutional responses for strategic purposes. Yet, specific challenges remain for Ukrainian National Research Universities insofar as the interplay between global and (post-)Soviet knowledge discourses reveal a dual framework, whereby adaptive responses to globalization and entrenched state-centered logics run parallel, and often in conflict, with one another. This study took a critical approach to identify and interpret *how* the phenomenon of internationalization manifested in the development of strategic partnerships, was translated and re-contextualized into structural innovations, and resulted in systemic institutional change.

The thesis delves into the institutional behaviour of three flagship universities in Kyiv, Ukraine and their respective doctoral schools. The selected universities – Kyiv-Mohyla Academy, Kyiv Polytechnic Institute and Taras Shevchenko National University of Kyiv – represent a mixture of organizational *types* which fall into one or more of the three education archetypes, including the Humboldtian, Soviet and Anglo-American models. These governance models allow for differentiation of institutional interpretations of internationalization and a means of capturing the various ways in which university actors negotiate their spaces of action and translate higher education discourses into practice. The analysis addresses issues of ‘hybridity’ which is not evident in this categorization. The study attempts to problematize internationalization anew by shifting focus on non-linear accounts of the phenomenon in order to comprehend the complex, multi-faceted and often contradictory ways the process plays out across different university landscapes. The inquiry employs conceptualizations combining the Delta Cycle for Internationalization (Rumbley 2010) and a new institutional approach (North 1990).

The study is structured as a single-case embedded case study design as described by Yin (2015). Data were collected via 45 semi-structured interviews with university actors and higher education stakeholder agencies, including: senior administrators, mid-level leaders, faculty members and doctoral candidates. The data were supported by scholarly literature, official documents, reports, strategy papers, grey materials, policy statements, field notes,

as well as university and ministerial websites. These data were analyzed for content and triangulated according to a modified content analysis approach.

This study expands and contributes knowledge on the internationalization of higher education by distinguishing variations of how the phenomenon manifested within different university settings. It examines the place of the university as an organization that not only produces and disseminates knowledge, but assimilates and adapts global knowledge to national needs. Finally, the inquiry explores internationalization as an academic innovation and a process of institutional change which shapes academic identities and legitimizes the university as a global actor.

ACKNOWLEDGEMENTS

This doctoral thesis is the result of a many years of innovative learning and practice that I have gained in the field of international higher education. The study echoes Nerad's (2011) assertion that "[I]t takes a global village to develop the next generation of PhDs and postdoctoral fellows." As such, this dissertation is a continuum of an intellectual journey that I began when working on the first generation of post-Soviet higher education reforms as a Visiting Faculty Fellow with the Soros Foundation's Civic Education Project in Belarus and Ukraine.

This study is the culmination of a number of collaborators to whom I am deeply indebted. I would like to thank my supervisor, Professor Prachi Srivastava for her guidance and insight throughout the entire process of developing this thesis. Her talent and support helped shape my capacity to learn and substantially added to the quality of the investigation. Je suis également reconnaissant aux contributions de professeur Gilles Breton et professeur Philippe Régnier pour leurs collégialité, soutiens et conseils professionnels. I would also like to acknowledge the valuable contributions of Professor Iveta Silova (Arizona State University) and Professor Sanni Yaya for their role on my Thesis Advisory Committee.

Special thanks go to the Shevchenko Foundation, the University of Ottawa's Professional Development Bursary and the J.D. Hearnshaw Memorial Bursary for the generous financial support. I would also like to thank Professor Stefano Bianchini and the International Office staff at the University of Bologna for facilitating my Erasmus Mundus mobility program during the summer of 2016. The valuable insights that I gained from the UNIVIA (TEMPUS) project and exchanges with Eastern university partners added substantial perspective and depth to this study.

I am especially grateful to my colleagues in Kyiv, whose ongoing efforts and dedication to the internationalization of higher education are commendable at this critical juncture in Ukraine's history.

Finally, I owe a debt of gratitude to my wife Iryna, our son Alex and to my family for their unwavering support and sacrifices in order to realize my lifelong dream of pursuing doctoral studies. No words can express my thanks.

LIST OF TABLES

I	Three Higher Education Models	9
2	Organizations and Participant Profiles	71
3	Organizing Principles of Internationalization	279

LIST OF FIGURES

I	Synthesis of Policy Rationalities	13
2	Internationalization Cycle	37
3	Delta Cycle for Internationalization	39

CHAPTER I INTRODUCTION

Globalization is bringing about a redefinition to the mission of higher education and research, described as nothing less than an ‘academic revolution’ (Altbach, Reisberg & Rumbley 2010, 1). In line with this assertion, the phenomenon of globalization has acquired “many shades of meaning arising from its multiplicity of dimensions and differentiated impacts in different parts of the world” (Maringe & Foskett 2010, 1). Similarly, knowledge production has become a central element to economic development, national security and identity (Pestre 2003, 250).

Thus, universities have acquired a crucial role as organizations that not only produce and disseminate knowledge, but assimilate and adapt global knowledge to national needs. Universities are major interlocutors and contributors to the global knowledge society discourse; however, for higher education systems in the former Soviet space, specific challenges remain. The coexistence of Soviet and European governance models reveals a dual framework, whereby adaptive responses to globalization and entrenched state-centered logics run parallel, and often in conflict, with one another.

Since gaining independence from the Soviet Union in 1991, Ukrainian universities have undergone a series of profound transformations. However, questions about competing academic and institutional frameworks, the changing logic of policy rationales, the adequacy and outcomes of internationalization strategies, as well as gauging Ukraine’s place in the European Higher Education Area (EHEA), remain. The latter represents a space for dialogue and reference engaging its members in a process of voluntary

convergence and coordinated reform of higher education systems (Yerevan Communiqué 2015). It also serves as a foreign policy rationale which uses education to strengthen political relations (de Wit 2002, 57).

From a research perspective, these questions have important implications for comparative and international higher education in post-socialist settings, as the landscape represents an intellectual space which offers a “(re)reading of the global through the lens of pluralities, discontinuities and uncertainties [and] is free of its pre-determined finality” (Silova 2010, 20). In a similar vein, the European *imaginary* has been advanced as a powerful ‘form of negotiation’ (Appadurai 1990, 5), which radiates pressure on higher education systems at various levels. This concept is being put to task by globalization, as it represents the construction and redefinition of new spatial action by the very actors themselves (Breton 2003, 23). This model is illustrative of Ukraine’s condition as its research universities re-evaluate internationalization strategies in the current context of accelerated globalization, regionalization and continued organizational path dependency on the Soviet higher education legacy. As such, the dynamics of internationalization and its translation into knowledge production and knowledge alliances, and the potential ensuing structural changes to higher education systems are taking place in a complex and fluid environment.

Recent changes to the legal framework of Ukraine’s higher education system provide a unique opportunity to critically assess the evolving definition of internationalization in relation to knowledge mobilization strategies, partnerships and institutional dynamics. Ukraine’s formal accession to the Bologna Process in 2005, following the Orange

Revolution a year earlier, marked a distinctive European shift in the country's higher education outlook (Bergen Communiqué 2005). Originally designed as a Western European innovation to the increasing challenges of global competitiveness, the Bologna Process laid the architecture for the alignment of tertiary systems under a single European higher education space (Bologna Declaration 1999). At the core of the Bologna Process is the central concept of a knowledge-based society which perceives “the creation, application and proliferation of knowledge as a desired outcome for economic growth and prosperity” (Berlin Communiqué 2003, 2).

However, universities are strongest when they form a ‘cluster’ – a geographic concentration of competing *and* cooperating institutions (Jessop & Sum 2013, 29). Hence, there is a powerful drive for higher education systems in post-socialist states to become full-fledged members of the Bologna Process, which links the members of the European Union and its periphery into the EHEA. Consequently, the external pressures exerted by the demands of Bologna compliance, achieving competitive advantage and reconciling the Soviet higher education legacy with contemporary global imperatives are powerful stimulants of educational change.

In step with the *EuroMaidan* revolution, the new Ukrainian government launched a series of higher education reforms under the framework of the “Law on Higher Education” (Parliament of Ukraine 2014) with the aim of reshaping and ‘modernizing’ the national higher education system (Kvit, 2015). In addition to providing a common regulatory framework and establishing clear rules for university governance and international

engagement, the new legislation expanded network-based activities to include training and research collaboration with non-academic stakeholders such as industry partners, illustrating the shifting spatial constructs in which knowledge is co-produced. Implemented as a response to the inconsistent outcomes of previous reform efforts and to facilitate greater systemic resilience, the new legislation attempted to initiate a process of de-centralization in conjunction with a series of macro-policy shifts across the higher education sector to support salient structural change.

In view of Ukraine's renewed momentum towards the Europe of Knowledge envisaged as the "gradual construction of an open dynamic European educational area" (European Commission 1997, 3), the drive for higher education policy convergence provides a window of critical reflection on the country's post-Soviet higher education legacy and hybrid rationalities. These draw on opposing projects (Soviet and global), often resulting in mutations at the policy level (Dobko 2013; Fimyar 2010; Gomilko, Svyrydenko & Terepyschchy 2016).

1.1 AIMS AND RESEARCH QUESTIONS

The purpose of this study is to map a framework to improve understanding of Ukraine's higher education system and institutional responses, employing the combined perspectives of *globalization, internationalization, the knowledge society, and macro-policy shifts* in higher education. The study intends to build on these discourses to develop comprehensive knowledge of *how* or *whether* select research universities foster 'coherent ecosystems of

innovation' (Jessop & Sum 2013, 29), by examining internationalization strategies, knowledge alliances, and their translation within organizational settings.

The study is structured as a 'single-case embedded case study' (Yin 2015, 50) of internationalization approaches from the perspective of three national 'flagship' universities in Kyiv, Ukraine. The inquiry takes a critical approach to identify and interpret *how* the phenomenon of internationalization is manifested in the development of strategic partnerships, translated and re-contextualized into structural innovations, and systemic institutional change. The main research question guiding this study is framed as follows: *How have research universities responded to the challenges and imperatives of the global knowledge society since Ukraine's accession to the EHEA?*

University experiences were examined by applying a combination of neo-institutional (or new institutional) theory (North 1990) and the conceptual framework of the Delta Cycle for Internationalization (Rumbley 2010) (see section 2.5). The study's main contributions are a reflexive account of university responses to discourses of the global knowledge society, extending neo-institutional theory to higher education, and advancing conceptual understanding of internationalization discourses in Ukraine's post-socialist higher education setting.

1.2 CONTEXT

Ukraine is positioned at the geographical crossroads of Europe and Russia. For centuries its territory has functioned as the geopolitical borderland between East and West. This spatial context has largely defined Ukraine's national and regional outlook, considering the

space it occupies and the European and Russian influences simultaneously exerted upon it. From this perspective, the territory of contemporary Ukraine is a space where hybridization and elastic identities have been contested and consolidated as survival strategies (Johnson & Tereshkovich 2014, 236). The history of Ukraine's higher education system is closely interwoven with that of the Soviet Union's socio-economic policies, research and innovation ecosystem and industrial modernization. Bureaucratic control, close regulation and tight policy coordination were inherent characteristics of the Soviet higher education system, which allowed it to become one of the most comprehensive in terms of teaching and research in the post-war era (Johnson 2008, 162). Yet, the combination of these characteristics, coupled with limited academic autonomy, parallelism, dogmatic rigidity and sharp cuts to state funding beginning in the late-Soviet period ultimately contributed to its steady decline.

Another unintended consequence of reform was the practice of uncritical higher education policy transfer, whereby Soviet management practices and modes of operation translated poorly into the emerging regional and global realities (Steiner-Khamsi 2004). Higher education and research also met severe challenges, insofar as its systemic 'strengths' were also its greatest 'weaknesses' as the policies and practices of the late-Soviet period often produced uneven results, and the distinctive structures characteristic of the Soviet condition began to break down. Important to note is that while the Soviet system of higher education and research made sweeping achievements, it also left a complex and ambiguous legacy insofar as its very nature constrained institutional adaptability, intellectual creativity and isolated the academic community from international scholarly movements (Johnson 2008).

Finally, the combination of historical legacies and systemic conditions shaped and informed contemporary Ukraine's higher education pathways.

Since the collapse of the Soviet Union in 1991, the newly independent states began a process of redefining their respective national higher education systems in to respond to the challenges of globalization, regional integration and state building (see Johnson 2008; Fimyar 2010). The newly independent states looked internationally to alternative higher education models at a time when globalization was in the process of making significant impacts on regional and national development (see Kwiek 2001). Universities found themselves in a radically different environment where the state was no longer at the centre of knowledge production efforts and borders no longer represented a strict, impermeable boundary.

The Bologna Process is considered to be one of the most comprehensive developments related to the knowledge society discourse, since it provides an “empirical window into the globalization of higher education, as it is playing out in Europe” (Välimaa & Hoffman 2008, 276). It is the clearest example of international engagement at the European and global level, “drawing more than 40 countries into a voluntary process facilitating a European Higher Education Area (EHEA) and a reference for similar efforts around the globe” (Altbach, Reisberg & Rumbley 2009, iii).

The reform course consolidated under the Bologna Process and its protocols has been defined as a ‘springboard’ to move post-socialist countries closer to Europe and lend

legitimacy to its higher education systems (Dobbins & Knill 2009, 416). The Bologna Process is often perceived as a means of changing the functioning of universities and bringing them in line with the demands of globalization and the knowledge economy. Moreover, the reproduction of Western European norms vis-à-vis a Western ‘centre’ and Eastern ‘periphery’ suggests that regional globalization occurring at the European level are reconfiguring institutional identities and spaces of action. It further underscores that the new ‘academic world order’ is far from egalitarian (see Hazelkorn 2012, Kurbatov 2012).

The Bologna Process presumes that universities will adapt implementation strategies to respond to national and international demands, yet the protocols do not bypass university governance, leaving it to member states to define their course of action (Dobbins 2011, 57). Defining institutional strategies within Ukraine’s post-Soviet higher education context has made policy planning and practice all the more challenging, especially when confronted with new (regional) trends and contrasting paradigms. As a number of scholars observe, universities across the former Soviet Union, while differing by national contexts, are shaped by three influential higher education models – the Humboldtian model, the Soviet model and the Anglo-American model (see Dobbins & Knill 2009; Dobbins, Knill & Vögtle 2011; Fimyar 2010; Shaw 2013). Each model exerts distinct influences on university governance on the basis of their respective action logics (see Table 1).

Table I**Three Higher Education Models**

Source: Clark (1986, 143); Dobbins 2011; Shaw (2013, 11)

Models	Locus of accountability	Mission to higher education	Role of the state	Institutional feature
Humboldtian Model	Academics	Search for truth for its own sake Fostering national modernization Training of an elite	Financial support Protection of academic freedom Control of institutions	Protection of individual academic freedom Limited institutional autonomy Unity of teaching and research
Soviet Model	State	Implementing predetermined national goals Fostering economic development Developing a common ideological identity Training of an elite	Determining goals to be accomplished by higher education institutions Establishing uniform standards of education Funding, controlling and regulating higher education institutions	Hierarchical structure Limited individual freedom Limited institutional autonomy Uniformity across institutions
Anglo-American Model	Market	Maximizing individual and collective returns to higher education Fueling the growth of regional and/or global markets	Product control Stimulation of quality and competition	University as a stakeholder organization Extensive institutional autonomy Academic freedom determined by institutions Diversity across institutions

1.3 PROBLEMATIC

Higher education has acquired a fundamental role in the global knowledge society. Accordingly, doctoral training represents an integral component of higher education and research, and is directly linked to the Europe of Knowledge project (European University Association 2005, 4; Lisbon Convention 1997). This concept is inherently tied to the idea that a nation's competitiveness is heavily influenced by its ability to innovate. Similarly, internationalization has been increasingly advanced as means for universities to gain competitive advantage, enhance quality and visibility or facilitate a response to globalization. Ukraine's integration in the EHEA poses specific challenges. The Soviet governance legacy and the drive for Europeanization are at the nexus of the Ukrainian higher education system (Shaw 2013, 7). Despite concerted reform efforts over the last two decades, the Soviet higher education legacy has proven resilient and continues to function alongside adopted European structures. The subsequent (re)appropriation of these governing norms by Ukrainian research universities is a reflection of institutional realities, as well as an adaptive response to the external pressures of globalization.

Guided by the premise that universities act as gateways to the global knowledge society, van der Wende (2001, 250) asserts that "internationalization policy at the higher education level aims to promote an internal transformation that strives for global competition and cooperation, which increasingly affect the higher education sector." Ukraine is no exception, considering that renewed reform efforts are aimed at increasing the quality, visibility, relevance and comparability of the higher education sector. Consequently, it has been argued that "the internationalization of higher education is a dynamic process,

continuously shaped and reshaped by the context in which it occurs” (International Association of Universities 2012, 1).

However, in post-Soviet higher educational settings, internationalization efforts take on specific sets of challenges. For example, the inheritance of Soviet management practices and subsequent ‘layering’ of European academic frameworks can often contrast with the highly fluid dynamics of globalization. Consequently, Biddle (2002, 10) warns that “translating the rhetoric of internationalization into reality is a complex enterprise... implementing them entails negotiation, persuasion and compromise. Ultimately, the plan put in place must reflect the university’s particular history and culture; failure to respect the institutional context puts the initiative at risk.” From this perspective, internationalization has taken on a greater institutional imperative, as Altbach and Teichler (2001, 11) caution, “a university without a proper international strategy runs the risk of becoming irrelevant.”

Knight (1999, 14) maintains: “the internationalization of higher education is one of the ways a country responds to the impact of globalization.” This praxis reinforces the concept that “most universities pursue a variety of routes to internationalization, depending on what the initiative is designed to accomplish” (Biddle 2002, 13). Teichler (2004, 21) provides additional insight by suggesting that the strategic options which higher education institutions, programs or individual scholars can choose are strongly shaped by the following factors: the economic strength of the country; the international status of the home

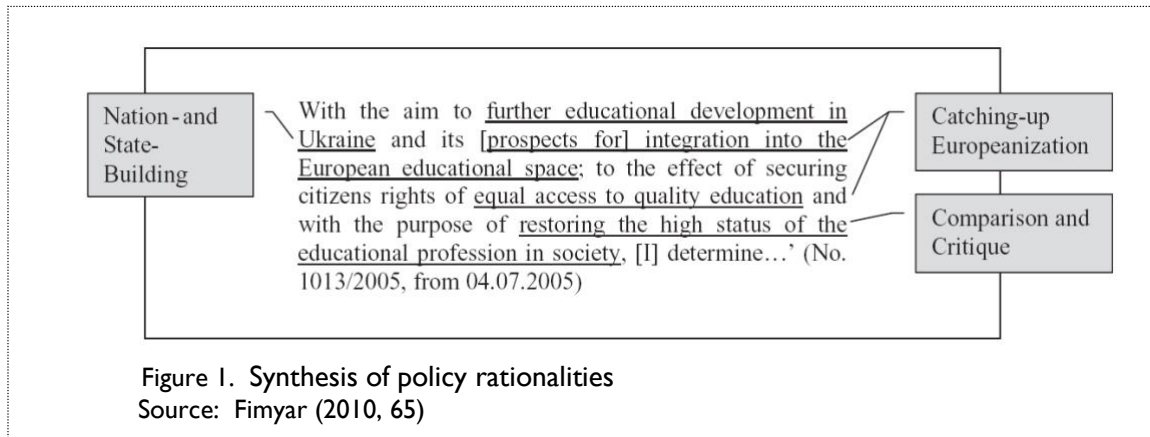
country language; the academic reputation of the national system of higher education; and the size of the country.

To elaborate upon the dynamics of internationalization, one needs to consider global and regional contexts, political conditions, historical backgrounds and potential future directions (see Chapter 2 for a more in-depth discussion of related concepts). Equally important are national and organizational-level rationales, endowments and goals. Internationalization rationales are defined by de Wit (2002, 84) as “motivations for integrating an international dimension into higher education. They address the ‘why’ of internationalization. Different rationales imply different means and ends to internationalization.”

Knight (2004, 23) and de Wit (2002, 83-101) identify four overarching rationales for the internationalization of higher education; including: *political* rationales (foreign policy, national security, technical assistance, peace and mutual understanding, national and regional identity); *economic* rationales (economic growth and competitiveness, labour market, financial incentives); *cultural and social* rationales (national cultural identity, intercultural development, community development); and *academic* rationales (extension of academic horizon, institution building, profile and status, enhancement of quality and international academic standards).

Ukraine provides a particularly interesting case, since its higher education system intersects with European innovation efforts and institutional forces rooted in the Soviet tradition. As

Figure 1 illustrates, Ukraine's higher education policy rationales are characterized by a growing interconnectedness between three rationalities: nation- and state-building; rationalities of comparison and critique; and catching-up/Europeanization (Fimyar 2010, 64).



This condition raises questions surrounding the widening gap between internationalization rhetoric and organizational practice, described by Maringe and Foskett (2010, 45), as 'strategic aspiration' versus 'strategic reality'. How higher education institutions adapt internationalization policies to successfully meet national, regional and global challenges remains a subject of interest (Dobko 2013; Gao 2015; Oleksiyenko 2014; Shaw 2013; Shaw, Chapman & Rumyantseva 2013).

Despite legislation designed to promote transformational change, Ukraine faces major challenges in its transition to a knowledge economy (see Hladchenko & Westerheijden 2017). The country's reorientation from the military-industrial complex to the commercialization of research results has stagnated due to systemic inability to efficiently leverage research and development resources (Yegorov 2008; Yegorov 2009; Yegorov &

Ranga 2014). In an attempt to reform this sector, Ukraine has endeavoured to redefine its objectives for the development of its national science system under the “Law on Science and Technical Activity” (Parliament of Ukraine 2015). The revamped legislation attempts to reposition the research and development sector by providing a more even playing field by encouraging an innovation-driven economy to take root.

Despite the passage of new higher education and research legislation, challenges remain insofar as the rule sets have yet to engage universities and stakeholders in articulating a clear vision to address macro-economic conditions needed for improving the governance, coordination and implementation of innovation policy. While mounting isomorphic pressures have created an opportunity for institutional actors to learn from the successes and pitfalls of its immediate EU neighbours, the change process often follows the ‘spirit’ rather than the ‘letter’ of reform. As such, the institutional logics aimed at creating a knowledge economy have not undergone significant changes and the structural reforms designed to build a knowledge economy have stalled or have not yet been adopted (Kurbatov 2012; Hladchenko & Westerheijden 2017).

In spite of state-led repositioning strategies designed to bring the Ukrainian higher education system in line with European standards and imperatives, continued challenges persist, due in part to entrenched Soviet institutional logics which seek to preserve the status quo by reproducing protectionist policies and setting barriers to innovation rather than develop a globally competitive model (Dobko 2013, 80; Kotvun & Stick 2009, 91; Oleksiienko 2014, 261). The dynamics of strategic priorities and outcomes, along with

evolving policy responses are the fluid features that define internationalization. By gathering actor-centered perspectives and reflexive accounts of institutional responses to globalization, a nuanced analysis of university experiences can be achieved.

I.4 GUIDING ASSUMPTIONS

Globalization exerts pressure on universities and governments to carefully calibrate partnerships for strategic purposes (Oleksiyenko 2011). In this regard, global engagement efforts represent a means of transcending knowledge boundaries, expanding academic horizon, generating new knowledge and advancing higher education reforms. From the perspective of the Ukrainian research university, globalization represents a new challenge of *external* adaptation and *internal* integration with which the organization must cope.

Therefore, a guiding assumption of this study maintains that shifts in higher education policy are occurring within the framework of increased contextual adaptation and ‘hybridity’. This assumption is analogous to Cowen’s maxim “as it moves, it morphs”, in reference to the ‘shape-shifting’ pattern of higher education policy as it travels from one region to another (Cowen, 2009, 315). It also builds upon Silova’s (2009, 315) observation that once an education discourse is transplanted from one context to another it changes meaning.

A second guiding assumption is that Ukrainian National Research Universities are becoming increasingly strategic in the way international strategies are devised and implemented. The integration of these universities into the EHEA represents a dialectic process between the increasing need for academic institutions to position themselves within

the emerging global system of higher education, while at the same time, preserving progressive national traditions and achievements. The result is a changing landscape of policies, practices and alliances.

As selective emulation, contextual adaptation and hybridity are among the institutional realities which Ukrainian universities face in light of an increasingly globalized environment, state-centred management legacies and resource asymmetries continue to be relevant factors in the higher education discourse. This suggests that new forms of negotiation and compromise are taking shape to legitimize and implement internationalization strategies and innovation policies, indicative of Scott's (1998, 122) assertion that maintains "while universities often perceive themselves as *objects* of globalization they are also its *agents*." These assumptions reinforce the argument regarding higher education policy convergence as not a matter of 'pitting legacies' against one another, but rather "a matter of combining them in a manner that is most expedient in view of national institutional peculiarities" (Dobbins & Knill 2011, 427).

1.5 CONTRIBUTIONS

This study makes several scholarly contributions. First, it addresses a research gap in the field of comparative and international higher education by critically examining the linkages between the phenomenon of internationalization and the knowledge society discourse in Ukraine. The study aims to improve knowledge of the impacts of the phenomenon of internationalization and its linkage to institutional change. It also attempts to give voice to the various actors who play a front-line role in formulating institutional responses to globalization into policies and practices.

Second, this study provides much needed intellectual monitoring of institutional perceptions and responses to internationalization and the broader knowledge society discourse, as contemporary Ukraine provides rich ground to investigate new types of research questions. By going beyond mainstream discourses of ‘global rankings’ and ‘world-class universities’, this study offers insights into policy choices and institutional behaviour patterns, as well as current and future directions for higher education in Ukraine at this critical juncture in its history.

Third, the thesis attempted to create new knowledge by critically examining the underpinnings of internationalization by facilitating a critical understanding of macro-policy shifts in higher education in Ukraine’s post-socialist setting. Finally, it is anticipated that the modes of enquiry presented in this thesis will be transferable to the study of international and comparative higher education in other regions of the former Soviet space.

1.6 STRUCTURE OF THE THESIS

The thesis is structured and organized around eight chapters. The first two chapters outline the conceptual underpinnings of the thesis, including the aims and research question, context, problematic and guiding assumptions, as well as the main discourses that frame current debates. In addition, the discussion presents a new way of gauging the phenomenon of internationalization through the lens of institutional change theory. Chapter 3 delves into the methodology and research methods employed in order to critically engage with the data collection, fieldwork and analysis. It also presents the technical aspects which were used to mediate the positionality of the researcher and the use of multiple languages throughout the study.

Chapters 4, 5 and 6 present empirical data from the institutional perspective of the three flagship universities selected for this case study. The analysis was structured through a combination of the Delta Cycle for Internationalization and new institutional theory. The inquiry examines *how* the phenomenon of internationalization plays out across each university setting from the perspective of key institutional actors. As such, the overarching goal of Chapter 7 was to provide an additional level of analytical rigour when critically engaging the data across three unique university settings. The analysis examines the interplay of institutional cultures, action logics and the mental models of university actors which exert distinct influences on the process of internationalization. Chapter 8 concludes with a synthesis of the findings and highlights the major themes of the study. The chapter closes with a discussion on future areas of research.

CHAPTER 2 CONCEPTUAL FRAMEWORK

Universities across the EHEA and its periphery are in a period of redefining their respective roles and contributions to the global knowledge society. In the recent past, dramatic changes have taken place in the higher education sector, whereby globalization is now considered “the most important contextual factor shaping the internationalization of higher education” (International Association of Universities 2012, 1). Similarly, universities have become strategic actors which increasingly play a decisive role in determining where they are “located in a world structural map of higher education” (Teichler 2004, 21). As such, it has become necessary to reassess the normative and institutional patterns shaping national internationalization discourses, as well as the factors informing higher education systems.

Internationalization in the early twenty-first century is taking place in an increasingly fluid, interdependent and complex environment. Consequently, the widening of higher education drivers has made internationalization more of an institutional imperative. The balancing of multiple outcomes, while preserving essential institutional core values and missions has become both a challenge and an opportunity. This resonates strongly with the Ukrainian case, considering its resilient Soviet higher education legacy and concerted efforts to accelerate European policy convergence.

At the core of this study is the objective to develop a reflexive account of the rationales, strategies and outcomes of the responses of select universities to globalization. The forces of globalization have exerted enormous pressures on higher education institutions, and

internationalization has emerged as the primary response to this phenomenon (Altbach, Reisberg & Rumbley 2009, 35). Knight (1999, 14) defines internationalization as “one of the ways a country responds to the impact of globalization yet, at the same time respects the individuality of the nation.” She asserts that, “internationalization and globalization are perceived as different but dynamically linked concepts. From this perspective, globalization can be thought of as the *catalyst* while internationalization is the *response*, albeit a response in a proactive way” (Ibid, 14). In support of this statement, van der Wende (1996, 193-194) highlights internationalization as an ‘educational innovation’ and a ‘process of educational change.’

Expanding research around internationalization and its central underpinnings has become increasingly salient to scholars and policy makers alike. Kehm and Teichler (2007, 260) articulate that “[T]he general state of research is characterized by an increase of theoretically and methodologically ambitious studies without a dominant disciplinary, conceptual, or methodological *home*”. Internationalization remains an underdeveloped field of research that is still at the ‘pre-paradigmatic’ stage (de Wit & Callan 1995). In line with this assertion is Teichler’s (2004, 10) observation that “there is no generally agreed conceptual framework for structuring or classifying knowledge with respect to internationalization. Studies tend to draw upon world systems theory, international relations studies, and organizational theory.”

Parallel views are echoed by Enders (2002) and Marginson and Rhoades (2002) who maintain that there is limited theoretical conceptualization and empirical study about the

phenomenon of internationalization of higher education institutions. This challenge is compounded by limited debate on the knowledge society in higher education internationalization (Teichler 2004, 23).

In a similar vein, Söderqvist (2007, 16) underscores that “theories of higher education internationalization are practically non-existent.” Conceptual challenges are mirrored by a dearth of empirical evidence, as noted by Kehm and Teichler’s (2007, 261) observations regarding the general state of research on international higher education:

[A]ny attempt to gather information on the state of systematic knowledge with regard to the international dimensions of higher education is hampered by the fact that research in this domain is not easily accessible. The thematic area is somewhat fuzzy... and therefore cannot easily be addressed through the typical strategies of literature research. Also, research reports and reflective thoughts are often published or otherwise distributed in ways that require enormous efforts to get hold of them.

Internationalization is increasingly understood to be linked to areas affecting institutional change via knowledge mobilization, strategic planning, management structures, organizational strategies and steering mechanisms (Altbach, Reisberg & Rumbley 2010; Teichler 1999; Teichler 2004; van der Wende 1997). In turn, changes in the emergent global higher education environment influence universities to adopt new organizational practices (Jones & Oleksiyenko 2011, 42). According to an extensive literature review of studies linked to a range of issues on higher education internationalization spanning the course of a decade, Kehm and Teichler (2007, 264) identify seven broad themes which characterize the thematic map of this field of study:

- Mobility of students and academic staff;
- Mutual influences of higher education systems on each other;
- Internationalization of the substance of teaching, learning, and research;
- Institutional strategies of internationalization;

- Knowledge transfer;
- Cooperation and competition;
- National and supra-national policies as regarding the international dimension of higher education.

2.1 GLOBALIZATION

Globalization is an ongoing, complex and dynamic process occurring at different levels in higher education, altering the latter's spatial correlations and traditional conceptions. Although there is no set definition, globalization is generally congruent with the view of the 'compression of time and space', the 'overcoming of distance' and the 'end of geography', which has made borders increasingly porous, enabling the flow of people, goods, capital and information (Appadurai 1990).

Globalization has led to the intensification of human interactions, especially in the last two decades. In a similar vein, globalization exerts pressure on various levels of higher education systems, performing an 'icebreaker' function for national higher education agendas. This has prompted increasingly rapid change with regards to increases in a wide range of transnational activities; and secondly, trends towards internationalization and regionalization (Enders 2002, 1-2).

Breton (2003, 26) posits that globalization has radically redefined spaces and forms of action in accordance with three structural factors. First, a shift in the traditional means of conceptualizing higher education which loosens territorial attachments; second, the creation of [global] space in which new issues manifest; and third, the construction of new [intellectual] space which facilitates a forum for the collective negotiation over the

definition of spatial action. From this perspective, a ‘new geography of action’ (Breton 2014, 19) is taking shape whereby higher education systems are *driving* and are being *driven* by the forces of globalization.

Despite the tendencies for convergence brought on by globalization, universities remain embedded within national higher education systems, even though some universities are more globalized than others. Furthermore, globalization does not necessarily translate into a linear process with uniform outcomes. As a result, persistent tensions exist between the forces of globalization and national diversity (Enders 2004, 369). Residual tensions, resistance and mutations may occur at the national or organizational levels as a result of the negotiation process.

Similarly, the context for globalization is uneven and varies substantially from country to country (Enders 2002, 18). Thus, “globalization affects each country in a different way due to a nation’s individual history, traditions, culture and priorities” (Knight & de Wit, 1997, 6). Globalization produces new spatial formations between universities which are linked *globally* while bound *locally*. Marginson and Rhoades (2002, 281) refer to this convergence as the ‘*glonacal* agency heuristic’ which fuses *global*, *national* and *local* perspectives through a spatial ‘fix’. This frame is particularly helpful for understanding the internal and external drivers of higher education in post-socialist higher education settings, as the region faces dual perspectives which need to take the post-1991 *local* and *global* contexts into account (Kwiek 2001, 401).

The simultaneous practice of cooperation *and* competition (*coopetition*) among institutions has also manifested itself within this frame as university leaders and governments alike have become preoccupied with optimizing strategies and competitive advantage (Breton 2014, 20). In line with these observations, Giddens (1990, 64) posits that globalization is essentially a ‘stretching process’ in so far as “the modes of connection between different social context or regions become networked across the earth’s surface as a whole.” Global research networks have rewired the playing field by linking academic ‘centres’ and ‘peripheries’ in knowledge production efforts, developing capacities and bringing new players inline with the global knowledge society and knowledge economy.

Globalization comprises numerous discourses making any discussion around it a complex and multifaceted undertaking. Given the broad range of discourses globalization encompasses and the nuanced approaches they take, higher education has become implicated in a wide range of changes related to globalization (OECD 2009, 19). Correspondingly, the worldwide network of universities is in a phase of dynamic transformation (McCarney 2005, 207). Though higher education institutions often see themselves as *objects* of globalization, they are also its *subjects* (Scott 1998, 122). In other words, universities are affected by, and at the same time, influence these processes (Enders 2004, 365).

2.2 INTERNATIONALIZATION

The meanings of ‘globalization’, ‘internationalization’ and ‘Europeanization’ are frequently used interchangeably to identify the process of cooperation and cross-border activities between states (Enders 2002, 7). Despite frequent conceptual blurring, there are

important distinctions between these definitions in their relation to higher education (Knight 1994, 3). Globalization and internationalization are different but related processes. Internationalization has been defined as “the variety of policies and programs that universities and governments implement to respond to globalization” (Altbach, Reisberg & Rumbley 2010, 7).

Another commonly cited definition is provided by Knight (2004, 9), who defines ‘internationalization’ as a “process that integrates the international, intercultural and global dimensions into the key functions of a university, as well as into its mode of operation” (Knight 2008, 21). Ennew and Greenway (2012, 5) argue that these modalities alone do not constitute internationalization and that it does not represent an end in and of itself. In this context, internationalization can be interpreted as “a means to an end and the mechanism by which universities are better able to achieve their core objectives in terms of generating, curating and disseminating knowledge, both for its intrinsic value and as a means of improving economic and social well-being.” Altbach and Knight (2007, 291) continue along these lines to provide additional nuance on the influence of internationalization in shaping higher education, arguing that “globalization may be unalterable, but internationalization involves many choices.”

Similarly, Sutton and Deardorff (2012, 17) assert that internationalization is “aimed not only at transforming individual institutions, but also at building global networks of learning and reflection.” In line with this assertion is the idea that “internationalization is as much a process of outward connection as inward infusion” (Sutton & Obst 2011, xiii). While

internationalization appears to be one of the major change processes influencing the development of higher education in most countries (Egron-Polak 2012, 57), higher education internationalization is not a new concept *per se*. The practice behind the movement of scholars, students and ideas gained prominence in Europe over a century prior to the Renaissance (de Wit 2002, 3-10; Wildavsky 2010, 17-18). However, it is only in the latter half of the twentieth century that the concept began to define the scale and scope of its impact on higher education.

Hudzik (2011, 7) asserts that over the last few decades, “powerful new factors have reinvigorated the international dimensions of higher education and the cross-border flow of students, scholars, and ideas as well as global growth in higher education.” It is arguably one of the most significant phenomena facing higher education (Rumbley 2015, 16); however, internationalization often suffers from conceptual unclarity. This observation is echoed by Knight (1999, 13) who holds that, “it is clear that internationalization means different things to different people and as a result there is a great diversity of interpretation attributed to the concept.”

Internationalization efforts are also aimed at bringing about greater convergence to international standards, and act as a response to an increasingly globalized environment (van der Wende 1997, 19-20). In recent years, internationalization policies have developed structured relationships with mainstream higher education, moving from short-term, add-on activities to a central strategic imperative at the institutional level (van der Wende 2001, 250). This concept is further advanced by Knight (2004, 15), who ascertains that the

transformational tenets of internationalization and globalization impact one another and as such, “[I]nternationalization of higher education is both a response to globalization as well as an agent of globalization. Internationalization is changing the world of higher education, and globalization is changing the world of internationalization.”

Unpacking spatial typologies further, ‘internationalization’ must be distinguished from ‘Europeanization’ since the two processes are understood to be shaping higher education institutions (Söderqvist 2002, 31). Kehm (2003, 110) defines ‘Europeanization’ as ‘internationalization-light’ or in other words, ‘regional globalization’ within a space characterized by a “common and shared history and culture, as well as an economic, political and cultural alliance *vis-à-vis* the rest of the world.” Within this frame, Europeanization can be characterized as a specific form of ‘regionalism’ in the face of internationalization and globalization (Kehm 2003, 111). The rationale behind Europeanization is multifold, as the phenomenon encompasses a number of discourses related to the European dimension of higher education to include: the achievement of European excellence; facilitating a framework for new governance and steering; strengthening Europe’s position in the knowledge economy; and providing space for policy convergence (Komljenović & Milavič 2013, 38; Söderqvist 2002, 149).

This shift accompanies a change of structures, norms, practices and identities, resulting over time in a redefinition of national higher education policies (Komljenović & Milavič 2013, 42; Kwiek 2001). In a similar way, Europeanization has reinforced itself in the economic and political imaginary which impacts not only members of the European Union,

but those of its periphery. Silova (2009, 304) observes that the later states have “become a part of another transformation process shared with the rest of the European Union – toward knowledge-based societies.” However, challenges remain in terms of providing space for the renegotiation of educational policies to occur (Silova 2009, 297). Finally, all three spatial contexts – globalization, internationalization and Europeanization – have become interwoven in higher education institutional strategies, indicating an even higher degree of complexity in planning, policy and practice.

2.3 KNOWLEDGE SOCIETY

The concepts of globalization, internationalization and Europeanization are closely linked with the emergence of the ‘knowledge society’, whereby exchanges of technology and immaterial goods play an ever-increasing role and are key drivers of the economy and motors of knowledge production (Kehm 2003, 110; Nowotny, Scott & Gibbons 2003, 193). First coined by Drucker (1969, 24), his praxis asserted that knowledge has become the foundation of the modern economy, manifested in the explosive growth of the knowledge sector. Dubbed the ‘third industrial revolution’, a corollary process took place whereby industrial productivity no longer constitutes the driving force behind economic output, and the creation and timely application of new knowledge is defining the pace of innovation and national prosperity.

These macro-level shifts can be grouped into the term ‘knowledge society’. The definition has deviated little since its introduction; however, it has undergone a number of bifurcations; including: ‘information society’, ‘learning society’, ‘higher education network society’, ‘global knowledge system’ (Altbach, Reisberg & Rumbley 2010, 3),

‘knowledge distribution chain’ (Altbach 1987, 48; Swart & Harvey 2011), and ‘international knowledge network’ (Välimaa & Hoffman 2008, 269). Finally, UNESCO (2005, 17) broadly defined the knowledge society as encompassing socio-political and ethical dimensions, fostering diversity and unlocking creativity.

The knowledge society has manifested itself in many ways. It represents an emergent discourse requiring radical reforms to higher education systems, but at its most fundamental level, the knowledge society encompasses major shifts in the patterns of production, distribution and application of knowledge, which in turn, influence education, research and innovation policies (UNESCO 2005). Within this frame, higher education becomes a driver of economic growth and prosperity. From this perspective, knowledge has become commodified, and as such, has undergone a change in status whereby societies organize themselves around knowledge production, and universities redefine their space(s) of action and strategic alliances accordingly (Breton 2003, 27-28).

Within the global knowledge society paradigm, higher education has acquired a pivotal role in making universities central institutions (Altbach & Salmi 2011, 11). Castells (1994, 15-16) synthesizes the relationship between higher education and the knowledge society, noting that science and technology systems of the new economy are equivalent to the “factories” of the industrial age: “if knowledge is the electricity of the new informational-international economy, then institutions of higher learning are the power sources.” However, unlike most resources, knowledge does not deplete with use – on the contrary it grows through *application* and *networking*. Beyond economic contributions, universities

shape the societies in which they are embedded. Sadlak (1998, 106) takes this concept one step further to argue that “higher education institutions have become central in modern society and their role has shifted from being a reflection of social, cultural and economic relationships to being a *determinant* of such relationships.”

2.4 KNOWLEDGE ECONOMY

The knowledge society and the knowledge economy are distinct, yet overlapping terms which complement one another despite frequent conceptual ‘layering’. The knowledge economy comprises several discourses linked by a common theme; namely, the importance of ‘knowledge’ (Dale 2005, 118). As such, knowledge has acquired new importance as a vital element required by societies for competitive advantage. The knowledge economy has become a powerful new *imaginary* in the last 20 years (Jessop, Fairclough & Wodak 2008, 2), and has been influential in shaping policy paradigms, strategies, and policies in and across many different fields of educational practice (Jessop & Sum 2013, 36). The knowledge economy is defined as “the application of knowledge from any field or source, new or old, to spur economic development” (Guile 2006, 355). It has also been described as a period of rapid change since the inception of the industrial revolution.

Higher education is a field in which ‘globalization’, ‘competitiveness’ and the ‘knowledge economy’ have resonated strongly (Jessop & Sum 2013, 24-25). These elements have particular significance *vis-à-vis* universities and higher education systems, since contemporary societies are organized around knowledge production having evolved from *industrial* economies to *knowledge* economies. According to this new developmental

paradigm, capital and labour are no longer sufficient inputs to meet the means of production, and therefore, knowledge becomes a third [critical] element.

Moulier-Boutang (2007) argues that the world entered a third form of capital accumulation, which he refers to as ‘cognitive capitalism’. Within this paradigm, a ‘soft revolution’ took place whereby knowledge replaced physical resources as the main driver of economic growth (Wooldridge 2005). The resources for production in this system are innovation and collective intelligence, as well as the ability to harness the outcomes of intellectual work, requiring investment in human capital and bridging geographically distant actors through new technologies and ‘connected brains’. Consequently, universities are often at the core of the knowledge economy. The knowledge economy is globally ‘wired’ through international research networks, i.e., connecting ideas, innovation and strategic university partnerships, whereby the university becomes a ‘cognitive engine’ and a *milieu* for innovation (Capello, Olechnicka & Gorzelak 2013, 3).

However, the dynamic processes transpiring within the knowledge economy suggests an alternative way in which universities collaborate and are linked globally (McCarney 2005, 205). Nowotny, Scott and Gibbons (2003, 179) contend that societies transitioned from a ‘Mode 1’ knowledge regime, whereby science was considered a distinct entity which evolved in an [organic] unplanned manner, to a ‘Mode 2’ paradigm of knowledge production. This shift entails the growing commodification of knowledge and application-specific inquiries into knowledge production, rather than the advancement of knowledge itself. In the Mode 2 paradigm, education is changing to be more in tune with the market

rather than for the advancement of knowledge, shifting the focus on ‘acquisitive’ rather than ‘inquisitive’ learning (Lauder, Brown, Dillabough & Halsey 2006, 6).

Thus, the role of the university in the knowledge economy has been undergoing fundamental changes over the last few decades as tertiary institutions have increasingly encompassed a so-called ‘third mission’ by gravitating towards an ‘entrepreneurial university’ pathway, whereby traditional missions of teaching and research are being supplanted by commercial activities (Sam & van der Sijde 2014, 891). Slaughter and Leslie (1997) developed the term ‘academic capitalism’ to describe the commercialization of higher education and research, as well as the shifting power relations between the university and the market. These factors are making significant impacts on the mission of higher education, having led to competing visions surrounding state-university relations and academic autonomy, and fueled debate on whether higher education constitutes a *public* or a *private* good.

The knowledge economy challenges the traditional role of universities by introducing market strategies, ‘knowledge branding’ and ‘performativity’. Cowen (1996b, 252) defines ‘performativity’ as a social construct in that it is both an “epistemological condition and an explicit political project.” Finally, Schugurensky (2013, 308) notes that the nature of academic culture and the role of universities are being recast under these circumstances, and as a result, are becoming less resistant and more receptive to these changes. However, defining policy direction in this emerging landscape presents specific challenges for

universities in the former Soviet space as ‘hybrid’ rationalities often persist, resulting in contradictory if not conflictual sets of action logics.

2.5 INTERNATIONALIZATION THROUGH THE LENS OF INSTITUTIONAL AND ORGANIZATIONAL CHANGE

North (1991) asserts that the university will engage in acquiring skills and knowledge that enhance its survival possibilities. As such, North’s theory of institutional change examines cooperation under the more challenging circumstances of non-repeated interactions, incomplete information and large numbers of players. His model advances the idea that institutions provide a mechanism for incremental change, because they facilitate opportunities for new forms of negotiation and compromise. Furthermore, North (1990, 7-8) theorizes on the institutional change matrix which is driven in part by ‘network externalities’ and ‘lock-in’, defined as “the symbiotic relationship between institutions and the organizations that have evolved as a consequence of the incentive structure provided by those institutions.”

These forces take the shape of incremental change, formal and informal rules of engagement, and the perception that organizations could improve by altering the existing institutional framework at a given margin. Thus, North’s model is useful for developing a critical understanding of internationalization as a *process* of change and elucidating *how* institutional arrangements contributing to the Soviet higher education legacy continue to function despite significant normative, mimetic and legislative transformations. For the purposes of this investigation, a stronger focus on the institutional evolution of North’s model is made rather than economic aspects. In this regard, North (1990, 8) provides a

more holistic perspective of how actors make decisions in light of incomplete information and “mental constructs that can result in persistently inefficient paths”. This (re)reading of the theory of institutional change attempted to provide a more nuanced distinction between the incentives imbedded in the formal and informal rules of institutional frameworks and the constraints which affect the choices that institutional actors make.

Furthermore, an attempt was made at extending North’s model to facilitate comprehensive perspectives on hybrid rationales, compensatory legitimacy and isomorphic pressures which encourage institutional actors to be more alike through formal and informal rules, procedures and norms. While new institutional theory literature provides comprehensive understanding of how higher education systems function within national contexts (Bégin-Caouette 2017; Chou 2012; Santiago & Carvalho 2016), there are few studies that explicitly analyze the phenomenon of internationalization and the adaptive institutional processes governing it. Based on the construct presented here, the current study attempts to facilitate a theoretic understanding of internationalization as a process of institutional change. In this regard, the study advances a model to better understand internationalization as a vehicle for transformation due to the incentives imbedded in formal and informal frameworks.

Teichler (1999, 9-10) provides additional dimension to the analysis by asserting that internationalization has not only brought about gradual trends of increased international activities, but substantive qualitative change, which he refers to as ‘quantum leaps.’ From North’s (1991) theoretic perspective, ‘revolutionary’ change is never as radical as its

supporters advocate, since the organizational norms provide the essential ‘legitimacy’ to any set of formal rules. Consequently, “institutional path dependency exists because of network externalities... the individuals and organizations with bargaining power as a result of the institutional framework have a crucial stake in perpetuating the system” (North 1997, 20).

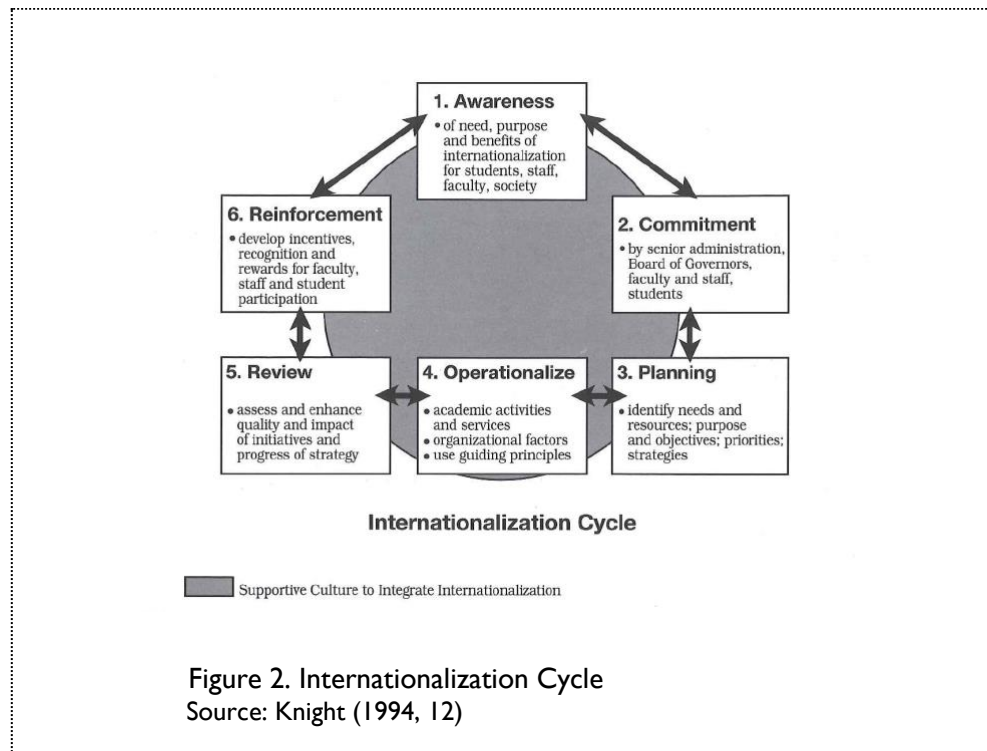
In the context of the current study, North provides a valuable framework to elucidate the case universities’ priorities, management cultures and resistance points; particularly under the conditions of organizational path dependency, which vary according to university. In its simplest form, path dependency implies that previous choices and entrenched institutional arrangements constrain future alternatives making the cost of reversal very high (North 1990, 100). Understood as such, Shaw (2013, 10) observes, “path dependence is a relative newcomer in the field of education, and yet one that holds a particular appeal for scholars examining post-socialist transitions.”

In the organizational landscape of the Ukrainian research university viewed through North’s theoretical lens, internationalization represents a new challenge of *external* adaptation and *internal* integration with which the organization must cope. North argues that societies that adopt the formal rules of another society will have very different performance characteristics than the original country. For example, the academic literature addressing Ukraine’s adoption of the Bologna Process suggests a fundamental mismatch between the existing logic of university governance rooted in the Soviet model of higher education and the logic presumed in European reforms (Shaw 2013; Shaw, Chapman &

Rumyantseva 2013). Subsequently, institutional responses will be strongly affected by the organizational culture and the adopted innovation. North (1997, 20) also explores organizational dynamics under the framework of incomplete information, increased specialization, divisions of labour, and transaction costs which shape the direction of long-term change. As such, the theory of institutional change provides a useful lens to assess the transaction costs of knowledge production and the institutional framework for productive activity.

Although North's model resonates well with the aforementioned institutional change aspects and is highly salient with the current case study, it does not fully capture *how* the phenomenon of internationalization permeates the fabric of institutional structures, nor does it explain the rationale behind internationalization pathways, and perhaps more importantly for this study, the increasing role that the international dimension plays in the inner dynamics of higher education institutions. The process of institutional adaptation is conceptualized in Knight's (1994) Internationalization Cycle (Figure 2) which establishes a visual representation of internationalization as a dynamic, cyclical process consisting of six dimensions: *awareness, commitment, planning, operationalization, review, and reinforcement*.

Originally designed as an analytical tool to assess the emerging internationalization processes in Canadian post-secondary institutions, the model captures a broad spectrum of complex and dynamic issues in a clear, concise format. When applied to the internationalization experiences of individual universities, key indicators emerge.



This element is significant for the purposes of this study since it places the tertiary institutions at the centre of the inquiry and provides a critical analysis of the findings. Knight's findings have been acknowledged as an important contribution to the emergent body of literature centered on the conceptual aspects of internationalization (de Wit 2002). Despite the applicability of Knight's model to capture and map the process of internationalization, Rumbley (2010, 219) identifies the following missing elements:

The broader perspectives of rationale, strategies, and outcomes for internationalization, which address the questions of *why* universities internationalize, *how* and in *what ways* they do this, and *to what ends*;

The recognition and articulation of notable *environmental* factors – opportunities, imperatives, obstacles, and resources – that play a critical role in shaping institutions' experiences of internationalization;

The clear and unequivocal representation of the notion of *change*, which captures the reality of a fluid external environment as well as the *transformational* nature of internationalization itself.

Rumbley's (2010) Delta Cycle for Internationalization (Figure 3) represents an updated and expanded interpretation of Knight's (1994) original model which incorporates the aforementioned elements to convey a more holistic perspective of internationalization experiences. Rumbley's model is particularly well-suited for this study, since it provides an additional layer of inquiry which goes beyond the scope of Knight's original framework. Consequently, the model provides a means of comparison and critique as to the underlying question of *why* universities are motivated to internationalize, the range manoeuvre undertaken to act on these interests, as well as gauge institutional action logics, impacts and outcomes (Rumbley 2010, 219-220).

At the core of this model is the fundamental concept of internationalization representing a function of institutional change against a fluid global environment.¹ Four broader perspectives of *opportunities*, *imperatives*, *obstacles*, and *resources* play the central role of informing the process of internationalization which shape institutional engagement. These elements proved particularly useful for the inquiry, since the additional dimensions incorporate institutional factors which are absent in the original model. Consequently, the combined models provide an inductive element to the inquiry. The added dimensions also provide enhanced rigor to individually test the phenomenon of internationalization in a non-linear, post-socialist higher education setting.

¹ The Greek letter 'delta' (Δ) represents the mathematical term for change.



Figure 3. Delta Cycle for Internationalization
Source: Rumbley (2010, 220)

The conceptual framework combines the theoretical tenets of North (1990) and the Delta Cycle for Internationalization (Rumbley 2010) matrix to facilitate a comprehensive framework to extrapolate insights on institutional responses to globalization, motivational strategies, and experiences in which internationalization plays out at each of the case study universities. North's theory complements the Delta Cycle by introducing an element of 'friction' to illuminate *how* the various phases play out in practice and as a function of institutional priorities, management cultures and resistance points.

This conceptual framework guides the architecture of ideas that underpin the tenets of this study and facilitates a window to gauge the interplay among the aforementioned features. It also provides the basis for a reflexive account of how national research universities have

responded to the opportunities and imperatives of internationalization since Ukraine's accession to the EHEA.

CHAPTER 3 METHODOLOGY

This chapter provides an outline for the methodological approach and research methods which frame the inquiry. It is intended to reflexively engage with the data and provide a framework from which critical analysis for this study was built. The first part of this chapter presents the research design and data collection methods. The second part focuses on operationalization aspects of how the research was carried out, data analysis, the management of multiple languages which were used extensively throughout the case study, as well as procedural challenges and limitations.

3.1 RESEARCH DESIGN: CASE STUDY

The case for this study is defined as the phenomenon of internationalization in higher education, with the specific objective of the inquiry to assess institutional perspectives on internationalization efforts and provide a framework to illuminate institutional responses to the global knowledge society discourse. The guiding assumptions behind the study are: firstly, that the phenomenon of internationalization represents a new challenge of *external* adaptation and *internal* integration with which the university must cope; and secondly, that university responses are strongly affected by the institutional culture and the adopted innovation.

University experiences were examined by applying a combination of neo-institutional (or new institutional) theory (North 1990) and the conceptual framework of the Delta Cycle for Internationalization (Rumbley 2010). The study takes a critical approach to identifying and interpreting *how* the phenomenon of internationalization manifests in the development of strategic partnerships, translated and re-contextualized into structural innovations, and

systemic institutional change. Thus, the aim of this inquiry is to critically assess the phenomenon of internationalization among a select group of flagship universities in Kyiv, Ukraine, defined as National Research Universities occupying a central role in Ukraine's higher education landscape (Cabinet of Ministers of Ukraine 2010). For the purposes of this inquiry, a single-case embedded case study design (Yin 2015, 50) was chosen, and three universities were selected for the analysis (see Section 3.2.1).

Yin (2003, 2) asserts that case studies are especially useful for allowing investigators to craft “holistic and meaningful characteristics of real-life events” which is plausible to the study of the internationalization of higher education. Furthermore, the inquiry's reliance on multiple sources offers additional justification for the use of the case study approach, and “can represent a significant contribution to knowledge and theory-building... [for example] in the field of organizational innovation” (Yin 2015, 49).

This conceptualization resonates well with the current inquiry, considering that the case is on the phenomenon of internationalization, and the sub-units of analysis are research universities situated within the same national context, but are informed by different academic models and institutional cultures. In the literature regarding the features of a case study approach, Merriam (1998, 27) maintains that “the single most defining characteristic of case study research lies in delimiting the object of study: the case.” The case is defined as “a single unit, entity, or phenomenon with defined boundaries that the researcher can demarcate or ‘fence in’, and therefore, can also determine what will not be studied” (Merriam 1998, 27). In-depth focus on the particular within a bounded system can help

provide a holistic understanding of the phenomenon of interest. This approach is particularly useful in the current investigation of how the phenomenon of internationalization plays out at select case study universities.

Merriam (1988, 36) asserts that a “qualitative case study is an intensive, holistic description and analysis of a single instance, phenomenon or social unit.” This approach is well suited to this study, since the research aims to address the changing nature of higher education in Ukraine, against a backdrop of broader political transition and macro-political dynamics of globalization and the knowledge society/economy. It also examines the role that Ukrainian National Research Universities may play as arbiters of knowledge and actors of change.

Merriam (1988, 29) notes that “qualitative case studies are particularistic, descriptive and heuristic.” The objective is to analyze the processes through which key actors manage institutional change across a series of different university settings. Accordingly, the study included heuristic descriptions of different university *types* to advance the understanding of the phenomenon of internationalization from three institutional perspectives. The aim is to enable comparison of institutional interpretations of the same phenomenon as it manifests across different institutional environments. Differing academic governance models are also elements which allow for a range of critical, comparative analysis.

Phillips (2006, 306) outlines a set of criteria for the classification of comparative education research. For the purposes of this study, the general application of comparative education research was reframed in order to make comparisons across sub-units (i.e., universities as

the organisations of interest) in the same national context. Furthermore, Phillips identifies the ‘analytical’ research type as responding to the following questions: “[W]hat are the explanations for relationships between components? Why do actors or systems behave in the way they do?” Similarly, the analytical approach responds to a set of research purposes. These types of questions are embedded within the research questions for this study below.

3.2 RESEARCH QUESTIONS

Three levels of conceptual analysis framed the study in order to gauge a range of perspectives on the impacts of globalization and how responses are perceived and managed at various levels within said organizational constructs. These levels are: (i) *organizational*: to gain macro-policy perspectives on regulatory frameworks guiding the national higher education system; (ii) *institutional*: to examine the institutional structures of the case universities, their frameworks for internationalization, policy rationales, strategic priorities and spaces of action; and (iii) *individual actors*: to analyze actor-level dynamics influencing operations, interactions with organizational hierarchy and network dynamics. A central research question and a subset of four secondary research questions were developed to guide the inquiry. A key point of inquiry was to explicate and determine the motivating factors behind the case study universities to engage in academic internationalization, their specific institutional responses and strategies employed, as well as the outcomes of internationalization efforts. Therefore, the central research question (RQ) guiding this study asks:

(RQ1) How have research universities responded to the challenges and imperatives of the global knowledge society since Ukraine’s accession to the EHEA?

A subset of secondary research questions probe the lines of inquiry to extract specific dimensions related to the rationale and strategies employed and outcomes experienced by the universities. The study also includes an additional research question which addresses the conceptual framework utilized for this case study:

(RQ2) What are the driving factors motivating Ukrainian research universities to internationalize?

(RQ3) What are the internationalization rationales and strategies employed by research universities?

(RQ4) What are the outcomes of internationalization for research universities?

(RQ5) How do research universities build knowledge alliances? What are the major differences between their approaches?

(RQ6) To what extent does the combination of North's theory of institutional change and the Delta Cycle for Internationalization accurately reflect the experiences of internationalization of case universities?

3.2.1 SELECTION OF LOCATION AND UNIVERSITIES

A key factor in analysing the phenomenon of internationalization was the country setting. Ukraine was selected as an appropriate setting due to the renewed dynamism in its higher education system, and the its need to critically engage with the emerging higher education discourses in the former Soviet Union. From this perspective, the study provides important insights into connections between the past and the present, as both are equally important to the study of institutional change (North 1990, vii). Considering the dearth of academic studies on the phenomenon of internationalization in higher education, particularly in post-Soviet contexts, and its centrality to the knowledge society discourse emerging in Ukraine, it was decided to situate the study there (see Finikov & Sharov 2014; Hladchenko, de Boer & Westerheijden 2016; Oleksiienko 2014; Oleksiienko 2016).

One of the first pieces of legislation passed by the pro-European government immediately following the *EuroMaidan* revolution (or Revolution of Dignity) was the 2014 “Law on Higher Education”, which seeks to revamp the Ukrainian tertiary education sector following previous false starts, incomplete reforms and unsuccessful attempts at modernizing the sector (Parliament of Ukraine 2014). The legislation also seeks to enable more nimble responses to international opportunities. Considered by some case study respondents from this study and confirmed by the literature as a ‘work in progress’ (Hladchenko 2016; Knudson & Kushnarenko 2015; Oleksiyenko 2016), the investigation provided a critical frame from which to gauge *how* the new legislation was manifested in the selected universities.

This legislation is considered ‘experimental’ by some observers as it is being implemented in a largely unreformed higher education system. This aspect is particularly salient to the study as the logics presumed in the law often clash with the existing institutional frameworks of the case universities. Furthermore, the legislation provided the opportunity to observe *how* or *whether* tensions were being negotiated and reconciled with competing values and expectations of university stakeholders. It also provided key insights on the agency of university actors, their changing academic identities and the inter-relationship between adaptation or resistance strategies *vis-à-vis* the European knowledge system.

The law is especially relevant to the study since it sets the stage for wider institutional change. It aims to provide universities with greater autonomy, quality assurance frameworks, create favourable conditions for Bologna compliance and improved research

intensity, as well as to prepare Ukrainian universities with the tools to benefit from international collaboration (see Kvit 2018). Furthermore, it is the first such legislation developed in consultation with a wide range of university stakeholders, including numerous case study respondents selected for interviews in this study. The interview strategy specifically included respondents that were directly involved in the development of the legislation. Finally, there is some research to suggest that the new legislation poses a major challenge to the status quo, as Ukrainian National Research Universities tend to be hierarchic in structure and resistant to change (Knudson & Kushnarenko 2015; Oleksiienko 2014).

Exploratory work on the selection of sub-units (i.e. the case study universities) first began with an online review of university websites, academic literature, and grey materials (i.e., reports, white papers, policy statements and conference proceedings). As work progressed and the scope of the study became more defined, key informants were identified. This included: practitioners and policymakers at the Erasmus⁺ Office in Ukraine, higher education institutes of the National Academy of Sciences of Ukraine, as well as academics who had published papers on similar issues. These informants provided important insights on the role and function of Ukrainian National Research Universities, the broader world-class research university project (see Oleksiienko 2014), as well as efforts to bring Ukrainian research universities into closer alignment with the regional and global knowledge systems.

As a next step, exploratory work was conducted on international partnerships, knowledge alliances and thematic networks. These collaborative initiatives were analyzed in order to gauge the scope and pattern of international activities of potential case study universities. The programs were identified via extensive online searches and higher education stakeholder databases. This approach takes its cue from Yin (2003, 98) who argues, “the use of multiple sources of evidence in case studies allows an investigator to address a broader range of historical, attitudinal, and behavioural issues”. The initial research revealed important intellectual hubs in Donetsk, Kharkiv, Lviv and Odessa; however, closer investigation showed these regional centres to have a less diversified knowledge base than Kyiv. Further enquiry revealed differences in university league tables, national and global rankings, and research intensity. Exploratory work was conducted by way of literature reviews, online searches and exchanges with key experts in the field.

As a result, Kyiv was selected as the location for the study chosen since it not only represents an important intellectual hub, but is home to five out of ten national flagship universities, and six out of 14 autonomous research universities in Ukraine (Mrinska 2013, 339). In line with McCarney’s (2005, 205) observations, research-intensive universities are linked within and between global cities that constitute major nodes of a networked world. This factor is significant for post-Soviet states such as Ukraine, considering that Kyiv is a major hub of academic, research and economic intensity, as well as a gateway to the global [knowledge] economy (Mrinska 2013, 329).

For the purposes of this study, National Research Universities were identified and selected on the basis of their legal status as defined by Ukrainian law (Cabinet of Ministers 2010), which was a key variable for selection. This provided a comparable league table from which comparisons could be made. By selecting universities of different *types* (liberal-arts, technical and classic research universities), the sub-units were purposefully selected with an eye on facilitating critical insights into specific internationalization practices and knowledge discourses. It was also important in the context of this study to expand research beyond a single university type in order to gauge various perspectives on the internationalization of doctoral training. These variances are critical when considering university experiences since the phenomenon of internationalization is practiced differently according to each institutional environment.

The following National Research Universities were selected to inform the inquiry: the National University of Kyiv-Mohyla Academy, the National Technical University of Kyiv Polytechnic Institute, and Taras Shevchenko National University of Kyiv. Kyiv-Mohyla Academy is considered to be “at once Ukraine’s oldest and one of its youngest universities” (Gleason 2001, 434). Founded in 1615 by Orthodox clergyman Petro Mohyla, who established the collegium on a radical reform of the monastical order, the Academy adopted a curriculum based on the Jesuit model of training, in addition to implementing Latin and Greek, as well as Old Church Slavonic (Oleksiyenko 2014, 256). As a result of tsarist suspicions that Western influence was permeating Ukrainian national consciousness, the institution was forcibly closed on reaction that it might act as a platform to challenge

Russian regional hegemony (Oleksiienko 2014, 256). The university remained closed from 1819 until Ukraine gained independence from the Soviet Union in 1991.

In keeping with the spirit of western-oriented scholarship, Kyiv-Mohyla Academy adopted Ukrainian and English as its medium of instruction, and was the first university in Ukraine to embrace a three-tiered higher education system (Bachelor–Master–PhD). Kyiv-Mohyla Academy rapidly gained a reputation as one of Ukraine’s most dynamic centres for academic excellence and international exchange (Holdsworth 1998). Comprehensive internationalization is recognized as a pillar of the institution’s core mission, which is manifest in its curricular designs and degree programs, academic networks, and dynamic growth of its doctoral programs.

Established in 1898, Kyiv Polytechnic Institute serves as one of Ukraine’s premier centres for Science and Engineering. Kyiv Polytechnic Institute is considered a leader of technical higher education in Ukraine and is one of the largest technical universities in Europe. It is perceived as an early adopter in national higher education reform, considering its implementation of joint degree programs, adoption of the European Credit Transfer and Accumulation System (ECTS), and regulatory mechanisms which have brought the university closer inline with the institutional standards of the EHEA. Kyiv Polytechnic Institute plays host to the German Academic Exchange Service (DAAD) and Campus France information centres, two major European higher education agencies which promote international exchange and research linkages, as well as facilitate extensive funding and networking opportunities across Ukraine.

Taras Shevchenko National University of Kyiv (formerly Kyiv State University) was established in 1834 and grew in prominence in the nineteenth century as the economic elites of the Russian Empire advanced towards its European periphery to strengthen their political and industrial positions (Oleksiyyenko 2014, 256). During the Soviet era, it was considered one of three top tertiary institutions in the USSR, along with Moscow State University and Leningrad State University. At present, Taras Shevchenko National University of Kyiv is a top-ranked national flagship institution with regional links to European and Eurasian universities and scientific networks. The university is considered an important knowledge hub which houses several institutes of the National Academy of Sciences of Ukraine, the leading center in both fundamental and applied research.

For the purpose of this study, private universities and non-comprehensive higher education institutions with a focus on undergraduate studies were excluded due to limited international activity and low research intensity. Furthermore, few private universities in Ukraine have sustainable funding in the form of endowments, rendering them highly dependent on tuition fees, which makes them “more commercial in nature than private” (Mrinska 2013, 333). The selected universities are public institutions with well-defined roles, significant institutional autonomy, sustained budgets, established governance structures and extensive networks.

In agreement with Lincoln and Guba’s (1985, 199-200) assertion that sub-units should be chosen in accordance with their inherent value to the study and aligned with the research

objectives, the rationale behind the choice of academic institutions include their long histories of teaching and research, established reputations for scholarly excellence, extensive international linkages, and ability to network with global centres of scholarship. Their visibility, international scope, comparable league table and unique institutional characteristics serve as motivating factors for this selective sample. The case study universities are nationally top-ranked and exhibit evidence of ‘world-class’ approaches to training and research. Furthermore, they represent different academic cultures and demonstrate high levels of awareness and commitment to regional and global engagement.

The selected case study universities represent a mixture of organizational *types* which fall into one or more of the three education models listed in Table 1. To reiterate, these are the Humboldtian, Soviet and Anglo-American models. However, there is an issue of hybridity which is not addressed in this categorization. By examining Ukrainian research universities from this perspective, one can differentiate institutional interpretations of internationalization. Differing governance models are also elements which allow for a range of critical, comparative analysis. While none of the aforementioned flagship universities have retained a homogeneous model, each exerts distinct influences on institutional governance on the basis of their respective action logics and legacies (see Table 1). One of the underlying objectives of this study was to determine to what extent these characteristics apply to the three universities in question.

3.2.2 DOCTORAL SCHOOLS

The research strategy also included doctoral schools at each case study university. By focusing on the phenomenon of internationalization at the doctoral school level, the research sought to examine important knowledge discourses embedded in national third-cycle reforms. These were identified as issues of compatibility with the Bologna Process, and the insertion of Ukrainian research universities within the framework of the EHEA and the emerging ERA. The ERA, in tandem with the Bologna Process, have provided synergy and impulse to the internationalization of doctoral training. As the investigation progressed and as interactions with field contacts and experts intensified, network-based activities were examined to provide reflexive accounts of joint PhD and dual degree programs through the lens of thematic networks and academic/research consortia under the Erasmus Mundus/Erasmus⁺, TEMPUS and Horizon 2020 programs, as well as other national-based initiatives. The rationale was to capture the different ways in which institutional actors translated higher education discourses into practice.

Doctoral training lies at the core of the research university and is considered to be the “main bridge between the European Higher Education and Research Areas” (European University Association 2005, 7). In the context of the Bologna Process, doctoral education has gained greater importance on the higher education agenda given its stated aim at creating the ‘Europe of Knowledge’ as the world’s most developed knowledge society (Berlin Communiqué 2003; Lisbon Convention 1997). However, the transformation of doctoral education presents a different order of challenge than the first two cycles. Ukrainian research universities face the challenge of reforming doctoral programs in order to adapt to new conditions driven by an increasingly interconnected world. This comes at a time

when the research universities themselves face an incomplete journey of structural reform (Hladchenko et al. 2016).

By sharpening the focus of the enquiry to capture internationalization experiences from the perspectives of doctoral schools from each respective case study university, the analytical scope allowed for examination of structural differences *within* and *between* the contexts of each institutional setting. It also facilitated a more nuanced account of specific institutional rationales, strategies and outcomes with regard to global and regional outreach. By examining the phenomenon of internationalization across various doctoral schools, a selective sample allowed for a range of comparison within each university. This approach follows the sampling strategy described by Jones, Torres & Arminio (2014, 115-117) which avoids Miles & Huberman's (1994, 34) warning on the "danger of sampling too narrowly".

The latest series of European cooperation framework programs for higher education, research and innovation are creating new consensus space by shifting the higher education playing field, linking universities into knowledge production efforts, extending academic horizon and drawing new players into the EHEA and the emergent European Research Area (ERA). Similarly, the new national legal framework for higher education cooperation and the promotion of cross-border collaborative instruments entail a refocusing of scholarly activities and the rethinking of academic identities (Wynnycky 2014).

Ukraine inherited the Soviet model of higher education, which is comprised of two levels of scientific degrees, the *kandidat nauk* (comparable to the PhD) and the *doctor nauk* (comparable to habilitation). The 2014 “Law on Higher Education” (Parliament of Ukraine 2014) represents the first real attempt at changing the structure of the *kandidat nauk* (candidate of science) since Ukraine gained independence from the Soviet Union in 1991. Thus, one of the most significant macro-policy shifts involve the reform of the Soviet-era *kandidat nauk* to an EHEA-compliant, structured PhD. This dual approach to doctoral training suggests a degree of ‘inverse symmetry’ (Shinn 2002, 608) in terms knowledge production, considering that structural variances, differing learning experiences and didactic components vary from one system to another.

Therefore, the analysis attempted to gauge the interplay and inherent tensions between these governance models to demonstrate *how* or *whether* they are being reconciled within each respective case study university. It also provided a window to gauge how the universities determine which knowledge alliances are strategic to pursue and those which are not, the action logics and mechanics which govern these processes, as well as the outcomes of organizational legacies and longer-term shifts in institutional identities.

For the purposes of this study, a sample was comprised of doctoral programs from both the *kandidat nauk* and structured PhD streams in order to balance the analysis and facilitate greater comparability. Four doctoral programs within each university were selected on the basis of their level of research intensity and international engagement. Doctoral programs were selected from the natural sciences, humanities and social sciences, management, and

technical disciplines. The selected divisions allowed for cross-comparison between the universities, as well as differentiation among disciplines. Additional distinctions were made amongst the so-called ‘professional’ disciplines, such as engineering which is increasingly subject to national, regional and international regulations. Similarly, disciplines that lend themselves to more commoditized forms of knowledge such as the natural sciences, engineering and management were examined in tandem with those which may hold stronger perceived national roles like literature and law.

Two joint doctoral programs from each university were included from this sub-set in order to provide additional analytical depth. The doctoral programs were selected on the basis of the following criteria: (i) commitment to the internationalization of doctoral training and research; (ii) harmonization of doctoral education within EHEA principles; (iii) demonstrable shifts in research output through the alignment of doctoral programs with the ERA; and (iv) development of doctoral programs adapted to each university as a working model.

The organization of doctoral programs illustrates a diversity of approaches to international engagement not only across universities and disciplines, but also across disciplines within the same university. Doctoral schools are playing a more decisive role in determining their spaces of action within the organizational framework of the university, as well as their positionality among a broader network of actors. By conducting a comparative analysis at the doctoral school level, the case study attempted to capture institutional dynamics, as well as internationalization experiences from the perspective of different university *types*.

The aim here was to focus on how doctoral schools distinguish and implement their knowledge alliances and determine their frameworks for action. The current study follows an analytical approach in which cases are used to illustrate and refine the understanding of internationalization as it plays out in each university setting.

Doctoral schools at each of the three universities were examined via a combination of methods; including: online searches for institutional documentary data, semi-structured interviews, project reports and campus visits. This step was critical for gaining comprehensive knowledge on the operational aspects of each doctoral school, the agency of institutional actors and determining academic identities. The analysis attempted to differentiate institutional responses within the same organization to better understand their respective rationales, strategies and outcomes. As the research progressed and additional data were integrated into the thesis, such as impacts and positionality of doctoral programs within each respective university setting, further distinctions were made to refine the case study. In a similar vein, this approach cast light on decision-making patterns, academic innovations and resistance points. The design took its cue from Sutton and Obst (2011, xiii) who describe the growing recognition of academic internationalization “as much a process of *outward* engagement as *internal* restructuring.”

3.2.3 DEMAND-SIDE DRIVERS

In order to balance the study, the sample was enlarged to capture higher education ‘demand-side’ drivers. Delgado-Serrano, Gomez-Bruque, Ambrosio-Albala and Llamas-Moreno (2010) devised a conceptual model in which supply- and demand-side drivers in academic internationalization could be better understood. The authors advance the concept

that the design and delivery of international post-graduate degrees entail working with a different set of action logics than those applied in national programs. Furthermore, the authors describe international post-graduate programs as ‘complex systems’ “comprised of a series of inter-related components; including: academic, administrative, economic management, quality assurance and marketing dimensions” (Delgado-Serrano et al. 2010, 188).

According to this frame, these dimensions are gathered and analyzed from the dual perspectives of supply-side (universities) and demand-side actors (students and stakeholders) in order to gauge specific approaches and determine drivers, challenges and practices. The authors conclude that a pattern of inter-relations between supply- and demand-side actors emerges as a result of this analysis, which can prove useful when designing and implementing international post-graduate programs (Delgado-Serrano et al. 2010, 187). For the purposes of this study, a modified version of this model was adapted in order to draw comparisons across sub-units and higher education stakeholder agencies in the same national context.

The examination of demand-side drivers brought sharper focus to the study by looking at relationships between the universities, doctoral students and higher education stakeholder agencies, as well as gauging patterns and mechanisms that govern institutional change. Demand-side drivers included doctoral candidates and higher education stakeholder agencies. These were: the British Council, Campus France, DAAD, Fulbright Ukraine, the Ministry of Education and Science of Ukraine, the National Academy of Sciences of

Ukraine and the National Erasmus⁺ Office in Ukraine. Accordingly, university-industry-government linkages were examined via the Centre for Innovations Development (Kyiv-Mohyla Academy), the Kyiv Polytechnic Institute Science Park and the Taras Shevchenko University Science Park. The addition of these demand-side actors sought to inform the heuristic relationships and mutual influences networked learning and research environments play in shaping university-higher education stakeholder relations.

Internationalization approaches are becoming increasingly salient and strategic. Yet our understanding of the processes involved in policy-making, the constraints they face from their *inter*-institutional environments, as well as their interplay and preferences is still limited. Demand-side actors provided a finer-grained analysis for the study, as doctoral training and research increasingly take on a greater regional and global character. Document analysis and interviews were expanded to capture the interplay between supply- and demand-side actors and the institutional frameworks in which they operate. Furthermore, it complemented the analysis of academic units and actors involved in planning and formulating university responses to globalization.

3.3 DATA COLLECTION

3.3.1 FIELDWORK

Two research trips consisting of 20 days each were conducted for field research in Kyiv (February to March 2016 and November to December 2016). In addition to the fieldwork in Ukraine, the study was enriched by interactions with knowledgeable experts at the University of Bologna (Italy) during my tenure as a visiting scholar with the Erasmus Mundus program during the summer of 2016. During that time, I actively participated in

the UNIVIA project in association with affiliated university representatives from Azerbaijan, Georgia, Kyrgyzstan, Tajikistan and Ukraine. This TEMPUS structural measures project aimed at building capacity in the area of internationalization, improve governance, develop best practices and support the integration of EU Eastern Partnership higher education institutions into a globally-connected network of universities. By engaging EU and Eastern project participants over the course of the training program, the experience contributed to the study by providing important insight on the challenges and opportunities of implementing European knowledge policies in non-EU higher education settings.

A considerable level of effort and planning was required in order to conduct the field research component of this case study. As discussed in section 3.2.1, the case study universities were identified prior to entering the field and selected in accordance with the research objectives. Contacts were obtained through gray materials, peer-reviewed articles and extensive background searches on each respective university's international portfolios. As the investigation progressed, more refined searches were conducted by focusing on university administrators and faculty linked to international projects, thematic networks and research consortia. Additional information, such as contact names and project portfolios were gathered via extensive online searches, and exchanges with higher education stakeholder agencies (see list above). Respondents were identified on the basis of their positions within each respective university and organization.

3.3.2 INTERVIEW METHODS

A total of 101 potential respondents were contacted for interviews, of which a total of 45 individuals agreed to take part in the study (see Table 2). It is interesting to note that response rates across each of the three case study universities were comparable. Interviewees were also found to be very accommodating regarding their participation in the study. Similarly, each of the higher education stakeholder agencies contacted for interviews accepted without hesitation. This approach ensured that a critical mass of respondents would be selected from a pool of institutional actors across each university. It also ensured appropriate levels of saturation and balance to support the case study.

In terms of recruitment strategy, senior administrators, mid-level leaders and faculty were selected on the basis of their affiliation with international operations at each respective university. The selection process took a two-pronged approach. First, extensive online searches were conducted to identify the appropriate sets of respondents via each respective university website. This proved to be an effective method of identifying and recruiting respondents, considering that e-mail addresses and contact information were readily available online.

Second, in order to gain additional dimension on academic internationalization from doctoral school perspectives, supplementary contacts were identified from collaborative initiatives and thematic networks involving doctoral training from each university. EU framework program catalogues and higher education stakeholder agency websites were key reference sources. Once the information was cross-referenced for accuracy, the contact information was transferred to an electronic database, which facilitated information

management over the course of the field visits. This tracking tool was developed to ensure adequate representation across each university and ensure accuracy across a wide range of universities and agencies.

Since the focus of this study is on the understanding of academic internationalization from a multi-actor perspective, each institutional actor position was deemed important, since the analysis attempted to give voice to institutional actors which have been largely absent from the scholarly discourse. Special attention was paid to higher education policymakers and practitioners with direct involvement in international programming, considering their ability to provide first-hand information and accounts of events. From this perspective, close attention was paid to organizational structure, given the structured, and largely hierarchical nature of Ukrainian National Research Universities.

Primary contact with case study respondents was initiated by way of formal letters of introduction to university administrators, faculty, doctoral candidates and higher education stakeholder agencies via e-mail and post outlining the nature of study, the purpose of the research visit, my affiliation as a PhD candidate at the University of Ottawa, as well as my professional background as a higher education practitioner.³ Two follow-up e-mails were forwarded within a week of each other if no response was received. Once a participant confirmed their availability for an interview, an electronic confirmation was sent indicating the day, time and coordinates of the meeting.

³ Following consultations on conducting formal introductions with university gatekeepers in Ukraine, a colleague noted that requests for interviews would likely be better received if written in English.

This approach not only corresponded with the views of Lincoln and Guba (1985, 256-259) on building and maintaining a sense of collegial trust prior to entering the field, but it also conveyed a clear message to the participants that their input was integral to the success of the project. For the purposes of this study, the interviews were conducted via five separate sets of interview schedules. Specifically, the interview questions were targeted at senior administrators, mid-level leaders, doctoral school directors, doctoral candidates and higher education stakeholder agencies. Furthermore, the interview questions were made available to respondents in both English and Russian, while respondents were given the option of responding in Ukrainian (see Appendix 2). The majority of interviewees communicated in Russian with the exception of respondents at Kyiv-Mohyla Academy, British Council, DAAD, Fulbright Ukraine and the National Erasmus⁺ Office, who spoke almost exclusively in English.

Subsequent to an additional ethics approval in the lead-up to the second field visit, the doctoral student interviews took place exclusively during the second field visit to Kyiv. The complimentary interview data provided valuable insights by facilitating actor-centered (demand-side) perspectives and a framework from which to build critical analysis. Supplementary interviews were arranged with the directors of doctoral schools, senior administrators of joint PhD programs and higher education stakeholder agencies.

A total of four doctoral candidates from each case study university were interviewed during the second field visit subsequent to consultations with the administrators of the doctoral schools. Male and female students were selected in equal number at each university.

Similarly, the case study captured the views of doctoral students who had participated in international learning or research activities over the course of their studies, as well as those who did not. Finally, considering that the focus of this study is on understanding the phenomenon of internationalization from a multi-actor perspective, the added dimension sought to complement the research by providing a more holistic viewpoint.

The interview schedules were developed in tandem with the overall objectives of the inquiry and the main research questions. Furthermore, each set of interview schedules were designed to elucidate answers in accordance with the six indicators of the Delta Cycle for Internationalization (Rumbley 2010). The interview questions were pilot tested with colleagues working in the field of higher education in order to fine-tune and avoid overestimating the knowledge of the participants. Once the pilot interviews were completed, the questions were reformulated accordingly so that it met the reliability and construct validity criteria of the inquiry (Beatty & Willis 2007). As for the quantity of interviews, the numbers were deemed sufficient, since the interview strategy targeted similar types of institutional actors across each case study universities. It is interesting to note that in the later stages of the interview process, similar responses were echoed from the respondents, which suggests that an appropriate saturation level was achieved.

3.3.3 DOCUMENTARY EVIDENCE

It became clear from the onset of the project that official reports and other university documents were not readily accessible, and that extensive efforts would be required to get a hold of them. This perspective was echoed in a 2014 national higher education

monitoring report, which noted the following on the state of research in the Ukrainian higher education sector:

Ukraine does not belong to the countries with a high degree of openness and transparency in society, so the publishing of critical and negative evaluations will probably cause significant damage of the image and reputation of the observed object (both fair and unfair). As a result, very popular is the only practice of criticism of higher education institution activities by state authorities and, sometimes by the third sector. The habit of publishing critical evaluations of their own activities outside their groups is not developed [...] Unfortunately, there is no systematic activity on the publication of critical evaluations of educational activities and the quality of higher education in Ukraine. Public monitoring and analysis of publications on the subject are not held (Finikov & Sharov 2014, 56).

In order to gain access to institutional documentary data, formal requests were made via letters of invitation and verbally at the conclusion of each meeting. The documents of interest at the universities included strategic plans, project and statistical reports, policy papers, annual budgets and conference proceedings. Comparable documents were requested with higher education stakeholder agencies. Of particular interest were strategic plans and EU project compendia, which provided detailed information on collaborative initiatives, thematic networks and academic consortia, as well as partner and budget information. Despite their utility to the study, these documents were published and distributed in small numbers and not readily available online. Between three to five reports and various grey materials were received per university.

Some respondents provided additional documents of interest to the study including newspaper and peer-reviewed articles on academic internationalization in Ukraine. These sources proved particularly useful for cross-referencing and validating interview data, as well as developing a more complete narrative on how the phenomenon of

internationalization was unfolding in a given university setting. The materials from each of the three universities were subsequently analyzed for their content and compared with the interview data sets for accuracy. This method facilitated robust engagement with the data by filling in gaps and complementing the interview data.

3.3.4 RESEARCHER POSITIONALITY

Researcher positionality played a pivotal role in the field component of this case study. By working in a cross-cultural fashion, this approach attempted to bring new perspectives on Ukrainian higher education through the viewpoint of a Canadian researcher. This was also one of the underlying strategies of the study since the lack of existing research on internationalization in Ukrainian universities required first-hand field investigation. From this perspective, my positionality as a researcher from a Canadian university worked to my advantage and was perceived in a positive light by the participants. Consequently, my positioning as a Canadian researcher helped me to negotiate my way through bureaucratic hurdles, access key informants and gatekeepers, as well as overcome real and perceived institutional barriers.

In agreement with Srivastava's (2006, 211) perspectives on leveraging 'currencies' for field data collection, defined as "a medium of exchange to achieve temporary shared personalities", reactivating network contacts for access to the case study institutions was not perceived as a barrier at the pre-entry stage of the inquiry. Although the planning stage was lengthy and logistically challenging at times, once in the field I was able to gain access to respondents with minimal obstruction. As a Canadian researcher from a Slavic background, my 'field identity' helped facilitate entry and a wide range of manoeuvre

within the case study institutions. As a near-native Russian speaker with no discernable accent, my linguistic and intercultural skills allowed me to interact with respondents and blend into the surrounding environment with relative ease. Participants would sometimes inquire about my background and nationality during initial introductions in order to ‘break the ice’ and open discussions on a collegial tone. Another external marker from the perspective of the respondents was their perceived comfort in the knowledge that my doctoral research was being conducted on a subject closely linked to their own work (FN 29-11-16).

In a number of research interactions, several participants (particularly senior respondents) were pleasantly surprised when greeted with equal fluency in English and Russian. This first impression often led to questions about my cultural identity, the doctoral research, and my related work experience in the former Soviet Union. Combined, these factors acted as ‘icebreakers’, which seemed to put the respondents at ease and set the tone for constructive interactions. In retrospect, these factors indicated a sense of mutual understanding, and potentially, a lesser degree of cultural *otherness*.

Marshall and Rossman (2011, 118-119) provide additional insight on mitigating risk through the use of ‘interpersonal considerations’ defined as “building trust, maintaining good relations, respecting norms of reciprocity and sensitively considering ethical issues.” By keeping potential risks in mind, but at the same time, sharing professional synergies and focusing around topics of mutual interest on international higher education, it was anticipated that many pitfalls could be mitigated.

In addition to having previously conducted research and having worked with the Soros Foundation on the first-generation of post-Soviet higher education reforms in Belarus and Ukraine, my professional insights and linguistic abilities facilitated access to data and allowed me to minimize the participants' perceptions of the researcher as an outsider. I believe this facilitated me to be less obtrusive and gain access to university actors. These attributes may also have helped to set a positive tone for engagement with the respondents during the entire cycle of research engagement with participants – from first contact and the lead-up to the interview stage, to the post-interview exit phase. Furthermore, the ability to communicate fluently in Russian appeared to set the respondents at ease, thereby setting a positive tone from the onset of discussions, while at the same time, opening a more meaningful and engaging dialogue with participants.

Equally important was the tacit knowledge of the Ukrainian higher education sector that I had from previous professional experience. This helped to provide insight into potential challenges and opportunities that the universities may be facing. These insights concur with the observations of Stake (1978, 6):

Tacit knowledge is all that is remembered somehow, minus that which is remembered in the form of words, symbols, or other rhetorical forms. It is that which permits us to recognize faces, to comprehend metaphors, and to “know ourselves.” Tacit knowledge includes a multitude of unexpressible associations which give rise to new meanings, new ideas, and new applications of the old. Polanyi recognized that each person, novice or expert, has great stores of tacit knowledge with which to build new understandings.

Consequently, my ‘real-life’ Slavic identity was accentuated as I attempted to strike a balance to “mediate positionalities” in the field (Srivastava 2006), as my cultural

background is *close enough* to the subjects to yield valuable insights that an outsider may not pick up on, yet sufficiently *distant* so that respondents would identify me as a Canadian researcher. Examples from field interactions included cultural synergies such as verbal and non-verbal cues, common understanding around post-Soviet management practices and legacies, as well as (written and unwritten) codes of conduct.

These qualities enabled me to reflexively engage with the case study participants from the unique perspective of an *outsider* with *insider* knowledge (Merton 1972). By following proper protocols of engagement and building collegial bridges, a professional rapport was established and sustained beyond the exit stage of the field investigation. Putting these combined elements through their paces helped achieve the research goals in timely fashion and increased the likelihood that field interactions and ‘currencies’ reaped dividends in the form of relevant data. This was evidenced by the fact that numerous respondents went out of their way to assist the research by providing valuable documents, negotiating access with institutional gatekeepers and key informants, as well as facilitating contacts with administrators and faculty, which would be difficult to access had those connections not existed. Jones, Torres & Arminio (2014, 118) define gatekeepers and key informants as:

[T]he individuals who know individuals and/or settings that meet the sampling criteria determined by the researcher. Gatekeepers and key informants typically hold some kind of formal or informal authority such that they may grant consent to enter a research setting. Key informants may differ from gatekeepers because they are less likely to have authority to grant access, but as an insider, may be able to influence gatekeepers. And once access is gained, key informants are integral to identifying the most suitable participants for a study because of their insider status. Key informants may also help researchers understand the politics at a particular setting, cultural considerations, or other dynamics that might impact the researcher’s request for access.

Similarly, case study participants facilitated first-hand accounts of how international partnerships, collaborative initiatives, and knowledge networks were playing out in their institutional surroundings. These institutional shortcuts facilitated access during the field investigation, and as a result, enriched the empirical component of the case study.

3.4 DATA COLLECTION METHODS

3.4.1 SEMI-STRUCTURED INTERVIEWS

A series of semi-structured interviews with key organizational actors were the major data collection method. Interviews were conducted to engage the actors within each university and higher education stakeholder agency, extrapolate views on internationalization processes, and identify perspectives on strategies. Semi-structured interviews were conducted in English or Russian, and lasted between one- to one-and-a-half hours. Due to time limitations and access issues, respondents were interviewed once, with the exception of five informants who were contacted for clarifications, additional information or field contacts.

Aside from English and Russian, participants were given the option of answering the interview questions in Ukrainian, depending upon their linguistic preference. Interesting to note that none of the interviewees responded in Ukrainian. This was likely due to my fluency in Russian and the fact that it remains an operational language in Ukraine. The structure of each interview was built around the research questions and specifically directed according to the participant's organizational position (see below).

A breakdown of participants according to organization, participant profile and number of planned semi-structured interviews is provided in Table 2. Participant profiles are listed for clarity and will not be published in the final dissertation. A total of 45 participants were interviewed to ensure representation from a cross-section of higher education policy decision-makers and university leaders defined by Rosser (2004, 317) as ‘non-academic support personnel’ and organizational stakeholders. Similarly, conscientious efforts were made to balance the analysis by engaging supply- and demand-side actors.

Table 2 | Organizations and participant profiles

Organizations	Participants	Interviews
Kyiv-Mohyla Academy	Senior administrators (2) Faculty members (2) Mid-level leaders (2) Doctoral candidates (4)	10
Kyiv Polytechnic Institute	Senior administrators (2) Faculty members (2) Mid-level leaders (2) Doctoral candidates (4)	10
Taras Shevchenko National University of Kyiv	Senior administrators (2) Faculty members (2) Mid-level leaders (2) Doctoral candidates (4)	10
Ministry of Education and Science	Ministry officials	2
National Erasmus+ Office in Ukraine	Senior administrators	2
National Academy of Sciences of Ukraine	Senior administrators	3
Higher Education Stakeholder Agencies	Senior administrators	5
Industry Partners	Senior administrators	3
TOTAL		45

All interviews took place on location of the respective university campuses and stakeholder agency offices, with the exception of two doctoral student interviews conducted via Skype. This approach provided an opportunity to observe and interact with participants in their institutional settings on a first-hand basis, as well as build a professional, consistent approach in all interactions. Similarly, additional informants and documents were identified on the basis of exchanges with case study respondents.

Considering the international nature of the respondents' work at their respective universities and organizations, it was [correctly] assumed prior to entering the field that the participants have regular exposure to international scholars, researchers and higher education practitioners. For example, the majority of participants indicated working knowledge of either English, French, German, Polish, or Russian while most administrators and faculty maintain working contacts with partner universities and higher education stakeholder agencies as part of their regular duties. Another indicator that validated this assumption was that the majority of respondents communicated in English in correspondence during the lead-up and follow-up to the interviews.

Prior to entering the field and during interactions, special attention was paid to linguistic sensitivities (see Maksimovstova 2017). As such, the respondents were given the choice of communicating in English, Ukrainian or Russian. As a fluent Russian speaker, my linguistic abilities and understanding of the environment set a positive tone for discussions. On two separate occasions, interpreters were dismissed from the meeting room shortly after the interviews began (FN 03-03-16; FN 29-11-16). On both occasions, interpretation

services had been arranged by the respondents prior to the meetings. Another salient issue is related to local perceptions of Western scholars and mitigating potential bias. As a doctoral candidate from a major Canadian research university, my position might have been perceived by some case study participants as an opportunity to present their institution in a way that is deemed ‘safe’ or ‘politically correct’ for an external audience. In other words, responses to interview questions might be coded in way that minimizes or omits institutional shortcomings and/or internal challenges. A useful tactic to mitigate this procedural challenge was to make notes of any occurrences during the interview session and reiterate the question(s) at the conclusion of the interview schedule.

In order to negotiate access to information with case study respondents, it is important to understand the cultural undercurrents that shape and inform post-Soviet communication styles (see Fell 2014). These elements are rooted in Soviet tradition and cultural stereotypes of Western and predominantly English-speaking counterparts. These attitudinal perceptions are also linked to a lack of genuine critique of institutional norms and practices, which could damage the reputation of the organization. From the dialectical perspective of the researcher, this suggests a difference between the responses *I want to hear*, versus the responses *I ought to hear*.

Attempts to mitigate this issue were made by probing the lines of enquiry and shifting tactics by asking participants to unpack specific issues or provide concrete examples, which helped clarify vague or generic responses. It should also be noted that the interviews were conducted with a deliberate emphasis on anonymity and confidentiality. This approach

was taken in order to ensure that respondents felt free to candidly share their opinions and experiences with the researcher. At the other end of the spectrum, a number of respondents provided critical perspectives on university policies and practices. These insights added depth and dimension to the data sets, while providing a balanced account of events and how they unfolded within each respective institutional setting. These perspectives allowed for the collection of critical data that informed and shaped the investigation. At the analysis stage, the data were then triangulated with other sources to minimize errors and potential biases in the final thesis.

The interview questions were focused around specific research topics which attempted to elucidate responses to inform the research questions. Richards and Morse (2013, 126-127) define this method as ‘open-ended questions’ developed in advance and asked in logical order in accordance to relevant theories and the main research questions. The interviews focused on specific exploratory themes to probe research questions and followed a set protocol. Questions were sequenced in the same order for all participants; however, the framing of the interview questions sometimes varied according to the organizational position of the participant. The answers might suggest additional time elaborating on a specific factor or context. The themes covered in the interview schedules included actor-centred perspectives on internationalization and doctoral training, the operationalization and measurement of international initiatives, shifts in higher education policy, and future challenges.

Once a topic was exhausted, a structured question brought the interview to the next important factor. At the conclusion of each interview, each participant had the opportunity to bring up elements that were not part of the interview in order to capture and incorporate unforeseen perspectives. Following the interview session, reflections were made on my role as an interviewer as well as pre-conceptions and responses during the interview that might require adjustment. These experiences were identified and incorporated into subsequent interviews.

The interview questions queried participants in order to evaluate responses in each respective case university, the perceived role and function of academic internationalization within the organization, as well as to explore the relationships between policy initiatives and approaches at different levels. The aim of the interviews was to develop data sets from the perspectives of key actors and to draw conclusions on the internationalization experiences of case study institutions as a whole. In addition to probing factors which might be conducive to institutional change, participants were asked to describe how internationalization transpires in their university setting and the ways in which specific organizational elements are connected to one another. This approach helped to gauge the interplay among perceptions, similarities/difference, and strengths/weaknesses from each participant group.

The interviews were digitally recorded (upon obtaining consent from the participants) and detailed field notes were kept. At the end of each working day, digital copies of the recorded interviews were uploaded to cloud storage in order to ensure data integrity and

security. A coding system was devised in order to safeguard the identities of the case study participants in the final dissertation. This system provided a means of maintaining a record of the interview data across a wide range of organizations and respondents and managing data transfer. The code was formulated by the acronym of the organization followed by the corresponding date of the interview (i.e. day/month/year).⁴ In cases where two or more interviews were held at the same organization and day, a letter was added to the end of the code. These codes were subsequently recorded in the electronic database mentioned above. A thorough content analysis of the interviews (described below) was conducted to identify recurrent themes and the frequency and intensity with which respondents expressed views related to those themes. Finally, a detailed log was kept of all interviews and research materials collected in order to facilitate access to the data.

3.4.2 DOCUMENT ANALYSIS

In order to conduct a comprehensive document analysis, official documents and reports, strategy papers, grey materials, policy statements, and university and ministerial websites were gathered and analyzed. Document analysis also included sectoral reports by supra-national steering agencies such as the EU, OECD, UNESCO and World Bank. These sources were analyzed for their content and triangulated accordingly, in an attempt to determine how activities measured up to stated objectives (see data analysis section below). The use of these multiple sources was intended to minimize the margin of error, as well as provide opportunities for triangulation which not only adds construct and external validity to the research, but provides confidence over an outcome (Yin 2013, 13). A database of

⁴ For example, an interview at Kyiv Polytechnic Institute on 2 March 2016 appears in the thesis as 'KPI 02-03-16'.

research materials was electronically catalogued to facilitate access to information, improve search capabilities, as well as establish a formal ‘audit trail’ in line with the recommendations by Lincoln and Guba (1985, 309).

Documentary sources were subsequently triangulated along the lines of inquiry. Marshall and Rossman (2011, 252) define ‘triangulation’ as the “act of bringing more than one source of data to bear on a single point. Derived from navigation science, the concept has been fruitfully applied to social science inquiry.” Mathison (1988, 13) notes that triangulation is an effective strategy of controlling bias and to ensure that a specific occurrence in an interview leads to a generally accepted interpretation. Another rationale for applying a triangulation approach is its usefulness in cases where numerous data sources are used. Marshall and Rossman (2011, 254) assert that “triangulation is not so much about getting the ‘truth’ but rather about finding the multiple perspectives for knowing the social world.” Finally, Yin (2012, 13) contends that triangulation establishes “converging lines of evidence” which not only adds validity to the research, but provides confidence over an outcome.

3.4.3 DATA ANALYSIS

The Delta Cycle for Internationalization (Rumley 2010) and institutional change theory (North 1990) served as the conceptual framework in which the case study data were collected and analyzed. This approach extended neo-institutionalist theory to higher education in an attempt to advance conceptual understanding of the academic internationalization discourse among a select group of Ukrainian National Research Universities. The Delta Cycle’s six dimensions (*awareness, commitment, planning,*

operationalization, review and reinforcement) provided a critical understanding and baseline from which to gauge the manner in which the phenomenon of internationalization is manifest across the three universities.

A second layer of inquiry served as a segue for a finer-grained analysis into rationale, strategies and outcomes. The purpose of this additional frame was to determine what motivated the selected universities to engage in the process of internationalization, the strategies at play and *how* institutional actors interpreted the outcomes of these efforts. It also intended to engage with the main research question and sub-questions to address *how* university actors acted upon this series of motivations.

In order to provide a reflexive account of each case study university, a thematic analysis was conducted on the basis of the interview materials, reports and official documents. A thematic analysis examines patterns across data sets according to specific research questions (Braun & Clarke 2006). Semi-structured interviews were grouped according to university and organization in order to provide a coherent frame of reference for each university. Next, theoretic factors were sought to determine why certain factors are more predominant than others and an attempt was made to make the appropriate linkages. Finally, the data analysis looked for inter-relationships and differences within the explored higher education institution.

Exploring the complexity of multiple universities of different types was a deliberate choice on the part of the researcher, since the focus of the study is on the internationalization

experiences of three case study universities and their respective doctoral schools. Therefore, comparisons across institutional settings was considered to be more suitable than comparisons of the same disciplines across different universities. The guiding principle was that critical analysis of doctoral programs would provide a better understanding of the shifts of scholarly activities and academic identities from a multi-institutional perspective and thus, ensure a more holistic view of internationalization as it manifests in each university environment.

Data from case study universities served to round out the analysis of the international dimension at these universities, which were purposefully selected to provide a measure of variety in terms of age, type, organizational culture, and areas of training and research. The case selection process took its cue from the ‘purposeful sampling’ approach described by Patton (2015, 256) who defines the process as “selecting information-rich cases to study, cases that by their nature and substance will illuminate the inquiry question being investigated.”

Taking into account that the inquiry included multiple sources, data was collected and synthesized from each university and presented according to the single-case embedded case study design. This step was essential since each university bears its own distinct organizational and historic characteristics, missions and responses to globalization. A thematic analysis was conducted on the basis of semi-structured interviews, official documents and reports, university websites, monographs and peer-reviewed articles in order to provide a reflexive account of each university.

A final rationale for applying a triangulation approach is its usefulness in cases where numerous data sources are used. Yin (2012, 13) contends that triangulation establishes “converging lines of evidence” which not only adds validity to the research, but provides confidence over an outcome. Yin underscores “[T]he most desired convergence occurs when three (or more) independent sources all point to the same set of events, facts, or interpretations.” This justification provides further rationale for the choice of the case study approach for this inquiry.

3.5 APPLYING THE CONCEPTUAL FRAMEWORK FOR DATA ANALYSIS

The conceptual framework employed for this case study combined the theoretical tenets of North’s (1990) institutional change theory and the Delta Cycle for Internationalization (Rumbley 2010) to organize and analyze the data from the perspectives of three Ukrainian flagship universities selected for this case study. The following sub-section provides a critique on the extent to which this combined model served the purposes of this study and the degree it accurately reflected the experiences of the case universities. This section first provides a critical overview of the Delta Cycle by exploring the contextual elements of the model and to determine its limitations. Second, the Delta Cycle and institutional change theory were examined as a combined model in order to elaborate upon the utility of this construct for the purposes of this study.

The Delta Cycle represents an expanded interpretation of Knight’s (1994) original model (Figure 2) which facilitates deeper perspectives on university experiences with the addition of rationales, strategies and outcomes. In addition, the Delta Cycle promotes internationalization as a driver of change, as implied by the Greek letter ‘delta’ (Δ). The

model conveys the idea that internationalization is fundamentally linked to the concept of institutional change. The phenomenon of internationalization does so by introducing change to the institutional environment, insofar as university actors must contend with *internal* factors that contribute to the shifting landscape, as well as *external* factors that must be negotiated and managed. And while the Delta Cycle for Internationalization is quite efficient in unpacking the phenomenon of internationalization as a standalone tool, it falls short of addressing the mental models of institutional actors and their agentic purposefulness that advance or resist institutional change.

The Delta Cycle represents a useful model to gauge the international experiences of the universities in this case study; however, it lacks the theoretical rigor to fully capture *how* the phenomenon of internationalization manifests as a function of change across the institutional settings of the case universities. Furthermore, the concept of institutional change remains somewhat obscured, therefore requiring an additional conceptual lens such as institutional change theory to leverage a more expansive and theoretically compelling level of analysis about how higher education institutions experience the process of internationalization. By putting this combined model through its paces, the analysis showed that institutional attributes which inform and shape the internationalization process would be essentially missed if it were not for the dual matrix.

Furthermore, the model advances the understanding of internationalization as a change process by gauging institutional responses from a multiple actor perspective. In turn, these perspectives helped to advance a more robust understanding of the formal and informal

rules and norms shaping institutional change. Accordingly, it provided valuable insight on how university actors self-organize when a complex phenomenon like internationalization is introduced to a given institutional framework. At the same time, it provided useful insight on the degree to which the change process itself manifested across different academic settings.

While the Delta Cycle for Internationalization speaks to the centrality of institutional change, the model is vague on specific details, lacking the appropriate set of indicators and conceptual tenets that define the process of change. For these reasons, Rumbley's (2010) extended matrix, which reflects rationales, strategies and outcomes, falls short when it comes addressing cultural and historical elements, management legacies, and mental models which inform and shape engagement with the phenomenon of internationalization. Furthermore, North's (1990) theory of institutional change introduces an element of 'friction' to illuminate how the various elements of the Delta Cycle for Internationalization manifest in practice and as a function of institutional priorities, management cultures and resistance points. A major implication for the analysis revealed that this approach facilitated a more rigorous approach of gauging university experiences by acknowledging different academic cultures, historical pasts and potential future trajectories.

This combined model provided a versatile analytical tool, which illuminated key indicators when applied to the internationalization experiences of the three case universities individually and as a collective group. This was critical for the purposes of this study, since it placed different *types* of higher education institutions at the centre of the inquiry

and provided critical analysis of the findings. Furthermore, the combined conceptual framework advanced a means of critically assessing the underlying questions of *why* (rationales) and *how* (strategies) institutional actors are motivated to internationalize, and *to what ends* (outcomes) institutional actors behave on those interests.

Subsequently, the combination of both models showed exceptional complementarity to this case study since university responses are strongly affected by the institutional culture and the adopted innovation. North's construct proved highly useful for developing a critical understanding of internationalization as a process of change and to elucidate how institutional arrangements contributing to path dependence and institutional inheritance continue to function despite substantial normative, mimetic and legislative adaptations. In this regard, institutional change theory proved highly complementary to the Delta Cycle for Internationalization by adding a missing conceptual dimension to the original model. The extension of neo-institutionalist theory to the study provided a useful construct to gauge the phenomenon by expanding knowledge on its underlying principles, manifestations and outcomes.

As a result of the analysis, a number of new insights came to light, including a more robust understanding surrounding the role of institutional actors as agents of change and a deeper understanding of the structural boundaries and complex adaptive systems driving institutional change. Furthermore, the case study provided a unique opportunity to test the combined conceptual framework in a dynamic and rapidly changing educational environment, where the transition processes itself remains incomplete. As such, the

combined matrix provided an advanced tool to engage more fully with the phenomenon of internationalization within the context of Ukraine's non-linear, post-Soviet higher education setting.

Thinking beyond the original six dimensions of the Delta Cycle for Internationalization allowed the inquiry to consider more expansive concepts relevant to internationalization and associated knowledge discourses. In a similar vein, the combination of the two models provided an opportunity to critically assess questions fundamentally connected to aspects of *outward* connection and *inward* change. Furthermore, the combined matrix provided the opportunity to derive important conclusions about the institutional priorities and capacities of a given university, the mental constructs of the actors involved, as well as critical areas where historical interests and contemporary debates intersect. By pulling together multiple strands of data from the case study, the conceptual framework attempted to move the discussion of internationalization to a higher level by problematizing the phenomenon anew, while raising important questions related to contemporary knowledge discourses.

3.6 TRANSLITERATION AND TRANSLATION

The language of the research environment is a salient point of discussion, considering that engagement with the respondents and data was predominantly in Ukrainian and Russian. The 'language of the data' as described by Srivastava (2006, 219) employed for this study is of useful consideration, since the majority of the interview data, official documentation, and institutional reports originated in either Ukrainian or Russian. For the purposes of

incorporating original sources of information into the final dissertation, I transliterated and translated the data given my ability to operate in both Slavic languages.

The Ukrainian to English transliteration system used in the final dissertation was based on the transliteration table of the Ukrainian Legal Terminology Commission (Decision No. 9 of 19 April 1996) (cited in Matiaszek 1996). Translated data sets were compared for accuracy in accordance with the method described by Marshall and Rossman (2011, 166), as the “[construction of] meaning through multiple transpositions of the spoken word or written word from one language into another.” This approach minimized inaccuracies, bias and misinterpretations.

Integrating field data into the analysis enriched the case study tremendously by giving voice to the numerous institutional actors and perspectives involved in this project. Temple (1997, 607) refers to the researcher/translator position as a “co-agent in the process of knowledge production.” This referential relationship with the institutional actors served to construct reference points from which to convey the complexity and diversity of institutional perspectives reflected in the analysis.

3.7 ETHICAL CONSIDERATIONS

This study sought and gained approval from the University of Ottawa’s Research Ethics Board, following the procedures for a minimal risk review. The *Tri-Council Policy Statement: Ethics Conduct for Research Involving Humans* (2014) was the primary reference document in preparing the ethics application and in guiding research interactions with the participants in this study. Accordingly, participants selected for interviews were

informed of their respective roles beforehand, including their right to withhold answers or withdraw from the interview process. Voluntary consent forms were provided to each participant in English, Russian or Ukrainian, which outlined the purpose, procedures, benefits and risks of participating in the study. Once both documents were reviewed and signed, each participant was provided with a copy and the other was returned to the principal investigator.

The study maintained participant anonymity so as to not reveal the identities and positions of those interviewed. In order to reinforce this element, informants were notified both in writing and verbally prior to the start of each interview. Participants received assurances from the researcher that the information shared will remain strictly confidential. Furthermore, participants understood that the contents will be used for the final dissertation and potential research publications, and that confidentiality will be protected by way of omitting real names and coding official titles.

Noteworthy are the overall positive responses from participants to the voluntary consent forms, in light of their accessibility in three languages (English, Russian and Ukrainian), as well as the level of clarity and detail presented in order to safeguard privacy. Conversely, a number of respondents asked questions concerning the procedures involved in gaining ethics clearance for field research, while others expressed interest in replicating similar research practices at their respective universities. At no point during the field research did any of the interviewees voice apprehension about signing voluntary consent forms.

Due to the range of participants and stakeholder profiles involved in this case study, anonymity of individual participants was kept for ethical purposes. While the names of universities are used in the final dissertation for comparison and evaluation purposes, no information on the participants is provided. Names and titles of informants were coded in the final dissertation in accordance with this practice in order to safeguard identities, minimize the risk of compromising the subjects, and to facilitate access. Reporting was done at the same level of anonymity. These elements were explicitly conveyed to the case study respondents in writing via letters of introduction and interview consent forms. While rationales for higher education internationalization and university strategies do not seem highly sensitive, the informants' identities; nonetheless, were coded and non-descript.

An explicit protocol of anonymity was observed during and after the investigation. At no point during or after the investigation were the names of other participants and the contents of their interviews discussed with other interviewees. The names of universities and organizations were used in the final dissertation and potential research publications for comparison and evaluation purposes. However, no information regarding the informants is provided. In this regard, every effort has been made to uphold ethical standards.

3.8 PROCEDURAL CHALLENGES AND LIMITATIONS

Despite measures to ensure that the appropriate case selection and access to data sources, the study faced certain limitations. First, due to time and logistical constraints, the scope of the case study was limited to three National Research Universities in Kyiv. These universities comprise a small, but important part of the Ukrainian higher education landscape. Other prominent universities are spread out across the country, including the

pro-Russian separatist-held conflict zones in the Donbas. While there are other intellectual hubs in Ukraine, namely, Donetsk, Kharkiv, Lviv and Odessa, they are said to have a less diversified knowledge base than Kyiv (Mrinska 2013, 329). Secondly, gaining access to organizational data such as statistics, official reports, strategy papers and annual budgets presented a challenge for this study. In this regard, access to official university documents remain largely outside the public domain. Furthermore, access to institutional data proved to be challenging even for some internal stakeholders (FN 29-11-16).

This process required a considerable level of effort and proved to be time consuming due to the dearth of readily available institutional data and independent reports associated with academic internationalization at Ukrainian research universities. Most of the data collected for the empirical component of the case study were gathered through semi-structured interviews, thus requiring extensive planning and field work. Achieving constructive dialogue with a wide range of academic stakeholders involved negotiation and persistence. This approach brought inherent risks, considering that the case study required direct access to knowledgeable informants who could engage in informed discussions on academic internationalization. In this regard, the success of the project hinged upon access to a critical mass of engaged respondents at each respective university. This aspect was successful thanks to the working relationships and positive rapport established with field respondents, along with mutual interest in advancing academic internationalization efforts.

Certain procedural challenges were also noted at the interview stage around issues of disclosure. The detailed approach to the interview process required in the answer schedule

was perceived as somewhat intrusive by a minority of respondents. The aversion to detail for some participants left omissions, descriptive answers or leaps from one issue to another. This was resolved in the data collection phase by reiterating questions and unpacking issues with the aim of elucidating specific examples and clarifying responses. These gaps underwent further vetting at the analysis stage by cross-comparing the responses of institutional actors from the same university. At the analysis stage, the sometimes-fragmented nature of the collected data required (re)constructing coherent data sets based on multiple sources, thus requiring careful vetting in order to validate the data.

Furthermore, significant effort was required to identify and integrate Ukrainian sources. This was considered a procedural challenge, rather than a limitation considering the dearth of scholarly materials devoted to academic internationalization. A conscientious effort was made to identify and integrate Ukrainian scholarly sources wherever possible. Within this backdrop, transparency remains a barrier to conducting comparative higher education research in Ukraine. In order to overcome this obstacle, a conscientious effort was made to constructively engage respondents, while building trust and developing collegial ties in a relatively short period of time.

A final limitation to the study is the fact that many of the core instruments related to the internationalization of doctoral training and research have only recently been codified and sanctioned following passage of the 2014 “Law on Higher Education” (Parliament of Ukraine 2014). These knowledge policies governing higher education, research and innovation have yet to be fully implemented at the case study universities, therefore making

it difficult at times to draw summary conclusions. The inquiry attempted to mitigate this limitation by integrating comparative aspects from wider institutional experiences into the case study.

CHAPTER 4 KYIV-MOHYLA ACADEMY

The purpose of this chapter is to facilitate critical analysis of the phenomenon of academic internationalization at the National University of Kyiv-Mohyla Academy. Data were collected from semi-structured interviews with respondents from across the university; including: senior administrators, faculty, mid-level leaders and doctoral candidates. Higher education stakeholder agencies and industry partners round out the analysis to provide further depth and dimension to the study. Other sources of data such as official documents, national legislation, scholarly articles, monographs, grey materials and university websites provide additional insight into the university's experiences. In order to assess and monitor institutional behaviour, multi-actor perspectives are examined through the conceptual framework of the Delta Cycle for Internationalization (Rumbley 2010) and new institutional change theory (North 1990).

By acquiring reflexive accounts of the university's rationales, strategies and outcomes of internationalization efforts, the analysis will attempt to develop a clear understanding of Kyiv-Mohyla Academy's strategic outlook within the context of a changing higher education landscape. The overarching goal of the chapter is to explore the challenges faced by the university and determine *how* it responded to the imperatives of the [global] knowledge society since Ukraine's accession to the EHEA.

ORGANIZATIONAL OVERVIEW

Founded in 1615 by orthodox clergyman Petro Mohyla, who established the collegium on a radical reform of the monastical order, Kyiv-Mohyla Academy is considered to be "at once Ukraine's oldest and one of its youngest universities" (Gleason 2001, 434; Greenwald

1997). The Academy adopted a curriculum based on the Jesuit model of training, in addition to implementing Latin and Greek, as well as Old Church Slavonic (Oleksiienko 2014, 256). A major objective of the Academy was to emulate European intellectual traditions and training methods and apply them to education in Ukraine (Bulgakov 1843; Sydorenko 1977). The Academy subsequently adopted the organizational structure, instructional methods and curriculum of the Jesuit schools at a time when the Orthodox Church felt threatened by Western influences. Within this context, Sydorenko (1977, 107) traces the origins of the Academy's 'hybrid' institutional dynamics to its founder:

Metropolitan Mohyla's most lasting single endowment to Ukrainian learning in general and the Kievan Academy in particular was his introduction and popularization of a hybrid form of Latin scholasticism. This contribution rested on a paradox, on mutually exclusive axioms. On the one hand, this form of learning was designed to draw Ukraine directly into the Western, particularly Catholic, intellectual maelstrom; on the other, it was viewed as the catalyst in Mohyla's determined efforts to revitalize and uphold a seemingly moribund Orthodoxy, weakened to a large degree by the same intellectual currents stemming from the West... It [the Academy] was Latin in form and Orthodox in spirit.

For more than a century, Kyiv-Mohyla Academy remained an important intellectual hub of the Eastern Slavic region – long before the emergence of Moscow University in the mid-18th century (Sydorenko 1977, 1).⁵ The Academy prospered and enjoyed its 'golden age' at the end of the 17th century when enrolment stood at over 2,000 students, and represented one of the largest centers of scholarship in Eastern Europe. In many respects, its importance was comparable to that of Jagiellonian University in Kraków or Charles University in Prague. Kyiv-Mohyla Academy was open to young men from all social strata and attracted students and scholars throughout the region. It became a cosmopolitan

⁵ The first 16 rectors of Moscow University were alumni of Kyiv-Mohyla Academy.

training center for generations of Ukrainian intellectuals, civic and military leaders, artists and politicians (Holdsworth 1998). Despite the Academy's regional prominence and comparability to Western contemporaries, it remained what Sydorenko (1977, 134) termed "a victim of expediency and transition, with its potential unrealized and its general acceptance compromised by external difficulties. This ambivalence was produced not only by the general instability of the period, but also by the absence of a firm pedagogical tradition in Ukraine".

The history of Kyiv-Mohyla Academy is intertwined with the history of Ukraine itself, as its long and often turbulent past coincided with numerous challenges (Iaremenko 2015; Sydorenko 1977). Ukraine's geopolitical position, coupled with increased pressure following decades of instability for Kyiv subsequent to the city's transfer to Muscovy, translated into a protracted decline. The defeat of the Academy's patron, Hetman Ivan Mazepa (1687-1709) to Russian forces at the battle of Poltava in 1709, coupled with a subsequent ban on Ukrainian publications and religious texts by Tsar Peter I, dealt a severe blow to the Academy. Kyiv-Mohyla Academy transitioned through a period of revival following the Tsar's death only to go into further decline under Catherine the Great, who deprived the Academy of its financial support and turned it into a ward of the Russian Imperial government. The Academy was subsequently closed in 1819 as a reactionary move to counter perceived Westernizing influences and fears that Ukrainian cultural consciousness might challenge Russian regional hegemony and destabilize the borderland of the Russian Empire (Gleason 2001, 435; Oleksiyenko 2014, 256).

The Academy remained closed until Ukraine gained independence from the Soviet Union in 1991, when it was re-established as the National University of Kyiv-Mohyla Academy following its forced closure by the Kremlin on “nationalist, free-thinking intellectual centres on the outskirts of the empire” (Oleksiienko 2014, 257). The original campus and pre-revolution era buildings were re-established on the grounds of a Soviet naval academy. The university subsequently shared its space with navy commissars during a time of strained relations when Ukraine and Russia were deciding the fate of the Soviet Naval Fleet (Hawthorne 1998; Greenwald 1997, 43).

Kyiv-Mohyla Academy was conferred the title of ‘National University’ by presidential decree in 1994 (President of Ukraine 1994). The designation is reserved for public universities with the fourth accreditation level (higher education institutions authorized to provide doctoral and post-doctoral degrees) and in recognition of exceptional achievement in national capacity building in education, science and service (Oleksiienko 2014, 252). Its special status brings with it enhanced funding and institutional autonomy, in addition to greater independence to generate income. The university’s ‘experimental’ status meant that during the initial phase of development, the Academy’s governing body reported directly to the Cabinet of Ministers, bypassing the Ministry of Education and Science of Ukraine. It also provided the Academy with the opportunity to develop and implement accredited Bachelor’s and Master’s programs (NUKMA 2-12-16).

In keeping with the spirit of western-oriented scholarship, Kyiv-Mohyla Academy adopted a bilingual (Ukrainian and English) medium of instruction and was the first university in

Ukraine to embrace a three-tiered higher education system (Bachelor–Master–PhD). From its inception, the Academy was determined to adhere to the highest academic standards; including: Ukraine’s first anonymous university entrance examinations; curricular innovations which borrow heavily from the American liberal arts tradition; attracting and maintaining highly qualified staff, researchers, administrators and students; (re)branding itself on the policy rationales of nation-building and ‘Europeanization’, as well as institutional autonomy and a departure from state-centred management logics (Greenwald 1996, 588; NUKMA 2-12-16). From this perspective, the Academy adopted Europeanization as a means of reinforcing new symbols and (re)defining its academic identity along the lines of a new higher education governance model based on academic excellence, adaptive structures, norms and practices. In turn, this conceptualization was reified and channelled into the wider nation-building project (NUKMA 25-11-16).⁶

Kyiv-Mohyla Academy rapidly gained the reputation as one of Ukraine’s most dynamic centres for academic excellence, innovation and international exchange (Johnson 2008, 168). By virtue of its bilingual character, the Academy continues to attract regular flows of international lecturers and researchers.⁷ Moreover, interactions with international contacts and opportunities were shown to be encouraged by the university’s faculty members and actively sought out by students (Gleason 2001, 436; NUKMA 9-03-16).

⁶ Important to note is that the Kyiv-Mohyla Academy Foundation of America adopted the motto “Building Ukraine through Education”.

⁷ Gleason (2001, 236) notes that more Fulbright lecturers have taught at Kyiv-Mohyla Academy than at any other Ukrainian university.

Kyiv-Mohyla Academy's innovative approach to training and research attracts substantial technical and financial support from public and private sources, international organizations, philanthropic foundations and higher education stakeholder agencies (NUKMA 9-03-16; Greenwald 1996; McCarthy, Bader & Pleskovich 2003). While the majority of the university's core funding comes from public sources, external funds are also leveraged from the Kyiv-Mohyla Foundation of America, a US-based, non-governmental agency whose mission is to undertake philanthropic activities and promote the mission of the Academy abroad (National University of Kyiv-Mohyla Academy 2015, 15). According to an independent auditor's report and Internal Revenue Service tax records, the Kyiv-Mohyla Foundation of America received US \$390,418 in 2014 and \$268,876 in 2015, respectively (GuideStar 2017; Internal Revenue Service 2015).

Internationalization is widely recognized as a pillar of Kyiv-Mohyla Academy's core mission, which is manifest in its academic degree systems, research, scholarly networks, recognition of foreign degrees, and quality assurance frameworks. The international dimension is also perceived as a fundamental element in knowledge production and a means of advancing scholarship and innovation. The Academy's positioning by virtue of its international initiatives, strategic partnerships with higher education institutions, stakeholder agencies, and pioneering degree programs have shaped Kyiv-Mohyla as a reference point for the emulation of fundamental reforms throughout Ukraine's national higher education system (Wynnyckyj 2009). In 2008, Kyiv-Mohyla Academy launched Ukraine's first structured PhD degree programs modeled after an EHEA-compliant third-cycle platform (NUKMA 9-03-16; Talanova 2010, 333–334).

The EHEA criteria are based on the principles of academic quality and transparency. Specifically, these criteria include implementation of a three-cycle degree system, quality assurance provisions, recognition of comparable degrees, study periods and transferable credits, as well as the promotion of mobility of students and staff (see Bergen Communiqué 2005; Lisbon Convention 1997). Originally designed as a pilot model for a new type of doctoral training in Ukraine, the Kyiv-Mohyla doctoral school developed hybrid PhD programs, which borrow from “sections of Soviet higher education legacy which are perceived as positive, a European model of coursework and a North American model of governance” (NUKMA 9-03-16).

In addition to being one of the few Ukrainian universities to grant internationally recognized EHEA-compliant degrees across all three cycles (Popova 2010), Kyiv-Mohyla Academy was accredited with the title of ‘National Research University’ by the Cabinet of Ministers of Ukraine in 2009 (Parliament of Ukraine 2009). Kyiv-Mohyla Academy’s admittance into the Ukrainian ‘Ivy League’ was granted on its distinctions in ‘research and innovation’, ‘integration between research, teaching and industrial applications’, as well as its ‘international projects and programs’ (Parliament of Ukraine 2010). The National Research University project – albeit still incomplete – emerged as a reformist move aimed at differentiating and identifying Ukrainian flagship universities with the capacity to meet the increasing demands of the knowledge economy (Hladchenko, deBoer & Westerheijden 2016). These demands include investments in formal and informal networks, deeper integration within regional and global knowledge systems, and enhancing knowledge distribution (OECD 1996).

The National University of Kyiv-Mohyla Academy is comprised of six faculties, 27 departments, 32 research centres and one regional satellite campus. The Academy plays host to the British Council, the Centre for Polish and European Studies, the Goethe Institute, the Jean Monet Centre of Excellence in European Studies, a modern library network and a university publishing centre. The university is staffed by approximately 600 professors and researchers. During the 2015–2016 academic year, enrolment stood at approximately 3,500 students and an annual operating budget of UAH 120,971,900 (CAD \$7.5 million) (National University of Kyiv-Mohyla Academy 2015, 15).

Against this backdrop, Kyiv-Mohyla Academy is regarded as a Ukrainian flagship university which occupies an important place in the national higher education landscape. The university's rich historical background, pivotal role in the country's intellectual history, institutional resilience, centrality to the mission of nation building and international footprint lends credibility to this position. In 2015, the Academy celebrated its 400th anniversary.⁸ This milestone sparked reflection and debate on the university's past, current outlook and future challenges.

Given the university's prominence in the Ukrainian higher education landscape, Kyiv-Mohyla Academy represents a key national research university which has demonstrated the extent to which the phenomenon of internationalization can play a transformative role in institutional development. In the context of this case study, transformative approaches

⁸ The National Bank of Ukraine issued a redesigned UAH 500 banknote in October 2015 – the highest denominated bill – to commemorate Kyiv-Mohyla Academy's Quadra centennial.

are broadly defined as those which introduce a series of systemic and normative changes in a given academic structure. These approaches seek new and innovative ways of legitimizing higher educational discourses, changing frames of reference and empowering institutional actors. Consistent with this view, the Academy's responses to the challenges and imperatives of the global knowledge society since Ukraine's accession to the EHEA indicates that it acts reflexively by way of its strategic partnerships and pragmatic approach to regional and global positioning. From this perspective, Kyiv-Mohyla Academy provides valuable insight on the internationalization experiences of an influential Ukrainian national research university.

AWARENESS

The awareness dimension of the Delta Cycle for Internationalization (Rumbley 2010, 220) addresses the question of the degree of perception to which the importance and benefits of internationalization are acknowledged by university stakeholders. Interview data from Kyiv-Mohyla Academy serve to illustrate the influence of internationalization on institutional positioning strategies, knowledge alliances/mobilization and organizational development. The data suggest that the Academy's administrators, faculty and students are highly cognisant of internationalization efforts and its application to organizational positioning, visibility, academic quality and relevance. Despite the complexity and scope of the university's operations, Kyiv-Mohyla's relatively small size (compared to the other universities in this study) accounts for a rather homogenous level of internationalization awareness across campus.

The logic behind this observation is two-fold, considering that: (i) internationalization is perceived as a means of *legitimizing* existing programs; and (ii) is understood as an important mode of *stimulating* internal cooperation among academic stakeholders (NUKMA 9-03-16). The interview data indicate that case study participants are highly aware that internationalization represents an important element for the advancement of the Academy's overall mission, given the general consensus that international engagement enables university actors and higher education stakeholders to connect in meaningful scholarly activities, which might otherwise been unattainable had such arrangements not been in place (NUKMA 9-03-16; NUKMA 9-03-16a). A mid-level leader at the Kyiv-Mohyla Academy doctoral school made the following observation:

[I]nternationalization educates our students abroad and [facilitates] the acquisition of knowledge. The goal of [academic] internationalization serves not only to provide mobility opportunities for our students and doctoral candidates with the goal of acquiring knowledge, but also transferring knowledge back to Ukraine (NUKMA 28-11-16).

The scale of awareness is correlated with varying rationales – from raising its institutional profile and ‘knowledge branding’, ‘modernizing’ curricular design to extend academic horizon, diversifying revenue streams, as well as improving regional and global positioning. Not only do these perspectives illustrate the various degrees of awareness among university stakeholders, they also cast light on *how* the phenomenon is defined and understood from various actor-centred perspectives. In this regard, the data suggest that international awareness levels are highly contingent upon the degree of engagement on the part of the individual actor(s) and advanced on their own merits, since partnerships cannot be sustained where there is an absence of intellectual symmetry and a dearth of mutually attractive problems.

The interview data from Kyiv-Mohyla Academy consistently point to the strong influences of European framework initiatives for providing a ‘stimulus for reform’ and a driving force for ‘academic entrepreneurship’ (NUKMA 9-03-16). From this perspective, the Academy’s degree structures, *inter alia*, are designed to accommodate a wide degree of compatibility with European scholarly activities and academic structures. Case in point, Kyiv-Mohyla was the only university in Ukraine to recognize foreign degrees and academic mobility credits prior to the introduction of the 2014 “Law on Higher Education” (Moroziuk 2008), indicating a high level of institutional awareness and commitment to internationalization. From this perspective, these receptive elements appear to have a steering effect, as illustrated by Kyiv-Mohyla Academy’s elevated degree of institutional autonomy and leadership role in national higher education reform efforts.

Dual and joint degrees, interdisciplinary courses, quality assurance frameworks, structured PhD programs, collaborative research consortia and the creation of an EHEA-compliant doctoral school are catalysts for innovation and institutional change, designed in order to be more responsive to the needs of an increasingly knowledge-based economy and society (NUMKA 25-11-16). These modalities are clear manifestations of how Kyiv-Mohyla Academy has positioned itself internationally in strategic ways in order to ensure its participation and relevance in the EHEA.

The International Office reinforces the awareness dimension by providing information on academic mobility programs, international scholarships and project opportunities throughout the academic year. The unit also acts as a channel for diffusing information on

behalf of higher education stakeholder agencies, including the British Council, Campus France, DAAD, European framework initiatives and Fulbright Ukraine. Along these same lines, the interview data with senior administrators and faculty revealed that administrative support staff work directly with deans, faculties, departments and institutes to support ‘bottom-up’ approaches to knowledge transfer and international program development. This multi-dimensional engagement approach was repeatedly referred to by the case study participants who acknowledged administrative, communications and outreach activities as reinforcing elements of the awareness dimension. A mid-level leader synthesized the office’s multiple roles within the academic enterprise in the following excerpt:

The International Office has multiple tasks, among them are international students, and providing support to them... Another activity is student and staff mobility, meaning incoming and outgoing mobility. Our third main responsibility is all support related to Erasmus⁺ projects, which is the main financial instrument of the European Commission to support educational projects. We are not dealing with research grants and research projects, our research unit deals with that. But we are providing assistance along with Erasmus⁺ with applications and for other grants, which could support educational activities and projects. Besides that, we are very much involved in the organization of different international events at the university starting from high-level visits, through conferences, etc. Additionally, we are involved in the university’s participation in international rankings... meaning that we prepare the university profile for U-Multirank and QS [university ranking systems].

Access to information serves as an integral element for the implementation of effective quality assurance mechanisms, while transparent descriptions of learning outcomes facilitate informed decisions on individual education pathways. These institutional conditions are key to strengthening university autonomy, particularly under Ukraine’s current decentralization efforts. Similarly, access to information and administrative transparency represent pillars of the quality assurance standards outlined in the Yerevan

Communiqué (2015). The International Office hosts a comprehensive website and provides targeted communications with internal and external stakeholders (NUMKA 25-11-16). Interesting to note that in 2016, Kyiv-Mohyla Academy was top ranked among 186 Ukrainian universities for online access to course catalogues, funding opportunities and information on academic mobility opportunities according to the CEDOS think tank (Kyiv-Mohyla Academy Foundation of America 2016).

Given the direct input that the aforementioned higher education stakeholder agencies play in the internationalization awareness dimension, an analysis of this element would be incomplete without recognizing their influential role and impact. Notable are the significant influences of European Union framework initiatives, cooperation projects and structural measure programs, which reinforce the expanding European role in higher education discourse. The interview data from senior administrators, mid-level leaders and faculty indicate that internationalization awareness levels have been significantly augmented as a result of Ukraine's regional positioning as an Eastern Partnership member and affiliation with EU thematic network initiatives such as the TEMPUS (Trans-European Mobility Program for University Studies) program (structural framework measures and joint projects); Erasmus Mundus/Erasmus⁺ (academic consortia); the Marie Skłodowska-Curie Actions and the EU flagship – Horizon 2020 (research consortia) (European Commission 2015).

In a similar vein, the internationalization rationales described by de Wit (2002), which inform institutional awareness at Kyiv-Mohyla Academy are complex and multifold. The

interview data from across the respondent groups illustrate a combination of political, economic, socio-cultural and academic rationales from various sub-groups within the university. Relying on interview data from administrators and faculty, internationalization is widely perceived as an educational innovation, insofar as one senior administrative respondent acknowledged the phenomenon as “a form of legitimization which stimulates activities and facilitates a greater ability to do various things you could not do otherwise” (NUKMA 9-03-16).

Noteworthy is the augmentation of internationalization awareness levels attributed to economic rationales. From this perspective, the economic dimension takes on a different meaning within the institutional realities of the Ukrainian higher education system than the neoliberal connotation evoked by notions of ‘academic capitalism’ (Slaughter and Leslie 1997). In this context, institutional actors have gravitated towards entrepreneurial pathways in order to develop and sustain academic programs, as well as secure grant funding in light of national budgetary shortfalls. This mutation is analogous to Schriewer’s maxim “as they move, they morph” in reference to the ‘shape-shifting’ pattern of higher education policy as it travels from one region to another (Cowen 2009, 315).

Contextual adaptations and institutional responses to national economic realities involve the (re)negotiation of resource allocations, and do not necessarily translate into neoliberal logics *per se*. External funding sources are widely perceived as a means of professional advancement and supplementing scholarly activities. A similar rationale applies to the perception of internationalization as a means of diversifying income streams and

augmenting limited, if not inadequate institutional funding (NUKMA 09-03-16; NUKMA 25-11-16). A respondent at Kyiv-Mohyla Academy illustrates the tension between the perceptions and realities of international funding sources within the institution:

Internationalization is usually seen as means of supplementing the university's income and a means of doing so – and I stress that its *seen*, because it is a question of *perceptions* – but it is generally perceived as being more money with less strings attached. In reality, the strings attached are as bureaucratic, as difficult and as constraining as they are domestically in Ukraine, they're just different (NUKMA 09-03-16 | emphasis in original).

The perceived benefits and heightened awareness of internationalization are particularly salient in light of declining state funding and absence of academic mobility and international research grants (NUKMA 9-03-16a). In this regard, the interview data suggest a strong link between awareness levels and external higher education stakeholder agencies, considering that the majority of international initiatives are currently funded exclusively by external sources (NUKMA 9-03-16; NUKMA 9-03-16a). Respondents consistently pointed to the influences of EU initiatives such as TEMPUS and Erasmus over the last two decades as external drivers of institutional change at Kyiv-Mohyla Academy, and to a certain degree, across the Ukrainian higher education sector as a whole.

A similar logic applies to the unfolding Bologna Process as a significant element contributing to the awareness of internationalization as an external innovation and a process of educational change. Viewed through this lens, contextual adaptation is indicative of a wider interpretive frame involving the travelling and translation of ideas, as well as the re-contextualization' of norms by the very university actors themselves, "such that they 'make sense' within their specific spheres of activity, improving 'fit' through both

the adaptation of domestic practices and the flexible interpretation of [European] norms themselves” (Dakowska & Harmsen 2015, 12).

Higher education remains a highly regulated domain in Ukraine (NUKMA 9-03-16; Hladchenko, de Boer & Westerheijden 2016, 111). The interview data from senior administrators and faculty indicate that internationalization awareness levels have been augmented in no small part by the normative framework outlined in the 2014 “Law on Higher Education” (Parliament of Ukraine 2014). Noteworthy is the active involvement of the Kyiv-Mohyla academic community in the legislation’s design and development, as well as its provisions, which are underpinned by a pro-European, nation-building agenda. Liliya Hrynevych, Minister of Education and Science provided the following insights on the passage of the new legislation:

Given the long-term consequences for the country, the adoption of this law is one of the most important, if not the most important, decisions made by the Ukrainian Parliament after the Revolution of Dignity... This is the adoption of a democratic, pro-European system... which begins a new era in the development of Ukrainian higher education. One primary purpose is to achieve true quality improvement in higher education... and the transformation of our educational system to become truly competitive in the European Union (cited in British Council 2015, 1).

In this context, the doctoral school acted as the basis upon which the architects of the legislation took inspiration, since the previous law only addressed the first two cycles, whereas third-cycle reform required profound structural change. A senior respondent from the Kyiv-Mohyla Academy doctoral school explains:

There was a realization that in fact, for the Bachelor’s and Master’s levels, there was really no need for a new Law on Higher Education. The real need for a Law on Higher Education actually came up because of the fact that there was a need for PhD reform. Because Ukraine under the old law had

BA and MA programs, the need for a real reorganization of the system had to do with the idea of implementing university autonomy, reforming the PhD system and also providing opportunities for mobility, which is tied to the other two factors. These paradigms required a change in the law (NUKMA 09-03-16).

Aside from setting the ‘rules of the game’ (North 1991, 98), the revamped legal framework facilitates a reorganization of the higher education system, provides greater institutional autonomy and creates new consensus space for action (NUKMA 9-03-16). The data also indicate an important role for Kyiv-Mohyla Academy and its institutional actors. As a senior administrator at the Kyiv-Mohyla doctoral school asserted: “Ukraine’s new law... is revolutionary... not least because it represents a unique case where a legal act was written not by... politicians, but rather was composed, debated, modified as a result of compromise, finalized, and then lobbied by higher education professionals and students” (cited in British Council 2015, 1).

In a similar vein, the modified rule sets promote integration into the EHEA and ERA, while facilitating a normative framework to support transformational institutional change. Against this backdrop, the new legislation defines the role of the National Research University and its alignment with regional and global innovation systems (see Article 30, Parliament of Ukraine 2014).

Although lacking in operational elements, the legislation advances a new paradigm by way of its transformative approach to defining knowledge spaces and facilitating a road map for systemic institutional change. By the same token, it strives to define the “international integration of Ukraine’s higher education system into the EHEA provided that the

accomplishments and progressive traditions of national higher education are preserved and developed” (Parliament of Ukraine 2014, Article 3).

The range of perspectives gathered from the respondents at Kyiv-Mohyla Academy reveal a high level of awareness of internationalization and its linkage to change in institutional structures, norms, practices and identities, resulting over time in a redefinition of higher education policies. These insights provide a clear indication that awareness levels are highly in tune with the academic culture. Furthermore, the data support the conclusion that internationalization is widely perceived as a factor of significant relevance for both strategic and pragmatic reasons.

COMMITMENT

The segue from *awareness* to *commitment* represents an operational shift from perception to action. According to Knight’s (1994, 12) Internationalization Cycle, the demonstrated commitment of university leaders, administrators and students is of critical importance which should be manifest in both symbolic and concrete ways. Furthermore, it should reflect building commitment to the process of integrating an international dimension into teaching, research and service functions. Within this backdrop, the data from the National University of Kyiv-Mohyla Academy illustrate a largely consistent record of commitment to international engagement, extensive knowledge alliances and innovative curricular development as evidenced by the university’s portfolio of programs and collaborative initiatives.

This dimension can be interpreted along the lines of a historic continuum, which has long been an integral component of the Academy's inner dynamic and institutional outlook. From a Northian perspective, these observations are suggestive of a 'sequential story' of how the present and the future are connected to the past by the continuity of institutions (North 1990, 118).

Similarly, the theory of institutional change provides additional dimension to the analysis by casting light upon institutional 'pre-requisites' which support complex exchange patterns:

Creating an institutional environment that induces credible commitment entails the complex institutional framework of formal rules, informal constraints, and enforcement that together make possible low-cost transacting. The more complex the exchange in time and space, the more complex and costly are the institutions necessary to realize cooperative outcomes (North 1990, 57-58).

The interview data confirms a steady level of commitment and wide recognition of the transformative role which internationalization plays in knowledge production, innovation and the advancement of the university's overall mission to teaching and research. On the other hand, the interview data also suggests that Kyiv-Mohyla Academy has, in some respects, become more inward looking over the last decade (NUKMA 9-03-16). Programmatic developments and demonstrated commitment on behalf of the respondents reveal a high level of international engagement at Kyiv-Mohyla Academy preceding Ukraine's accession to the EHEA.

Despite the lack of institutional resistance to internationalization efforts, a senior respondent noted that the Academy could be missing significant opportunities by not applying its full potential to pursue academic partnerships and consortia (NUKMA 9-03-16). Similarly, the respondent suggested a level of institutional ‘fatigue’, insofar as internationalization approaches highlight the need to commit substantive administrative and financial resources behind transformative initiatives which drive innovation and produce desired outcomes.

Internationalization appears to be a major process informing institutional change at Kyiv-Mohyla Academy; however, it is only in the last decade that the concept began to define the scale and scope of its broader [national] impact on doctoral training with the introduction of EHEA-compliant structured PhD programs. Supported by the McArthur Foundation, Kyiv-Mohyla was the first university in Ukraine to implement ‘experimental Masters programs’, since the conventional model of second-cycle training did not exist in the Soviet higher education system (NUKMA 2-12-16; Finikov & Sharov 2014, 29; National TEMPUS/Erasmus⁺ Office in Ukraine 2014, 3).

Considered ‘revolutionary’ to Ukraine’s higher education system, the implementation of an EHEA-compliant, third-cycle training model introduced an ‘experimental’ framework to stimulate wider systemic change (Talanova 2010, 333; Wynnyckyj 2009). Kyiv-Mohyla Academy’s commitment to establish a doctoral school and structured PhD programs based on a Bologna-compliant model represents an illustrative example of the university’s efforts to align with the EHEA and ERA – two pillars of the ‘Europe of Knowledge’ (Berlin

Communiqué 2003). To this end, the Academy became a ‘laboratory for reform’, as the doctoral project represents the first significant attempt of a Ukrainian National Research University to put into practice a series of structured PhD degree program and an EHEA-compliant doctoral school (Meleshevyh & Myklebust 2007, 66).

Although designed to pursue similar objectives, the Soviet-modeled *kandidat nauk* (candidate of science) and the structured PhD have vastly different underlying approaches; including the former’s minimal course work, lack of recognition mechanisms for international credits and academic mobility, prohibition of joint degrees and nominal institutional support (Meleshevyh & Myklebust 2007, 66; Wynnyckyj 2009). Against this context, the transition of doctoral training towards EHEA-compliant structured PhD programs represents “a challenge of a different order” considering the profound consequences of structural change in non-EU member states such as Ukraine (European University Association 2005, 36). Insofar as the project “represents a radical departure from the legacy of the Soviet era of research”, the Kyiv-Mohyla doctoral school evolved into a national ‘best practice’ model for the enactment of fundamental reforms within the country, which provides both the structure and intellectual space for the “inclusion of students into a global academic community” (Wynnyckyj 2009).

Although Kyiv-Mohyla Academy has a long history of commitment, *inter alia*, with European-modeled second-cycle degree programs, which began as early as the 1990s (European Commission 2015a, 3-4), the dedication at the highest levels of leadership and across teaching, research and administration functions suggests that the Academy is

institutionally predisposed to favour internationalization. The interview data supports the conclusion that the university has been consolidating its commitments over the past two decades and continues to do so on both sides of the administrative and academic house. While conscientiously making this series of strategic choices, Kyiv-Mohyla Academy appears to have witnessed a shift in institutional culture and national positioning. By the same token, its impacts are felt beyond the Academy, as the doctoral school has become a national reference point for the internationalization of training and research, as well as a showcase for best practices in third-cycle reforms.

Fundamental to this case study is the understanding that an ‘evolutionary’ process appears to have transpired through a series of voluntary, yet highly formalized steering processes, which support a range of innovations and institutional changes that may not have been achieved had they been left to formal channels. The TEMPUS program represents a major EU initiative, which supports capacity building, institutional autonomy, curricular reform and the ‘modernization’ agenda of higher education systems in non-EU neighbouring states; including: Eastern Europe, Central Asia, the Western Balkans, the Middle East and North Africa (Gwyn 1996).⁹ TEMPUS was originally designed to foster [new] spaces of cooperation in support of structural reform efforts in higher education systems and to promote voluntary convergence with EU developments in higher education. Yet, recent efforts have been increasingly characterized by a stronger emphasis on ‘performativity’ and enhancing compatibility of higher education systems across Europe and its regional periphery.

⁹ ‘Modernization’ is a frequently used term within the European higher education discourse, which is linked to curricular reform, quality assurance and governance; yet does not have a set definition.

Since its inception in Ukraine in 1993, the TEMPUS program has promoted voluntary higher education policy convergence among the neighbouring regions of the EU through a series of project-based modalities and structural measures.¹⁰ The data illustrate how this influential program has mapped out a ‘sequential story’ to advance the understanding of Kyiv-Mohyla Academy’s approach to internationalization. According to EU statistical data, Kyiv-Mohyla Academy participated in 28 TEMPUS initiatives since the program’s introduction in Ukraine (European Union 2014, 423). These collaborative initiatives gave new prominence and drive to EU higher educational programming, which has seen growing momentum, an increase in visibility and reach beyond Europe’s borders.

The TEMPUS program also formalized EU activities in the area of higher education reform established in the Bologna Process and Lisbon Convention. Among the key strategies identified in the latter is the establishment of the European Area for Research and Innovation, which goes beyond first- and second-cycle reforms to address the very core of doctoral training (Lisbon Convention 2000; Repečkaite 2016). The ERA is broadly defined as a system of scientific research programs integrating the scientific resources of the European Union. Its purpose is to increase the competitiveness of European research institutions by bringing them together and encouraging a more inclusive way of work. It is comparable to the research and innovation equivalent of the European common market (European Commission 2000). In retrospect, the data provide important insight on understanding intervention-based institutional change from the perspectives of each of the three individual case study universities.

¹⁰ The European Commission phased out the TEMPUS program at the end of 2016 and replaced it with Erasmus+.

Connecting Kyiv-Mohyla Academy with European higher education structures is a key institutional commitment manifested in a number of EU-sponsored programs; including: Erasmus⁺, TEMPUS, the Jean Monnet Centre of Excellence and Horizon 2020. Beyond positioning Kyiv-Mohyla Academy into international spheres of higher learning and research, these initiatives represent major drivers of academic reform (NUMKA 25-11-16). Moreover, they provide important insights to discourses surrounding the adoption and adaptation of knowledge ‘branding’ and mapping higher education policy developments in Ukraine’s post-Soviet institutional realities.

Kyiv-Mohyla Academy has positioned itself in close alignment with European structures to facilitate the advancement of its own internationalization agenda and forge closer connections with regional and global partners. This commitment is manifest in strong synergies and active engagement with institutional efforts to make academic programs and study cycles (and components thereof) more comparable to the education and research functions of the EHEA and ERA. By the same token, it also represents a conceptual *shift* in the nature and content of post-Soviet doctoral training, as explained in greater detail below.

The Academy’s commitment to enhancing the international character and relevance of its doctoral programs can be traced to the same year as Ukraine’s accession to the Bologna Process. In 2005, Kyiv-Mohyla Academy launched a three-year TEMPUS structural measure project titled: *Training for the Implementation of the Higher Education Area Third-cycle in Ukraine*. The first phase of the so-called PhD ‘experiment’ involved the

formation of an academic consortium consisting of Kyiv-Mohyla Academy as coordinator and three consortium members of the European University Association's (EUA) Doctoral Programmes Project; including: Université Pierre et Marie Curie, Universitat Autònoma de Barcelona and the University of Bergen (Meleshevych & Myklebust 2007, 67). Dubbed 'experimental' for its radical departure from the traditional Soviet-era approach to doctoral training and research, Kyiv-Mohyla Academy became a *de facto* 'laboratory of reform' for the implementation of an EHEA-compliant third-cycle training program (Talanova 2010, 333).

The Academy's commitment to create structured PhD programs blurred the boundaries of graduate training and research in Ukraine, while at the same time, broke with traditional patterns of institutional continuity. Accordingly, it highlighted tensions between the Soviet higher education legacy and the demands of the Bologna Process and Lisbon Convention. An excerpt from a TEMPUS structural measure mapping report brings these dual challenges into perspective by illustrating the institutional commitment to align doctoral programs with the demands of the EHEA and the ERA:

While these structural changes are strategic challenges for Western European universities, they have revolutionary significance for many Eastern European institutions, with a heritage of research training from the Soviet higher education system, with a sharp distinction between research at the Academy of Sciences and education at universities. Post-Soviet Ukraine is a typical illustration of such a divorce between research and education (Meleshevych & Myklebust 2007, 66).

The Academy's commitment to institutional change in the form of higher education policy convergence is further reflected in its strategic partnership approach, which aspires to foster wider reform efforts at the national level: "[T]o achieve this goal, the National University

of Kyiv-Mohyla Academy needs partnership from European universities to set up novel management of doctoral programs. The [TEMPUS] project will significantly improve training of doctoral students. It will impact on transforming the *aspirantura* in Ukraine within the Bologna Process” (Ibid, 67).¹¹

It is important to note that the initial TEMPUS third-cycle structural measures project attempted to catalyze institutional commitment through the external acquisition of knowledge on doctoral training programs from abroad; and second, ‘lock-in’ third-cycle reform efforts at Kyiv-Mohyla Academy. The intended outcome of this collaborative intervention was to create the necessary institutional conditions for the development of a functioning model for the enactment of fundamental national reforms in Ukraine’s higher education system (Morenets 2007, 70; Talanova 2010, 334; Wynnyckyj 2009). The interview data validated this claim in light of its perceived accomplishments in implementing new approaches to third-cycle training. Furthermore, two successive PhD capacity building projects were modelled on the original program and subsequently scaled-up (discussed below).

Insofar as the architects of the project did not intend to bring an end to the traditional Soviet model of doctoral training, the introduction of an EHEA-compliant, structured PhD necessitated wider systemic change and a shift from state-centred management logics to greater institutional autonomy in the form of a new academic *contract*. Unpacking this aspect further, the interview data revealed that the structured PhD sought to challenge the

¹¹ The Soviet-modeled *aspirantura* is the post-graduate study period leading to the candidate of sciences degree (*kandidat nauk*), which is roughly the equivalent of the PhD.

academic status quo. Furthermore, the implementation of third-cycle programs within an unreformed national higher education system required cross-institutional collaboration in order to overcome internal deficiencies, resource asymmetries, support international networks, bridge competencies, as well as foster intellectual risk taking (NUKMA 2-12-16). From a Northian perspective, these points are salient in terms of avoiding the high transaction costs entailed in identifying academic counterparts, funding sources and conducting doctoral training and research.

In the next phase of development, Kyiv-Mohyla Academy's commitment to enhance internationalization and 'lock in' doctoral reforms was further manifested in the *ASP2PhD* (2010–2013) project, a TEMPUS structural measure program designed to create a functional doctoral school and EHEA-compliant PhD programs in Ukraine and Georgia (European Union 2014, 92-93; NUKMA 9-03-16). The Kyiv-Mohyla doctoral school received the single largest contribution in the Academy's history, obtaining €400,000 from a TEMPUS project budget envelope of €1.5 million (NUKMA 9-03-16; European Union 2014, 92-93). Designed as an inter-regional knowledge cluster to "internationalize all aspects of doctoral education and research", the project's overall objectives incorporated the harmonization of doctoral education in Ukraine within the framework of the EHEA and attempted to improve research output quality through the integration of Ukrainian scholars into the ERA (European Union 2014, 93).

By targeting faculty, administrators, doctoral students and higher education stakeholders, the *ASP2PhD* initiative committed Kyiv-Mohyla Academy to establish a doctoral school

based on the Bologna and Lisbon principles, develop five nationally- and internationally-recognized, EHEA-compliant PhD programs and ERA-integrated thematic research groups; as well as secure broader institutional commitment to catalyze subsequent third-cycle reform efforts in Ukraine (European Union 2014, 92-93). As a result, critical mass was identified in the following five disciplines: economics, environmental sciences, health sciences, humanities and social sciences (NUKMA 2-12-16).

In addition to TEMPUS funding, an emerging PhD program in Mass Communication received a €50,000 grant from the Foundation for Development of Ukraine (Collins, Zaparucha & Larrue 2010, 6). These efforts were complimented by an additional grant from the Kyiv-Mohyla Foundation of America, which financed management training of PhD programs at American partner universities. The commitment to develop a doctoral school and EHEA-compliant structured PhD programs are leading examples of Kyiv-Mohyla Academy's resolve to initiate transformative institutional change and become a national model for third-cycle reform throughout Ukraine.

This extended commitment was manifest in a subsequent Erasmus⁺ capacity building project titled *DocHub (Structuring cooperation in doctoral research, transferrable skills training, and academic writing instruction in Ukraine's regions)* (2016–2019). The initiative was designed to consolidate critical mass through the creation of regulatory frameworks in research and supervision in support of third-cycle reforms in Ukraine. Five regional doctoral training hubs were meant to be created in order to integrate the National

Academy of Sciences research institutes into the teaching and research activities across participating universities.

The *DocHub* initiative has developed a series of five objectives and a corresponding number of work packages. These include: (i) a draft Code of Practice and state-level regulatory framework for the functioning of inter-institutional cooperation in PhD training; (ii) the establishment of five regional doctoral hubs as national centres of excellence in PhD training; (iii) establishment and integration of five discipline-specific research networks from Ukrainian and EU partner universities; (iv) the establishment of infrastructure and systems for training in advanced academic writing customized to thematic areas in each hub and boost English-language training; and (v) the design and pilot of transferable skills and speciality courses across the network. The participating doctoral schools are meant to be designed to function as inter-regional doctoral teaching hubs, with a view to enabling cooperation in PhD training, co-supervision, credit transfer and joint PhD mobility among 11 Ukrainian and four EU higher education institutions (National Erasmus⁺ Office in Ukraine 2016, 61).¹³

¹³ The DocHub consortium is comprised of Kyiv-Mohyla Academy (project coordinator), Lviv Polytechnic University, Simon Kunets Kharkiv National University of Economics, Oles Honchar Dnipro National University, Institute of Higher Education of the National Academy of Educational Sciences of Ukraine, V.O. Sukhomlynsky Mykolayiv National University, Institute for Economics and Forecasting of the National Academy of Sciences of Ukraine, Institute for Condensed Matter Physics of the National Academy of Sciences, Institute for Social and Political Psychology of the National Academy of Educational Sciences, Ministry of Education and Science of Ukraine, Institute of Macromolecular Chemistry of the National Academy of Sciences of Ukraine. EU university partners include Vilnius University (grant holder) (Lithuania), Université Lumière Lyon 2 (France), Limerick Institute of Technology (Ireland) and the University of Tampere (Finland).

The resulting shift also appears to be making significant advances in terms of institutional positioning in comparison to other national research universities (Korodenko 2016). Yet, institutional change is a function of many factors, not the least of which is the Academy's commitment to showcase its academic culture, steer structural reforms and enhance institutional quality and visibility. Limitations, to this end, are dictated by the degree to which the Academy can mobilize resources and work within existing institutional frameworks to enable it to pursue specific strategies and goals.

Kyiv-Mohyla Academy has made extensive commitments to enhance its international positioning by developing strategic portfolios and supporting educational innovation. The administration, faculty and staff have demonstrated far-reaching commitments to the development of strategic partnerships and patterns of institutional change, which show no sign of weakening. Notable among them are the Academy's well-developed academic mobility and research programs, as well as steady flows of students, scholars and researchers to and from its campus.

Equally important are the ways in which connections between faculty, international university counterparts and higher education stakeholder agencies are fostered, especially where structured PhD programs and associated knowledge clusters are concerned. As the flows of ideas and innovation require active transfer and translation, their diffusion by actors and agents is an area of interest, as their activities may help gauge institutional trajectories. In this regard, the data indicate that joint European doctorates developed via faculty-led, research-driven approaches have established common codes of engagement,

institutional guidelines and well-defined regulations that instill self-reinforcing mechanisms promote long-term research interests.

The concept of traveling ideas as described by Rogers (2003) is a particularly useful metaphor to explore how historical contexts, institutional cultures and networks form connections in order to diffuse innovations. Similarly, it is useful in the sense that these concepts can illuminate cases of path dependence as well as the mental constructs of institutions and players which may constrain downstream choices (North 1990, 108). In this regard, Czarniawska and Joerges (1996) assert: “[A]gents who transport ideas play a significant role through their perceptions of the ideas and contexts. It is therefore important to explore *who* transports and supports certain ideas as well as how they are packaged, formulated and timed” (cited in Hladchenko, deBoer & Westerheijden 2016, 113). Against this conceptual background, the data suggest an agentic role for the Kyiv-Mohyla Academy doctoral school, considering its prominent position in leading Ukrainian universities in the process of third-cycle reform.

A respondent acknowledged that while the central administration at Kyiv-Mohyla Academy provides ‘moral encouragement’ to foster internationalization efforts, there appears to be little evidence to suggest explicit or implicit resistance (NUKMA 09-03-16). On a cautionary note, the respondent indicated that internationalization initiatives often detract from core teaching and research responsibilities. At the same time, the interview data from respondents at Kyiv-Mohyla Academy identified areas where commitment levels to internationalization face real constraints. Noted among these challenges are varying

perceptions surrounding the acquisition of financial resources, coupled with additional release time and increased administrative workload required to develop and manage international initiatives. Reflecting upon the experiences at Kyiv-Mohyla Academy, a senior respondent highlighted the following salient points regarding institutional commitments to internationalization:

The word ‘resistance’ indicates that you are up against some sort of barrier or pressure *not* to do something. I don’t think it’s a question of that. There is no active resistance, as a matter of fact its [internationalization] always encouraged. The question is: are you, as an academic prepared to invest the time and effort into realizing those opportunities? (NUKMA 09-03-16| emphasis in original).

Kyiv-Mohyla Academy has made noteworthy commitments on both the academic and administrative sides of the house to enhance its international positioning. Interview data from the case study participants suggest that internationalization efforts have brought about stronger lines of interplay between academic and administrative staff. The addition of new administrative personnel specifically dedicated to support international program development by way of technical writing and project oversight were noteworthy commitments, which are planned to come into effect in the near future (NUKMA 25-11-16). Despite these commitments, continued challenges remain, insofar as this cadre of non-academic professionals must undergo steep learning curves within field-specific competencies.

Furthermore, the interview data reveal that Kyiv-Mohyla Academy faces continued administrative challenges in the form of regular support staff turnover; especially among more experienced administrators who possess essential project management and English-

language skills (NUKMA 9-03-16). Turbulent labour market conditions, coupled with low wages across the education sector compound the commitment dimension; given the ongoing challenge of recruiting quality administrators and retaining corporate memory for extended periods of time (NUKMA 25-11-16).

These findings build upon key aspects of ‘mid-level leaders’, defined by Rosser (2004, 317) as “non-academic support personnel within the structure of higher education organizations”. Mid-level leaders comprise an essential cadre of individuals whose administrative roles and functions support the goals and mission of the academic enterprise. Meyer (2010, 118) builds upon this concept by advancing the idea of the ‘knowledge broker’, defined as “people [that] move knowledge around and create connections between researchers [practitioners] and their various audiences”. Knowledge brokers have been increasingly integrated into administrative structures in order to establish and maintain links, as well as serve as intermediaries between a growing number of stakeholders engaged in internationalization efforts. Kyiv-Mohyla Academy’s decision to foster new positions, which provide support for international activities is further evidence of the university’s institutional commitment within the context of a changing higher education landscape.

These individuals not only operate with specialized forms of knowledge within and outside of the Academy, they produce a new kind of knowledge, referred to by Meyer (2010) as ‘brokered knowledge’. As the international dimension matures and the significance of mobilizing knowledge becomes more salient, so too are the ways in which academic

programs, partnerships and networks are designed and managed. From this perspective, further institutional change at Kyiv-Mohyla Academy is on the horizon.

PLANNING

In accordance with the planning dimension of the Internationalization Cycle, Knight (1994, 13) asserts that this element should occur at “several different levels”, ranging from macro-institutional aspects to the level of academic units, departments, research centres and interest groups. As a first step, Knight (1994, 13) underscores the importance of clarifying the rationales for internationalization efforts, the intended outcomes, unique features, resources and institutional needs to be assessed and factored into a strategy. As planning will be unique to each institution, this dimension should also capture the broader spectrum of mission statements to more detailed operational plans.

In a similar vein, North (1997, 19) maintains that there are significant transaction costs associated with achieving institutional objectives; therefore, requiring appropriate strategies to accomplish them. Yet, he cautions that individuals typically act on incomplete information with subjectively derived models that are frequently incorrect and inefficient:

[T]he informational and institutional requirements necessary to achieve results are stringent. Players must not only have objectives but know the correct way to achieve them. But how do the players know the correct way to achieve their objectives? The instrumental rationality answer is that even though the actors may initially have diverse and erroneous models, the informational feedback process and arbitraging actors will correct initially incorrect models, punish deviant behaviours and lead surviving players to the correct models... But these are stringent requirements that are realized only very exceptionally... Institutions are not necessarily or even usually created to be socially efficient; rather they, or at least the formal rules, are created to serve the interests of those with the bargaining power to create new rules (North 1997, 19-20).

The data collected at Kyiv-Mohyla Academy in the context of the aforementioned criteria reveal important, but mixed elements of the planning dimension. Although planning for internationalization is occurring at different levels throughout the Academy, respondents indicated that there is no university-wide internationalization strategy currently in place (NUKMA 9-03-16). Similarly, the planning aspect is infrequently acknowledged as an integral component of the internationalization phenomenon. In this regard, the interview data reveal a mixed pattern of planning, coupled with an important role for individual actors driving the internationalization process, highlighting the importance of both ‘policy entrepreneurs’ (Dakowska & Harmsen 2015, 12) and ‘norm entrepreneurs’ (Tamtik & Kirss 2015). These ‘agents of change’ actively participate in the process shaping the way internationalization evolves and implemented across various institutional contexts.

North (1990, 5, 83) defines an ‘agent of change’ as the individual entrepreneur who interacts between institutions and organizations, and responds to the incentives embodied within an institutional framework. In tandem with this observation, Chaffee and Jacobson (1997) assert that those in charge of planned change need to provide “...adequate recognition to the power of the cultures in which planning occurs... if they [planners] help to establish an institutional culture with a shared vision, a willingness to understand the organization and its environment, and trust, they gain access to the efforts and enthusiasm of all participants in transforming the institution.”

In order to unpack the planning dimension and improve understanding of its function, Bartell (2003) advances a culture-based framework underpinning the internationalization

process of universities. He posits that alignment of institutional culture with the internationalization objectives and strategies selected by the university are essential in order to enhance the effectiveness of planned outcomes. Viewed through this lens, adaptation is perceived as a process of institutional change involving a reflexive approach to changing demands emanating from the external environment:

Internationalization, viewed as an organizational adaptation, requires its articulation by the leadership while simultaneously institutionalizing a strategic planning process that is representative and participative in that it recognizes and utilizes the power of the culture within which it occurs. The orientation and strength of the university culture and the functioning structure can be inhibiting or facilitating of the strategies employed to advance internationalization (Bartell 2003, 43).

The analysis of the data sets reveal that internationalization planning at Kyiv-Mohyla Academy is a complex enterprise; yet it remains an aspect which is not readily elaborated upon in the data and through various levels of institutional actors. The principle theme that emerges from the interview data suggests that the planning dimension takes on a largely de-centralized approach to identifying and responding to international opportunities. In a similar vein, the International Office plays a key function in coordinating international activities across campus. The interview data casts important light on the catalytic role that individual actors play in internationalizing the institution, while at the same time, providing critique on the academic enterprise's responsiveness to international opportunities.

A senior respondent at Kyiv-Mohyla Academy provides the following insight into the university's international planning dimension and at the same time identifies a crucial gap in its current approach: "I'm not aware of the internationalization strategy of the university... that's already a problem. If I'm not aware of the internationalization strategy

it becomes a question of *is there* an internationalization strategy or is it pretty well *ad hoc*...” (NUKMA 9-03-16 | emphasis in original). The respondent continues by elaborating upon the Academy’s approach to internationalization, while suggesting the need for a more effective institutional planning strategy:

I would describe the [internationalization] approach as being ‘entrepreneurial’ – you see an opportunity and you try to pounce on it. But it requires a certain type of person to pounce on that opportunity. The unfortunate fact is that bureaucracy and entrepreneurship are antitheses. I would say that we are missing significant opportunities. We are not applying enough to various European consortia; we are not using the opportunities that exist for cooperation with American and Canadian universities... (NUKMA 9-03-16).

The absence of an internationalization strategy at Kyiv-Mohyla Academy should not be regarded as an omission of the planning dimension *per se*, as the process appears to be occurring organically, drawing upon synergies from individual actors, historical continuity and institutional predisposition favourable to international engagement. According to the typology set out by Bartell (2003, 66), the Academy’s international planning dimension can be characterized as ‘adhocratic’, defined as “[a] university [which] is outward looking, fosters, supports and rewards creative innovation and the infusion of intrapreneurial and entrepreneurial spirit.”

The internationalization planning dimension at Kyiv-Mohyla Academy remains a complex and somewhat elusive element, making it difficult to fully capture. Secondary lines of inquiry reveal that an internationalization committee was created in November 2016 with the inherent goal of developing an internationalization strategy (NUKMA 25-11-16). Furthermore, it is important to note that while the institutional culture remains highly

receptive to internationalization, certain aspects of the planning dimension are dependent upon variables which remain outside of the realm and scope of the university administration. For example, resource asymmetries and other external factors such as Ukraine's different starting point than EHEA partner countries influence the process of internationalization planning. These observations suggest that the planning dimension is positioned in an area of tension between institutional realities and the increasing demands of the EHEA.

Against this context, contextual adaptations and institutional responses to network externalities have involved the (re)negotiation of resource allocations, the lowering of transaction costs and incomplete information (North 1990, 19). Academic mobility funding and foreign travel grants have been temporarily frozen by the Ministry of Education and Science of Ukraine in response to the protracted domestic economic crisis and ongoing conflict in the Donbas (NUKMA 05-03-16; NUKMA 09-03-16a). The resulting austerity measures have increased pressure on administrators, students, faculty and researchers alike to seek funding from external sources, as well as national and international higher education stakeholder agencies. Consequently, the international planning dimension has become increasingly reliant upon EU-centred grant, academic mobility and joint research programs. The EU structural measures, academic support programs and research consortia are widely perceived as key sources of technical assistance and revenue, as well as a means of bridging national budgetary shortfalls (NUKMA 09-03-16; NUKMA 09-03-16a).

The Kyiv-Mohyla Academy doctoral school intersects with the institutional drive to create EHEA- and ERA-compliant PhD programs, along with the overall objective to integrate scholars within a global academic community and provide an alternative to the Soviet model of post-graduate training (Korodenko 2016). In tandem with these observations, the development of structured PhD programs and ongoing third-cycle reforms require the planned and sequenced development of a number of structural elements; including: adaptive quality assurance frameworks, effective administrative structures, sustainable funding mechanisms, strategic partnerships and continued commitment to national higher education reform efforts.

A respondent describes Kyiv-Mohyla's institutional outlook as an 'anomaly' within the Ukrainian higher education landscape, explaining:

Kyiv-Mohyla Academy started as a 'strange animal' in terms of Ukrainian academia because the concept of liberal arts was very much foreign to Ukraine in the post-Soviet period. [A]nd here we have the idea, which incidentally has become the norm in Ukraine... [T]he concept of having a large portion – up to 25 percent of courses as electives. The concept of an elective course didn't exist in the Soviet Union... Most [Ukrainian] universities are in a state of shock, whereas Kyiv-Mohyla Academy is saying: "we've always had that!" (NUKMA 05-03-16)

The interview data indicate that a major driver behind the international planning dimension hinges on sustained efforts to integrate academic programs more fully into the EHEA – in addition to aligning thematic research groups within the framework of the emerging ERA. To this end, planning for institutional change appears to be geared towards consolidating reform efforts and positioning the Academy towards greater engagement with European higher education structures. Similarly, ongoing third-cycle reform efforts provide an added

stimulus for the convergence of third-cycle teaching and research, as well as deeper regional engagement, as outlined in the Berlin Communiqué (2003):

Conscious of the need to promote closer links between the EHEA and the ERA in a Europe of Knowledge, and of the importance of research as an integral part of higher education across Europe, Ministers consider it necessary to go beyond the present focus on two main cycles of higher education to include the doctoral level as the third-cycle of the Bologna Process. They emphasize the importance of research and research training and the promotion of interdisciplinarity in maintaining and improving the quality of higher education and in enhancing the competitiveness of European higher education. Ministers call for increased mobility at the doctoral and post-doctoral levels and encourage the institutions concerned to increase their cooperation in doctoral studies and the training of young researchers.

The interview data and related resources reveal that Kyiv-Mohyla Academy did not plan a ‘mechanical’ transfer of an EHEA-compliant third-cycle doctoral training model into its institutional framework; but rather, sought an ‘evolutionary’ pathway to reform through a selective process of policy ‘borrowing’ and ‘lending’, while at the same time, preserving national traditions (Korodenko 2016). This perspective was summarized by a faculty member who provided key insights on the Academy’s approach to the international planning dimension and the hybrid academic environment in which the doctoral program has evolved:

I don’t think that it [Kyiv-Mohyla Academy] has ever defined internationalization... I think that the doctoral school has always been about implementing a reform model or piloting a new style of PhD training in Ukraine. There is a good statement that comes from a dean in Slovenia that has become a quotable quote: “*Take the best from the West and leave them the rest*”. The problem with that is that you’re creating a hybrid model; you’re never copying anything pure... So, what we’ve created in the doctoral school is a hybrid of sections of the Soviet higher education legacy, which are perceived to be positive, a European model of course work and a largely American model of governance (NUKMA 9-03-16 | emphasis in original).

Against this context, the Kyiv-Mohyla doctoral school acts as a national focal point for the introduction of new administrative governance structures, management practices and strategic partnerships (Korodenko 2016). It has also made significant efforts to integrate international teaching and research elements into its structured PhD programs. A case study respondent supported the accuracy of this perspective, noting that Ukraine's membership in the EHEA provides a stimulus for institutional change and access to technical and financial resources; however, cautioned in regard to its perception of being a systemic panacea:

The EHEA is a stimulus for doctoral reform...and going back to the money issue, it provides an alternative source of a massive amount of money if you're prepared to play the game according to the European rules, which would have not been available to us if we [Ukraine] weren't part of the EHEA... I think there's a lot of hype and potential optimism in the joining of the ERA through Horizon 2020... But again, I think that many will become disillusioned once they start actually preparing the grants and reports... So many variables needed to start... That's why the tempo of innovation starts to fall off. On the other hand, I will say that once you're in the project it's actually not that bad, it's just the scenario of preparing for it and reporting is such a huge pain... (NUKMA 9-03-16)

Aside from planning at the institutional level, a senior administrator from Kyiv-Mohyla Academy holds a seat on the National Team of Higher Education Reform Experts.¹⁴ This consultative working group is headed by the Ministry of Education and Science of Ukraine and coordinated by the National Erasmus⁺ Office, which draws from a pool of national expertise from across the country and acts as a forum to support policy dialogue, coordination, best practices and synergies in the advancement of national higher education reform efforts.

¹⁴ A senior representative from Taras Shevchenko National University of Kyiv, one of the three universities selected for study, is also a member of the 2014–2017 National Team of Higher Education Reform Experts.

This stakeholder dialogue process is intended to guide reforms – while being mindful of national needs and aspirations – with the aim of advancing institutional change along the Bologna Process and Lisbon Agenda objectives (European Commission 2013, 3). It also represents a forum for national consultations on consensus building and regional coherence on strategic issues with peer institutions across Ukraine, as well as higher education stakeholders at both the Ministry and EU levels. It is worthwhile to note that a number of key faculty from Kyiv-Mohyla Academy – including its former and present presidents made significant contributions to the 2014 “Law on Higher Education”, while the assistant director of the doctoral school currently serves as an advisor to the Minister of Education and Science.

Despite these concerted efforts, an administrator at Kyiv-Mohyla Academy underscored the importance of evaluating the current context of the university’s internationalization planning dimension, which is sometimes sidelined, as it is one of a broad range of issues the university faces. A respondent provided insight on the need to critically reflect upon the Academy’s current planning approach in order to enhance institutional performance, since the positioning of both the doctoral school and the Academy have emerged as major steering instruments:

One of the things that we have had, I think, a real challenge with at the university in general, and for the doctoral school in a microcosm, is moving from an *entrepreneurial* model to an *administrative* management model. Long-term; obviously, you need an administrative model... [The] problem is that you’re trying to implement an administrative model without losing entrepreneurial spirit. When your primary instruments of financing are the Ministry of Education (*and that’s a minor one now*) and the European Union (*which is a major one now*), and they are both very bureaucratized,

it's very difficult to maintain that kind of entrepreneurial spirit that has made the doctoral school and Kyiv-Mohyla Academy in general, quite successful (NUKMA 9-03-16 | emphasis in original).

Despite the lack of a strategic plan for internationalization activities, the interview data provides further evidence that Kyiv-Mohyla Academy is taking lengths to evaluate current challenges and to critically reflect upon the university's modes of operation in order to improve strategic planning and enhance international operations. While there is evidence to suggest that respondents were modifying their activities to adapt to external sources of institutional change, it was less clear in some cases, whether these responses are reflexive or reactive.

OPERATIONALIZATION

According to Knight (1994, 13), the operationalization dimension of the Internationalization Cycle centres on the question of *how* internationalization is manifested and implemented within a university setting. The data sets from respondents at Kyiv-Mohyla Academy suggest that this dimension is among the most dynamic and well-developed. Yet, the underlying management structure remains more difficult to gauge. Data compiled from semi-structured interviews, official reports and peer review journals demonstrate that internationalization is a highly visible and dynamic element in the Academy's teaching and research activities, as the university strives to position itself among other Ukrainian National Research Universities and the emerging regional knowledge system.

The data indicate that the Academy supports a range of international programs and projects which drive innovation, knowledge production, and ultimately, institutional change. Unpacking the operationalization dimension further, this element is particularly helpful for understanding the dynamics at play over strategic partnerships and institutional characteristics which inform spatial actions. In this regard, the phenomenon of internationalization is taking place in an environment of increased contextual adaptation and hybridity, thereby requiring reflexive responses to internal and external elements, as well as stakeholder demands.

In Kyiv-Mohyla Academy's institutional landscape viewed through North's theoretical lens, the phenomenon of internationalization represents an ongoing challenge of *external* adaptation and *internal* integration with which the institution must cope. North (1997, 20) explores organizational dynamics under the framework of incomplete information, increased specialization, divisions of labour, and transaction costs which shape the direction of long-term change. In the context of the operationalization dimension, the theory of institutional change provides additional dimension to assess change management processes, as well as the modes of interaction between institutional actors and existing structures.

OPERATIONALIZING INTERNATIONALIZATION

The case study respondents provide important insight into the operationalization dimension at Kyiv-Mohyla Academy, as internationalization represents 'an innovation from outside' which has been integrated into the core functions of teaching and research (NUKMA 09-03-16). In a similar vein, the operationalization dimension provides valuable insight on

how internationalization manifests itself through various actor-centred perspectives and epistemic communities within the same university.

The respondents acknowledged that internationalization has evolved into an integral component of the Academy's operational activities, while affirming that strategic partnerships and the adoption of external innovations in curricular design, teaching and research have advanced significantly in recent years. This tendency appears likely to continue in future. The interview data provide a useful overview of the operational elements, which drive Kyiv-Mohyla Academy's internationalization activities; namely:

- i) The bilingual (Ukrainian-English) character of the university, which helps foster a favourable environment for international engagement;
- ii) An 'embedded' approach to internationalization efforts;
- iii) Steady flows of students and staff to and from partner institutions;
- iv) Institutional collaboration in key European and international academic networks.

The data sets support the accuracy of these findings and provide critical insight into the operationalization dimension at Kyiv-Mohyla Academy. Beginning with the issue of fostering an international environment, it is important to note that bilingualism is an integral component of the Academy's persona – woven into the institutional fabric by way of the Ukrainian and English languages. This comparative advantage has become, in many regards, a 'currency' and a signature feature of the university's institutional identity. The Academy has leveraged its bilingual character as a means of strategically engaging international partners and improving its positionality within the regional knowledge system. In a similar vein, this element appears to reinforce the notion of the university as

a provider of an educational alternative to the Soviet higher education legacy. As a senior administrator insightfully summarizes:

[T]here is the reality of an awful lot of Western visiting faculty coming to Kyiv-Mohyla Academy on a regular basis. If you're going to access those Western faculty, you're going to have to speak English. The reality is that now the rest of the country is catching up, but for the last 15 years one of the things that's made Kyiv-Mohyla Academy so unique is [that] the students speak English! They [students] get extensive English-language training during their first and second years, and they come to us already having some knowledge of English. That immediately sets us up for an international focus. It also sets up a scenario where our graduates tend to be more in demand in international companies (NUKMA 09-03-16).

In a similar vein, respondents indicated that the English language is an integrative medium of internationalizing the curriculum and research, to the degree that the Kyiv-Mohyla Academy cannot exist in isolation (BC 04-03-16). Respondents contend that the bilingual character of the institution is an integral component which has advanced internationalization efforts and is widely perceived as a comparative advantage over other Ukrainian National Research Universities. Furthermore, the data indicate that the English language is a vital element of expanding geographical reach, leveraging institutional strengths and facilitating knowledge production efforts; given the changing learning environment, which is shifting the operational dimension from academic *mobility* to knowledge *mobilization*.¹⁵

In addition to the centrality of language to the institutional character of the university, the Kyiv-Mohyla doctoral school instituted a range of additional requirements for students in its structured PhD program above and beyond the traditional requisites of the Soviet-

¹⁵ 2016 was declared the “Year of the English Language in Ukraine” by presidential decree (President of Ukraine 2015).

modeled *aspirantura*; including: autonomous entrance examinations; drafting doctoral thesis proposals in English; conducting an original research project which makes a meaningful contribution to the field of study; publishing a minimum of one academic paper in an international peer-review journal; and participating in a minimum of one international conference (NUKMA 9-03-16; NUKMA 9-03-16a).

In addition, the Kyiv-Mohyla Academy doctoral school recommends international co-supervision to its PhD candidates; however, stops short of making this option compulsory, given the challenge of matching co-supervisors across various disciplinary fields (NUKMA 9-03-16). A respondent provided additional depth and dimension into this area of insight, while contemplating upon the English language as a contributing factor towards the enhancement of teaching and research:

Part of the curriculum of the doctoral school [requires] a PhD student in their first year to write a doctoral proposal. That doctoral proposal is usually about 50 to 60 pages. We've instituted that it is now written in English and has been for the last five years or so, because originally it wasn't necessarily in English. Based on that doctoral proposal, we try to find an international co-supervisor for every student. I would say that we are successful in approximately 60 percent of cases... so I guess that's a measurement tool if you like – the extent to which our students have international co-supervisors. Is it formalized as a measurement we report upon? *No*. Is it something our doctoral students are very aware of and it motivates them to write better proposals and to work harder on their doctoral research? *I think so*. I think it's also one of the reasons that we have such a high completion rate (NUKMA 9-03-16 | emphasis in original).

The operationalization dimension casts critical light on the discourses and networks of the Academy's hybrid doctoral program. In a similar vein, it also illustrates the fundamental strategy behind third-cycle reforms, as explained by a case study participant from the Kyiv-Mohyla Academy doctoral school:

One of the things we are very proud of is the fact we had graduates of an alternative system and those graduates had gone through joint [PhD] thesis defences with Barcelona [Universitat Autònoma de Barcelona] with Maastricht University, with some going through thesis defences within the Ukrainian system and creating a sort of collage... We created this ‘hybrid’ and it legitimated us. Then when we started talking about how do we implement reform through legislation, there was never any question as to how it needed to be done. (NUKMA 09-03-16)

Beyond the use of English as a *lingua franca*, Kyiv-Mohyla Academy supports substantial international academic flows, which revolve around a range of modalities; including: bilateral mobility agreements, European framework initiatives, joint degrees, structured PhD programs, thematic networks and knowledge clusters, research institutes, and sustained engagement with higher education stakeholder agencies. Mobility flows are made possible by approximately 150 agreements between Kyiv-Mohyla Academy, international partner universities and research institutions (National University of Kyiv-Mohyla Academy 2015, 11). Despite these figures, a case study respondent underscored that the administration remains ‘skeptical’ about sheer numbers, since several agreements remain inactive or redundant (NUKMA 25-11-16).

Global engagement activities are supported by the International Office, which is staffed by a director and five administrators assigned to the operational aspects of the Academy’s internationalization efforts. The International Office represents a small, but distinct administrative unit that operates as an extension of the central administration and maintains a direct line of communication with the President (NUKMA 25-11-16). The division of labour at the International Office provides insight on the way Kyiv-Mohyla Academy self-organizes to respond to changing institutional needs. This approach takes its cue from

Laitinen (2012), who describes the broad diffusion of responsibilities between various actors on campus as an example of mainstreaming or ‘embedded’ internationalization. This distributed mode of management has entrenched international content into the structure of courses, academic programs and research, while maintaining key administrative responsibilities centralized.

OPERATIONAL SPACES OF ACTION

A secondary theme that emerges from the data indicates that the operationalization dimension at Kyiv-Mohyla Academy is driven by a combined centralized/de-centralized approach. The interview data and related resources support the accuracy of this perspective, insofar as the operational space brings together different institutional actors with diverse capacities for multi-actor participation.

Within this context, the International Office is divided along three distinct lines of activity – a European section, which oversees institutional coordination for Erasmus⁺ mobility initiatives; an international division responsible for bilateral agreements and educational grants; and a third sector, which manages incoming student and faculty integration, Ukrainian language training for foreigners, visas and residence permits. These operational elements provide important evidence of the way in which institutional change at Kyiv-Mohyla Academy unfolds in order to meet the demands of an increasingly interconnected learning and research environment.

Beyond academic mobility, Kyiv-Mohyla Academy’s association with internationally-focused scholarly networks reflects an important aspect of the operationalization

dimension. Given the increased understanding that universities play a pivotal role in self-transformation through critical engagement with each other (Delanty 2001, 128), the Academy actively promotes its interests and advances international higher education objectives via institutional membership in such academic networks as the European Association of International Educators (EAIE) and the European University Association (EUA). Recognizing the need for greater global visibility, Kyiv-Mohyla Academy is actively preparing its first application to the 2018 QS and Times Higher Education World University Rankings (NUKMA 25-11-16).

The majority of case study participants repeatedly echoed the strategic relationship Kyiv-Mohyla Academy has developed with EU higher education stakeholder institutions. Especially important are the highly salient lines of action with the TEMPUS, Erasmus⁺ and Horizon 2020 programs, as well as the Jean Monnet Centre of Excellence. In addition to EU-centered programs, strong linkages exist with a range of national higher education stakeholder agencies; including: the British Council, Campus France, Fulbright Ukraine, the German Academic Exchange Service (DAAD) and the Goethe Institute.

In terms of strategic priorities, Kyiv-Mohyla's link to Europe represents a historic, yet dynamic and rapidly evolving vector of development. The Academy's strategic focus on EU university partners and stakeholder agencies suggests that partnerships are driven, to a large extent, by historical and contemporary affinities, as well as institutional continuity. The data indicates that Europe remains Kyiv-Mohyla Academy's strongest connection, given the lengthy and multifaceted relationship which has evolved between European

partner universities and higher education stakeholder agencies since the university's reincarnation in 1991. Evidence of this is reflected in the high proportion of international agreements, European framework initiatives, bilateral agreements, thematic research networks and knowledge alliances. The Erasmus Mundus/Erasmus⁺ initiatives, TEMPUS, as well as the Horizon 2020 research and innovation program stand out as the most prevalent in terms of knowledge branding, institutional visibility and international footprint.

These findings were confirmed by the majority of case study respondents. In a similar vein, both sides of the academic and administrative house noted that engagement with universities in new EU member states of Central and Eastern Europe represent a strategic vector of the operationalization dimension, not only because of geographic proximity, but also for historic, cultural and linguistic reasons. Faculty and staff made repeated reference to key partner universities in Poland and the Baltic States as potential institutional models for emulation, insofar as shared post-socialist experiences have facilitated strategic linkages. The interview data reveal that these interdependent regional partnerships serve an important 'icebreaker' function by facilitating a 'window' to Europe. From this perspective, regional linkages can be understood as a heuristic 'shortcut' designed to build upon similar higher education reform experiences and learning from [the near] abroad – thereby advancing the process of institutional adaptation and change.

The provision of scholarships under the auspices of the Visegrad Fund and other national granting agencies represent notable secondary lines of action, which complement EU

cooperation initiatives and reinforce regional linkages.¹⁶ These sub-regional networks are a testament to the wide array of international partnerships between Kyiv-Mohyla Academy and university counterparts in Ukraine's immediate geographic periphery.

Consistent with this view, Kyiv-Mohyla Academy established a UNESCO Chairs program and became a signatory to the UNITWIN network in 1998. These joint initiatives promote inter-university cooperation and networking to enhance institutional capacities through knowledge sharing and scholarly cooperation with over 700 institutions in 130 countries. The objective is to initiate high-level research, training and scholarly publications for the purpose of fostering nation-wide reference points in the field of human rights, as well as poles of excellence at the regional level.

In a similar vein, the establishment of the Jean Monnet Centre for European Studies at Kyiv-Mohyla Academy in 2011 was the first of its kind to be opened in Ukraine. The Jean Monnet Actions are EU-supported initiatives designed to support academic programming, which focus on the development of interdisciplinary teaching activities and new lines of study on European integration. According to a respondent, the Jean Monnet Centre's teaching and research activities are recognized as being 'unparalleled' in Ukraine in light of its multi-disciplinary approach in the area of European studies, research methods and promotion of research by emerging scholars (NUKMA 09-03-16a). In a similar vein, it

¹⁶ The purpose of the Visegrad Fund is to facilitate and promote the development of closer cooperation among Eastern Partnership regions and the Western Balkans in the areas of science and research, cross-border cooperation and student mobility.

was noted that not all universities in Ukraine are eager to cooperate with the Jean Monnet Centre due to different institutional cultures and fear of competition (NUKMA 09-03-16a).

Designed to operate within a *glonacal* framework (Marginson and Rhoades 2002), the Jean Monnet Centre contributes to doctoral training by collaborating with scholars, researchers and content experts across a range of disciplines. This network supports various activities to advance the co-creation of knowledge; including: thesis co-supervision, joint research projects, conferences and contributing to national and international scholarly journals (NUKMA 30-11-16). A case study participant underscored that the operational aspects of the Jean Monnet Centre would be “difficult to imagine without internationalization”, since its activities are geared to create synergies and informed discourse within a wider transatlantic network (NUKMA 30-11-16). Furthermore, this educational import shows a high level of compatibility with existing academic structures at Kyiv-Mohyla Academy.

Beyond large-scale regional knowledge clusters and research networks, the operationalization dimension illuminates smaller-scale collaboration between Kyiv-Mohyla Academy, international partners and individual academics. The Academy was the first university in the post-Soviet region to offer an international summer program in 1998 (NUKMA 2-12-16). Initially supported by the Soros Foundation Network, the program originally began as an annual gathering of scholars from across Ukraine as a means of networking with visiting Western lecturers and learning from abroad without the need to leave the country (NUKMA 2-12-16).

Moving from the historical to the contemporary context, the international summer program addresses selected topics in contemporary Ukrainian, European and Eurasian studies. The seminars are selected through a competitive, merit-based process and managed by individual scholars and departments, while institutional oversight is provided by the International Office. This on-site, faculty-driven initiative fosters strategic connections among academics, students and young researchers, while simultaneously reinforcing partnerships based on common standards and academic relevance.

This collaborative initiative can be understood along the lines of a historic continuum, which developed organically out of individual partnerships, mutually interesting problems and intellectual symmetry (see Warner 2008). Furthermore, the interview data reveal that Kyiv-Mohyla Academy adopted a trimester system by design, rather than by default in order to attract international visiting lecturers during the summer months, as well as expose faculty and students to European and North American teaching methods (NUKMA 2-12-16). This ‘bottom-up’ approach is also a vivid example of the Academy’s tactic of promoting ‘internationalization at home’ (NUKMA 25-11-16). At the same time, it provides an example of the combined centralized/de-centralized approach to the operationalization dimension at Kyiv-Mohyla Academy, which allows for different entry points to international engagement activities throughout the institution.

Kyiv-Mohyla Academy has been motivated to internationalize by carefully calibrating partnerships for strategic purposes. From this perspective, the interview data reveal that senior administrators sought to develop tactical partnerships with top-ranked international

universities to better position the Academy from its very inception in order to “drive the university forward” (NUKMA 2-12-16). These clusters include: Charles University (Czech Republic), Central European University (Hungary), Jagiellonian University (Poland), Sciences Po Paris (France), University of Helsinki (Finland), and the University of Oslo (Norway). According to respondents, these partnerships were successful in light of the academic linkages and lasting alliances that were developed via bilateral and EU framework programs.

Following closely along these lines, the rapid expansion and penetration of the TEMPUS program has made a notable impact on the operationalization dimension at the Academy over the last two decades, prompting a series of administrative and academic changes. Described as a “model of EU support being used as a catalytic intervention within a system” (Gwyn 1999, 133), the Academy was one of four National Research Universities selected to take part in the initial TEMPUS (1994–1998) structural measure programs, which focused on higher education governance, curricular ‘modernization’, as well as fostering multi-disciplinarity and implementing European approaches to Master’s degree programs in Ukraine (European Commission 2015a, 3-4).

Kyiv-Mohyla Academy participated in a total of 28 TEMPUS structural measure and capacity building projects since the program’s introduction to Ukraine in 1994 (National TEMPUS/Erasmus⁺ Office in Ukraine 2014, 427). In addition to providing technical support, peer mentorship and a major source of funding for scholarly activities, the TEMPUS program formalized cooperation between EU Member States and Eastern

Partner countries to engage in structured reforms. At the conclusion of the project, each partner institution is expected to integrate the modules, curricular and/or administrative innovation into the curriculum and make the program self-sustaining.

The second-generation TEMPUS programs (2000–2006) introduced new subject areas and priorities, which corresponded with Ukraine’s accession to the EHEA. This phase of development was also devoted to the introduction of multi-disciplinary courses and innovation in curricular development, in addition to structural measures such as governance reforms, and higher education quality assurance frameworks based on Bologna Process recommendations and implementation of the ECTS (European Commission 2015a, 4). A senior respondent highlighted a major outcome of these efforts, while underscoring underlying tensions:

The fact that we have a School of Social Work is a result of a lot of international contacts. Social Work didn’t exist as a subject area in Ukraine before it became part of Kyiv-Mohyla Academy and that was definitely an innovation from outside... The School of Public Health is another, since health in Ukraine was always a function of medical universities, which were always separate from the Ministry of Education and run by the Ministry of Health, and still is... The School of Public Health is a place where you learn how to manage the health system. It’s problematic because the health system is unreformed, and you’ve got a bunch of people that are basically trained to work under a reformed health care system; but nevertheless, that’s something that definitely came from outside (NUKMA 09-03-16).

In latter instalments of the TEMPUS program (2007–2013), institutional redevelopment initiatives took priority, which went beyond curricular reform and led to the creation of new academic units and centres. Two major outcomes were the creation of the Kyiv-Mohyla Academy doctoral school and the Network of Innovating Laboratories initiative

(INNOLAB),¹⁷ an inter-regional knowledge cluster, which attempted to create a functional ‘Triple Helix’ model (Etzkowitz & Leydesdorff 2000) for the purpose of stimulating a regional innovation ‘ecosystem’ by linking academia, government and industry in Ukraine and Belarus (National TEMPUS/Erasmus⁺ Office Ukraine 2014, 202). The operational challenges of transforming the research and development system in Ukraine are well documented, as are the issues of catalyzing new spaces for knowledge production and innovation (Yegorov 2008; Yegorov 2009; Yegorov & Ranga 2014).

Developed in partnership with the University of Bradford (United Kingdom), Tallinn University of Technology (Estonia) and Aristotle University of Thessaloniki (Greece); Kyiv-Mohyla Academy took the regional lead in the creation of new intellectual space for cross-border collaboration and dialogue. In addition to unlocking innovation customized to the dynamics and realities of the Ukrainian environment, the project initiated new graduate courses based on best practices and experiences of ‘entrepreneurial universities’ (Bazhal 2015, 5). This repositioning strategy was an attempt to create an effective ‘plug-in’ to enable academic-enterprise-government exchanges, stimulate local talent, and launch interdisciplinary platforms for innovation and resource-generating research and development activities.

Furthermore, the INNOLAB project identified evidence-based practices and gaps to better understand how to address the challenges of transforming Ukraine’s post-Soviet research

¹⁷ The full title of the INNOLAB project (2012-2014) reads “Innovation Laboratories: Using an open innovation learning platform and action research in enterprise education in order to enhance the engagement and innovative capabilities of universities in post-Socialist societies”.

and development system. The interview data provides additional insight to the INNOLAB project, as noted by a key respondent:

We are at the very beginning of [creating] the Triple Helix model in Ukraine. I would argue, and you may disagree, that we are at the starting point... Even those universities; for example, the Polytechnic University [Kyiv Polytechnic Institute] and others that claim to cooperate closely with private enterprise and the state... This is essentially a *linear* innovation process model – it is not a Triple Helix cooperation model whereby innovation is developed *jointly* (NUKMA 09-03-16a | emphasis in original).¹⁸

By late 2013, TEMPUS project activities were to be gradually phased out by the end of 2016 and its modalities merged into the new EU higher education cooperation program – Erasmus⁺. On a parallel track, Erasmus Mundus transitioned into Erasmus⁺ in 2014. Its operations were partitioned into two distinct components: (i) joint Master's degrees, belonging to the realm of the EHEA, and (ii) joint doctoral programs, which moved third-cycle training closer to the ERA. The bifurcation between the two academic cycles is based on the tenet that Europe, in its bid to become a global leader in the knowledge economy, cannot be supported by the same policy instruments that govern second-cycle degrees insofar as the doctorate becomes a greater means to the Lisbon objectives (innovation and economy) than the Bologna Process (harmonizing higher education systems). As such, this decision triggered a conceptual shift in the European higher education discourse surrounding doctoral training (Repečkaite 2016, 256-258).

¹⁸ The Centre for Innovations Development was created in 2013 as a spin-off of the INNOLAB project. Its mission is to build upon the work of the INNOLAB project and foster innovation by incubating domestic and in-house knowledge products, educational services, as well as leveraging institutional strengths by linking internal and external stakeholders, seeding venture capital and human resources for project development, training modules and commercializing new technologies (FN 05-12-16).

In addition to bilateral academic mobility programs, Kyiv-Mohyla Academy has been active in 39 Erasmus⁺ Actions on Mobility and Cooperation in Higher Education during the 2015–2019 academic cycles. The Academy's engagement strategy included participation in thematic network projects and academic mobility initiatives specifically designed for both the structured PhD and *aspirantura* streams. The Erasmus⁺ program is intended to enhance quality in higher education through academic mobility and cooperation between the EU and various regions of the world. In addition to providing structural support to faculty and staff mobility; graduate students pursue integrated programs of study and earn transferable credits at two or more higher education institutions outside of Ukraine. The Erasmus⁺ program (and previous iterations thereof) endeavours to boost the attractiveness of European higher education, often targeting specific disciplines by supporting joint graduate (dual Masters and PhD) training programs, which operate as thematic consortia.

Taken together, the EU higher education support mechanisms and country-specific initiatives facilitate an important platform for international operations, curricular innovation and institutional change. The TEMPUS and Erasmus programs serve to reinforce and harmonize relations between target universities, the Ministry of Education and Science of Ukraine, the National Academy of Educational Sciences of Ukraine and its affiliated higher education institutes. Viewed through a multi-actor perspective, the operationalization dimension provides important evidence of the way Kyiv-Mohyla Academy self-organizes to respond to internal and external stakeholder demands, as well as context-specific needs and activities.

While the operationalization dimension appears to be set on solid academic and administrative foundations, challenges remain in this pivotal area. Respondents from across the Academy (as well as the other case study universities) consistently cited funding as an obstacle to pursuing international activities. Insofar as academic mobility and international project activities are funded almost entirely by external sources; faculty, researchers and students must constantly seek grants and scholarships in order to cover costs. Despite Kyiv-Mohyla's strong emphasis on academic mobility and broad institutional support for international competency building, the Academy does not provide mobility scholarships, nor had the central administration allocated a separate budget for the International Office's activities (NUMKA 25-11-16). Salaries of the International Office staff are provided by the central administration, while revenue for additional support personnel is generated from tuition fees, grants and project funding (NUMKA 25-11-16).

All case study participants expressed the need to secure adequate funding in order to participate in international scholarship. This point was particularly salient among doctoral students, considering that the majority of those interviewed were pursuing employment opportunities outside of their studies in order to supplement modest state stipends, pay tuition fees, and defray the high cost of living in Kyiv.¹⁹ The cost differential was acknowledged as a major obstacle to obtaining an international learning experience or research opportunity. Finally, the doctoral candidates interviewed reinforced the view that participation in an international academic mobility or research program is conditional upon obtaining adequate funding.

¹⁹ The average stipend for a doctoral candidate in Ukraine is approximately US \$100 per month (NUKMA 26-11-16).

Despite wide-ranging autonomy as a National Research University, residual state monetary controls are a mitigating factor to Kyiv-Mohyla Academy's operational efforts (Kalashnikova et al. 2016, 10). The current legislation stipulates that 75% of incoming foreign currency entering state university budgets is to be sold to the National Bank of Ukraine in accordance with interbank exchange rates (National Bank of Ukraine 2015). Despite the implications these budgetary constraints have on the operations dimension, international projects remain a lifeline for Ukrainian universities. In spite of ongoing lobbying efforts aimed at resolving fiscal tensions between the university and the state, the issue remains a challenge to the operationalization dimension (NUKMA 09-03-16a). These operational challenges are compounded by volatile exchange rates and steady depreciation of the Ukrainian national currency since early 2014.

This situation is further complicated by the fact that redundant and often contradictory laws remain in force, and have yet to catch up with the new operational realities of the Ukrainian higher education environment; despite provisions outlined in the "Law on Higher Education" that provides a greater range of institutional and financial autonomy to universities. The resulting policy misalignments have caused negative downstream effects by impeding the positionality of Ukrainian National Research Universities in taking on a greater leadership role in international activities. A TEMPUS country report notes that Ukrainian administrators are often compelled to seek counterparts in neighbouring EU partner universities in order to manage project funds and coordinate grant activities (National TEMPUS/Erasmus⁺ Office in Ukraine 2015, 29). Ukrainian administrators [sometimes reluctantly] relinquish responsibility for project management and oversight,

despite active involvement throughout a given program's conceptual design, development and life cycle. As a result, administrators and faculty often fail to benefit from valuable international project management experience.

Operational challenges are further compounded by resource asymmetries, which highlight tensions and hierarchies between academic 'centres' and 'peripheries'. The most common examples cited by respondents was the need to seek external funding for international academic activities. Furthermore, the interview data confirmed an important, but increasingly bypassed role for national higher education stakeholder agencies and growing reliance upon European funding instruments for international financial support (NUKMA 25-11-16). The data sets from Kyiv-Mohyla Academy present a multifaceted picture of how the operationalization dimension plays out at this university.

The data also point to an increase in new forms of knowledge production through international linkage and exchange, as well as collaborative approaches to transforming knowledge boundaries. Similarly, the Academy has embraced an ambitious agenda of third-cycle reforms, which evolved over time into a national best practice model. Despite bureaucratic and financial hurdles, Kyiv-Mohyla Academy remains operationally engaged and will likely continue along this trajectory in the foreseeable future. Taken together, these issues highlight key challenges the Academy faces in its transition towards the 'Europe of Knowledge'.

REVIEW

Knight (1994, 13) defines the review dimension of the Internationalization Cycle as a two-step audit process. The first, involves an analytical overview of how the university monitors its international activities and the ways in which oversight is being conducted. The second step relates to the extent to which internationalization is incorporated across the organization's evaluation and review efforts. The university viewed under North's lens affirms that organizations will engage in acquiring skills and knowledge that enhance its survival possibilities. As such, North's theory of institutional change examines cooperation under the more challenging circumstances of non-repeated interactions, incomplete information and large numbers of players. The model advances the idea that institutions provide a mechanism for incremental change, because they facilitate opportunities for new forms of negotiation and compromise. The data clearly support the conclusion that Kyiv-Mohyla Academy has a dynamic and evolving international portfolio; however, the review dimension reveals a limited scope of activity.

Despite the limited information gathered around this dimension, case study participants indicated a growing interest in expanding review efforts beyond current levels. As such, respondents noted that Kyiv-Mohyla Academy conducts its international review activities in a less structured manner. A senior administrator acknowledged that although the Academy performs an annual evaluation of its operations, which sets benchmarks and indicators for international activities, the university does not have a formal internationalization strategy (see President of the National University of Kyiv-Mohyla Academy 2016). Secondary lines of inquiry reveal that future plans are underway to

implement ‘precise benchmarks’ to gauge international outcomes and ensure close articulation between stated objectives and outcomes (NUKMA 25-11-16).

In the absence of a formal and systematic review process, respondents referred to external benchmarks, noting that EU bilateral, research and network partnerships have their own [indigenous] evaluation and quality assurance mechanisms to assess the effectiveness of given program or initiative. Other case study participants cited scholarly outputs, such as numbers of students participating in joint degrees and mobility programs, professors engaged in collaborative initiatives, publications in international peer-reviewed journals, research grants and university rankings as measures of success at a given margin (NUKMA 25-11-16; NUKMA 2-12-16). Finally, it was noted that the university’s third-cycle reforms, coupled with major outreach efforts, high ratio of influential alumni measured against the relatively small student population are elements which came within the scope of Kyiv-Mohyla Academy’s informal review dimension (NUKMA 9-03-16).

The interview data casts additional light on the positionality of the Academy from both the mental constructs of the players (North 1990, 111) and the broader perspective of academic ‘centres’ and ‘peripheries’, as candidly noted by a respondent:

We talk about being recognized on a world stage, etcetera, etcetera... but in reality, if we are honest with ourselves, we are a small provincial, *prestigious* liberal arts school. There is nothing wrong with that, but we need to understand what we are. For Ukraine we are extremely influential. As soon as you get out of Ukraine’s borders... (NUKMA 9-03-16 | emphasis in original)

On the administrative side of the house, case study respondents spoke in rather general terms when providing data that relate to the review dimension. From this perspective, the success of Kyiv-Mohyla Academy's international activities are measured against the results they deliver. Respondents noted that the Academy's objectives are in step with the overarching objective of gaining recognition as a player on the international scene, closer alignment with developments in higher education across Europe, as well as defining the university's place within the broader framework of the EHEA (NUKMA 25-11-16; NUKMA 28-11-16). In a similar vein, a case study respondent offered a more critical perspective on the Academy's Bologna-compliant PhD programs. While maintaining an overall positive outlook on the institutional achievement record, the respondent argued that the structured PhD programs are relatively new, thereby requiring additional academic rigour in order to demonstrate quality. It was also noted that attracting top international lecturers remains a challenge due to a lack of funding (NUKMA 28-11-16).

Another set of indicators from the data point to Kyiv-Mohyla Academy's preparedness to enter the Bologna Process from its very inception to the Ukrainian higher education system, in addition to the institutional pre-conditions which made it possible. A respondent underscored that many enabling elements were already in place; including: the Academy's position as an early adopter to ECTS standards, elective courses, multi-disciplinary learning pathways, as well as the existence of EHEA-compliant Bachelor's and Master's programs since the early 1990s (NUKMA 25-11-16).

The interview data also reveal that internationalization is increasingly perceived as a form of *agency* to legitimize reforms and bring about a greater degree of institutional alignment with European academic programs, norms and standards. A respondent acknowledged this perspective – both in terms of legitimizing third-cycle reforms and transforming knowledge boundaries, underscoring:

One of the ways in which we legitimize reform to a Ukrainian audience is by showing that we are recognized or partnered with international partners... I don't think it's ever actually been verbalized this way, but I'll try it for the first time. Internationalization is used as a means of *legitimization*; first of all. And secondly, as a very important means of stimulating or motivating cooperation internally from supervisors, from academic staff, from students... The offer is, with this new model, because of our international contacts you will have greater abilities to travel, to publish jointly, to do various things you would not have the ability to do under the old Soviet model because it was incompatible with what they do in the West. (NUKMA 9-03-16 | emphasis in original)

Despite the lack of formalized and comprehensive review mechanisms at Kyiv-Mohyla Academy, the interview data nonetheless show concerted attempts at assessing the outcome of international activities beyond current levels. In a similar vein, the data provide a glimpse into the broader question of *how* tensions are reconciled with competing values and expectations of institutional stakeholders, as well as the Academy's unique pathway to the EHEA.

REINFORCEMENT

The reinforcement dimension of the Internationalization Cycle (Knight 1994, 14) considers the way in which higher education institutions provide recognition and incentives to key actors who advance the university's internationalization efforts. Viewed through a Northian lens, this element plays a reinforcing role via network externalities and increasing

returns (North 1990, 137), which have placed a decisive signature on Kyiv-Mohyla Academy's institutional matrix.

The data gathered from the case study participants reveal a number of important developments, as well as underlying tensions between increased expectations generated by the internationalization process and resource asymmetries, which have become a defining feature of the Ukrainian higher education landscape. From this perspective, the discussion inevitably turns the focus of the analysis to issues of funding.

To this end, financial limitations are a common theme across the reinforcement dimension. Respondents acknowledged that there are few resources in the national higher education system and the same time, underscore the challenge of maintaining a tempo of innovation under such conditions before losing momentum. The perceptions around the dynamics of the reinforcement dimension indicate positive efforts and achievements in this area; however, the data also suggest that there are gaps in addressing institutional expectations.

An analysis of the reinforcement dimension echoes a major tension between the need to drive innovation and securing adequate levels of funding. A faculty member argues that resource asymmetries can negatively affect faculty interest in international engagement efforts, noting:

The effort that is expended on internationalization, grant writing, traveling and all of that is time and effort that is taken away from writing papers and books, etc. And I'm at a stage right now where I want to write papers and books... but there is certainly no funding for writing papers and books, so you're put into a situation where you're going to have to look for the

funding and that's going to take away time from papers and books, and so you get into this vicious cycle... (NUKMA 09-03-16).

The reinforcement dimension also raises issues linked to professional development as an incentive to those who partake and advance internationalization efforts. Within the realities of the contemporary Ukrainian higher education environment, securing adequate resources to pursue scholarly endeavours remains a constant challenge. The interview data indicates that faculty and doctoral students inherently perceive internationalization as a means of advancing their academic careers and research objectives. This perspective was captured by a senior administrator, who suggested that international engagement of Kyiv-Mohyla scholars represents a means of reconciling tensions within the broader framework of academic centres and peripheries; underscoring: “[They] want to understand the world, and they want the world to understand them...” (NUKMA 02-12-16). Following closely along these lines, the respondent noted a distinctive split in participation rates among older and younger faculty members, in addition to those who are proficient in foreign languages and those who are not.

The reinforcement dimension remains a somewhat elusive element to gauge due to resource asymmetries and the decentralized nature of Kyiv-Mohyla Academy's internationalization process. As evidenced by this perspective, Kyiv-Mohyla presents a mixed picture, considering that recognition of international advancement is widely supported *internally* on the one hand; however, incentives are largely *externalized* in the form of research and lectureship opportunities abroad. Recognizing and rewarding the role played by faculty is integral to successful internationalization; however, this element

remains highly dependent upon network externalities such as outside sources of funding and partnerships. As a case in point, a respondent noted that faculty members were rewarded with placements at prestigious European partner universities for up to six months for their contributions to structural PhD reforms (NUKMA 02-12-16).

In a similar vein, a senior administrator noted that Kyiv-Mohyla Academy takes a positive reinforcement approach by providing barrier-free access to international grant applications, while actively encouraging faculty and students to apply for external scholarships and competitions (NUKMA 02-12-16). From this perspective, the discussion inevitably turns to issues of institutional transparency and corruption. Unpacking these elements further, a respondent underscored that Kyiv-Mohyla Academy fosters a merit-based approach to rewarding faculty and students, in as much as they advance both institutional and personal goals (NUKMA 02-12-16). Nonetheless, administrators, faculty and doctoral candidates alike were quick to note that other Ukrainian National Research Universities do not necessarily follow the same transparent approaches; particularly when it comes to the dissemination of information, transparency and ethical selection procedures.

The reinforcement dimension has also captured views on the pressing issue of institutional brain drain. The discussion with case study respondents at Kyiv-Mohyla Academy suggest that while international mobility is perceived in an overall positive light, the practice brings with it an inherent element of risk. According to a faculty member, student mobility periods of two to three months are considered too short and ineffective, whereas one-year

terms increase the risk of brain drain; while six months is regarded as optimal (NUKMA 9-03-16).

A similar sentiment was echoed by a senior faculty member who noted that in recent years, approximately a dozen Kyiv-Mohyla Academy alumni earned their PhD degrees abroad and returned to assume tenure-track positions (NUKMA 2-12-16). In the opinion of the respondent, brain circulation can be achieved if 30⁺ internationally-trained doctoral graduates rejoin the university. Admittedly, more needs to be done to attract and retain a qualified labour pool, as well as promote stakeholder buy-in. On the administrative side of the house, Kyiv-Mohyla Academy instituted paid sabbaticals to its tenure-track faculty in February 2017 (NUKMA 10-02-17).

As an innovation from the outside, this modality sheds light on the administration's change management tactics to the internal governance of the university. Considering that the 'players' within the institution act as agents of change, modifications to the "codes of conduct, norms of behaviour, and conventions" as well as "extensions, elaborations and modifications of formal rules" (North 1990, 36-40) help institutional actors to coordinate their activities and manage expectations. While professors are given recognition for these efforts when evaluated, their involvement in international outreach activities receives little compensation in terms of additional salary and resources.

Finally, analysis of the reinforcement dimension highlights a major tension between academic entrepreneurship and resource asymmetries, as explained by a senior administrator who argues for the need to reinvigorate Kyiv-Mohyla Academy:

I think that the major challenge is that enthusiasm for developing the doctoral school and developing new and innovative models of administering, management and doing research and all of that [is that] you can only work on enthusiasm for so long and one of the things that has been a challenge for the university in general... The number of people that are influential in Ukraine that are graduates of our university is astronomical... Clearly, we've been doing something right, but the problem is that it has been fuelled by a lot of enthusiasm and I would call it *academic entrepreneurship* or *ethic*, and I think that it can last for so long... I'm experiencing this now, but when I listen to people that have been with Mohyla for the last 20 years – since the very beginning – five or six years ago, I would say: “why don't you have enthusiasm, etc...” And now that spark of enthusiasm is starting to die in me as well, and I think overall, the spark of enthusiasm is beginning to die in the institution, which is problematic – I think it's a major challenge (NUKMA 09-03-16 | emphasis in original).

At the same time, the respondent points to potential sources of institutional renewal, explaining:

I think that one of the things that really needs to happen is some serious funding for an endowment. Endowments are going to make or break universities in this country. Kyiv-Mohyla has a very good heads-up on everybody else, but it's a lot of work and it's an awful lot of good will and a real need for trust on the part of potential donors. And I think that trust, at this point, is not being fostered by the political environment in Ukraine and so it's problematic. Having said that, I think that if we found our *Rockefeller* if you like, in other words, somebody who would put in the first real seed grant... What the university really needs right now is a donation of \$10–\$15 million and that then becomes a legitimate endowment. Unfortunately, it is about *money* and it's about *independence* (NUKMA 09-03-16 | emphasis in original).

As demonstrated by this wide range of perspectives, Kyiv-Mohyla presents a mixed picture across the reinforcement dimension. The Academy's increased dependence upon network

externalities underscores the growing need to not only identify sources of funding for its international activities, but also to maintain a degree of institutional sustainability. Financial instruments and grant mechanisms are acknowledged as “strong incentives for internationalization efforts and a means of reaching strategic goals” (NUKMA 25-11-16). In the context of this case study, these insights demonstrate a dynamic and evolving institutional framework, which is highly receptive to international activity and closer alignment with the imperatives of the EHEA and ERA. Despite mixed outcomes, greater reliance upon external funding has increased the risk of new forms of [path] dependence, as explained by Repečkaite (2016, 258):

This move cements the European model of three-cycle education (undergraduate, graduate, and post-graduate)... As participating universities adapt their organizational structures, there is no way back for them – EU-wide networking and generous funding creates habits that institutions are eager to sustain, often with subsequent applications for more EU funding.

RATIONALE

The data from Kyiv-Mohyla Academy suggest that there are three overarching rationales motivating the university to pursue an agenda of internationalization. The first rationale reveals that internationalization is an integral component of the Academy’s academic mission, insofar as the phenomenon has evolved into a pathway of aligning teaching and research with developments in higher education across Europe and globally. The second rationale can be interpreted along the lines of a historic continuum and institutional principle, which has guided the Academy since its revival following the collapse of the Soviet Union. The third factor can be attributed to economic rationales, which motivate Kyiv-Mohyla Academy to implement the demands of the EHEA and ERA, despite resource asymmetries.

Kyiv-Mohyla Academy's decisive break from previous norms of academic work and training methods was captured from the perspective of a senior administrator, who explained the institutional significance of international engagement from its very inception:

We [Kyiv-Mohyla Academy] escaped the Soviet legacy by shifting to a Western model of higher education. Internationalization was our way out... it was absolutely clear. The global model was understood by Kyiv-Mohyla Academy and the Soviet system was dated. The Soviet system produced 'specialists' who didn't have individuality – only a role. We didn't want [our] students to take on a role, but to take on a persona and develop meta-thinkers (NUKMA 2-12-16).

From this perspective, internationalization takes on a deeper meaning, considering that the Academy has embedded its commitment to the phenomenon and as a result, evolved into a defining feature of the institutional framework. This approach not only plays out on an administrative level, but on a professional and personal dimension, which contributes to the core mission of the Academy and common understanding around this point.

Building upon these elements is the perception of Kyiv-Mohyla Academy's wider role as a national focal point for the introduction of new governance structures, management practices, strategic partnership models and third-cycle reforms. From this perspective, internationalization can be understood along the lines of a continuum stemming from a historic and contemporary legacy of engagement between Ukraine and Europe. Kyiv-Mohyla Academy's perception of its unique role is a prominent and recurring theme in discussions around internationalization. Against this context, it is important to note that Kyiv-Mohyla Academy was never integrated into the Soviet higher education area, nor was its institutional foundation rooted in the state-centered management legacy. As such, the

Academy's internationalization rationale assumed a different trajectory than the other universities in this case study.

STRATEGIES

The data from Kyiv-Mohyla Academy indicate that internationalization has taken on a multi-dimensional role as both an element of knowledge production through international linkage and exchange, as well as a catalyst of institutional change. Accordingly, the data suggest a strong link between Kyiv-Mohyla Academy's internationalization efforts and strategic alignment with European higher education structures as a means of keeping pace with regional and global academic standards. Respondents consistently cited the TEMPUS and Erasmus programs as transformative mechanisms, which facilitate technical assistance, funding, and intellectual space to negotiate the Academy's entry into the EHEA. In a similar vein, the aforementioned programs provide critical space to stimulate macro-policy shifts in education and research, catalyze national reform efforts and spearhead innovation for the emerging knowledge society and knowledge economy.

Although Kyiv-Mohyla Academy does not have a formal international strategy, long-established partnerships and institutional bilingualism demonstrate a clear preference for European engagement. Noteworthy are the Academy's strategic linkages with universities in new EU member states of Central and Eastern Europe, as well as the Baltic States, given their geographic proximity and common post-socialist history. Further analysis of Kyiv-Mohyla's international outlook reveals that personal connections among professors and researchers in the aforementioned regions have developed into formal partnerships over time. Important to note are the linkages formed by senior faculty who studied in socialist

bloc countries during the Soviet era and continue to maintain collegial ties to the present day. These academic circles provide evidence of the centrality of European engagement at this flagship university.

Within this context, all case study participants reiterated the importance of Kyiv-Mohyla Academy's linkage to influential European programs as providing the framework for the university's impetus for international engagement (NUKMA 25-11-16). These programs involve an array of strategic partnerships with participating member universities in the TEMPUS and Erasmus programs, as well as the development of thematic networks. The Academy's participation in the EU framework programs demonstrates the institution's overall orientation for greater alignment with the EHEA and ERA, as well as an important means of assuring its ongoing relevance. Discussions with faculty members reveal a strong motivating undercurrent for the simultaneous practice of cooperation and competition (*coopetition*) among partner institutions, as the university carefully calibrates its strategies for competitive advantage at home and abroad.

In as much as these collaborative initiatives and thematic networks facilitate the *outward* projection of Kyiv-Mohyla Academy on the international scene, they also act as catalysts for the *inward* infusion of European higher education policies, norms and practices into the university's curriculum and institutional framework. The interview data indicate that these educational 'imports' show high levels of compatibility with pre-existing structures at Kyiv-Mohyla Academy (NUKMA 30-11-16). From this perspective, contextual adaptations and hybrid PhD programs represent a strategy by which Kyiv-Mohyla has

made concerted attempts at reconciling European innovations with the Soviet higher education legacy. In a similar vein, the data suggest that internationalization is increasingly promoted as a means of legitimizing and advancing national third-cycle reforms, catalyzing cross-institutional synergies and fostering closer alignment with European academic institutions and governance structures.

OUTCOMES

Kyiv-Mohyla Academy has made significant institutional efforts at international outreach and at making academic programs and study cycles more comparable to the learning and research functions of the EHEA and ERA. At the same time, the data gathered from case study respondents give the distinct impression that these efforts have strengthened the Academy's resolve to position itself among national and international contemporaries. Kyiv-Mohyla Academy's decisive break from previous norms of academic work, curricular innovations, thematic networks and multi-disciplinary programs, which were previously non-existent under the Soviet higher education system provide strong evidence to support this claim.

The interview data also reveal that internationalization is increasingly perceived as a form of agency. Kyiv-Mohyla Academy's ability to internationalize deeply and comprehensively, while maintaining sufficient attention to quality and competitiveness, suggests that institutional leveraging plays a pivotal role in bridging academic 'centres' and 'peripheries'. Given the understanding that universities facilitate a process of self-transformation through critical engagement with one another (Delanty 2001, 128), they are also becoming increasingly interconnected as institutional frameworks evolve and expand.

In a similar vein, institutional actors draw upon a range of legitimizing discourses and networks to selectively modify meanings, mobilize resources and alter higher education governance structures.

This observation is particularly salient within the context of Kyiv-Mohyla Academy's integration into Bologna-compliant structures and third-cycle reforms. Insofar as the Academy's hybrid institutional dynamics represent a means of reconciling tensions between the Soviet higher education legacy and the contemporary demands of the EHEA, it also appears to function as a 'centrifugal gear' by leveraging strengths between institutional actors and external stakeholders. By the same token, it allows internationalization to play out at several speeds across different epistemic communities within the institution, thereby providing a mechanism for contextual adaptation and institutional change.

CHAPTER 5 KYIV POLYTECHNIC INSTITUTE

This chapter explores the phenomenon of internationalization at the National Technical University of Ukraine Kyiv Polytechnic Institute, through the conceptual framework of the Delta Cycle for Internationalization (Rumbley 2010) and institutional change theory (North 1990). Data for the case study was gathered through a series of 15 semi-structured interviews with respondents from across the university; including: senior administrators, faculty members, mid-level leaders, doctoral candidates and higher education stakeholder agencies, as well as official documents, grey materials, university websites and numerous campus visits. Multiple-actor perspectives facilitate nuanced analysis; while at the same time illuminate *how* the phenomenon of internationalization and its various dimensions play out in practice and as a function of institutional priorities, management cultures and resistance points.

Official documents, national legislation, scholarly articles, monographs, grey materials, university websites and observational data gathered through multiple campus visits provide additional insight into the university's internationalization experiences. Higher education stakeholder agencies and industry partners complement the data sets and provide additional depth to the inquiry. The analysis will allow for a wider consideration of the university's rationale, strategies and outcomes for internationalization. The objective of this chapter is to address the main research question; namely: How has Kyiv Polytechnic Institute responded to the challenges and imperatives of the global knowledge society since Ukraine's accession to the EHEA?

ORGANIZATIONAL OVERVIEW

Established in 1898 by royal decree of Tsar Nicholas II, Kyiv Polytechnic Institute serves as Ukraine's flagship technical and engineering university. Kyiv Polytechnic Institute is considered a national 'flagship' university and is the largest technical university of its kind in Ukraine. From the Polytechnic's inception, a major objective was to train a workforce to meet increased demand for industrialization, which was sweeping the borderland of the Russian Empire. In tandem with other technical training centers in the region – concurrent with the opening of the Warsaw Polytechnic in 1899 – Kyiv Polytechnic Institute promoted the development of advanced scientific and technical skills for the industrial revolution.

The Polytechnic's mission was to advance the transition of the Russian Empire from a predominantly agrarian society to an industrial society, a process which began later than most European nations. In a similar vein, Kyiv Polytechnic's *raison d'être* was to keep pace with the emerging industrial and global economic system, in addition to the rapid change in advanced technical training (Zgurovskyi et al. 1995). Over time, this designation left a distinctive mark on the university's organizational identity and institutional culture. Echoes of Kyiv Polytechnic Institute's original mission resonate to date. At present, the university functions within the framework of an independent nation state, however, its mandate is geared toward a society and economy which are increasingly knowledge-based.

Originally named Kyiv Polytechnic Institute of Emperor Alexander II, the university was structured around four colleges; including: chemistry, engineering, mechanics and agriculture. The 160-hectare campus was designed and built in the city centre at the hub

of administrative, commercial and cultural activities, as well as a strategic junction of roadways, water routes and railways. The Institute was modeled upon contemporary European technical training centres of the era, such as the Zurich, Karlsruhe, Munich, Vienna, Hannover, Aachen, Dresden and Riga Polytechnics (Zgurovskyi et al. 1995). Kyiv Polytechnic Institute grew in prominence in the late nineteenth century as Russian economic elites advanced westward to the European borderland to strengthen political and industrial positions (Oleksiienko 2014, 256).

Kyiv Polytechnic Institute became an important hub for applied technical learning and its significance grew following the Bolshevik Revolution. In 1918, the Academy of Sciences of Ukraine was established, along with affiliated research institutes. As a result of this division of intellectual labour, teaching and research were separated. At the same time, the Bolsheviks designated resource rich Ukraine as the centre of Soviet industrialization; however, continued to marginalize its national language and culture (Oleksiienko 2014, 256). As a result of Ukraine's failed attempt at achieving independent statehood and its subsequent incorporation into the Soviet Union in 1922, economic and nation-building rationales guided decision making with regard to higher education priorities and policy development. Soviet polytechnics, pedagogical and agricultural tertiary institutions made significant gains from the ensuing higher education macro-policy shifts and closure of all universities until 1920 (Hladchenko 2016, 380).

During the inter-war years, Kyiv Polytechnic became the foundation for the expansion and reinforcement of higher education networks in Kyiv and across Ukraine's regional centres.

The Polytechnic was subsequently amalgamated into the Soviet higher education space. From 1934 to 1948, the university was named ‘Kyiv Industrial Institute’, reflecting the Soviet Union’s rapid drive for industrialization and shift in national resource mobilization. With the onset of World War II, the Polytechnic was relocated to Tashkent (Uzbekistan) in June 1941, where it functioned as part of the Central Asian Industrial Institute. In November 1943, the Institute was reopened following the liberation of Kyiv by the Red Army; however, the Polytechnic suffered considerable human losses in terms of faculty, staff and students during the war. In addition, the campus sustained heavy infrastructural damage and material losses as a result of the Nazi occupation and the ensuing battle for Kyiv.

During the immediate post-war years, major efforts were directed at restoring the Polytechnic, including reconstruction, replacement of scientific equipment and library holdings. In a similar vein, efforts were aimed at updating curricula, revising teaching methods, training a technical workforce, as well as fostering links with state industry partners. The rapid gains made during this period earned it the title of Kyiv Polytechnic Institute of the Order of Lenin (1948–1968). Over the course of the following decades, the Polytechnic grew significantly in terms of departments, faculty and students. By the 1960s, Kyiv Polytechnic Institute trained hundreds of international students from the Eastern Bloc and developing nations of Africa, Asia and Latin America. The broader focus of Soviet foreign policy on the latter regions was on the development of educational and scientific contacts as a prelude to political relations (Kanet 1975; Rosen 1970).

On a parallel track, Kyiv Polytechnic Institute fostered ties with the military-industrial complex, which supported research and development in key strategic sectors; including: aerospace, agriculture, defence, metallurgy and mining. These industries were regarded by the Soviet leadership as being integral to centralized state planning and the Cold War effort (Oleksiyenko 2014, 256; Kalashnikova et al. 2016, 1-2). However, in contrast to most Western universities, fundamental research and development was carried out and based at the institutes of the Academy of Sciences, a practice that remains largely intact to the present day and sparked debate on the future of the research university (Oleksiyenko 2014, 257). Specialized forms of knowledge and analogous industrial partnerships were leveraged for benefit to the Soviet state, earning additional distinctions and a subsequent name change to Kyiv Polytechnic Institute of the Order of Lenin of the 50th Anniversary of the Great October Socialist Revolution (1968–1992).

During the 1970s, Kyiv Polytechnic Institute became a pivotal research university thanks, in part, to knowledge production efforts and collaborative linkages with over 200 state enterprises and research centres. As a result of its expanded reach, it was granted the status of a ‘Category 1’ research institution from the Soviet Ministry of Higher Education in 1972 (Zgurovskyi 1995, 74). Furthermore, Kyiv Polytechnic Institute received recognition for implementation of best practices and innovative approaches to industrial production methods, technical transfer, applied research, as well as joint research initiatives with state-owned enterprises and research institutes. At that time, the university expanded to 113 departments and 31,200 students; including approximately 490 scholars from 37 countries (Zgurovskyi 1995).

The 1980s brought about a major expansion and upgrade of campus facilities, further leveraging Kyiv Polytechnic Institute's position and visibility as one of the Soviet Union's premier technical and engineering universities. Throughout the decade, the Polytechnic systematically moved towards a target-oriented mode of organizing its teaching and research, indicative of the 'Mode 2' paradigm of knowledge production (Nowotny, Scott and Gibbons 2003, 179). This shift entails the commodification of knowledge and the supposition of application-specific inquiries into knowledge production efforts. As a result, Kyiv Polytechnic became a key organization for the implementation of a range of programs procured by the State Committee on Science and Technology, the State Planning Committee (*Gosplan*), as well as the Soviet Ministry of Higher Education.

The collapse of the Soviet Union in 1991 signified the beginning of a lengthy transition period for Kyiv Polytechnic Institute and for higher education in Ukraine in general. National independence brought with it the need to recalibrate the university's mission towards building an independent and modern nation state. From this perspective, Oleksiienko (2014, 258) highlights the imminent tensions surrounding Kyiv Polytechnic Institute's transition from the Soviet higher education space to a national higher education provider:

Kyiv Polytechnic has been particularly strong in advancing new performance standards in university-industry linkages. On the other hand, the technical universities' dependence on the Soviet-moulded military-industrial complex placed limits and strains on curricula modernization... Following global trends, polytechnics or special engineering institutes were upgraded to technical universities. This allowed them to gain a higher degree of autonomy and to dismantle the Soviet legacy of heavy top-down silo control in higher education. However, increased autonomy meant unsustainable funding for research and infrastructure, in the absence of

access to science and technology-sophisticated markets and innovation-seeking stakeholders.

In April 1995, Kyiv Polytechnic Institute was granted the title of ‘National Technical University’ by presidential decree (President of Ukraine 1995). The designation was made in recognition of the influential role Kyiv Polytechnic Institute contributed to the training of engineering and scientific personnel, as well as the 100th anniversary of its founding proclamation. Its special status brought with it enhanced funding and institutional autonomy, in addition to greater independence to generate income. The rebranding of Ukrainian flagship universities represented the state’s attempt at differentiating public and private tertiary institutions and establishing a national league table (Hladchenko 2016, 380).

In December 2006, the Kyiv Polytechnic Science Park was created as a separate legal entity by presidential decree, which provided the university with the necessary space to foster an ‘ecosystem of innovation’ for scientists to market intellectual products, develop consulting projects, as well as commercialize knowledge with national and international partners (President of Ukraine 2006). Furthermore, the Science Park in partnership with participating faculties and institutes supports business incubators and a start-up school under the ‘Sikorsky Challenge’ rubric. As the first Science Park of its kind in Ukraine, Kyiv Polytechnic Institute expanded its reach through the establishment of university-industry-government linkages, indicative of the ‘Triple Helix’ model (Etzkowitz & Leydesdorff 2000). Moreover, the Science Park works in partnership with academic units, government agencies and external stakeholders on catalyzing innovation transfer initiatives

and business incubators. Similarly, a limited amount of applied research takes place with doctoral and post-doctoral candidates on specialized forms of knowledge such as nano-satellites and the development of drone technology (KPI 7-03-16). Other Ukrainian National Research Universities soon followed suit; including: Lviv Polytechnic National University and Taras Shevchenko National University of Kyiv (KPI 7-03-16).

In 2007, Kyiv Polytechnic Institute was accredited with the title of an autonomous ‘National Research University’ by the Cabinet of Ministers of Ukraine, thereby using the designation of a ‘research university’ for the first time (Cabinet of Ministers of Ukraine 2007; Hladchenko et al. 2016, 118). An ambitious government project to build flagship universities in Ukraine earned Kyiv Polytechnic Institute a place in the Ukrainian ‘Ivy League’ thanks to its ‘research and innovation’, ‘integration between research, teaching and industrial applications’, as well as its ‘international projects and programs’ (Parliament of Ukraine 2010).

In 2013, Kyiv Polytechnic marked its 115th anniversary, an occasion that sparked reflection on the university’s history, its ongoing activities and future role. Notable alumni include: Igor Sikorsky (1914), a leading aviator who developed innovative aircraft and helicopter prototypes; Sergei Korolev (1926), father of the Soviet space program and lead rocket engineer; and Borys Paton (1941), President of the National Academy of Sciences of Ukraine (since 1962). In terms of output, Kyiv Polytechnic Institute boasts an impressive record of training more engineers than any other university in Ukraine – an equivalent to approximately one quarter of the country’s engineers (KPI 2-03-16).

Kyiv Polytechnic Institute is currently comprised of 19 faculties, 10 institutes, 152 departments, a regional satellite campus, approximately 3,000 professors (1,000 of which are accredited for doctoral supervision), 40,500 students in addition to approximately 1,800 international students (KPI 28-11-16; KPI 2-03-16). The focus at the Polytechnic remains centred on the scientific and technical fields with few disciplines based in the social sciences and humanities. During the 2016–2017 academic year, Kyiv Polytechnic Institute's annual budget stood at UAH 860.7 million (CAD \$43 million) – approximately four percent of which was earned by way of 130 international projects (KPI 29-11-16; KPI 2-03-16; Shkolnyi 2016, 5). A targeted increase to seven percent is planned for the 2018–2019 academic year (Shkolnyi 2016, 5).

Kyiv Polytechnic Institute plays host to 41 international centres; including: the German Academic Exchange Service (DAAD) Information Centre and Campus France, two instrumental European higher education stakeholder agencies, which promote international exchange and research linkages, in addition to facilitating extensive funding and networking opportunities. Programs of study are concurrently offered in Ukrainian and Russian. Accordingly, the administration set an ambitious goal of offering English-language degrees across all programs of study by September 2017.²⁰ This element was widely perceived by the senior administration as a strong indicator of internationalization (KPI 29-11-16). Against this backdrop, Kyiv Polytechnic Institute has been making a transition towards EHEA-compliant PhD programs and was gradually implementing a

²⁰ This change occurred after the data collection period; therefore, data was not gathered on whether this event actually took place or how it was implemented.

three-tiered degree system in accordance with the 2014 “Law on Higher Education” (KPI 29-11-16).

Similarly, the Polytechnic’s ongoing transition towards the ECTS and broader shift in regulatory mechanisms have brought teaching and research closer inline with the institutional imperatives of the EHEA and emerging ERA. Yet, internal challenges with the transition from the *kandidat nauk* (candidate of sciences) to the structured PhD remain. And while the university has managed to preserve and develop its long-standing tradition of academic excellence, third-cycle reforms remain under-implemented (KPI 29-11-16; KPI 25-11-16).

Kyiv Polytechnic has also been particularly strong in advocating new benchmarks in fostering a ‘Triple Helix’ model of innovation – a trend which has intensified in the recent past (Oleksiienko 2014, 258). During the time period of this study, Kyiv Polytechnic Institute was the largest institution of technical higher education in Ukraine, and well positioned as a top-tier National Research University. From a global rankings perspective, Kyiv Polytechnic placed 501–550 in the 2017 QS World University Rankings, and >800th in the Times Higher Education World University Rankings, respectively.

The centrality of Kyiv Polytechnic Institute is a highly relevant factor to this study, considering its prominence in the Ukrainian higher education landscape and extent to which the phenomenon of internationalization has played out in its institutional development. It is also considered to be an important driver for technical and economic

development, and at the same time, a symbol of considerable prominence and national pride. Kyiv Polytechnic Institute is a public institution of significant importance, which makes it an essential university to include in a case study on the engagement of Ukrainian higher education with the phenomenon of internationalization.

AWARENESS

The awareness dimension of internationalization is an element of relevance and importance to the case study participants at Kyiv Polytechnic Institute, according to the interview data and documents accessed from various university sources. These observations are consistent with the views of Knight (1994, 12), who asserts the “importance to stimulate campus-wide discussions on such topics as the need, purpose, strategies, controversial issues, resource implications and benefits of internationalization.”

The semi-structured interviews, documentation from university sources, university website, as well as grey materials suggest that the awareness dimension shows a high degree of breadth and depth among case study participants, in addition to a fairly diffuse level across the academic enterprise. It is necessary to denote that these inherent features are partly attributed to the institutional culture of the Polytechnic, which is embedded in the mental constructs of the actors and the global nature of science.

An important point of departure for discussion around the awareness dimension at Kyiv Polytechnic Institute is the inherent nature of the scientific work undertaken by the academic community and the heuristic relationship between globalization and technical innovation. This aspect is synthesized by de Wit (2002, 226-227), who echoes the aforementioned elements:

The dialectical relation expresses itself in two phenomena referred to as the knowledge society or economy and transnational or borderless education. The relationship between globalization, new technologies, and science finds its expression in the concept of the knowledge society or economy. The same phenomenon; however, can be observed in the other core function of universities, teaching. Growing competition and collaboration with the private sector (in particular in the area of specialized, professional training and lifelong learning, distance education, and the use of new technologies) are developments that are increasingly coming to the forefront in higher education.

From this perspective, the interview data and university documentation suggest that internationalization is widely understood – implicitly and explicitly – as being a *gateway* for innovation and economic sustainability. Furthermore, the data suggest that awareness of internationalization at Kyiv Polytechnic Institute has grown significantly in recent years in light of Ukraine’s accession to the EHEA, following implementation of the 2014 “Law on Higher Education” and as a result of ongoing domestic economic challenges. According to a senior administrator, the university underwent a steep ‘learning curve’ where internationalization is concerned, noting: “15 years ago we [senior administrators] attended an international higher education conference in Salzburg where, among other notable experts, [Professor] Jan Sadlak was present... We came to the realization that internationalization at Kyiv Polytechnic Institute was not yet met...” (KPI 29-11-16)²¹

These insights provide clear indication that the awareness dimension has existed for many years and continues to evolve. Despite these positive attributes, the interview data also point to the priority and degree of awareness, as well as the ways in which the phenomenon of internationalization is internalized across the academic enterprise. The case study

²¹ Professor Jan Sadlak is an internationally-recognized and highly cited scholar in higher education policy, governance and management.

participants unanimously pointed to the strong influences of European Union initiatives over the last two decades – especially the TEMPUS and Erasmus programs – in raising Kyiv Polytechnic Institute’s international profile, as well as providing technical assistance and resources for international activities. In a similar vein, respondents made repeated references to the unfolding Bologna Process and national third-cycle reforms as significant discourses surrounding the internationalization awareness dimension, despite incomplete reforms, resource asymmetries and ongoing implementation challenges.

Another key factor influencing the awareness dimension was articulated by the rector of Kyiv Polytechnic Institute, who sparked a public debate on the central role that research universities play in building a knowledge economy (Zgurovskyi 2005; Zgurovskyi 2006). Taking his cue from the Europe of Knowledge discourse (Berlin Communiqué 2003), Professor Zgurovskyi argued that Ukrainian research universities should form the basis for the development of a knowledge economy, underscoring:

The research university is necessary for the country in order to build a knowledge-based economy. The main idea of the research university is the triangle of knowledge – education, science and innovation; the university must be the core of the innovation. It is up to the state to provide scientists with a high enough salary in order for them to have all conditions just to focus on research and to create a legislative basis beneficial for knowledge transfer. And it is up to universities and business to develop productive relationships through knowledge transfer (cited in Hladchenko et al. 2016, 117).

At the same time, senior administrators, mid-level leaders and faculty described the imperative to internationalize in pragmatic terms, such as the need to keep pace with emerging technologies, scientific innovation, as well as current regional and global knowledge production efforts (KPI 2-03-16). In a similar vein, administrators were quick

to note that economic rationales have significantly raised the awareness dimension, particularly in the areas of ‘market-oriented knowledge transfer’, information technology outsourcing, project procurement, foreign student preparatory training and international student recruitment (KPI 29-11-16, KPI 7-03-16).²² The final noteworthy element contributing to the awareness dimension is a strong preoccupation with global rankings. Combined, these elements seemed to have significantly raised internationalization awareness levels, particularly in light of increased conceptual blurring between academic and economic activities, as well as gauging comparative advantage with other national and regional universities.

Similarly, international awareness resonated strongly with the pool of doctoral candidates who participated in this case study. The interview data from these demand-side actors captured various discourses related to the extension of academic horizon, enrichment of research, mentorship and financial support. For the most part, these perceptions generated a high degree of awareness, despite unanimous concerns over the high transaction costs associated with conducting research and/or studying abroad; including: the persistence of language barriers, bureaucratic ‘red tape’, access to international scholarships and credit transfer.

It is interesting to note that awareness levels appear to be sustained by means of a mixed centralized/decentralized model. This ‘hub and spoke’ approach ensures a direct line of

²² According to a 2016 report on Ukraine’s high technology sector, the country had approximately 90,000 IT professionals, making it the first-ranked in Central and Eastern Europe in this field (see Sychikova et al., 2016, 20).

communication whereby the International Office and the International Collaboration Department provide advocacy and faculty-level support on global engagement opportunities and information on competitions in tandem with the Vice Deans for Research and Vice Deans for International Collaboration at each faculty. Regular information sessions were reported to be held on campus along with an international bulletin, which was published twice monthly and made readily available to other Ukrainian universities (KPI 2-03-16). Moreover, the International Office was said to organize seminars for professors on how to apply for the Erasmus⁺ program (KPI 2-12-16). Accordingly, the permanent presence of higher education stakeholder agencies on campus, such as the DAAD Information Centre and Campus France, along with steady flows of foreign professors and scholars was deemed to ensure a high level of linkage and exchange, reinforcing the international awareness dimension (DAAD 1-03-16; CF 2-03-16; KPI 25-11-16; KPI 28-11-16; KPI 2-12-16).

In a similar vein, a senior administrator at Kyiv Polytechnic Institute was designated by the National Erasmus⁺ Office as the national contact point for the EU flagship research program Horizon 2020. As a content expert, this senior administrator was tasked with disseminating information and calls for proposals, consulting on project development, facilitating partnerships and ensuring the timely submission of applications (KPI 2-12-16). Interviewees felt that ongoing national third-cycle training reforms contributed significantly to international awareness levels by placing additional requirements on doctoral candidates enrolled in structured PhD programs; including: attaining a ‘B2’ (upper intermediate) English-language proficiency score or higher (Cambridge English Language

Assessment), mandatory publication of a minimum of one academic paper in an international peer-reviewed journal, and active participation in at least one international conference (KPI 28-11-16; KPI 29-11-16a). In a similar vein, tenure-track professors were expected to achieve the same level of English-language proficiency in accordance with ongoing reforms (KPI 28-11-16).

Accordingly, the KPI doctoral candidates made repeated reference to the importance and inherent challenges of gaining access to and publishing in internationally-recognized scholarly journals. By the same token, these academic publications are measured by global citation indexing services such as the Web of Science and the Scopus database of peer-reviewed literature. Important to note is that these citation indices represent a metric, which is used as a measure of the university's research intensity and is applied as a 'performative' benchmark against national and global rankings. Alternatively, doctoral candidates at Kyiv Polytechnic unanimously referred to international linkage and exchange as a means of gaining access to scholars, peer-review journals and modern laboratory equipment, noting a lack of domestic resources due to high subscription rates and systemic deficiencies in the research and development infrastructure.

The aforementioned factors are particularly salient in light of diminishing state funding and ongoing austerity measures across the higher education sector. Nearly all case study participants attributed their awareness levels with the need to keep pace with the imperatives of global science, yet cautioned that language barriers, cost differentials and bureaucracy remain obstacles to international engagement.

Unpacking the awareness dimension further, mid-level leaders made repeated reference to discrepancies over internationalization perceptions across generational lines. Dubbed “the lost generation”, a mid-level leader attributed the demographic shift at Kyiv Polytechnic Institute to the labour market upheavals of the 1990s, when the then emerging private sector absorbed a large portion of the younger tertiary labour force as a result of higher wages and better working conditions (KPI 4-03-16). From this perspective, the respondent underscored that Kyiv Polytechnic Institute is considered to be at the ‘crossroads of generations’, whereby senior faculty tend not to be as internationally engaged as their younger counterparts (KPI 4-03-16). According to faculty interview data, the pattern appears to be attributed to a number of factors, including: foreign language proficiency, (change-resistant) mental constructs, personal dispositions, proximity to retirement, as well as protectionist barriers against external competition (KPI 4-03-16; KPI 25-11-16; KPI 2-12-16).

As one mid-level respondent mused, “older faculty neither impede, nor advance internationalization efforts” (KPI 4-03-16). Continuing along these lines, a faculty member noted a perceived pattern between faculty generations, arguing: “[t]he younger the faculty member, the more open [they are] to internationalization. The same logic can be applied to exchanges between professors... The older [the professor], the less importance they place on internationalization” (KPI 25-11-16). A similar view was echoed by a mid-level leader who perceived the internationalization awareness dimension as being closely linked to the age of faculty-level leadership, arguing: “...the younger the dean, the more willing they are to innovate and bring something new to the faculty and attract better students”

(KPI 2-12-16). The respondent continued by noting an important link between language proficiency and student mobility: “[T]here is an age gap among the professors (at Kyiv Polytechnic Institute). The older generation doesn’t speak English... thanks to young professors, we can host exchange students under Erasmus⁺” (KPI 2-12-16).

Finally, tensions were noted in the awareness dimension at the highest levels of the university, specifically on issues related to the lack of clarity around international credit transfer, conflicting internal perceptions concerning the status and affiliation of international doctoral research, unclear rules of engagement on release time for doctoral candidates and professors, as well as recognition and advancement for academics engaged in international activities (KPI 2-12-16; KPI 28-11-16; KPI 25-11-16). The range of perspectives from the case study respondents indicate that there is a wide scope in which internationalization is both perceived and interpreted at Kyiv Polytechnic Institute. Overall, the data support the conclusion that the awareness dimension is robust; however, outcomes are highly conditional upon bureaucratic hurdles, the availability of resources and a considerable degree of personal engagement. The findings also suggest that internationalization is widely perceived as a factor of significant relevance and that the university has established the corresponding mechanisms to support actors and agencies across this large and complex university.

COMMITMENT

The shift from the awareness to the commitment dimension represents an important step in terms of beliefs and actions of senior administrators and the wider academic community. Knight (1994, 12) argues that while strong support is needed from the university leadership

to transform commitment into planning strategies, the real drivers of internationalization are faculty and staff. The data gathered from case study participants, official documents, and grey materials indicate that normative and programmatic developments have expanded significantly over the last decade. And while high-level commitments have been made to Kyiv Polytechnic Institute's international dimension, outstanding challenges remain in terms of resource asymmetries, steep hierarchies, and the pace of institutional change. Despite inherent challenges, the data indicate a rigorous and sustained commitment to regional and global engagement.

The senior administrators, mid-level leaders and doctoral candidates who took part in this case study spoke to the question of *how* the commitment dimension of internationalization is manifested through various programs and institutional frameworks in this large and complex organization. Supply- and demand-side actors provided valuable insight on how internationalization plays out across the university, in addition to gauging various perspectives on internationalization as a function of institutional change. In a similar vein, the findings also revealed the different ways in which institutional actors translate internationalization into practice. The data confirm that the discourse surrounding the importance of the knowledge economy has paved the way for far-reaching reforms, formal changes in rules, and transformative approaches to knowledge production and academic enquiry.

The interview data indicate that Kyiv Polytechnic Institute's governance structure provides considerable scope for the academic community to conduct its international activities with

a degree of independence and is able to develop and sustain support structures with relative autonomy (KPI 25-11-16; KPI 2-12-16a). The university's commitment to internationalization has manifested itself in a number of concrete ways. According to a mid-level leader, Kyiv Polytechnic was the first National Research University to establish an international mobility office in 2006, only a year after Ukraine's accession to the Bologna Process (KPI 2-12-16).

From this perspective, a senior administrator cast additional light on the university's approach to internationalization, noting the phenomenon is widely perceived as *a means to an end*:

Internationalization, for our university, is a question of *leadership*. Through dialogue with partners, through the acquisition of new experiences, knowledge, and technology we can become better. For the university, this is the most important moment. Our students come here and know that they [have access to] the best instructors, the finest technology and equipment. We see that international cooperation provides us with these outcomes. By taking best global practices we improve ourselves... for us this is a serious motivator (KPI 2-03-16 | RU translated from original | emphasis in original).

Furthermore, case study participants frequently addressed the topic of *how* Kyiv Polytechnic Institute's commitment to internationalization is demonstrated programmatically. As faculty, staff and doctoral students largely represent 'consumers' of international programming, the respondents provided valuable insight on their perceptions of institutional commitment to internationalization. Notable among these are the TEMPUS and Erasmus programs, as well as the EU flagship research initiative, Horizon 2020. Similarly, senior administrators and mid-level leaders made repeated reference to the university's strategic links with such multi-national corporations as Boeing (aerospace),

Huawei, Microsoft and Samsung (hardware/software development, information technology and consumer electronics), as well as developing collaborative agreements with top-200 multinational corporations for research and development purposes (KPI 7-03-16; KPI 29-11-16; Stefanovich 2016). At the time of data collection, Kyiv Polytechnic Institute had approximately 50 such partnerships, which facilitated applied research placements, seed funding and networking opportunities (Sidorenko 2015, 2).

Other important indicators of Kyiv Polytechnic Institute's commitment to enhanced international engagement are its well-developed thematic networks, academic consortia and joint degree programs, which have become highly recognized knowledge brands and prominent features of the higher education landscape in Ukraine. The most prominent of these are the EU-sponsored TEMPUS and Erasmus Mundus/Erasmus⁺ initiatives, commonly associated as 'amplifiers' of the Europe of Knowledge discourse. Given the increased tone and frequency from actors and agencies across the academic enterprise, the perceived importance of EU and analogous national-based programs has grown significantly in the recent past in light of accelerated *rapprochement* with European institutions following the *EuroMaidan* and the subsequent freezing of academic and scientific ties with Russian counterparts.

Quality assurance is another domain in which the commitment dimension clearly manifested itself. In April 2015, Kyiv Polytechnic became a signatory to a quintipartite memorandum on a European engineering certificate between the Ministry of Education and Science of Ukraine, the Forum of Rectors of Higher Technical Educational

Establishments, the European Network for Accreditation of Engineering Education (ENAAE), and the European Federation of National Engineering Associations (FEANI) (Shkolnyi 2016, 5). The objective of this initiative was to create an engineering ‘passport’ to ensure quality assurance in training and bring technical training in closer alignment with EHEA standards.

According to the perspective of the respondents, Kyiv Polytechnic Institute’s programmatic developments appear to demonstrate a sustained commitment, revealing a fairly high level of dedication to regional and global engagement. One of the cornerstones of the Polytechnic’s commitment dimension is the TEMPUS program, which left a distinctive mark upon the university’s international outlook and trajectory. Kyiv Polytechnic Institute participated in a total of 21 TEMPUS structural measure and capacity building projects since the program’s introduction to the Ukrainian higher education system in 1994 (National TEMPUS/Erasmus⁺ Office Ukraine 2014, 423). This series of collaborative initiatives gave prominence and drive to Kyiv Polytechnic Institute’s international programming, which extended geographical reach, leveraged institutional change and expanded knowledge production efforts.

Furthermore, they provided a legitimizing discourse and new symbols from which higher education policy borrowing and lending can take hold. These views are in line with Silova (2002), who advances the concept of education transfer and the active role of local agency. This praxis contends that university actors do not operate in a vacuum, but instead, leverage

institutional and structural legacies to legitimize specific discourses and construct new identities over time.

In line with these observations is the high regard in which the TEMPUS programs are held by the university administration, faculty and doctoral candidates. For example, a wall-sized banner chronologically outlining each TEMPUS project that Kyiv Polytechnic Institute participated in over the last 20 years was prominently displayed in the International Office. Similarly, TEMPUS-sponsored laboratories and interactive classrooms had distinctive plaques indicating EU support (FN 2-03-16). A senior administrator provided the following insights:

The best example is our TEMPUS poster... In 20 years we [Kyiv Polytechnic Institute] took part in 21 [TEMPUS] projects and these initiatives determined the development pathway of the university and Ukraine as a whole. We became aware of what we needed to improve in our environment. Furthermore, projects emerged which are tied with serious advances, such as the translation of library holdings into electronic databases. [And] the development of new subject areas leading to the realization of the linguistics faculty, which provides technical language training... (KPI 2-03-16 | RU translated from original).

These symbolic representations appear to show an element of ‘stickiness’ and provide legitimacy and adhesion to external EHEA structures and normative frameworks. From a Northian perspective, these observations suggest sustained complex exchange through third-party enforcement (North 1990, 14).

Looking beyond third-party enforcement, it is important to note, *inter alia*, that a number of TEMPUS programs were specifically designed to bridge the gap between academia and industry (European Commission 2012, 13). These thematic networks represent key

indicators in terms of the Polytechnic's specific commitments and priorities to international engagement. Furthermore, new courses and curricula were adopted under the TEMPUS framework to meet the changing demands of the Ukrainian labour market (National TEMPUS/Erasmus⁺ Office Ukraine 2014, 423). Faculty respondents noted that intensive cooperation with European counterparts within the TEMPUS program helped create new knowledge, improve teaching skills and evaluation techniques, resulting in greater competitiveness of their academic units and improved status and standing (KPI 25-11-16; KPI 2-12-16a).

Finally, the analysis revealed that several TEMPUS projects were modeled upon public-private partnerships (see Robertson et al. 2012, 1-19), in view of their direct links to applied research and commercialization of knowledge, indicative of the 'Mode 2' paradigm of knowledge production (Nowotny, Scott and Gibbons 2003). These collaborative initiatives include: *Creation of Third-Cycle Studies – Doctoral Programme in Renewable Energy and Environmental Technology* (CREDO) (2010–2013), the *Innovation Hybrid Strategy of IT-Outsourcing Partnership with Enterprises* (2012–2015) and *New Model of the Third Cycle in Engineering Education due to Bologna Process in Belarus, Russia, Ukraine* (2013–2016) projects (National TEMPUS/Erasmus⁺ Office in Ukraine 2014).

These developments are significant to the analysis considering that the public-private partnerships developed under the TEMPUS and other framework programs support entrepreneurial strategies between the university and industry partners. In this regard, public-private partnerships within the academic setting appear to foster longer-term shifts

in institutional identities which legitimate and enable economic activity in academic settings. Furthermore, they actively promote agentic actorhood among university administration, faculty and staff, thereby becoming more receptive to entrepreneurial activities, and adapting or modifying organizational frameworks in order to adjust to the growing commercialization of knowledge.

Against this backdrop, the commitment dimension helped to illustrate the agency of EU programs, concisely summarized by a senior international administrator who noted: “TEMPUS reorganized our academic programs, now Horizon 2020 and Erasmus are making an impact” (KPI 29-11-16 | RU translated from original). In this regard, Kyiv Polytechnic Institutes’ ongoing commitment to EU-driven initiatives was most pronounced via its international programming. Case in point, a senior administrator noted that the university was successful in three out of 27 Horizon 2020 applications in recent years (KPI 29-11-16). Furthermore, Kyiv Polytechnic Institute is an active participant in 45 Erasmus⁺ initiatives across all three ‘key action’ areas, including: (i) academic mobility; (ii) cooperation for innovation and exchange of best practices, and (iii) support for policy reform (KPI 2-12-16). To provide some scope on financial commitments, a senior administrator noted that the EU invested €1.3 million in four Erasmus programs alone at Kyiv Polytechnic Institute for academic mobility, international doctoral research, staff training, and capacity building initiatives (KPI 2-03-16).

Accordingly, Kyiv Polytechnic extended its commitments to the international enterprise as the first university in Ukraine to implement intellectual property rights and export joint

training modules abroad, for example, in China, Egypt, Nigeria and Turkey (KPI 02-03-16; KPI 29-11-16). It is important to note that the administration has made extensive commitments in the area of international student recruitment. According to a senior respondent, Kyiv Polytechnic Institute plays host to more international students than any other Ukrainian National Research University (KPI 2-03-16). Despite this claim, the lack of accessible institutional data made this observation difficult to verify. At the same time, a senior administrator identified areas where challenges remain, both in terms of quantity and quality, noting that central administration has set an international student recruitment target of 7–8 percent – up from the current 4.3 percent of the student population; however, overarching concerns remain over candidate quality and completion rates (KPI 29-11-16). Finally, senior respondents underscored that negative perceptions over the prolonged conflict in Ukraine’s south-eastern Donbas region and national security issues are considered to be factors that impede international student recruitment efforts (KPI 2-03-16; KPI 29-11-16).

From an international student integration perspective, Kyiv Polytechnic’s commitments have been extended to include an array of foreign student integration and retention services. As noted by a senior administrator: “During Soviet times, international students were considered as a separate *caste*. We found that international students were not at the same level... we now have the same academic requirements for international *and* Ukrainian students” (KPI 29-11-16 | RU translated from original | emphasis in original). In this context, the senior respondent made reference to an earlier practice whereby international students were given differential treatment, often subject to less rigorous assessment

methods and enrolled in preparatory courses in order to ensure academic success. In the past, these practices were part of the Soviet Union's wider 'soft power' strategy, which included technical training of foreign students from Eastern Bloc and socialist-oriented countries of the Global South (see Rosen 1970). Following Ukraine's independence, the overarching motivation shifted from political to economic rationales, considering that revenue from international student recruitment comprises a substantial component of Kyiv Polytechnic Institute's annual budget (KPI 29-11-16).

Considering the direct involvement of multiple actors and external agents throughout the internationalization process, the senior administrators, mid-level leaders, doctoral students and higher education stakeholder agencies who participated in this case study spoke of the perceived importance of EU-sponsored and national-based networks (DAAD, Campus France, Alexander von Humboldt Foundation, Ukraine-Japan Centre, Ukraine-Poland Centre, etc.), as well as industry partners as a measure of Kyiv Polytechnic Institute's commitment to internationalization. In this context, a senior administrator noted that "education is not only to be found at the university" (KPI 29-11-16a).

This observation suggests that 'carriers' of the knowledge discourse through international and industry partnerships contribute to institutional change. This may be due, in part, to the perceived advantages of network externalities such as access to intellectual and financial resources, and closer alignment with the regional knowledge system. From this perspective, Schmidt (2013, 84) underscores: "[T]he spatial boundaries of innovation systems are also supposed to permeable, because linkages to national and international

innovation systems prevent regional ones from becoming too path-dependent and from running the danger of lock-in effects”.

Looking beyond Europe, Kyiv Polytechnic Institute extended its global reach and diversified its international commitments by fostering strategic partnerships with African, Asian, and Middle Eastern universities in the areas of applied research, intellectual entrepreneurship, and student recruitment. These efforts are particularly salient in light of shrinking state budgets, increased competition from national and regional higher education institutions (particularly in neighbouring Poland), and pressure to diversify revenue streams.

Despite Kyiv Polytechnic Institute’s outward commitment to international engagement, the case study participants unanimously noted that international activities remain exclusively funded by external sources, and that no financial support from the university is provided. At the same time, a faculty respondent identified instances where Kyiv Polytechnic Institute’s commitment to third-cycle reforms have been lacking, casting light on an underlying tension between the implementation of the structured PhD and the Soviet-era *kandidat nauk*, underscoring: “Old tendencies and inertia continue. I do not see much in terms of strategy. The [structured] PhD is treated like an ‘experiment’ to which no one knows the outcome... Some colleagues hope that the Ministry of Education and Science will revert to the *kandidat nauk*” (KPI 25-11-16).

According to the interview data, Kyiv Polytechnic Institute's commitment to internationalization appears to be set on solid foundations on both sides of the academic enterprise, despite the ever-present reality of the university's limited resources, heavy dependence upon external funding and differing perceptions around third-cycle reform. At present, the data suggest a substantial level of commitment to internationalization accompanied by incremental, yet visible manifestations of institutional change at this large and prominent Ukrainian National Research University.

PLANNING

The planning dimension of the Internationalization Cycle (Knight 1994, 13) is an activity that calls for development at "several different levels" of the academic enterprise. It should also include specific strategic plans, as well as give special attention to "centralization/decentralization" issues, since "planning for internationalization will be unique to each institution" (Knight 1994, 13). Similarly, North (1997, 19) asserts that there are significant transaction costs associated with achieving institutional objectives, thus requiring appropriate strategies to accomplish them. Furthermore, North cautions on acting on incomplete information that is frequently incorrect and inefficient, as well as subjectively derived models.

Based on a review of these criteria, the data gathered for this study suggest that the international planning dimension at Kyiv Polytechnic Institute is occurring at various levels of the academic enterprise. Nonetheless, the size and complexity of the university presented a challenge on assessing the full scope of the planning dimension. A number of indicators provide key insights into this element, including: the European dimension of

higher education development, the largely mixed pattern of planning, the important role for senior administrators, faculty and staff, as well as the university's strong linkages to industry partners.

Against this backdrop, the data indicate that Kyiv Polytechnic Institute has become increasingly receptive to 'performative' conditions as a result of declining state funding and increased competition for resources and students. Furthermore, the role of the university in the knowledge economy has undergone fundamental changes over the last few decades as the Polytechnic increasingly embraces a so-called 'third mission' by gravitating towards an 'entrepreneurial university' pathway, whereby traditional missions of teaching and research are being supplanted by commercial activities. Kyiv Polytechnic Institute's international outlook is highly indicative of 'academic capitalism' (Slaughter & Leslie 1997), a phenomenon which describes the commercialization of higher education and research, as well as the shifting power relations between the university and the market.

These shifts were noted by senior administrators and mid-level leaders who observed increased receptivity to entrepreneurial pathways and the perceived need to develop greater synergies between academia and industry (KPI 4-03-16; KPI 28-11-16; KPI 29-11-16). Broadly defined, 'entrepreneurial pathways' are organizing principles which legitimate and enable economic activities in academic settings. These principles foster support for collaborative initiatives in order to leverage intellectual and human resources for economic benefit. For the first time, international economic activities were codified in Article 76 of the "Law on Higher Education" (Parliament of Ukraine 2014). While the legislation

provides an added level of autonomy for university actors to pursue international economic activities, it also assumes a shift in academic identities from a recipient of state funding to that of a reflexive actor.

Accordingly, the planned change process itself emerged as a salient topic of discussion, considering the introduction of EHEA-compliant structured PhD programs, market-oriented activities, in addition to new institutional positions created in support of internationalization efforts. As Cameron (1984, 123) asserts, “internationalization requires organizational adaptation, that is, a process involving [...] modifications and alterations in the organization or its components in order to adjust to changes in the external environment”.

From this perspective, Kyiv Polytechnic Institute’s international planning dimension was expanded in recent years to include the implementation of Bologna-compliant PhD programs, closer alignment with EHEA and institutional rebranding along the lines of a ‘modern technical research university’ (Kyiv Polytechnic Institute 2016). Furthermore, evidence indicates that the university’s central administration has become more systematic in the way individuals are trained and tasked to engage in international activities (KPI 2-03-16). As such, the planning dimension is supported by Vice Deans for Research and Vice Deans for International Collaboration, whose role is to champion international efforts at the faculty level. These recently created positions were developed along with an internal (voluntary) association of individuals at the departmental level who act as contact points for global engagement and outreach.

According to a senior respondent, this campus-wide network represents approximately 100 individuals engaged at the faculty-level over the last six to seven years (KPI 2-12-16a). Furthermore, this mixed centralized/de-centralized model is widely perceived as a means of advancing faculty-led, research-driven initiatives, while at the same time, facilitating faculty-level buy-in. From this perspective, a senior faculty member noted that Kyiv Polytechnic Institute's approach to international planning is conducted through a "web of interlocutors", expressed in mathematical terms as an "algorithmic method of developing international partnerships" (KPI 2-12-16a).

The interview data suggest that a major driver behind the international planning dimension hinges upon efforts to integrate third-cycle programs more fully into the EHEA – in addition to aligning thematic research groups within the framework of the emerging ERA. Despite the incremental pace of third-cycle reform, the change process is geared toward consolidating cooperation with European partners and (re)positioning Kyiv Polytechnic Institute towards greater engagement within networked spaces (Sidorenko 2015; Shkolnyi 2016).

Against this backdrop, the planning dimension casts light on congruence with the objectives of training and research for the insertion of the university into the EHEA and ERA. Case in point, Kyiv Polytechnic Institute deepened the international planning dimension by developing an extensive Ukrainian-language guide to the Horizon 2020 application process. The 40-page document provides a series of recommendations and critical reflection on the methodological aspects of international partnership building,

gauging the internal academic climate and determining resource efficiencies (Sidorenko et al. 2014).

These findings resonate with the views of Bartell (2003, 68) who asserts, “internationalization is essentially a process involving all facets of university life, the university can, nevertheless, select as a target objective the point on the internationalization continuum that is consistent with its environment”. From this perspective, the international planning dimension shows a direct line of congruence with knowledge transfer applications and applied research in the technical and scientific fields indicative of the ‘Mode 2’ paradigm of knowledge production. Accordingly, it is important to note the ‘quasi-industrial’ or ‘industrial-type’ approach Kyiv Polytechnic Institute has adopted as part of its international planning strategy. These approaches are evidenced by institutional ‘policy talk’ and manifested in the Polytechnic’s international programming, strong linkages to industry partners and more recent administrative shifts *vis-à-vis* the creation of administrative units and cadres specifically designated to facilitate more nimble responses to the knowledge economy.

These elements resonated strongly with the case study participants and was a recurring theme in discussions on internationalization and academic culture. Furthermore, the ‘quasi-industrial’ discourse is widely accepted as an institutional norm. As Oleksiyenko (2017, 126) explains: “Industrial-type solutions are nonetheless tempting, particularly when tax payers’ subsidies decline. Campuses require a critical mass of university

personnel who can diversity the institution's resource pools by adopting entrepreneurial practices.”

A senior administrator confirmed that the planning dimension has grown in importance as the phenomenon of internationalization evolves and matures (KPI 29-11-16). This point is especially salient in light of the TEMPUS, Erasmus⁺ and Horizon 2020 programs, which not only involve negotiations with central administration and academic units, but also draw wider input from the National Erasmus⁺ Office, the Ministry of Education and Science, and European partner universities. Furthermore, the overwhelming majority of case study respondents pointed to the transformational aspects of these programs and their ability to influence teaching and research.

Another key development in the planning dimension is a 15-point plan for international engagement outlined in the *Kyiv Polytechnic Institute Strategic Development Plan for 2012–2020*, which includes a range of objectives; from boosting its position to a top-500 ranked university, increasing international student recruitment, developing dual degree programs and joint laboratories, as well as expanding academic programs and attracting leading global scholars (Kyiv Polytechnic Institute 2012, 27-28). These metrics provide important examples of how the university perceives its positionality to ensure active participation within the wider framework of the EHEA and the emerging ERA, as well as derive economic benefit from international activities.

Nonetheless, the document remains largely declaratory in nature with no clear indicator as to how precisely the university is to achieve its objectives. Furthermore, only passing reference to the strategic plan and its international objectives were made during the course of interviews with senior administrators and mid-level leaders, which suggests that the planning dimension lacks collective input and vision (FN 12-12-16; KPI 11-25-16; KPI 2-12-16a).

Upon further enquiry, a mid-level leader revealed that an updated international strategy was being drafted. The document was intended to clarify issues surrounding country and regional priorities, course electives, international mobility credit transfer, and was intended to be made operational by 2017 (KPI 2-12-16). According to the respondent, the renewed strategy foresees increased de-centralization through the creation of designated individuals responsible for academic mobility support at the faculty level (KPI 2-12-16). In turn, this new administrative cadre is meant to work in tandem with the International Office to improve the planning dimension by facilitating information sharing on project development, and (from a Northian perspective) lower transaction costs associated with academic mobility.

Furthermore, the interview data illuminate areas where the planning dimension has been especially active, but challenging, particularly in the areas of ECTS reform. A senior faculty member provided the following observations on the subject:

I worked on the ECTS system as an instructor when Ukraine first joined the Bologna Process. This required a modular approach [to credit accumulation and transfer]. Beginning in the 2000s, these started as pilot projects with only a few departments taking part at the university. Many years have

passed since implementing those changes and the entire university now functions under a modular system, which we know as the ‘Bologna system’. I think that this is a good approach to aligning higher education systems with the entire world (KPI 2-12-16a | RU translated from original).

When asked to provide additional details on implementing credit transfer in practice at Kyiv Polytechnic Institute, the faculty respondent acknowledged that a considerable amount of planning and effort was being expended, yet internal challenges remain:

[T]here is an *incomplete* understanding of academic activities. For example, the Erasmus⁺ program is very active, especially in academic mobility. There are some outstanding questions remaining, which are only decided by individual planning between Ukrainian professors and the hosting European professor. How is this connected? Academic programs in Ukrainian and European universities are not always *compatible*. Under these conditions, the projects require verification of ECTS credits which students require at the European university. This is not always possible; therefore, Ukrainian and European professors communicate with one another to find a similar program in order to reach a compromise. In order to unify and standardize the Ukrainian and European higher education systems, certain steps are currently being taken on the international accreditation of technical majors in Ukraine. I think this will help avoid many problems (KPI 2-12-16a | RU translated from original | emphasis in original).

According to the data collected from institutional respondents, Kyiv Polytechnic Institute’s international planning dimension is a complex enterprise involving both sides of the academic house (i.e. administrative and scholarly). The dominant theme that emerges from the data indicate that the planning process has become more receptive to ‘performative’ conditions as the Polytechnic has increasingly encompassed the so-called ‘third mission’ of higher education by gravitating towards entrepreneurial pathways. Furthermore, institutional actors draw upon a range of legitimizing discourses, symbols and networks to selectively modify meanings, mobilize resources and alter higher education governance structures.

These shifts are evidenced by the institutional logics constructed by individual actors and the agency presumed in entrepreneurial pathways. From this perspective, the culturally embedded environment diffuses and enacts entrepreneurial models resulting in the adoption of analogous policies and practices. Evidence to this effect is manifest in Kyiv Polytechnic's international programs, projects and knowledge alliances, which legitimize and reinforce the link between academia and industry.

Within this context, the planning dimension elucidates the strongest evidence of 'performativity' of all three case study universities. Evidence of this can be seen in Kyiv Polytechnic Institute's approach to identifying and responding to opportunities, in addition to 'quasi-industrial' approaches to international planning and operations. This orientation has led university actors to redefine methods of operation and (re)calibrate international partnerships for strategic purposes. Despite evidence of extensive planning in support of internationalization efforts, it remains unclear as to whether this will resolve tensions between academic and entrepreneurial interests, given incomplete structural reforms and a continued degree of institutional path dependence.

OPERATIONALIZATION

The operationalization dimension of the Internationalization Cycle speaks to "academic activities and services, organizational factors and guiding principles" (Knight 1994, 13). As the three central elements of the operationalization function, this dimension speaks to the question of *how* internationalization plays out in an institutional setting, as well as the implementation of the university's international vision. Viewed through North's lens, the

phenomenon of internationalization represents an ongoing challenge of *external* adaptation and *internal* integration with which the institution must cope (North 1997, 20).

The data gathered from case study respondents at Kyiv Polytechnic Institute indicate that the operationalization dimension is a developed and dynamic element. The data captured from semi-structured interviews and various institutional sources illustrate the highly visible and reflexive approaches the university has taken to position itself within the regional knowledge system. This is evidenced in the Polytechnic's close association with European framework programs, higher education stakeholder hosting arrangements and national positioning as Ukraine's Horizon 2020 contact point. And while the scope and scale of international activities have shown increased depth and dimension in recent years, operational limitations suggest that the effectiveness of Kyiv Polytechnic Institute may at times be less than optimal.

The data gathered from faculty and senior administrators provide depth and dimension to an additional insight of importance. Namely, faculty and administrators have played a focused role in the internationalization process through the development of corresponding infrastructure and meaningful collaboration between both sides of the academic and administrative house. This approach has been described by a senior administrator as a 'self-taught process' (KPI 2-03-16). According to the same respondent, the nature of international programming has developed in such a way that it "moves at such a quick pace that it is sometimes difficult for the university to keep up, thereby requiring the international unit to slow down" (KPI 2-03-16).

The interview data indicate that Kyiv Polytechnic Institute's international operations dimension has taken an evolutionary course over the last few years, whereby global outreach activities are organized along three distinct lines of business – academic mobility, international recruitment and international projects: (i) the International Office supports international mobility, dual degrees, institutional agreements and the Erasmus⁺ program; (ii) the Centre for International Education is responsible for international recruitment and degree-seeking students; and (iii) the International Collaboration Department oversees intellectual entrepreneurship, project management and significant income-generating revenues, which are reinvested in the university (Sidorenko 2015, 2). According to a senior administrator, the university created an operational infrastructure in order to provide more nimble responses to internal needs, while at the same time, facilitating a greater degree of reflexivity within a regional and global playing field (KPI 02-03-16; KPI 29-11-16).

Each individual unit is headed by a director and staffed by approximately 15 individuals, including three full-time staff that provides operational oversight on academic mobility (KPI 2-12-16). Important to note is that the International Collaboration Department is a self-funded, for-profit entity financed entirely by the contracts it acquires (KPI 4-03-16). According to a mid-level leader, this division of labour represents a major institutional shift which came about at Kyiv Polytechnic Institute within the last five years (KPI 2-12-16).

Similarly significant to the operations dimension is that all three departments represent distinct units within the university administration. Despite this advanced support framework and peer advocacy network, a mid-level leader argued that responsibilities for

internationalization remain somewhat fragmented, resulting in a degree of workload duplication and lost productivity:

Sometimes I think that we double our responsibilities... for example three departments are responsible for developing double degrees. But sometimes it seems to me that only I am responsible, but then suddenly I realize that an agreement was signed *without* me. So, it wasn't cleared with me, but then I should work with this agreement and faculties contact me and ask how to manage *this* or *that*. Yes, sometimes it's a real challenge... we are separated, there is no unique or united international office that knows everything about the university – probably due to the fact that we are a huge university. But sometimes, I feel that we are doing the same work and sometimes *nobody* does, and so it goes round and round (KPI 2-12-16 | emphasis in original).

Yet, despite sweeping autonomy introduced in Ukraine's 2014 "Law on Higher Education", operational tensions continue to exist between Kyiv Polytechnic and state policy governing foreign currency controls. Against this backdrop, the data indicate that policy misalignments continue to clash with the operational functions of a modern research university (KPI 28-11-16; Kalashnikova et al. 2016, 10).

Kyiv Polytechnic Institute's programmatic developments demonstrate that the European vector of international operations remains a strategic priority. Moreover, the interview data confirm that the International Office expanded its functions as a result of the increased demands of European programming (KPI 28-11-16). In contrast to the other two National Research Universities selected for this case study, the data indicate rapidly emerging developments in Asia and Africa, particularly on the 'supply-side' areas of student recruitment, distance training and academic entrepreneurialism (KPI 2-03-16; KPI 4-03-16; KPI 29-11-16). These developments are highly indicative of Kyiv Polytechnic Institute's balancing strategy among academic 'centres' and 'peripheries'. In addition, the

data suggest a shifting role for the university as an emerging international academic service provider.

From this vantage point, the European higher education discourse has been promoted as a means of legitimatizing Kyiv Polytechnic Institute's strategic outlook and integrative pathway to the EHEA and ERA (Sidorenko 2015, 2). While the most illustrative examples include the Erasmus Mundus/Erasmus⁺, TEMPUS and Horizon 2020 programs; national-based initiatives such as DAAD and Campus France also play a vital role in the operationalization dimension in view of their active presence on campus. The interview data and university documentation suggest that these agencies and thematic networks play a pivotal role in self-transformation through critical engagement with institutional actors and university structures. Early into Ukraine's accession to the Bologna Process, the rector of Kyiv Polytechnic Institute took note of the intrinsic element of change associated with these macro-policy shifts:

Accession of our country to the Bologna process provides an opportunity to make structural transformations of higher education in a harmonized system of criteria, standards and characteristics, which will allow Ukraine to become a recognized part of the European educational and scientific space. Of course, these transformations are not only necessary but also objectively timed for the higher education system of Ukraine (Zgurovskyi 2005).

In addition to providing a broad range of technical support, best practices, peer mentorship and a major source of funding for scholarly activities, EU-sponsored programs helped formalize cross-border cooperation and 'lock-in' structural reforms. Looking eastward, the interview data revealed that Kyiv Polytechnic Institute had a robust relationship with Russian technical universities and industry partners prior to the *EuroMaidan* revolution.

In a similar vein, a mid-level leader noted that efforts were underway to develop joint degrees with Russian counterparts; however, plans were suspended as a result of escalating geopolitical tensions (KPI 2-12-16).

As presented in this sub-section, the data from the Kyiv Polytechnic Institute case study indicate that internationalization is a vital element to expanding geographic reach, leveraging institutional strengths for knowledge production efforts, and facilitating institutional change. Accordingly, senior administrators and faculty alike widely perceive the phenomenon of internationalization as penetrating the functions of teaching and research. This view was echoed by a senior international administrator who noted:

We believe that at some future date our office can be liquidated, but only when international activities become an absolute norm for every professor and student. When they contribute to international projects, partake in international internships, engage in the necessary measures, participate in joint research with international partners... When this becomes the norm, we will understand that our work is complete (KPI 2-03-16 | RU translated from original).

The interview data revealed that the international operations dimension to be quite developed and robust. Despite extensive changes to the operations portfolio, a senior administrator referred to its future outlook as a ‘work in progress’, arguing for ‘new thinking’ on international partnerships and improved negotiations over the insertion of the university into a global framework (KPI 29-11-16).

The interview data gathered from higher education stakeholder agency representatives maintain that the internationalization of teaching and research have advanced significantly at Kyiv Polytechnic in recent years and continue to develop quite dynamically (DAAD 1-

03-16; CF 2-03-16). However, concerns remain over operational challenges such as low wages and resource asymmetries, the university's attractiveness for foreign scholars, the massification of English-language degree programs, as well as achieving parity with incoming and outgoing student exchange flows (KPI 2-12-16).

Following closely along these lines, respondents from both sides of the academic house spoke to the increased importance of joint PhD degrees (*cotutelle*) for knowledge production efforts, international research activities and their dynamic growth in recent years. Yet, in spite of the creation of 12 double degree programs in recent years, a mid-level leader noted that these initiatives remain exclusively outgoing, while key elements such as funding and international credit recognition remain operationally challenging (KPI 2-12-16).

Noteworthy is the fact that joint doctoral thesis supervision, international research consortia and thematic scientific networks are modalities which have begun to redefine the operations dimension, and continue to make an impact on the quality of learning and research. And while English remains the *lingua franca* for the majority of international scientific enquiry, the data reveal an increasing number of academic activities being carried out in French, German and Polish. According to a senior administrator, networking with universities in Central and Eastern Europe is driven as much by cultural and geographic proximity as by major European investment in research and development infrastructure (KPI 29-11-16a).

Kyiv Polytechnic Institute's international operations support substantial outward academic flows via 200⁺ bilateral agreements with international partner universities, research institutions and industry partners (KPI 28-11-16). A senior administrator noted that the university leverages its international partnerships to better position itself in order to advance its structured PhD programs (KPI 28-11-16). Important to note is that most academic mobility occurs within the framework of the 45 Erasmus⁺ programs in operation at the time of this study (KPI 2-12-16). By the same token, a mid-level leader noted that as many as 30 inactive bilateral exchange agreements continue to formally exist on paper, despite the lack of any activity behind them (KPI 2-12-16).

Although Kyiv Polytechnic Institute demonstrates extensive support for internationalization activities, the central administration has not allocated a separate budget for the International Office, nor does it provide mobility scholarships to students, faculty and staff. This situation was similar to the other universities in the study. Accordingly, the university relies exclusively upon external funding sources for academic mobility scholarships, research and conference grants (KPI 2-12-16). Despite financial constraints, a senior faculty member took note of a recent policy shift at Kyiv Polytechnic Institute regarding the international activities of the professorial corps. In the recent past, professors were obliged to take personal, annual or unpaid leave when taking part in international initiatives, whereas now they are remunerated for the scholarly work they conduct abroad (KPI 25-11-16). This policy shift illustrates a major shift in the way in which Kyiv Polytechnic validates and legitimizes international scholarly activities.

Important to note within the operationalization dimension is the internal decision-making process and the development of international partnerships. A mid-level respondent noted that the International Office does not have the authority to make decisions regarding partnerships, nor does it have the power to initiate agreements, given its interlocutory role between the faculties and partner universities (KPI 2-12-16). Unpacking this element further, a senior faculty member cast light on institutional approaches to partnership building at Kyiv Polytechnic Institute, while at the same time, underscoring the importance of taking a grassroots approach:

As a rule, we have two variants. The first variant is bottom-up, when the partnership begins with personal contacts by professors... If I know a professor abroad we begin working by way of personal contacts and then we, as a rule, expand our contacts and involve the university. This is our approach to the Erasmus program, for example. Then, there are [top-down] cases when the rector travels abroad and signs an agreement with someone at a certain university, and then the administration makes enquiries to all faculties [stating]: “We have an agreement with a given university. How can you take part?” We then review the request and respond accordingly. As a rule, this does not work without personal contacts (KPI 25-11-16 | RU translated from original).

The data collected within the context of the operationalization dimension reveal important, but mixed elements. Although internationalization is being operationalized at different levels of the university, the analysis reveals clearly defined roles for individual actors driving the internationalization process on both sides of the academic house. According to interview data from senior administrators, mid-level leaders and faculty, a ‘bottom-up’ approach based on individual contacts, mutually interesting problems and intellectual symmetry was clearly the preferred partnership model.

Finally, Kyiv Polytechnic Institute's affiliation with international academic networks and associations reflect a less visible, but nonetheless, important aspect of the operationalization dimension. From this perspective, the Polytechnic is a member of the European University Association (EUA) and the Magna Charta Universitatum group, which actively promote university interests, while advancing higher education objectives within a regional forum. The university is also a member of the International Association for the Exchange of Students for Technical Experience (IAESTE) and the Board of European Students of Technology (BEST), which promote the advancement of academic mobility and the internationalization of technical education (Sidorenko 2015, 2).

As presented in this section, the operationalization dimension presents a multifaceted picture of how internationalization plays out at this large research university. The interview data provides evidence to suggest that incremental change tied to third-cycle reforms has taken place over recent years, albeit the understanding of how it should be achieved remains somewhat blurry. The case study participants also point to the increase in performative aspects of internationally-focused research projects and technical training activities with universities and industry partners alike. This institutional *leitmotif* suggests that the administration has turned focus towards increasingly steering and controlling a 'Mode 2' paradigm of knowledge production, which is geared for the commodification of knowledge. Despite a perceptible amount of international activity occurring at Kyiv Polytechnic Institute, the operationalization dimension is hampered by resource asymmetries, policy mismatches and differing internal perceptions on how to advance the

university's progressive accomplishments and traditions, while aligning itself with the European and global knowledge system.

REVIEW

In accordance with Knight (1994, 13), the review dimension is considered an extremely important element when “an organizational change such as internationalization is underway”. Defined as a two-step audit process, the element first gauges how the university monitors internationalization activities and direction into the functions of the university. The second acts as a measure of the degree to which internationalization is integrated into the administrative and academic evaluation and review activities across the institution. From a Northian perspective, organizations will engage in acquiring skills and knowledge that enhance its survival possibilities (North 1990, 91). As such, incremental change processes typically consist of marginal adjustments to the rules, norms and enforcement that constitute the institutional framework (North 1990, 83).

The data indicate that Kyiv Polytechnic Institute took a dual-track approach in the development of its international portfolio. On the one hand, the Polytechnic took a largely incremental approach to academic internationalization, evidenced by the piecemeal adoption of the ECTS credit system and Bologna third-cycle reforms; on the other, its entrepreneurial activities illustrate a more dynamic pathway of development. Nonetheless, the data gathered from Kyiv Polytechnic Institute suggest a limited, but somewhat varied scope of activity around the review dimension. Furthermore, the case study data support the conclusion that the review dimension at Kyiv Polytechnic Institute has become more formalized and systematic in the recent past due in large part to the Bologna reforms.

Nonetheless, the interview data and related university reports suggest that the university's reliance on quantitative data do not always provide a complete picture.

Most of the data that relate to the review dimension at Kyiv Polytechnic Institute was provided by a small circle of respondents, which suggests a fairly narrow scope of focus in this key area. In order to develop a clearer understanding around this dimension, this section builds upon what little data was provided from the case study participants, in addition to procedural aspects and patterns that frame the discussion around this element. The interview data reveal that Kyiv Polytechnic Institute's international review activities are, for the most part, measured against the results they deliver. However, closer analysis reveals an absence of systematic feedback, heavy reliance upon quantitative data and a greater need for results-based management tools.

The first insights into the review dimension are provided by a senior administrator who refers to the internationalization process at Kyiv Polytechnic Institute as a "self-taught process" and described as a "work in progress" (KPI 29-11-16). According to the interview data gathered from senior administrators, faculty and mid-level leaders, the review process entailed appraisals of international initiatives on the basis of quantifiable objectives, such as participant numbers, [joint] publications and funding. The interview data reinforces the observation that review activities are in place, however current practices reveal gaps in measuring outcomes and feedback mechanisms. Furthermore, review activities remain by and large, informed by static input/output metrics with little to no means of capturing qualitative and results-based outcomes. As one mid-level leader asserted:

[There are] annual reports that provide information to our rector, but there is no real tool for measuring how successful the [international] work was – only the numbers. There was a year when the number of outgoing students decreased, but the office worked much harder than in previous years. But then, the next year we got 25 or 26 Erasmus⁺ projects, so the number of students should have increased... so only reports but nothing more (KPI 2-12-16).

When prompted to expand upon the question of content, measurement tools and specific approaches for gauging internationalization outcomes, the same respondent noted that the review dimension is measured against quantitative benchmarks set out in Kyiv Polytechnic Institute's *Strategic Development Plan*, asserting:

Mobility levels should be raised by five percent, for example. This is not strategic and not so... *precise*. The [university] strategy states briefly “having more projects”, that’s all! Within this line, yes of course, the number of projects increased and increased... We addressed the line of this strategy, but no other tools [are available] on *how* to evaluate our efforts (KPI 2-12-16 | emphasis in original).

Additional insights into the review dimension were provided by a faculty member who explained how internationalization efforts were measured at the university. According to the respondent, Kyiv Polytechnic Institute used a series of quantitative metrics; including: an annual review of the number of research and training trips abroad, the amount of funding generated by way of international engagement activities, numbers of publications and joint publications in international peer-reviewed journals, conferences and citations in global indexing services (KPI 25-11-16). Furthermore, the review dimension provides the university with the opportunity to assess and document international standards and ‘best practices’. As noted by a professor interviewed for this case study, the internationalization of teaching and research are critical for “professional advancement” and “borrowing models from abroad” (KPI 26-11-16). These elements are all the more important, since

Kyiv Polytechnic Institute does not provide sabbatical leave and the administration only recently began to remunerate professors for teaching and research activities conducted abroad (KPI 25-11-16).

Despite the extensive range of international activity at Kyiv Polytechnic Institute and the presumed change management processes associated with the phasing out of the Soviet-era *kandidat nauk* by 2019, surprisingly little was stated about the review dimension. A senior faculty member provided critical insight into the introduction of the structured PhD, suggesting a top-down, mechanical approach to third-cycle reform, rather than an ‘organic’, integrated method:

To be honest, much stayed on paper... They [central administration] said “[W]e need to prepare a PhD”. The faculty, courses, equipment and students stayed the same. We needed to think of new disciplines – they thought of it. We needed to think up new names for majors – they thought of it. But in reality, it seems to me that the same things will be taught as in the past... I perceive this with caution, but regardless I hope that things will change because *not* changing will prove to be impossible... Unfortunately, for the time being, much has stayed on paper and was implemented by force (KPI 25-11-16 | RU translated from original | emphasis in original).

Meanwhile, serious criticisms were expressed about the limitations of the review dimension at Kyiv Polytechnic Institute by the same respondent in the context of partially-implemented reforms and the alignment with EHEA objectives within the internal academic and administrative functions of the university:

The Bologna system is *incomplete*. That is, we do not have a credit transfer system. We do not have possibilities for individual learning pathways – this is simply absent. We even lack the ability to budge certain [administrative] barriers. We cannot organize a group of students in a flexible way and choose courses [electives]... this does not work. There are yet to be changes that indicate otherwise. There are universities where the situation is rumoured to be better, including: Kyiv-Mohyla Academy, Sumy State

University, Chernovtsy National University and the Ukrainian Catholic University... As far as I see it [at this university], few are interested because you have to open yourself to the world, you have to show what you have, you need to trust your partners and the professors teaching your students. For the time being, the administration and the majority of professors are not prepared. The administration needs to take more austere measures or else reforms will stall. Otherwise, it will likely stay this way with some sporadic initiatives (KPI 25-11-16 | RU translated from original | emphasis in original).

Furthermore, a senior administrator surmised that Kyiv Polytechnic's institutional framework continues to function largely by way of a centralized, 'Soviet' model (KPI 29-11-16). In a similar vein, the same respondent added that underdeveloped financing mechanisms, at times unclear internationalization outcomes and conceptual blurring surrounding the role of a globalized research university remain ongoing challenges (KPI 29-11-16).

Beyond issues of Bologna compliance and higher education policy shifts, perhaps one of the most revealing elements of the review dimension at Kyiv Polytechnic Institute was the perceived need to improve international spaces of action, as well as to the means by which institutional actors negotiate within the context of university networks and professional communities. A senior administrator acknowledged its limited scope, and at the same time, expressed concern over the need to address the gap in Kyiv Polytechnic's international outlook:

Algorithms were ignored... if we saw a foreigner, we showed them our best. Given this *naïveté* we gambled away our intellectual substance. We need to professionalize our approaches and agreements, projects, memoranda of understanding and intellectual property rights. Kyiv Polytechnic Institute needs professional and competent people to negotiate these new terms of reference... We have to put up barriers when we see that negotiations are not mutually beneficial (KPI 29-11-16 | RU translated from original).

The absence of systematic feedback mechanisms and largely qualitative indicators suggest that the review element appears to have limited scope and impact. Furthermore, the interview data from respondents on both sides of the academic house reveal a less clear picture of whether the review dimension is being used to modify evaluation activities and implement institutional change. Considering the increased stakes of institutional change, coupled with the complexity of third-cycle reforms, these observations suggest a gap between what Maringe and Foskett (2010, 45) identify as ‘strategic aspiration’ and ‘strategic reality’.

REINFORCEMENT

The discussion around the recognition and rewarding of institutional stakeholders is at the core of the reinforcement dimension of Knight’s (1994, 14) Internationalization Cycle. This element is considered vital to ensure “renewed awareness and commitment” to the internationalization process (Knight 1994, 14). The review dimension also calls for higher education institutions to provide incentives and rewards for institutional actors who advance the university’s international activities. Viewed through a Northian lens, this dimension plays a reinforcing role via network externalities and increasing returns (North 1990, 137). Knight asserts that internationalization is a “cyclical not linear” process, whereby the reinforcement dimension “usually stimulates changes to existing programs or policies and the development and implementation of new activities and services” (Knight 1994, 14).

An analysis of the data gathered at Kyiv Polytechnic Institute suggests mixed perceptions around the reinforcement dimension. On the one hand, the case study data suggest gaps in

terms of what the internationalization process has generated. On the other, the university faces challenges in meeting the academic and administrative expectations of international engagement activities. Unpacking this element further, the reinforcement dimension reveals underlying tensions between supply- and demand-side actors linked to incomplete structural reforms and resource asymmetries. Furthermore, the interview data suggests a degree of mismatch between what the university offers and what it can actually deliver in terms of incentives and rewards. Nonetheless, there are also signs of effort and constructive achievement in this area.

The most prominent themes that arose from this dimension are policy asymmetries and significant economic challenges when accessing international learning or research activities. As mentioned earlier in this chapter, the reinforcement dimension is hampered to a large degree by partially-implemented ECTS reforms, heavy reliance upon external funding sources for international academic activities, and a lack of understanding of need for third-cycle reforms. Perhaps the most striking observations within the reinforcement dimension are its limitations on both sides of the academic and administrative house and the extent to which it appears to be a non-issue.

Much of the discussion around the reinforcement dimension centered upon funding issues and policy mismatches linked to systemic incompatibilities; including: conflicting perceptions over the status and affiliation of doctoral candidates abroad, as well as recognition and advancement for faculty engaged in international scholarship. Here, the majority of discussions around the reinforcement dimension inevitably turned to the issue

of funding, considering that financial support is a key example of the way that the university fosters and advances the internationalization process. Against this backdrop, Kyiv Polytechnic Institute does not have a dedicated annual budget for international travel grants, conferences and mobility bursaries. Furthermore, there are financial limitations around international guest lecturers and visiting scholars on campus. As such, the university depends entirely upon external funds to support international academic mobility and research activities, thereby shifting the reinforcement dimension (and power dynamic) to higher education stakeholder agencies.

Despite these challenges, Kyiv Polytechnic Institute appears to have made some progress in the reinforcement dimension by valorizing the international engagement activities of its professors. According to a senior faculty member, the university began providing release time for tenure-track professors engaged in international scholarly activities over the last two years. Prior to this, faculty members were obliged to take personal or vacation leave, as well as leave without pay in order to participate in international initiatives (KPI 25-11-16). This recent shift suggests growing acknowledgement and value for global outreach activities. In a similar vein, faculty respondents noted that the policy is important advancement in relieving administrative stress. Nonetheless, funding and working conditions remain on the minds of many faculty members, who argue that while Kyiv Polytechnic Institute has endeavoured to uphold high quality teaching and research standards following the collapse of the Soviet Union, current labour market conditions do not always allow scholars to realize themselves to their fullest potential (KPI 26-11-16; KPI 29-11-16a).

On a parallel track is the issue of institutional bureaucracy, which can negatively impact interest and participation in international teaching and research activities. Most vocal were the doctoral candidates who participated in the case study. These respondents cited a range of issues, from unsystematic recognition of international credits and unclear rules governing the status of full-time/part-time studies, to legal ambiguities surrounding military service. Combined, these barriers made it difficult for the university to provide incentives and rewards for institutional actors who advance Kyiv Polytechnic Institute's international activities. Also significant to the reinforcement dimension, senior administrators and faculty alike point to the lack of state funding for international initiatives, institutional brain drain and increased competition with European universities. Here, a senior international administrator casts revealing light on the gravity of the situation:

The state does not have funding for international academic activities. As such, internationalization occurs at the expense of the university and its initiatives. These are university-led programs, which the state does not finance... The new "Law on Higher Education" has widened the scope of international activities, but it is one thing to make declarations and quite another to actually do it. If there are no funds earmarked to support these initiatives, activities are difficult to accomplish [...] In the recent past we felt very serious competition from our international surroundings. I was shocked by the latest statistics – 40,000 Ukrainian citizens are studying in Poland. You understand that these are students who could have been studying at our universities! These 40,000 are the most active, well prepared, [they] demonstrate high ambition... in summary – *the best*. In the end, 40,000 of our best students are not studying in Ukraine but are studying in Poland. This is to say that Ukrainian universities are losing out to competition against partners in Poland, the Baltic States and Germany. As such, we have entered a period where we no longer face *national* competition alone, but strong *international* competition and Ukrainian universities are trailing... We need to work harder to compete with leading universities (KPI 29-11-16 | RU translated from original | emphasis in original).

Although funding issues were on the minds of many institutional actors, a senior lecturer noted that incentives and rewards for advancing internationalization need not only take form of monetary remuneration. According to a senior academic, improved reinforcement could help improve working conditions and facilitate ‘brain circulation’ for scholars and students returning to the university from abroad:

Without internationalization, change will be difficult. We aspire for change, but not brain drain – like a *membrane* in biology. We cannot compete with the West on economic terms, but we want to create mechanism for scholars to return to Ukraine if the living and working conditions exist... money is secondary. The proper conditions need to be put into place in order to make this idea work (KPI 26-11-16 | RU translated from original | emphasis in original).

Considering the aforementioned institutional limitations of the reinforcement dimension, virtually all case study participants spoke of the importance of individual initiatives, personal contacts and networking. As evidenced by this wide range of perspectives, the university’s eroding support for the reinforcement dimension due to its inability to underwrite international activities has, to a large degree, shifted power to higher education stakeholder agencies whose reinforcing role via network externalities and increasing returns has gained significant momentum in recent years.

RATIONALE

The data from Kyiv Polytechnic Institute indicate that institutional actors are motivated to pursue an international agenda for two overarching reasons. First, there is a long history of global engagement with technical higher education and innovation that is fundamentally aligned with the university’s mission and institutional outlook, which has become synonymous with the advancement of global science. The transmission and translation of

global knowledge into national needs is an organizing principle, which is all the more relevant for preparing human capital for an increasingly competitive marketplace and maintaining the university's status as a national leader in technical higher education. From this perspective, the university's alignment with the EHEA and ERA indicate that institutional actors are motivated to pursue international activities as a result of the globalized nature of science.

The expansion of thematic networks under the Erasmus Mundus/Erasmus⁺, TEMPUS programs, higher education stakeholder agencies, as well as the Horizon 2020 national contact point are clear manifestations of the university's efforts to align itself more closely with regional and global knowledge systems. Similarly important in this context are Kyiv Polytechnic Institute's ties with industry partners and multinational corporations, which leverage knowledge for technical transfer and commercial purposes. Furthermore, the permanent presence of higher education stakeholder agencies and joint international organizations on campus supports the university's praxis on staying current with the global orientation of technical higher education. Finally, the symbols, modified rule sets and legitimating discourses which these networks generate suggest increasing openness and receptivity to the rising tide of academic *and* entrepreneurial opportunities.

The second rationale can be attributed to economic factors, as resource asymmetries, state funding cutbacks and the growing commodification of knowledge place increased pressure on Kyiv Polytechnic Institute to develop closer synergies between academia and industry. The university's entrepreneurial pathway has emerged as a key action logic, which has

increasingly blurred the lines between academic and entrepreneurial activities. A reoccurring theme in the interview data and related university documentation suggest that this approach is a matter of institutional course, as the administration seeks to diversify knowledge production efforts and expand educational services beyond the territorial boundaries of Ukraine.

Equally important to note is the increased tone and frequency of the *performative* elements of academic activities, which represent a powerful discourse for internationalization at Kyiv Polytechnic Institute. The case study participants nearly unanimously spoke of the importance of global rankings, the perception of the university's place in the regional and global knowledge systems, as well as the ability to effectively market and export educational services and knowledge-based applications abroad. Economic rationales have prompted a series of academic and administrative changes at Kyiv Polytechnic, as previously noted in this chapter. These shifts include increased conceptual blurring between academic and entrepreneurial activities, as well as the recent creation of administrative units specifically designed to seek out and respond to entrepreneurial activities. However, as Oleksiyenko (2014, 252) warns, the growing commodification of knowledge and performative approaches in higher education bring with it inherent risks:

Performativity can overtake the spirit of healthy competition in challenging established concepts, inquiry modes or conclusions. Academic freedom can be stifled, leading to the demise of intellectual institutions. The pursuit of effective plug-ins into intellectual networks abroad can discriminate against local cultures, languages and histories in favour of new symbols, communicative forms and paradigms of thinking. Building a strong research university is thus a challenging task that requires sorting out benign and malignant factors, and effectively using tools that strengthen, rather than compromise the symbiosis of global and local forces.

As an educational innovation, internationalization efforts have taken on a more pervasive role in advancing academic and administrative shifts at Kyiv Polytechnic Institute, as evidenced by the drive to develop joint degrees, restructuring third-cycle programs and fostering university-industry-government linkages. From a change process perspective, the data suggest inconsistencies between new and existing institutional frameworks, as well as unresolved tensions between the two. As such, the process of *internalizing* change has been largely incremental and cautionary.

STRATEGIES

Kyiv Polytechnic Institute's strategy for regional and global engagement is set out in the *Strategic Development Plan for 2012–2020*. The document articulates a largely prescriptive approach to international engagement, calling for targeted increases in global rankings, international academic and commercial activities, as well as expanded membership in scientific networks. While these elements point to the administration's desire to reposition the Polytechnic over time, the largely prescriptive approaches set out in the strategy fail to account for resources and concrete details around the issues of *how* the university is to achieve said goals.

Moving from the conceptual to the operational, a key consideration in the analysis of Kyiv Polytechnic Institute's international strategy hinges on the way the university organizes its work. From this perspective, the university has adopted a mixed centralized/de-centralized model. This network approach ensures transversal lines of communication between central administration and academic units. This strategy appears to have taken an evolutionary pathway, which supports the function of the university, considering its large size and

complexity. Accordingly, Kyiv Polytechnic Institute's quasi-industrial approaches and strong emphasis on generating industrially-applicable knowledge is reflected in recent structural changes in the university's internal operations and increased support for internationally-oriented commercial activities.

Kyiv Polytechnic Institute's strategic directions can also be understood in geographic terms. Although the university enjoys a long history of cooperation with EU partner universities and higher education stakeholder agencies since joining the EHEA, European engagement represents a strategic vector since the Ministry of Education and Science suspended academic and scientific ties following hostilities with Russia in 2014. The university's subsequent westward reorientation, coupled with a strong emphasis on academic mobility and entrepreneurial linkages are central pillars of its international outlook. Interesting to note are Kyiv Polytechnic Institute's strategic links with the EU's newest university partners in Central and Eastern Europe. Senior administrators and faculty alike noted that inter-institutional connections were facilitated by common post-socialist experiences, cultural closeness and mutual desire to transform knowledge boundaries. Furthermore, inter-regional partnerships are increasingly customized to the dynamics of the national environment.

By embracing global outreach, capacity building and academic mobility initiatives, Kyiv Polytechnic Institute has fostered a range of institutional adaptations, as well as modifying teaching methods, curricula and quality assurance frameworks to encourage systems thinking. While case study respondents consistently cited the TEMPUS, Erasmus and

Horizon 2020 programs as transformative mechanisms for institutional change, the apparent lack of acceptance and understanding of the structured PhD model by some of the administration and faculty suggests a degree of path dependence. Furthermore, given the size and complexity of the university, there is little compelling evidence to show *how* tensions are being reconciled between the two training models, given the apparent disconnect between the reform rhetoric and the reality on the ground. These inherent challenges add a layer of complexity to the phasing out of the Soviet-era *kandidat nauk*, which is slated for completion in 2019 (KPI 28-11-16).

While the interview data and related documentation indicate that Kyiv Polytechnic Institute has engaged in a series of faculty-led strategies to bring individual doctoral programs closer inline with EHEA standards, the university's piecemeal approach to third-cycle reform provides little evidence to suggest wide-scale transformational change. As such, the traditional Soviet model of doctoral training remains largely intact since the structured PhD necessitates deeper systemic change. Although Kyiv Polytechnic Institute's extensive portfolio of international partnerships, knowledge clusters and thematic networks facilitate the university's *outward* connection to regional and global knowledge systems, the slow pace of *inward* change suggests somewhat moderate levels of compatibility with existing institutional structures and norms.

OUTCOMES

According to the case study data, Kyiv Polytechnic Institute has made significant strides in developing its international footprint, along with bringing its academic and administrative functions closer inline with regional and global knowledge systems. At the

same time, international efforts continue to face considerable obstacles. Academic idiosyncrasies, resource asymmetries and under-implemented reforms are cited by a range of case study respondents as factors which impede institutional change.

Against this backdrop, discussions around internationalization outcomes are widely perceived by case study participants to have taken an evolutionary pathway over the last two decades. While traditional modalities such as academic mobility and joint degrees under thematic networks such as Erasmus Mundus/Erasmus⁺ programs have gained prominence in the recent past, and are likely to continue along a similar trajectory in the foreseeable future, Kyiv Polytechnic Institute has steadily gravitated towards an ‘entrepreneurial university’ pathway whereby the traditional missions of teaching and research are being supplanted by commercial activities. In a similar vein, the university’s ‘quasi-industrial’ approach has been adopted as an institutional norm. Given current domestic economic challenges, this self-reinforcing discourse has been advanced as a legitimizing form of agency.

As evidenced by these forms of contextual adaptation, Kyiv Polytechnic Institute has embarked on an ambitious, but largely incremental process of modifying institutional frameworks in order to adjust to the demands of the EHEA and the fluid economic landscape. This suggests that new forms of negotiation and compromise are taking shape to legitimize and implement internationalization practices and innovation policies. Specifically, Kyiv Polytechnic appears to have approached third-cycle reforms in accordance with its institutional priorities and realities as evidenced by its active

participation in numerous thematic networks and collaborative initiatives. However, the interactions of institutional actors reveal a largely incremental approach to modifying existing third-cycle programs and academic structures. The interview data support the conclusion that Kyiv Polytechnic Institute has a dynamic and evolving international portfolio; however, by the same token the data also reveal a somewhat fragmented set of outcomes.

The perspectives gathered from the interview data and university sources suggest that Kyiv Polytechnic is moving forward with the development of innovative cross-border partnerships, as well as efforts to bring third-cycle training and research closer inline with the EHEA. While the university has taken extensive steps to (re)negotiate its *entrepreneurial* spaces of action, comparable efforts have been less rigorous on the academic side of the house. Efforts to this effect have manifested in institutional rhetoric and policy documents, which place high institutional priority on international entrepreneurial activities, resulting in increased receptivity and less resistance to these changes (see Kyiv Polytechnic Institute 2012; Kyiv Polytechnic Institute 2016).

Within this context, international academic activities continue to face challenges and internal administrative barriers. These are manifested as tensions between institutional actors pursuing academic practices presumed in the European knowledge system, and those who seek to preserve and reinforce the Soviet higher education legacy. From this perspective, Kyiv Polytechnic appears to lack a shared sense of urgency on third-cycle reforms on both sides of the academic house. The central administration's apparent

inability or unwillingness to move forward with institutional reform by way of a cohesive institutional project suggests that wider systemic changes are needed, along with a shift from state-centred management logics to greater institutional autonomy.

CHAPTER 6 TARAS SHEVCHENKO NATIONAL UNIVERSITY OF UKRAINE

The aim of this chapter is to examine the internationalization experiences of Taras Shevchenko National University of Kyiv through the conceptual framework of institutional change theory (North 1990) and the Delta Cycle for Internationalization (Rumbley 2010). The primary source of data for the analysis originates from semi-structured interviews with 15 respondents, including supply- and demand-side actors on both sides of the academic house. Official documents, reports and grey materials support the case study and provide important details about the internationalization process as it plays out within the institutional setting of the university.

The first objective of this chapter is to examine the phenomenon of academic internationalization by applying the Delta Cycle for Internationalization's six dimensions (*awareness, commitment, planning, operationalization, review and reinforcement*) to assess its performance against these main indicators. The analysis is then expanded to a wider framework in order to gauge the university's rationale, strategies and outcomes. The fundamental goal of this chapter is to address the main research question; namely: How have institutional actors at Taras Shevchenko National University responded to the challenges and imperatives of the global knowledge society since Ukraine's accession to the EHEA?

ORGANIZATIONAL OVERVIEW

Founded in 1834, Saint Vladimir Royal University of Kyiv was established by royal decree of Emperor Nicholas I. The university's original name reflected the dominant role and

significance of Kyiv as a hub of Orthodox Christianity for the Russian Empire. The university was originally structured around two departments: the Department of History and Philology and the Department of Physics and Mathematics. The Faculty of Law and the Faculty of Medicine were added in 1835 and 1847, respectively. The university grew in prominence during the nineteenth century as the economic elites of the Russian Empire advanced towards its European periphery to strengthen their political and industrial positions (Oleksiyenko 2014, 256). As a result of the Bolshevik Revolution and Ukraine's failed attempt at building a sovereign nation state, the university was disbanded from 1920–1933 along with other higher education institutions throughout Ukraine, on suspicion of harbouring Ukrainian national consciousness.

The university reopened as Kyiv State University in 1933 on the basis of the Soviet higher education model. Its mission was to train a new generation of Soviet citizen. The onset World War II led to the university's evacuation and subsequent closure. The campus sustained heavy damages, as well as human and materiel losses during the ensuing liberation of Nazi occupied Kyiv in 1943. The university reopened in January 1944 and by the end of the 1940s, the scope of its work and training output levels began to regain pre-war levels. During the post-war years, Kyiv State University rose to prominence as one of the top three tertiary institutions in the Soviet Union, together with Moscow State University and Leningrad State University.

The university gained the reputation as a 'flagship' training centre, and in 1959, received the Order of Lenin, the Soviet Union's highest award (Kopiika 2014, 11). Over the course

of the following decades, the university grew significantly in terms of departments, faculty, staff and students. In 1960, the first cohort of international students was admitted, opening the way for the development of a broad range of educational and scientific contacts. In a similar vein, Kyiv State University's Institute for International Relations became a key training centre for Soviet diplomats in tandem with the Moscow State Institute for International Relations (MGIMO). The university further expanded its activities in subsequent decades and in 1984, earned the Soviet Union's second highest award, the Order of the October Revolution.

The dissolution of the Soviet Union in 1991 signified the beginning of Ukrainian national independence. This shift brought with it the need to recalibrate the university's mission towards building an independent nation state. In April 1994, the university was granted the status of a National University by presidential decree (President of Ukraine 1994). By November 1999, a second decree was passed granting the university further autonomy (President of Ukraine 1999). In May 2008, the status of Taras Shevchenko National University of Kyiv (herein known as Kyiv National University) was raised as part of the Ukrainian government's efforts at establishing a Ukrainian 'Ivy League' (President of Ukraine 2008).

The world-class research university project was summarized as follows: "The state wanted to provide Kyiv National University with stimulus and support, including finance for becoming a world-class research university. It was expected the university to enter into world rankings and to present Ukraine on the international level" (Hladchenko et al., 2016,

118). The legislation stipulated that the university was to become the main higher education institution in Ukraine. It also promised additional benefits, such as a salary increases for academic staff and supplementary funding for international study visits, as well as increased state funding for research (President of Ukraine 2008). However, attempts at uplifting the performance of Ukrainian universities to global standards have, at best, led to mixed results (Oleksiyenko 2014). In line with the ‘world-class’ research university vision, the Cabinet of Ministers of Ukraine granted the university the title of ‘National Research University’ in July 2009 (Parliament of Ukraine 2009). The world-class research university project – though still incomplete – was introduced as a means of developing a league table of prominent Ukrainian universities with the capacity to meet the increasing demands of a globalized economy (Oleksiyenko 2014).

A public institution, Kyiv National University is one of Ukraine’s leading universities. The university is staffed by 2,951 faculty members across 14 faculties and eight institutes. In 2016–2017, student enrolment stood at 20,759 including approximately 382 international students and some 30 international long-term lecturers (Academic Council of Taras Shevchenko National University of Kyiv 2016). In 2016, its annual operating budget was UAH 1.15 billion (CAD \$57 million) (Academic Council of Taras Shevchenko National University of Kyiv 2017, 5). Programs of study are offered in Ukrainian and Russian with limited offerings in English.

Kyiv National University is a nationally top-ranked comprehensive higher education institution with regional links to European and Eurasian universities and global scientific

networks. The university is considered a knowledge hub of significant relevance to this study and is a leading national university in both fundamental and applied research (Hladchenko et al. 2016, 120). From a global standings perspective, the university ranked 411–420 in the 2017 QS World University Rankings and 801–1,000 in the Times Higher Education World University Rankings, respectively.

Kyiv National University is a central higher education institution to this study considering the important place it occupies in the Ukrainian higher education landscape. By virtue of the university's long history, scope and scale of activities, central location in the heart of Kyiv, as well as its political, social and economic significance lends credibility to its 'flagship' status. Against this backdrop, a study addressing the phenomenon of internationalization in Ukrainian National Research Universities would be incomplete without its inclusion. For these reasons, it is an essential case study university from which the international dimension can be critically assessed.

AWARENESS

Knight (1994, 12) defines the awareness dimension as the mindfulness of “need, purpose, benefits of internationalization for students, staff, faculty, society.” North (1990, 111) argues that institutional awareness force subjects “to question the behavioural models that underlie their disciplines and, in consequence, to explore much more systematically the implications of costly and imperfect processing of information for the consequent behaviour of the actors”. Measured against this definition, the data gathered from semi-structured interviews with institutional respondents and supporting documents reveal a strong level of awareness among the case study respondents about the importance and

centrality of internationalization at Kyiv National University. Considering the large size of the university and the various institutional actors therein, internationalization awareness levels show relatively homogenous levels on both sides of the academic house. The interview data, official university documentation and grey materials suggest that the awareness dimension shows a strong degree of breadth and depth among case study participants, in addition to a fairly diffuse level across the academic enterprise.

The data indicate that awareness levels have taken an evolutionary pathway originating from the Soviet era and developing over time through to Ukraine's independence, accession to the Bologna accords in 2005, and advancing to more complex arrangements since the passage of the 2014 "Law on Higher Education". Evidence of the awareness dimension is manifest in the 2009 *Concept of International Relations Development of Taras Shevchenko National University of Kyiv*, which envisions the university within a "single global scientific space and the European Higher Education Area, as defined by the Bologna declaration" (Taras Shevchenko National University of Kyiv, 2009). Further precision around the international awareness dimension is outlined by a senior administrator, who candidly notes:

Independent Ukraine has existed for 25 years, but during that time the transition from a post-Soviet to a global higher education space has been taking place. Over a decade has passed since Ukraine signed on to the Bologna accords. However, in reality that decade was devoted to understanding what the Bologna Process is, what the European Higher Education Area is, [and] what the global higher education space is. For our university there is a distinct advantage – *why?* Many international students from over 90 countries oriented towards the Soviet Union studied here during Soviet times[...] Already then we understood internationalization in a certain way. Currently, we use the parameters provided by the European Higher Education Area... (TSNUK 3-03-16 | RU translated from original | emphasis in original).

From this perspective, the same respondent indicated that international awareness goes beyond institutional cognisance to form a pillar of the university's overall mission, underscoring: “[I]nternationalization comprises one of four components of our university, including teaching, research, innovation and internationalization. Important to note [is that] not only does the management understand this, but our professors and students as well. They understand the need to work collaboratively in order to raise [academic] standards and *quality*” (TSNUK 3-03-16 | RU translated from original | emphasis in original).

Following closely along these lines, a senior international administrator noted that internationalization is a key vector of the university's overall mission (TSNUK 3-03-16a). From this perspective, the data suggest that the administration has implemented a coherent institutional framework by creating a number of corresponding positions and structures, which provide direct oversight and support for international activities. Notable among these are the creation of the position of vice rector for international relations, consolidation of the International Cooperation Office, strengthening international linkages at the faculty and institute level, as well as nominating interlocutors at the academic unit level to provide oversight at the country and regional level (TSNUK 3-03-16a).

In a similar vein, the International Cooperation Office plays a key role in maintaining awareness levels to a range of institutional actors across campus. This unit is responsible for disseminating information on academic mobility and grant opportunities, as well as liaising with partner universities and negotiating international agreements. The

International Cooperation Office website also facilitates up to date information on seminars and events, as well as an online inventory of partner universities and mobility scholarships (TSNUK 29-11-16).

Similarly, higher education stakeholder agencies and international centres also play a key role in supporting the awareness dimension. The interview data reveal that a substantial level of international awareness among administrators, faculty and doctoral students is generated by the TEMPUS and Erasmus programs (FN 30-11-16). Most, if not all case study respondents at the university acknowledged the salience of the European knowledge ‘brand’, its significant impact on academic programming, as well as associated funding opportunities. Furthermore, EU-sponsored programs provide an array of technical assistance, partnership opportunities, as well as steady flows of international lecturers and students to and from campus.

In this regard, a doctoral candidate who had previously worked at the International Cooperation Office noted that approximately 70 percent of all the university’s academic mobility occurs within the parameters of the Erasmus program, while the remainder is a ‘mixed bag’ of exchange programs offered by various higher education stakeholder agencies (TSNUK 1-12-16a). The doctoral respondents unanimously agreed that bilateral agreements provide significant opportunities for academic mobility and research. Yet, they also cautioned that mobility scholarships and travel grants are provided exclusively by external funding agencies; namely EU-sponsored initiatives as a rule (TSNUK 30-11-16; TSNUK 1-12-16a; TSNUK 21-12-16).

The data also suggest fairly high levels of international awareness manifested across programmatic and geographic areas. A senior international administrator noted that the university takes a “multi-vectored” approach to global outreach (TSNUK 3-03-16). In other words, the university pursues international partnerships across various geographical areas, including Asia, Europe and North America. However, traditionally strong relations with the Russian Federation have been frozen on “ethical grounds” following the annexation of Crimea and ongoing geopolitical tensions in the Donbas (TSNUK 3-03-16). A senior academic noted that the shift towards Europe has been disruptive, given the break in relations with Russia and the increased demand for English language training (TSNUK 30-11-16).

Perhaps the most compelling expressions of institutional awareness came from respondents directly involved in the TEMPUS and Erasmus programs. Interview data suggest that the awareness dimension is driven in part by the quality of international academic contacts, compatibility with existing programming and accessibility to mobility funding (TSNUK 3-03-16; TSNUK 1-12-16a). Against this context, a senior administrator noted that inter-regional cooperation initiatives such as the Polish Erasmus for Ukraine program – a joint initiative between the EU and the Polish Ministry of Education – offered 450 mobility scholarships to Ukrainian scholars in 2015, approximately 60 of which were specifically earmarked for Kyiv National University (TSNUK 3-03-16).

Unpacking the awareness dimension further, the EU flagship research program, Horizon 2020 was cited by a senior faculty member as an important element in bringing the

university on “more equal footing” with the global knowledge system and provided an added stimulus for higher education reforms (TSNUK 1-12-16). From this perspective, the *agency* of EU-led initiatives appears to be a source of reinforcement for the awareness dimension on both sides of the academic house, thanks to the extension of academic horizons and operational reach. While discipline-based initiatives such as the American Common Law Centre, the Centre for German Law, the Centre for Polish Law, as well as the Jean Monnet Chair have a permanent presence on campus, their scope, scale and visibility is scarcely comparable to that of the EU programs.

The awareness dimension is also reflected in more pragmatic terms of internationalization, as evidenced by participants’ perceptions over the need to keep pace with global rankings, curricular and scientific innovation, in addition to sufficient attention to quality and competitiveness. In this regard, the subject of competition is never far from the conversation where international awareness is concerned. A senior international administrator casts light on the subject by providing important contextual perspectives:

Internationalization is not only fixed to legal texts and other documents. Today there is an understanding that Kyiv University works in a competitive environment... Over the last five to seven years, the psychology of a fairly large number of academic staff, personnel and university managers was not altogether negative, but [rather] ‘*why do we need this?*’ A rhetorical question: if we recruit foreign students, conduct joint research, participate in international conferences and publish joint papers, then what more should we do? Today, time has shown that there is very strong competition, mostly from the Baltic States, Poland and Czech Republic due to a serious drop in demographics... Ukrainian students comprise a large portion of students in those countries. If all Ukrainian students were to be removed from Polish universities today, approximately five [Polish] universities would close. An analogous number of closures would also occur in the Czech Republic and the

Baltics... In Ukraine the problem is somewhat on the opposite side of the coin because there is a war going on and many parents send their children to study abroad in order to avoid military service. I want you to understand that this is not always a question of *quality* but a question of *security* (TSNUK 3-03-16 | RU translated from original | emphasis in original).

The analysis revealed that economic rationales heightened sensitivities around the international awareness dimension. This was especially evident among respondents who observed increased blurring between academia and the market due to state budget cuts in research and development. A senior faculty member observed that the Ukrainian government only provides 0.25 percent of the required seven percent stipulated for scientific research and development due to fiscal austerity measures (TSNUK 1-12-16). The respondent noted that internationalization is understood as a channel to gain a wider degree of autonomy from the state's limited resources and thus, provides a means of sidestepping high transaction costs by bringing together different actors and organizations with diverse capacities (TSNUK 1-12-16). In a similar vein, the respondent candidly noted that “without internationalization, we cannot survive” (TSNUK 1-12-16).

The analysis also revealed that normative changes introduced in the 2014 “Law on Higher Education” widened the scope of the awareness dimension by introducing a new framework for international engagement (Article 1, Parliament of Ukraine 2014). Likewise, the legislation decreased the teaching workload of academics from 900 hours to 600 hours per year in order to provide more time for research (Article 56, Parliament of Ukraine 2014). Despite the new law's attempt at creating favourable conditions for the expansion of joint doctoral training and aligning third-cycle programs along EHEA

standards; administrators, faculty and doctoral candidates consistently cited the slow pace of internal adaptation and resource asymmetries as impediments to international engagement efforts.

In October 2012, the Ministry of Education and Science of Ukraine placed additional requirements on the *kandidat nauk* and PhD programs in an effort to bring Ukrainian doctoral training closer to the global ‘scientific mainstream’; including: a ‘B2’ (upper intermediate) English-language proficiency score or higher (Cambridge English Language Assessment), mandatory publication of a minimum of one academic paper in an international peer-review journal and active participation in at least one international conference in an EU or OECD state (Finikov & Sharov 2014, 29; Ministry of Education and Sciences, Youth and Sport of Ukraine 2012).

Despite increased requirements, the state has not allocated additional resources to academic language training, nor developed competitive mechanisms for scholars to apply for funding for study visits or conferences abroad. While these elements have substantially raised the level of international awareness on both sides of the academic house, a senior faculty member cautioned that resource limitations can only support approximately 10 percent of current demand for English language training, thereby putting the entire pre-requisite at risk (TSNUK 30-11-16). Accordingly, a senior doctoral school administrator noted that a combination of resource asymmetries and lack of coordination have resulted in a degree of institutional reluctance to internationalize (TSNUK 1-12-12).

From the doctoral candidates' perspective, the respondents made repeated reference to increased international awareness levels in light of the aforementioned demands. In terms of publishing in peer-reviewed journals, global citation indexing services such as the Web of Science and the Scopus bibliographic database of peer-reviewed literature were the most commonly cited, as well as the Hirsch Index (author-level metrics) and the Polish-based Index Copernicus International. Nonetheless, doctoral respondents underscored that publishing in [international] peer-reviewed journals is a time-consuming task which brings with it inherent risks, since the process may add as much as one year to their studies (TSNUK 1-12-16a). While others noted that some Ukrainian scholarly journals listed under the international citation indices require a fee for publications (TSNUK 1-12-16b). Doctoral candidates often attempt to circumvent this barrier by seeking a co-author in an OECD country in order to meet the added international demands placed on the curriculum.

Despite administrative challenges, the doctoral candidates interviewed for the case study revealed that internationalization brought heightened awareness of their disciplines and new perspective by way of access to leading experts in their respective fields, curricular innovation, access to modern equipment and contemporary scholarly materials. On the other hand, many respondents found those resources which they grew accustomed to noticeably lacking upon their return to Ukrainian academe.

A number of doctoral candidates in the natural sciences noted their reliance upon colleagues in European universities for access to the latest scientific journals, while others regularly request that laboratory tests or algorithms be carried out on equipment at partner

universities due to a lack of comparable tools on campus. Some mentioned increased reliance upon online resources such as Google Scholar, while others referred to pirated copies of scientific journals and e-books due to high subscription rates and lack of access at the university library (TSNUK 1-12-16a). As one respondent candidly noted: “[I]nternationalization helped to create new directions, but we aren’t the only ones and we’re not necessarily the best” (TSNUK 21-12-16).

Despite ongoing challenges on the academic and administrative sides of the academic house, the data from Kyiv National University suggest that the awareness dimension is fairly dynamic. Additionally, the respondents show keen interest in the internationalization phenomenon, as demonstrated by the various rationales expressed by institutional actors. And while there is evidence of both a historical sense of relevance and contemporary imperative on the increased centrality of a globalized higher education environment, there is also a sense from respondents that growing levels of awareness have created tensions between the expectations generated by internationalization and institutional capacity to adapt to a rapidly changing environment.

COMMITMENT

The commitment dimension of Knight’s (1994, 12) Internationalization Cycle is defined as dedication to the international project, which should be manifest in ways which are both symbolic and concrete. From a Northian perspective, this involves “creating an institutional environment that induces credible commitment and entails the complex institutional framework of formal rules, informal constraints, and enforcement that together make possible low-cost transacting” (North 1990, 58). Against this background, the data

from the case study respondents suggest a sizeable commitment to the university's internationalization efforts. By the same token, institutional actors note that greater efforts are required to improve the university's capacity in this area.

Kyiv National University has made notable commitments to internationalization as evidenced by an administrative unit focused on programming and the appointment of senior and mid-level personnel to oversee activities in this area. The Academic Mobility Office was opened in November 2015 with a staff of six, along with an International Research Office staffed by three personnel dedicated exclusively to activities and programming in these respective areas (TSNUK 30-11-16). In order to support the work of the central administration, the university's faculties and institutes assign a faculty member to coordinate internationalization efforts at the academic unit level (TSNUK 3-03-16a).

From a normative perspective, the *Concept of International Relations Development of Taras Shevchenko National University of Kyiv* was introduced in November 2009. This document outlines the university's main international goals as follows: "achieving world-class research university status" and "securing the organization of scientific processes on par with the best international standards and successful integration in the European Higher Education Area" (Taras Shevchenko National University of Kyiv 2009). Despite the linear and largely declarative nature of the document, no indicators or tools are provided to determine how international objectives are to be achieved beyond scorecard metrics, highlighting serious gaps in the current approach. Furthermore, it makes no reference to

restructuring academic programs and operations as a function of international efforts, nor does it elaborate upon or make the case for systemic institutional change to better meet the changing needs of students and faculty engaged in international activity.

In a similar vein, the university's Academic Council publishes a series of brief annual reports, which document and highlight the international achievements of the academic community (Academic Council of Taras Shevchenko National University of Kyiv 2016a). However, the nature of these reports remains highly quantitative in nature, revealing little about the qualitative aspects of international activities and their subsequent outcomes. In this regard, the following metrics were assessed and recorded: (i) the university's position in global ranking; (ii) quantity of publications in international peer-reviewed journals; (iii) international students and foreign professors; (iv) joint programs with international partners; (v) joint international chairs, laboratories and scientific associations; and (vi) international awards and recognition attributed to the faculty and staff (Ibid).

Despite the university's visible commitment to international engagement, its funding stops short of allocating a separate budget for the International Cooperation Office (see Academic Council of Taras Shevchenko National University of Kyiv 2017). Furthermore, the interview data confirm that academic mobility and international research activities are funded exclusively by external sources and that no financial support from the university is provided. From this perspective, institutional actors have become increasingly resourceful in leveraging partnerships to gain access to international funding, increase student recruitment and more recently, market educational services abroad.

Another indicator of the university's commitment to internationalization is manifest in the TEMPUS and Erasmus programs. As mentioned earlier in this chapter, both programs helped to expand cooperation for innovation and exchange and support policy reform by bringing them closer inline with the EHEA. Within these EU framework programs, Kyiv National University participated in 22 TEMPUS structural measure and capacity building projects since the program's introduction to the Ukrainian higher education system in 1994 (National TEMPUS/Erasmus⁺ Office Ukraine 2014, 423). At the time this research was being conducted, the university was affiliated with 66 Erasmus⁺ projects, including two capacity building initiatives across all three key action areas (academic mobility, cooperation for innovation and exchange of best practices, and support for policy reform).

Noteworthy is the *Quality Assurance Tools for the Management of Internationalization* (2009–2012) TEMPUS initiative, a structural framework measures project which at its core, attempted to institute a series of self-assessment tools and define performance gaps. The project's final report provides the following insights on the commitment dimension, along with specific reference to the overarching need for systemic institutional change:

Excellence cannot occur without international cooperation, networks, and exchange. Networks and cooperation on an international level are keys to solving the problems found within society, both today and in the future. What this means is that all universities even the smaller ones need to develop a strategic direction for their internationalization in a fashion that will allow them to thrive in the future. To put it another way: Internationalization is now a core task of all universities, and contains the potential to elevate an institution's overall competitive position.

Universities in the former Soviet Union increasingly have internationalization as one of the main strategic goals of their university's strategy. A strategic approach, however, requires the move from a mere individual, incidental and peripheral perspective towards an institutionalized and professionalized process of internationalization. This

also requires a paradigm shift in the daily work processes in all areas dealing with internationalization, from the more or less incidental and individually oriented work processes of today towards professionalized protocols applying the parameters of quality assurance in internationalization (Bruns 2011, 4).

In recent years, the university has also committed itself to closer alignment with the imperatives of the emerging ERA through scientific networks, thematic research clusters and the introduction of three collaborative projects within the Horizon 2020 framework (TSNUK 30-11-16). While accession to these programs is widely perceived by case study respondents as a positive trend, the modular and piecemeal approach to structured PhD reforms has yet to bring about wide-scale and systemic institutional change.

The data from Kyiv National University suggest a substantial level of symbolic and concrete manifestations of commitment to internationalization. However, the commitment dimension illustrates something of a mixed picture. From this perspective, the data raised compelling questions regarding the sustainability of current global engagement efforts due to resource asymmetries, policy misalignments and incompatibilities with current doctoral programs. The dominant theme that emerges from the data suggests that the commitment dimension relies heavily upon a centralized, top-down approach. While this orientation provides space for involvement by the university's faculties, as evidenced by the array of international mobility programs, thematic networks and knowledge alliances; one of the most revealing elements of the commitment dimension was the ongoing challenge of translating and re-contextualizing external innovations into existing frameworks to foster meaningful institutional change.

PLANNING

Knight's (1994, 13) Internationalization Cycle recognizes the planning dimension as an important element, which should occur at "several different levels" across the higher education institution. Along with providing an institution-wide plan to demonstrate priority, framework and direction, the university needs "to translate this expression of importance and intent into strategic and operational plans" Knight's (1994, 13). As planning for internationalization will be unique to each tertiary institution, this dimension should also take into consideration that universities are not starting with a blank slate. Furthermore, setting realistic timeframes and goals are important, along with a sense of institutional movement and achievement which catalyzes support. Parallel views are echoed by North (1990, 64), who asserts that "the institutional framework will affect both transformation and transaction costs; the latter because of the direct connection between institutions and transaction costs, and the former by influencing the technology employed".

According to these criteria, the data collected in the context of this sub-section reveal important elements of the planning dimension at Kyiv National University. Senior administrators, faculty and mid-level leaders noted that over the last decade, internationalization as both concept and strategy has evolved from a fragmented and marginal theme to a more central agenda item for the university. However, they also note the challenges of implementing institutional change within the university's post-Soviet realities. Evidence of the planning dimension is manifest in the *Concept of International Relations Development of Taras Shevchenko National University of Kyiv*, a four-page document, which outlines the university's priorities for regional and global engagement (Taras Shevchenko National University of Kyiv 2009).

The document articulates the need for strategic engagement and network partnerships in order to leverage its regional and global positioning. The interview data also demonstrate a centralized pattern of planning, coupled with an input–output metric approach to measuring international outcomes. From an institutional governance perspective, a senior international administrator noted that the university’s Senate reviews proposals and formulates strategies on the basis of five-year plans derived from a series of [undisclosed] quantitative indicators (TSNUK 3-03-16). Accordingly, the respondent continued by highlighting the collegial approach behind this method, which allows for “numerous voices to be heard across the academic enterprise, as internationalization resonates differently according to discipline and academic unit” (TSNUK 3-03-16).

At the same time, the senior administrator underscored that this approach provides adequate flexibility should a change of tactic or ‘fine tuning’ be required. The existence of these consultative elements provides further evidence that Kyiv National University approaches its international activities in a planned and measured way. From a faculty perspective, a senior faculty member noted that the very nature of the scientific field positioned his work well ahead of the university’s internationalization efforts (TSNUK 1-12-16). In this regard, the professor underscored his proactive approach to international planning due to the global nature of science and the need to be well integrated into the scientific community.

This orientation includes active participation in knowledge networks, making research results available and publishing in international peer-review journals as well as being

visible in global citation indexing services such as the Web of Science and the Scopus database of peer-reviewed literature, which according to the senior respondent “only gained prominence at the university level in the recent past” (TSNUK 1-12-16 | RU translated from original). According to the senior respondent, internationalization is perceived as an *extension* of the discipline, as well as a *means* of advancing knowledge production efforts and innovation.

Further insight was provided by a senior lecturer who candidly noted that the EU-sponsored TEMPUS program provided the initial framework for the planning dimension, since international activities were not being properly captured due to the university’s dated outcome-mapping methods, which failed to provide the proper space for reporting (TSNUK 29-11-16). For these reasons, it is believed that the planning dimension was infrequently mentioned by the case study participants as a critical component of international operations (FN 3-12-16). From this perspective, the same respondent offered the following critique of the university’s current approach to international planning:

It [the administration] is *extremely* supportive if it [initiatives] comes from the top. If [coming from] either the President or the Ministry or the body considered to be an ‘authority’. Having said that, the Rector would come back to the university and say “from tomorrow, we’re doing this...” Fine, then they’re very supportive. If it comes from a *bottom-up* approach, then there is a huge problem. Not that they would totally reject [the proposal], as I said before... they see the rationale behind it, they *can* support it, but it will take time. And even the TEMPUS projects, they would say the right words and attend meetings[...] but the actual realization of what it was all about would come in two or three years’ time (TSNUK 29-11-16 | emphasis in original).

Aside from planning at the institutional level, a senior administrator from Kyiv National University holds a seat on the National Team of Higher Education Reform Experts.²³ Headed by the Ministry of Education and Science of Ukraine and coordinated by the National Erasmus⁺ Office, this consultative working group is draws from a pool of national expertise from across the country and acts as a forum to support policy dialogue, coordination, best practices and synergies in the advancement of national higher education reform efforts.

The data gathered from institutional actors illuminates the various layers of understanding as to *how* the planning dimension plays out in practice. Furthermore, the analysis indicated that international planning is a complex undertaking not easily captured or voluntarily disclosed by the case study respondents, as evidenced from the sometimes-coded responses regarding the internationalization of doctoral programs and third-cycle reforms. In this regard, some respondents avoided direct questions or provided vague responses on international doctoral programs and their outcomes. The prevailing theme that emerged from the data is that the planning process relies upon a predominantly centralized approach to decision making along with a degree of symbolic input from faculty and mid-level leaders.

This orientation places the university's senior administration at the steering core of the planning dimension, while providing a visible, but limited role for faculty and staff. Furthermore, the international planning dimension appears to be far less robust than the

²³ A representative from Kyiv-Mohyla Academy is also member of the 2014–2017 National Team of Higher Education Reform Experts committee.

other two case study universities. This is particularly telling in regard to the internationalization of doctoral training and third-cycle reforms. In this regard, improved international planning could facilitate enhanced knowledge management and coordination for institutional change.

OPERATIONALIZATION

The three central components of the operationalization dimension of Knight's (1994, 13) Internationalization Cycle are identified as "academic activities and services, organizational factors and guiding principles", which centre on the concrete implementation of the university's international vision. From a Northian perspective, the phenomenon of internationalization presents the institution with the dual challenges of coping with external adaptation and internal change (North 1997, 20). The operationalization dimension also speaks to the issue of diminishing resources and the need to manage competing institutional priorities, which is particularly salient for this case study. In this regard, Knight (1994, 13) underscores: "[I]n the current environment of decreasing resources and competing priorities, one has to be practical and realistic about how to manage an internationalization process without new money and perhaps with even less money. New partnerships with private and public sector agencies plus linkages with community groups are being formed to share and maximize resources".

The size and scope of Kyiv National University's operationalization dimension, coupled with the relatively recent impetus for third-cycle reforms presented some challenges for (re)creating an accurate and balanced representation of this element. Nonetheless, the data

indicate that the operationalization dimension is a highly evolved and dynamic aspect of internationalization at this case study university. The interview data and various institutional sources such as official reports and documents demonstrate that the phenomenon is quite robust on both sides of the academic enterprise. While evidence suggests a moderate degree of internationalization reflected in doctoral programs and curricular development, Kyiv National University has yet to embrace and implement a far-reaching institutional change agenda addressing operational aspects and governance of its third-cycle programs.

Unpacking the operationalization dimension further, the interview data and related resources indicate a fairly substantial level of infrastructure to support international efforts. The university's international operations are organized around two senior administrators: the Vice-Rector for International Relations who provides leadership for the International Cooperation Office and the Vice-Rector on Academic and Educational Work, who oversees the Academic Mobility Office. Each respective administrative unit is headed by a director and staffed by a total of six employees (TSNUK 30-11-16).

The interview data provided additional insight into the history and background of the operationalization dimension, as well as a narrative of the structural change that took place as a result of the university's internationalization efforts since Ukraine joined the Bologna Process in 2005. A senior faculty member provided the following critical insights into the development of the university's international support infrastructure:

There is no such thing as an [international] vision or mission statement...
Because of the QATMI [*Quality Assurance Tools for the Management of*

Internationalization] TEMPUS project (2009–2012), which had to do with internationalization, they [the senior administration] developed the International Cooperation Office... Before that, it was a kind of service. And the function of this office was actually to do the paperwork for people travelling abroad to international conferences, simply because Human Resources didn't speak any foreign languages and they didn't know *how* to complete the forms... [A]nother priority – and this is a very recent development – the International Relations Office set up a Mobility Unit. And that's one of the priorities here to help support student and staff mobility... We had to lobby a lot for mobility[...] So this office is now dealing with that. And I believe and *know* that this is quite a huge move forward for the university, because we didn't have all of this even three years ago (TSNUK 29-11-16 | emphasis in original).

Kyiv National University's international operations support substantial mobility flows through 263 bilateral agreements with international partner universities and research institutes (TSNUK 30-11-16). Included in the mix are approximately 150 agreements with European universities and 80 agreements with Asian universities (Kravchenko 2015, 8). Important to note is that the overwhelming majority of academic mobility flows occur within the framework of 66 Erasmus⁺ programs and three Horizon 2020 research projects in operation at the time of this inquiry (TSNUK 30-11-16). Despite these significant numbers, the university experienced a substantial mobility imbalance with approximately 2,100 outgoing and nearly 100 incoming students and faculty in 2016 (TSNUK 30-11-16).

In addition, few international scholars are based at the university on a permanent basis. A monitoring study on the integration of Ukrainian universities into the EHEA explains the reasons for the disproportionate numbers of inbound scholars, such as limited funding from the host university, negative perceptions around wages and benefits, as well as a lack of Ukrainian and Russian language skills, which are not widely acquired outside the former Soviet Union (Finikov & Sharov 2014, 123). On the opposite side of the coin, a mid-level

leader underscored that the university faced real challenges where English language proficiency of its professors is concerned. It was noted that the International Cooperation Office works closely with the British Council in Kyiv to raise English language competencies of the professorial corps (TSNUK 30-11-16). Yet, challenges remain, since the lack of English teaching and research capacity is perceived to have negative downstream effects, such as low publication numbers in international peer-reviewed journals and limited capacity for training international students, which ultimately reflects in national and global rankings (TSNUK 30-11-16).

In terms of programmatic developments, the EU-sponsored Erasmus Mundus/Erasmus⁺ programs stand out as the most prominent international academic initiative in terms of scope and reach, despite the university's large number of bilateral agreements. According to the majority of case study respondents at this university, Erasmus is the academic mobility program of choice for students, faculty and staff at Kyiv National University, considering its prominent international footprint, prestigious knowledge 'brand', access to scholarly networks and generous funding mechanisms.

At present, Kyiv National University has 15 double degree agreements with universities in France, Germany, Italy, Japan, Lithuania and Poland, as well as an additional three with the Russian Federation – the latter of which remain frozen at the time of the investigation (Kravchenko 2015, 12). One of the most visible outcomes resulting from these collaborative agreements is the International French-Ukrainian Research Cooperation in Molecular Chemistry (Université Toulouse III – Paul Sabatier), which consists of a joint

laboratory, scientific journal, as well as the introduction of joint PhD supervision under the *cotutelle* framework. A senior administrator from a participating doctoral school noted that the *cotutelle* is an important external innovation and a curricular breakthrough; yet warns that it is costly to operate; therefore, the university is moving ahead ‘cautiously’ (TSNUK 1-12-12).

These operational efforts provide important evidence of the impact that international programming is making on the way the university self-organizes to meet contemporary knowledge production needs an increasingly interconnected academic environment. Despite the range and scope of Kyiv National University’s international engagements, the operationalization dimension revealed that the central administration does not provide mobility scholarships to students, faculty and staff. Accordingly, a mid-level leader confirmed that the university relies exclusively upon external funding for international mobility scholarships and research grants (TSNUK 30-11-16).

Following closely along these lines, another major challenge facing the operationalization dimension is the issue of credit recognition. Despite the clauses in the “Law on Higher Education” overseeing ECTS credit transfer and course electives, major internal obstacles remain around these points due to an underdeveloped academic system of credit recognition and international equivalencies. The interview data casts critical light on these operational challenges, while providing insight on the internal mechanics of the university. From this perspective, a senior faculty member asserts:

The university and the management system are not prepared, and have no capacity for international projects, for income diversification [...] bringing

international expertise here... It's just not designed for that. We need to train and retrain and get new people in terms of accounting, in terms of administration, because the whole system is just not designed for that. It's not that they don't *want to do it*, they just don't know *how* (TSNUK 29-11-16 | emphasis in original).

Furthermore, doctoral candidates who gained exposure to European academic practices noted that course electives remain limited and misalignments with international credit transfer continues to be an operational challenge at Kyiv National University (TSNUK 1-12-16; TSNUK 21-12-16). In a similar vein, a doctoral respondent noted that the development of interdisciplinary programs remains at an impasse for the university on the whole; however, according to the informant, initial efforts were being made to accommodate curricular change at the Institute of International Affairs (TSNUK 21-12-16).

The interview data and related university documents provided key insights on the operationalization dimension and the university's history of engagement with the TEMPUS program. Since its introduction to the Ukrainian higher education system in 1994, Kyiv National University took part in 22 TEMPUS projects. These collaborative initiatives include third-cycle governance reform projects (*Fostering Sustainable and Autonomous Higher Education Systems in the Eastern Neighbouring Area* 2012–2015), curricular innovation (*Network for Developing Lifelong Learning in Armenia, Georgia and Ukraine* 2013–2016), quality assurance frameworks (*Achieving and Checking the Alignment between Academic Programmes and Qualification Frameworks* 2013–2016) and internationalization capacity building projects (*Promoting Internationalization of HEIs*

in Eastern Neighbourhood Countries through Cultural and Structural Adaptations 2013–2016).

While case study respondents on both sides of the academic house indicated that a number of administrative and academic changes have come about as a result of the TEMPUS projects; including: assessment tools, best practices, curricular innovation and the development of English-language training modules; third-cycle reforms remain incomplete and for some, still treated as somewhat ‘experimental’. Here, a doctoral candidate sheds light on the subject:

The administration is trying to reform the *kandidat nauk* at Taras Shevchenko National University of Kyiv. The duration of studies increased from three to four years – two years of study then a research component. It could help improve the quality of programs. Some professors are skeptical about the [structured] PhD programs proposed. This is the first year [of implementation] and modifications are needed. Academics are very conservative, and they don’t like change (TSNUK 21-12-16).

Finally, the operationalization dimension revealed that Kyiv National University is a member of several international support networks, which are widely perceived as an important aspect of the operationalization dimension. Against this context, the university is affiliated with the European University Association (EUA), the Magna Charta Universitatum Group and the Eurasian Association of Universities (EAU). The university is also a member of the International Association of Universities (IAU) and the Enterprise Europe Network (EEN), an EU-sponsored initiative which promotes the advancement of collaborative partnerships between small and medium enterprises and academia in over 60 countries.

As presented in this section, the operationalization dimension represents a multifaceted picture of *how* internationalization is implemented at Kyiv National University. By the same token, this dimension illustrates the complexities of internationalization from a multi-actor perspective. While the interview data indicate that the university has begun consolidating its services in order to operationalize its international activities more efficiently, the slow and often piecemeal approach suggests a degree of inertia and institutional path dependence.

Clearly, a great deal of international activity has been taking place across this large research university. However, it is less clear whether doctoral programs were maximizing their potential to fully realized their operationalization capacities. Insofar as the university has embraced an ambitious agenda of academic mobility and research, on the other hand, the data indicate conflicting perceptions around the internationalization of doctoral training and institutional capacity to internalize a far-reaching change agenda.

REVIEW

At the core of the review dimension of Knight's (1994, 13) Internationalization Cycle is the issue of *how* or *whether* a university measures and evaluates its international programs and initiatives. Defined as a two-step audit process, Knight (1994) considers (i) the extent and the ways in which the university monitors its international activities and direction; and (ii) the degree to which international perspectives are integrated in the regular monitoring and evaluation efforts across the university. North's theory of institutional change brings additional perspective to the review dimension, as incremental change promotes marginal

adjustments to the rules, norms and enforcement that constitute the institutional framework (North 1990, 83). The model advances the idea that institutions provide a mechanism for incremental change, while facilitating opportunities for new forms of negotiation and compromise. Accordingly, North asserts that formal and informal institutions can provide a hospitable framework for evolutionary change (North 1990, 89).

An analysis of the interview data and related university materials indicate that the very concept of an international review dimension at Kyiv National University is at a relatively new stage of development. Despite the wide range of international activities taking place across the academic enterprise, the analysis revealed that the review dimension is a much less dynamic element of internationalization efforts. Although the data revealed a fairly narrow scope of activity in this key dimension, the lines of inquiry revealed growing interest among administrators and faculty in developing improved international assessment methods. This observation was echoed by a senior faculty member who provided the following insight into the university's current efforts and the inherent challenges of integrating international perspectives into the university's evaluation efforts:

This is something I'm fighting for. Not just about internationalization, but they've [the administration] also started to talk about and do something about quality control, because they're all inter-related[...] Nobody [at the university] talked about what sort of criteria [are required]. How are we going to measure this? We do have some progress [but] we've only just begun and it's going to take some time. You know, we have all sorts of annual reports. And those annual reports on academic activity on international activity, on this and that... they were designed, as I call them '*back in 1913*' – which is not true – it's sort of a joke, but it's not far from the truth[...] Those tables for reports were designed a long time ago. They do not account for TEMPUS projects, they do not account for Jean

Monnet...²⁴ But these are projects that people are involved in. They spent a lot of their time and a lot of effort on that, but the university not only does not support it, they don't even account in terms of *my* reporting... what *I did* all last year. They don't account for that because there is no space in the reporting system. So, we started to talk about it and insist, but our voice is not so loud yet. On the one hand, the university – like itself – likes to report on the international activities of projects. On the other hand, the university wouldn't account at all when I report on what I do. *They don't care*... I'm happy at least that we started to talk about it. We started trying to get the message across. How will the administration react to all of this? I don't know... (TSNUK 29-11-16 | emphasis in original).

The analysis confirms that the university takes a fairly narrow approach to the international review dimension, as evidenced by responses from senior administrators and university reports (TSNUK 3-03-16; TSNUK 3-03-16a; Academic Council of Taras Shevchenko National University of Kyiv 2016; Academic Council of Taras Shevchenko National University of Kyiv 2016a). These indicators include an orientation toward scorecard metrics such as global rankings, publications in international peer-review journals, incoming and outgoing mobility flows, international student enrolment, annual number of visiting scholars, as well as joint training and research programs. Yet, this approach to the review dimension failed to capture the finer-grained aspects of the internationalization process, such as demonstrable shifts of higher education policies and practices; alignment of existing doctoral programs with EHEA and ERA principles, and the adaptation of international third-cycle approaches with existing academic frameworks.

²⁴ The Jean Monnet actions are designed to promote excellence in teaching and research in the field of European Union studies.

From this perspective, the review dimension seemed to face internal challenges stemming from historic [negative] perceptions of internal evaluation procedures carried over from the Soviet era. Here, a senior doctoral school administrator provides the following insight:

Assessment is a painful area because during Communist times, evaluations were performed by one person – a Party leader... Currently the common approach to conducting evaluations does not take a methodological approach. We are now developing a special form in order to review the effectiveness of upgrading [international] qualifications. We need to define criteria. Currently, the criteria are as follows: the number of students that studied abroad, the length of time abroad, how many doctorates and professors, how many returned... These are important criteria, but they are weak (TSNUK 1-12-16 | RU translated from original).

Unpacking the review dimension further, the analysis revealed hidden political meaning carried over in the mental models through which university actors framed their perceptions. In this context, internationalization appears to be understood as a process not only in terms of systems, procedures and mimetic patterns, but a wider shift that may be deeply imbedded by a set of institutional actors who may be carrying over an older mental model.

Interesting to note that on both sides of the academic house (academic and administrative), case study participants made little reference to the review dimension. Although administrators and faculty readily acknowledged that the internationalization of scholarly activities is a critical component for scientific and professional advancement, especially in the current Ukrainian context. This point is particularly salient in light of ongoing third-cycle reforms, which require greater internationalization as the university's commitments to the Bologna Process and Lisbon Convention continues to draw doctoral training into closer convergence with the EHEA and emerging ERA. Despite the high stakes involved in the transition from the *kandidat nauk* to the structured PhD, the interview data from

administrative and faculty respondents provided little insight into *how* the international components of doctoral training and research are concretely assessed, beyond rudimentary input–output metrics.

The interviews captured the perspectives of a small minority of administrators and faculty who expressed growing interest in expanding international review efforts beyond current levels by advocating a reorientation away from linear assessment approaches and more toward outcome-based and impacts. In other words, these respondents sought an improved set of review criteria in which the international dimension could be measured against existing academic models and institutional frameworks. This perspective was echoed by a senior faculty member who noted that a review of bilateral agreements was completed in 2010–2011 in order to determine needs and the degree to which existing agreements could be revived and redeveloped (TSNUK 29-11-16).

While university respondents openly acknowledged the range of international activity on campus – especially around third-cycle training – there seemed to be limited interest to move current review mechanisms beyond its current scope. This appears to represent a gap in the university’s internationalization review efforts. Although more rigorous evaluation methods are occurring at the faculty level than were disclosed by senior administrators, especially through the Erasmus⁺ and Horizon 2020 programs, respondents were disinclined to include them in the discussions.

Under these circumstances, moving the review dimension beyond its current reductionist orientation could present a challenge, given the slow pace of integrating international perspectives in the regular monitoring and evaluation efforts and piecemeal approaches to internationalization. The data from administrative and faculty sources indicate that international review activities remain somewhat limited by their linear nature, and given current parameters, unlikely to play a defining role in renegotiating spaces of action, adapting evaluation procedures or become a leverage point for institutional change.

REINFORCEMENT

The reinforcement dimension of the Internationalization Cycle (Knight 1994, 14) calls for the recognition and compensation of institutional actors who advance the university's international efforts. Knight asserts that institutional culture will determine the specific ways internationalization efforts are acknowledged and rewarded. Furthermore, she contends that in order to develop a supportive culture of internationalization, a university must "find concrete and symbolic ways to value and reward faculty and staff who are involved in this type of work" (Knight 1994, 14). According to North (1990, 95), this dimension plays a "self-reinforcing" role by way of "significant learning effects for organizations that arise in consequence of the opportunity set provided by the institutional framework. The resultant organizations will evolve to take advantage of the opportunities defined by that framework... There will be coordination effects directly via contracts with other organizations and indirectly by induced investment through the polity in complementary activities."

An analysis of the data gathered around the reinforcement dimension highlight tensions between the academic and administrative sides of the house. It also echoes conflicting views on the degree to which Kyiv National University supports international efforts in “concrete and symbolic ways”. The data also reveal major gaps in terms of what the university offers the academic community by way of recognizing and rewarding institutional actors for engaging in international activities. Here, a senior faculty member sheds critical light on systemic mismatches and structural deficiencies of the reinforcement dimension:

The university and the management system were designed for public funds. The management system is not prepared for [and] has no capacity for all those international projects, for income diversification, for bringing international expertise here... it's not designed for that... It's sometimes easier for them to say 'no' just to be on the safe side... And this is how the university resists. Another thing is that people still think in terms of 'what's in it for me'. There is a big lack of motivation for academic staff – 'why should I spend all this extra time to do this?' Because of what I mentioned before, there is no differentiation, there is no evaluation process, there is no performance evaluation at all (TSNUK 29-11-16| emphasis in original).

Concerns over limitations of the reinforcement dimension were made by both faculty and doctoral students who voiced issues over resource asymmetries, heavy dependence upon external funding and internal barriers to internationalization. The university's noticeable lack of a dedicated budget for international travel, conferences grants and mobility stipends have made students and faculty highly dependent upon external higher education stakeholder agencies (Academic Council of Taras Shevchenko National University of Kyiv 2017). Additional mismatches were noted around conflicting perceptions around credit transfer, student residency requirements and university regulations, which frequently surface as tensions between the changing *external* demands generated by

internationalization and *internalizing* change (FN 01-12-16). Combined, these unresolved challenges have yet to manifest into a supportive culture for internationalization, thereby substantially undermining the reinforcement dimension.

As such, a senior faculty member touched upon two major challenges of the reinforcement dimension for doctoral training and research stemming from what the respondent perceives as the administration's shortcomings on valorizing internationalization:

We have a lot of graduate students and they can get scholarships and they're admitted *there* [at a partner university], but then *here* nobody knows how to account for the time they are absent, etc. And if he or she doesn't attend classes – and this is still very much a Soviet thing – then it should be signed off along with credit transfer (TSNUK 29-11-16 | emphasis in original).

Similarly, a number of doctoral candidates interviewed for the case study voiced concerns over the lack of progress around ECTS credit transfer, academic flexibility to pursue interdisciplinary studies, student-centred learning pathways, as well the slow pace of curricular change (TSNUK 1-12-16a; TSNUK 21-12-16). Among these concerns was the notion that a traditional dissertation is still required as a major component of the doctoral program and alternatives to the thesis, such as a compilation of peer-reviewed journal articles is not permitted (TSNUK 1-12-16a).

In the absence of well-developed reinforcement mechanisms in place to validate international activities, coupled with institutional limitations on valorizing and *internalizing* scholarly activities, there is a sense that the lack of action taken by the university administration may leave students and faculty feeling disillusioned by the international dimension. Despite these challenges, incremental change appears to be

occurring on the margins of the academic enterprise, with formal acknowledgment of international training activities, which formally recognize the enhancement of professional competencies and academic qualifications of the professorial corps, as evidenced by an internal report titled: “On the International Recognition of Scientific Achievements of the Staff of Taras Shevchenko National University of Kyiv” (Academic Council of Taras Shevchenko National University of Kyiv 2016a).

In the absence of a developed reinforcement dimension, the interview data revealed that faculty and doctoral students seek support by way of individual initiatives and networks for the pursuit of academic endeavours, funding and/or enhanced career opportunities. As evidenced from doctoral candidates and faculty respondents, the lack of tangible mechanisms that the university leverages to support internationally-driven members of the academic community appears to be offset, to a certain degree, by a small but increasingly visible group of ‘norm entrepreneurs’ (Tamtik & Kirss 2015). From a Northian perspective, these ‘agents of change’ respond to the incentives embodied within an institutional framework and actively participate in the process by which internationalization is informed and shaped across various institutional contexts (North 1990, 5). In this regard, the reinforcement dimension remains more symbolic than concrete for the time being, given current institutional constraints, contradictory values and practices.

RATIONALES

The interview data and related sources from Kyiv National University point to a varied set of motivating rationales behind the institutional agenda for internationalization. Respondents provided various factors; including: academic, economic and political rationales. A collective understanding resonated around the perception of internationalization as an organizing principle for greater alignment with developments across the EHEA and ERA. At the same time, a number of senior respondents voiced the need to strike a balance in order to maintain and preserve *national* higher education traditions.

As a Ukrainian national flagship university, there is a perceived historic mission of international engagement, which is understood to be fundamentally aligned with the global nature of science and the academic profession. The university's long history of international engagement has provided a platform from which to build contemporary networks of learning and research. From this perspective, university actors perceive its continued relevance and competitiveness linked to international engagement in an environment of accelerated European integration and increased globalization. Another rationale shaping the university's international outlook cited by case study respondents is the Bologna Process, and in particular, EU-sponsored programs such as TEMPUS, Erasmus⁺ and Horizon 2020. The data indicate that these international networks play an increasingly important role in shaping doctoral programs and informing academic engagement in new ways.

From this perspective, the unmistakable agency of EU initiatives provide critical support to scholarly activities by way of intellectual resources and much needed funding. However, these collaborative initiatives also play a complex role in both *cooperative* and *competitive* ways. Case in point, a senior faculty member provided critical insight on recent developments, noting that some colleagues feared “ulterior motives” behind the acceleration of European higher education policy convergence and the recruitment of Ukrainian students (TSNUK 29-11-16).

In so far as these collaborative initiatives and thematic networks provide critical space for policy borrowing and lending, the unreformed institutional framework of the university stops short of fostering systemic institutional change and a broader shift from state-centred management logics to greater autonomy in the form of a new academic *contract*. Furthermore, the largely selective approach to internationalization illustrates the university’s incremental pathway of institutional change. From this perspective, important insights were provided by a senior administrator, who underscored the need to synchronizing internationalization efforts within the framework of Ukrainian realities, while at the same time, acknowledging power asymmetries and different ‘sets of rules’ than those playing out at European universities (TSNUK 3-03-16).

Finally, as with all universities selected for this case study, economic rationales ranked high on the list of motivating factors, in light of resource asymmetries and decreasing state support to higher education. To this end, a senior doctoral school administrator provided important insight on current internationalization efforts and change processes at Kyiv

National University, noting that the university faces similar challenges as its Western counterparts; however, the margin of error is much smaller in the Ukrainian higher education context, noting: “I recently returned from England... They face the same problems as we do, but they have more funding to resolve issues; therefore, they solve their problems more quickly... they can *experiment*, they can allow for *errors* – things that we in Ukraine cannot allow for the time being” (TSNUK 1-12-16 | RU translation from original | emphasis in original).

STRATEGIES

The *Concept of International Relations Development of Taras Shevchenko National University of Kyiv* outlines a three-pronged strategic approach to international engagement, which focuses on (i) achieving ‘world-class’ status in higher education; (ii) partnering with top international higher education institutions in order to bring the university into alignment with the requirements of the Bologna accords and EHEA; and; (iii) positioning the university with international funding agencies to achieve financial stability and sustain international cooperation (Taras Shevchenko National University of Kyiv 2009). Although the strategy provides a basic framework for the university’s action logics on internationalization, the document remains linear and static as a result of its largely descriptive nature and emphasis on scorecard metrics. Furthermore, the respondents indicated little interest at modifying current international strategies beyond current parameters.

The data collected from case study respondents and related university materials point to a strategic approach that is commonly expressed in geographic terms; namely, through engagement with Europe, followed closely by Asia (mainly China). Senior administrators and mid-level leaders noted that emerging Asian markets represent a strategic area for international student recruitment and knowledge investments such as joint educational programs and start-ups (TSNUK 03-03-16; TSNUK 03-03-16a). The interview data also suggest that while engagement with Russian counterparts comprised an important vector of the university's international strategy prior to the *EuroMaidan* Revolution, the increased rapprochement with European partners in recent years has acted as a 'counterbalance' and precursor to closer political ties. Equally important are the substantial number of international students the university recruits from across the former Soviet Union and China (Academic Council of Taras Shevchenko National University of Kyiv 2016).

The second approach was expressed most often in programmatic areas, particularly around EU-sponsored initiatives such as TEMPUS, Erasmus⁺ and Horizon 2020. The case study respondents at Kyiv National University placed heavy emphasis on academic mobility as a key action area for its internationalization strategy. These programs are highly valued for providing doctoral candidates, faculty and administrators with international study and research opportunities, as well as cooperation for innovation and exchange of best practices, and support for policy reform. For these reasons, EU programs have become a central pillar of the international dimension and are likely to remain that way in the foreseeable future.

Beyond academic mobility, the university is positioning itself, albeit incrementally, into closer alignment with the requirements of the EHEA and ERA. The recent introduction of the *cotutelle*, quality assurance frameworks and ongoing development of the structured PhD provide important evidence showing movement in this direction. The emphasis on English language training is also a key development in the university's strategy to bring doctoral candidates closer to global orbits of learning and research. However, without adequate funding mechanisms to support the training and testing of academics, the *means* have largely become *ends* in themselves.

Furthermore, the changing requirements to academic titles are aimed at enhancing the quality of third-cycle training through a greater focus on research at the international level (Hladchenko & Westerheijden 2017, 2). Despite these concerted efforts, the largely unreformed institutional environment has resulted in misalignments with European and global models resulting in inconsistencies between practices and outcomes.

OUTCOMES

The data from the Kyiv National University suggest that its international orientation has taken a largely evolutionary pathway, developing slowly over time and most noticeably over the last decade. Yet, real concerns remain over the university's incremental pace of internationalizing teaching and research, as well as its capacity to reform doctoral programs, particularly in the context of the Bologna Process. As evidenced by the interview data, both sides of the academic house addressed mismatches between the model prescribed by European demands and the inherent incompatibility of existing institutional

logics. While closer alignment with the EHEA has promoted a certain level of systems thinking, there is little evidence to suggest a far-reaching change agenda on the horizon. These fundamental misalignments have resulted in tensions between existing policies and practices, and the changing demands generated by the insertion of the university into a regional and global framework.

Though the university has achieved a number of successful international outcomes over the years, as evidenced by the way the university self-organizes to meet the contemporary needs of the knowledge economy and an increasingly competitive academic environment, the analysis suggests that its approach to internationalization to date is fragmented and compartmentalized. With this in mind, the analysis revealed that successful international outcomes ultimately depend upon the senior administration's commitment and leadership, as well as the capabilities of institutional actors responsible for its execution to allocate the appropriate resources and political will to *internalize* change.

At present, there appears to be a disconnect between strategic aspiration and the reality on the ground. Furthermore, there is little compelling evidence to show *how* the university plans to internationally position its doctoral programs in the foreseeable future, despite the complex macro-policy shifts required to realize this project. From this perspective, the interview data point to institutional and administrative inconsistencies, such as competing and conflicting institutional values, persistent concerns over the lack of resources and challenges resulting from the negotiation of multiple and often *incompatible* action logics. In this regard, internationalization appears to be something of a 'disruptive innovation'.

If internationalization is understood to be as much a process of *outward* connection as *inward* change (Sutton & Obst 2011, xiii), current hybrid logics demonstrate that Kyiv National University has engaged in a highly incremental pathway of institutional change. As a national flagship university, this approach gives the impression that the administration could be doing more to reach its fullest potential in this area. From this perspective, the data suggest that collaborative initiatives and thematic networks appear to essentially be a product of partner institutions' lead, rather than the university's own initiative.

Finally, the largely piecemeal approach to third-cycle reform and incremental approach to aligning the university closer to global orbits of higher education are key examples of institutional complexity. By the same token this also illustrates the degree to which the largely unreformed academic and administrative environment is often misaligned with European models of higher education. These conflicting logics and inconsistencies between practices and outcomes have resulted in a degree of 'policy drift' whereby *means* have become *ends* in themselves.

CHAPTER 7 ANALYSIS AND FINDINGS

The aim of this chapter is to facilitate an analysis and synthesis of the findings as presented by the three universities and the selected doctoral schools for this case study. The study took a critical approach to identifying and interpreting *how* the phenomenon of internationalization manifested in the development of strategic partnerships, was translated and re-contextualized into structural innovations, and resulted in systemic institutional change. The chapter revisits the collective experiences of the three case study universities to juxtapose international rationales, strategies and outcomes. It also provides the opportunity to analyze the underlying dimensions of the Delta Cycle for Internationalization (Rumbley 2010) which speak directly to the question of *why*, *how* and *to what ends* institutional actors were motivated to engage in the phenomenon of internationalization.

The conceptual framework enabled to gauge *whether* or *how* various dimensions of the Delta Cycle for Internationalization played out in practice, and as a function of institutional priorities, management cultures, and resistance points in the selected universities. The analysis also attempted to add additional dimension to internationalization as a process institutional change (North 1990), thereby guiding a deeper level of inquiry into the universities' distinctive rationales, strategies and outcomes. In doing so, the investigation provided an additional level of analytical rigour when engaging the data across different institutional environments.

7.1 ORGANIZING PRINCIPLES OF INTERNATIONALIZATION

A review of the collective data sets revealed that all three case study universities demonstrated various rationales, strategies and outcomes in their respective international portfolios, in addition to demonstrable institutional change resulting from international engagement since Ukraine's accession to the EHEA in 2005. Overall, what emerged from the collective body of data are institutional nuances which differentiated each university. These distinctions are embedded in the respective action logics and institutional cultures of each university, which inform their global engagement. The data illuminated factors which encouraged or discouraged university actors to engage in the process of internationalization. One factor is the varying degree of receptivity to institutional change. A second factor are the mental models of institutional actors which are "pre[-]existing mental constructs through which they [actors] understand the environment and solve the problems they confront" (North 1990, 20).

The data further indicated the manner in which internationalization manifested within each university. Table 3 presents an overview of the organizing principles for internationalization for the three case study universities, synthesizing the findings relating to the rationales, strategies and outcomes for each one. Each element exerted distinct influences on the phenomenon of internationalization and the particular university's respective action logics.

Table 3 | Organizing Principles of Internationalization

	Rationales	Strategies	Outcomes
Kyiv-Mohyla Academy	Academic: Aligning programs with EU standards Providing a national alternative to the Soviet model of higher education Economic: Diversification of revenue streams and economic autonomy Political: Nation-building and restorative higher education discourses	Third-cycle reforms and EHEA/ERA alignment Bilingual (Ukrainian-English) academic environment International partnerships and academic consortia Looking to the past and European future to construct institutional identity	Hybrid PhD programs Knowledge alliances National model for third-cycle reform and close alignment with the EHEA and ERA Procurement of national and international funding Kyiv-Mohyla Foundation
Kyiv Polytechnic Institute	Academic: Technical knowledge transfer and building human capital Preservation of national higher education traditions Economic: Commodification of knowledge Diversification of revenue streams and economic autonomy	Collaborative initiatives and knowledge alliances Fostering synergies between academia and industry Quasi-industrial management approaches and entrepreneurial pathways Marketing education abroad English-language training for international students	Incremental alignment with EHEA/ERA and piecemeal third-cycle reforms Increase in global rankings and visibility International student recruitment and export of educational services
Taras Shevchenko National University of Kyiv	Academic: Continued academic relevance, competitiveness and status Preservation of national higher education traditions Economic: Diversification of revenue streams and economic autonomy	Partnership with higher education stakeholder agencies and international universities State-centred management logics Marketing education abroad	Incremental alignment with EHEA/ERA and piecemeal third-cycle reforms Increase in global rankings and visibility International student recruitment and export of educational services

The logics presumed in third-cycle reforms prescribe “agentic and purposive actorhood” to individual actors and to the institutions they function within (Hladchenko & Westerheijden 2017, 2). Furthermore, alignment with the EHEA requires institutional actors to think and work differently by operating inside and outside of native institutional frameworks. From this perspective, the interests of institutional actors and their agency appeared to be enabled by prevailing institutional logics on the one hand, and yet constrained by institutional limitations on the other.

Inconsistencies in the sphere of policy and planning, as well as incompatible prescriptions from multiple institutional logics often resulted in ‘policy drift’, when *means* become *ends* in themselves (see Hladchenko & Westerheijden 2017, 2). Furthermore, incompatibilities between practices and outcomes often resulted in institutionalized practices losing legitimacy. Despite (re)positioning strategies designed to bring academic programs closer in line with European standards, challenges persisted at the institutional level. This is partly due to entrenched state-centred management logics, which seek to preserve the status quo by reproducing protectionist policies and setting barriers to competition, rather than developing globally competitive higher education models.

The analysis cast light upon key outcomes of the internationalization process itself, which suggests hidden political meaning often carried over in the mental models of institutional actors. These factors frame the internationalization process and steer subsequent actions. In this regard, the internationalization process appears to be bringing about shifts, not just in systems or processes as the phenomenon would imply, but in a wider set of political

changes. These collective findings have important implications for this case study as they highlight the concept of the variable speeds at which institutions change. From this perspective, Roland (2004, 109 | emphasis added) makes the following observation: “[T]he interaction between slow-moving and fast-moving institutions can shed light on institutional change (*why, how and when* it occurs), and evinces both the difficulty of transplanting institutions into different cultural contexts and the advantages of diverse institutional ‘blueprints’”.

7.2 RATIONALES

The analysis revealed that internationalization rationales can be traced to various sets of institutional logics, as evidenced by the case study universities. These rationales imply different means and ends of internationalization, as well as motivations for integrating a global dimension into the institutional framework. According to the Delta Cycle for Internationalization (Rumbley 2010), these rationales stem from the *awareness* and *commitment* dimensions, which speak to the question of *why* university actors are motivated to engage in the phenomenon of internationalization.

Within this context, Knight (2004, 23) and de Wit (2002, 83-101) identify four overarching rationales for the internationalization of higher education; including: (i) academic rationales (extension of academic horizon, institution building, profile and status, enhancement of quality and international academic standards); (ii) cultural and social rationales (national cultural identity, intercultural development, community development); (iii) economic rationales (economic growth and competitiveness, labour market, financial incentives); and (iv) political rationales (foreign policy, national security, technical

assistance, peace and mutual understanding, national and regional identity). These rationales are inherently linked to institutional perceptions and priorities, as well as university endowments and goals.

The collective data sets suggest that academic and economic rationales represented some of the most dynamic elements among the three universities. These rationales were spontaneously recognized across all institutional settings and university types, from the liberal arts settings of Kyiv-Mohyla Academy and the techno-industrial Kyiv Polytechnic Institute, to the more traditional academic environment of Taras Shevchenko National University of Kyiv. Accordingly, academic and economic rationales were expressed enthusiastically and unanimously from both sides of the academic house – from administrators and faculty to staff and doctoral candidates, at each university.

The data indicate that academic rationales have dramatically expanded receptivity to EU framework programs over the last two decades, most notably through the TEMPUS and Erasmus initiatives, and increasingly through research collaboration via the Horizon 2020 program. The academic rationales indicate a growing desire on behalf of the case study universities to reposition themselves within the framework of the EHEA, the emerging ERA and the wider global knowledge system. Accordingly, the growing imperative to align doctoral programs within the emerging ERA was evidenced by the varying pace of third-cycle reform across the three university settings. At the same time, it is important to note that third-cycle reforms have increasingly sensitized institutional actors to the dual imperatives of global engagement and the preservation of national higher education

traditions. In this regard, institutional actors across all three universities articulated an unmistakable link between internationalization and performativity within an increasingly competitive environment.

The interview data revealed that a major academic rationale motivating Kyiv-Mohyla Academy to engage in the phenomenon of internationalization is linked to the broader project of facilitating an alternative to the Soviet higher education legacy through systematic integration with the European knowledge system. This rationale has provided a set of written and unwritten rules and norms that have become embedded into the university's identity over time. The Academy has also employed a restorative educational discourse with the purpose of returning to a pre-Soviet by (re)constructing a national, pro-European identity (Bain 2010). These powerful sets of discourses have provided Kyiv-Mohyla Academy with a window to look into the past, while at the same time, construct a new academic identity and institutional belief system. The restorative education discourse has strong political implications for its graduates and their civic actorhood. It is also a key factor which differentiates Kyiv-Mohyla Academy from the other two universities selected for this case study.

Academic rationales proved particularly salient for Kyiv Polytechnic Institute, whose long history of technical training can be traced back to the Industrial Revolution and the need to adapt global knowledge to national needs. These rationales represent an organizing principle of Kyiv Polytechnic's international footprint, considering its institutional culture and strong links to regional and global engagement efforts for the advancement of technical

higher education, scientific innovation and systems thinking. Similarly, academic rationales appeared to inform Kyiv National University's international outlook. By virtue of its prominent national position as a classic research university and fundamental need to maintain global networks of teaching and research, institutional respondents readily perceived the Polytechnic's continued relevance and competitiveness linked to the international project.

Economic rationales also emerged as a prominent theme across the data sets at each university. While respondents across all three universities noted the importance of transcending knowledge boundaries and meeting the imperatives of global science, they also voiced concern over resource asymmetries. From this perspective, economic rationales and growing performative discourses resonated strongly with case study participants. In this regard, institutional actors from across the universities voiced concern about shrinking state contributions to higher education, coupled with increased pressure to offset budgetary shortcomings with external funding.

Ukraine's ongoing economic crisis has placed mounting pressure on university administrators, faculty and doctoral candidates alike to seek alternative sources of funding for scholarly activities. These sources include EU programs and national-based funding agencies, in addition to entrepreneurial activities which have increasingly blurred the lines between academic and market-oriented initiatives indicative of the so-called 'third mission' of higher education, whereby traditional missions of teaching and research are being supplanted by commercial activities (see Slaughter & Leslie 1997).

The interview data indicated that the case universities lacked the necessary monetary resources to finance international mobility and research initiatives, and that the majority of international academic initiatives were conducted in the context of the EU-funded initiatives. According to case study respondents, the EU framework and structural measures programs bridged human and financial resources, while creating new spaces of action which would have not been possible had Ukraine not joined the EHEA. Meanwhile, international economic activities have gained prominence at all three universities, perhaps most notably at Kyiv Polytechnic Institute and Kyiv National University, resulting in increased conceptual blurring between academic and entrepreneurial activities. While Europe was clearly the dominant vector for outgoing scholarship and incoming funding, Africa, Asia and the former Soviet Union represented the geographical mainstay for student recruitment and economic activities at the latter two universities.

The data suggest that internationalization rationales were predominantly understood as a *means to an end*, in so far as they represented a channel to advance institutional objectives and priorities. At the same time, these rationales allude to institutional priorities, management legacies and mental models, which inform and shape engagement with the phenomenon of internationalization.

The data indicate that Ukraine's accession into the EHEA and the wider European integration project provided direct influence on doctoral education and the various pathways which the phenomenon took as it manifested itself across each respective university setting. Furthermore, systemic, structural and characterological factors of each

university came into play as determinants of international rationales. These determinants are often influenced by institutional variables and mental models that shape the intellectual community. This observation is indicative of a 'shape-shifting' pattern as the phenomenon of internationalization travels from one institutional environment to another, and as a result, changes meaning as it is transplanted from one context to another (Cowen 2009).

Academic rationales were evidenced in the interview data, which spoke to the importance of the international dimension, the respective missions of case study universities and the various applications in which international programming were manifest in the academic enterprise. University respondents spoke of the central place of internationalization in the extension of the academic horizon, the co-creation of knowledge, encouragement of systems thinking and leveraging intellectual and economic resources. However, the case study participants were acutely aware of institutional limitations, and more specifically, the often-slow pace of internalizing change associated with the alignment of existing knowledge frameworks with regional and global knowledge systems.

From this perspective, the data identified fundamental mismatches in policies and practices rooted in the Soviet governance model and the logics presumed in European reforms. These logics include academic and financial autonomy, quality assurance frameworks, international credit recognition and lifelong learning (Crosier, Purser & Smidt 2007). Furthermore, the Bologna Process also presumes a democratic institutional culture characterized by transparent and accountable governance structures, as well as decentralized, bottom-up administrative mechanisms. It is important to note that institutional

responses were strongly affected by the academic culture and the adopted innovation. In this regard, the analysis suggests that internationalization can be regarded as a ‘disruptive innovation’ as the phenomenon represents a new challenge of external adaptation and internal integration with which institutional actors must cope. Broadly defined, this term refers to an innovation which has the ability to challenge or displace established conventions in policy and practice by way of its introduction to an existing institutional framework. These observations illustrate underlying tensions within the context of each university, in light of the expectations generated by internationalization efforts and institutional constraints.

In the case of Kyiv-Mohyla Academy, internationalization is understood to have been infused in the institutional culture from its re-establishment following the collapse of the Soviet Union. Its historic connection to internationalization and restorative education discourse has been recast along the lines of the European integration and nation-building projects. The data from Kyiv Polytechnic Institute revealed that its international rationales are widely perceived to be driven by the heuristic relationship between globalization and technical innovation. Similarly, respondents from Kyiv National University indicated that international rationales pre-date the Soviet era; however, a more robust understanding of the phenomenon has evolved over the course of the last decade with the implementation of increasingly complex initiatives and (re)positioning strategies.

Looking at the case universities as a collective group, institutional respondents unanimously identified EU-based programs as a major driver behind academic and

economic rationales. The EU accession narrative has become tightly bound with higher education reforms. Interview and documentary data indicated that access to intellectual and financial resources provided leverage for increased access across national boundaries and systems of higher education. The EU framework initiatives along with their affiliated thematic networks and symbols represent a distinct European knowledge brand, which gained a heightened sense of urgency and agentic purpose following Ukraine's accelerated *rapprochement* with the European project following the *EuroMaidan* revolution and subsequent passage of the 2014 "Law on Higher Education". As the study suggests, these rule sets are still under negotiation across the institutional frameworks of the three case study universities as actors and agents engage in the process of grappling with converging and diverging models of doctoral education.

As such, the Bologna Process and revised "Law on Higher Education" dominated much of the discussion on how internationalization has played out across these universities and selected doctoral programs. The growing imperative to adapt third-cycle training programs, particularly in the context of wider commitments made by the universities is salient to this discussion, considering resource asymmetries, increased competition and different starting points than Central and Western European counterparts. These observations were most evident in the increase in thematic doctoral training networks and structural measures initiatives sponsored by the EU via the TEMPUS and Erasmus programs over the last five years (National TEMPUS/Erasmus⁺ Office in Ukraine 2014; National Erasmus⁺ Office in Ukraine 2016). These developments are significant in the context of this study, since the internationalization of doctoral training and third-cycle

reforms are occurring at different speeds across the three university settings, despite broad-based commitments to action specified in the revised higher education framework.

Despite heightened levels of internationalization awareness and commitment across the three universities, discrepancies across institutional cultures emerged, thereby illuminating institutional variances. Furthermore, the predisposition of certain academic fields to internationalize, especially in the fields of engineering and natural sciences, suggests a propensity towards regional and global outreach. This point was evidenced from the interview data, which indicated that science-based disciplines are more likely to align with regional and global knowledge systems than those fields with a stronger national focus. One reason for this stipulation was evidenced in the field data, which demonstrated that bridging competencies and strengths *vis-à-vis* human, technical and financial resources could be utilized more effectively on a regional scale in order to overcome internal deficiencies.

Perhaps the most telling elements behind the international rationale dimension were variations in the spaces of action university actors possessed and their capacity to implement change within a given institutional setting. From this perspective, administrators, mid-level leaders and faculty sometimes lacked internal support mechanisms to steer internationalization efforts towards more transformative outcomes, which could potentially foster structural change to existing normative and institutional frameworks downstream.

Unpacking this dimension further, the analysis examined internationalization strategies and their specific manifestations in order to provide additional nuance and depth of field to the study. The data from the three universities suggest that strategies are largely determined in accordance with institutional action logics. Some of the most evident strategies were manifest in structural shifts in the administrative units and infrastructure specifically developed to support international objectives at each university. These units were headed by senior administrators and supported by mid-level leaders and a cadre of regular staff of varying rank and programmatic expertise. International activities were coordinated through centralized offices and showed substantial evidence of formal structure.

These units were closely affiliated with the rectorate and faculties, providing further evidence that internationalization had gained institutional prominence at each case study university, supported with corresponding governance structures. In addition to the central administrative offices, faculty representatives complemented international activities by providing critical buy-in and grassroots-level support. Despite the outward commitments of international engagement efforts, internationalization rationales showed certain limitations. For example, none of the universities provided international scholarships, nor did they offer academic mobility and research grants. Furthermore, funding for international activities was exclusively provided through external (predominantly EU-based) sources, raising questions over new forms of path dependence. Accordingly, several respondents pointed to a disconnect between internationalization ‘policy talk’ and the lack of internal support mechanisms to realize international initiatives.

This perspective was echoed by a knowledgeable expert from the National Academy of Sciences of Ukraine, who noted that “the rhetoric of internationalization has not yet caught up with the realities of existing capacities and mechanisms of Ukrainian universities” (NAS 05-03-16 | RU translated from original). This gap was confirmed by a number of respondents at each university, who underscored that more could be done to strengthen institutional commitments to international engagement. Similarly, respondents at all three universities noted that older faculty members and those lacking foreign language skills (especially English) had a less positive perception on the benefits of internationalization overall, and were therefore, less disposed to participating in regional and global engagement activities. Furthermore, several respondents noted that older faculty were more likely to set barriers to internationalization rather than open themselves up to external benchmarks.

From this perspective, programmatic and geographic areas provided important insight into the international rationales of the three case study universities. Kyiv-Mohyla Academy clearly demonstrated the farthest-reaching commitment to institutional change as evidenced by its structured PhD programs, pioneering advances in ECTS credit recognition, inter-disciplinary doctoral programs, student-centered learning and transformative partnerships. In this regard, the Academy’s international rationales have informed and shaped governance structures and institutional frameworks. Political rationales were also reflected in the tone and frequency of European knowledge discourses, the reinforcement of national higher education traditions, as well as the notable absence of the Russian language from Kyiv-Mohyla Academy’s operational *lingua franca*.

Kyiv Polytechnic Institute's international rationales were most pronounced in terms of its linkages to global science and strong accent on academic entrepreneurship, as demonstrated by the creation of administrative units specifically designed to advance these ends. While the doctoral schools surveyed showed strong evidence of commitment to international programming, the influence of the phenomenon appears to have made visible, albeit piecemeal impact on third-cycle reforms. In retrospect, economic rationales appeared most pronounced in Kyiv Polytechnic Institute's efforts to bridge academia and industry. This ethos was evidenced in its approach to regional and global outreach, which is embedded in its institutional culture, academic outlook, as well as its associated policies and practices.

Finally, Kyiv National University's rationales were evidenced by its incremental alignment with the EHEA, as well as its selective involvement in regional and global networks and thematic knowledge clusters. While the administration and individual actors had increased measures to professionalize and integrate international activities into the university's operational framework, interview data suggest that internationalization efforts had yet to catalyze commitment levels that could bring about a fundamental shift to third-cycle training and research. This suggests a fundamental mismatch between 'concrete' and 'symbolic' commitments, insofar as the data indicate that international rationales were essentially formulated along the lines of institutional priorities and capacities.

7.3 STRATEGIES

As internationalization strategies are unique to each university setting, this aspect represented one of the most dynamic elements among the three universities. This element

cast critical light on the institutional strategies and pathways put into play, along with the institutional drivers motivating them. In accordance with the Delta Cycle for Internationalization (Rumbley 2010), internationalization strategies are derived from the *planning* and *operationalization* dimensions to address *how* internationalization is implemented within each respective university setting. Unpacking this dimension further, strategies can be considered as a series of institutional responses to external or internal factors.

From this perspective, case study universities exhibited various strategies in their approaches to international engagement, ranging from an entrepreneurial approach at Kyiv-Mohyla Academy, to more prescriptive methods involving formalized targets and indicators, and a stronger role for central administration such as those applied at Kyiv Polytechnic Institute and Kyiv National University. In line with Northian frameworks, the collective body of data indicated that university actors devised formal and informal strategies to facilitate the advancement of their respective agendas (North 1990, 4).

Interview data and university reports indicated that the centrality of the planning dimension in steering the internationalization process showed a considerable degree of variance at the three universities. Kyiv Polytechnic Institute and Kyiv National University had developed formal internationalization strategies, while Kyiv-Mohyla Academy had a mixed pattern of planning, coupled with an agentic role for individual actors and an institutional predisposition to international engagement. Although the planning dimension was within the respective frameworks of the international strategies of Kyiv Polytechnic Institute and

Kyiv National University, the primary focus of associated documents was on scorecard metrics, which called for an increase in global rankings, projects, international students and funding. Yet, the most telling aspects were the conceptually simple and static nature of both university's strategy documents. In this regard, both of their international strategies failed to express an articulated vision for institutional change, nor did they anticipate broader internal policy shifts and institutional change with the introduction of increasingly complex international activity.

Kyiv-Mohyla Academy, on the other hand, lacked an internationalization strategy altogether. However, the interview data demonstrated an entrepreneurial approach to regional and global engagement, which was woven into the university's academic culture. Senior respondents, faculty and mid-level leaders interviewed for the study did not perceive this as an omission, but rather an 'organic' process stemming from the implementation of new and 'experimental' training models in Ukraine, such as: the introduction of EHEA-compliant structured PhDs, new administrative governance structures, course electives and adaptive management practices.

The analysis revealed that internationalization strategies face the challenge of adaptation within the institutional realities of each university setting. In a similar vein, the interview data from all three case study universities indicated that economic drivers play a pivotal role in steering the planning dimension in light of shrinking state budgets and contributions to the higher education sector. These circumstances prompted the case universities to embrace entrepreneurial-like behaviour, which has increasingly blurred the traditional lines

between academia and industry, as evidenced by the establishment of science parks, contracting services, marketing of international educational services abroad and increased foreign recruitment efforts.

As a segue from rationales to strategies, the developments within each case study university pointed to substantial activity within the EU framework programs. Considerable activity was also noted from national-based higher education stakeholder agencies outside of the supranational framework, such as the British Council, Campus France, DAAD, Fulbright Ukraine, as well as regional stakeholders like the Visegrad Fund and targeted initiatives such as the Polish Erasmus Program for Ukraine. Interesting to note is that higher education stakeholders from the EU's newest members in Central and Eastern Europe are playing an increasingly agentic function as regional role models and a gateway to Europe. These examples illustrate the shifting spatial patterns in which knowledge is co-produced and applied within the institutional realities of each respective case study university. Conversely, the interview data indicated that Polish universities represent a major source of regional competition, considering that over half of Poland's international students originate from Ukraine (Marsh 2015). These developments suggest the emergence of new geographies in the Europe of Knowledge (see European Commission 1997).

To this end, institutional actors across each university appeared to be receptive to EU framework programs such as the TEMPUS, Erasmus⁺ and Horizon 2020, which provide access to intellectual resources and funding. The establishment of administrative units specifically geared for engagement with EU and other national higher education

stakeholder agencies were clear manifestations of the ways in which the planning dimension had adapted to meet changing needs. While the interview data and related university reports clearly made the case for European programming as a priority vector for all three case universities, there was surprisingly little evidence to show *how* Kyiv Polytechnic Institute and Kyiv National University planned their transition from the Soviet-modeled *kandidat nauk* to the structured PhD. This is despite the level of difficulty involved in such complex undertakings and the potentially disruptive nature of the transition on existing academic programs and operational structures.

These ‘under-developments’ imply a more ‘mechanical’ and piecemeal transfer and translation from one training model to the other. For example, interview data and the analysis of internationalization strategies indicated that while Kyiv Polytechnic Institute and Kyiv National University both took an active role in global engagement, the administration largely kept centralized management structures and institutional approaches intact. These developments also highlighted key elements in understanding the interaction between ‘fast-moving’ and ‘slow-moving’ institutions; or political changes, which tend to move quickly on the one hand, and institutional culture, values, beliefs and social norms, which are inclined to change gradually (Roland 2004).

The interactions between the two provided valuable insight into the dual-track approach to third-cycle reform. Accordingly, this approach appeared to reduce reversal costs and potential disruptions downstream. In this context, the gradual alignment of the *kandidat nauk* with the EHEA-compliant PhD suggests an effort to implement change in doctoral

education without disrupting traditional approaches to training and research, while at the same time, advancing experimental pathways at the margins.

These observations validated the conclusion that internationalization strategies are often positioned in an area of tension between institutional realities and the demands of the EHEA. The gradual adoption of a single European standard for the length of doctoral degrees and clarity on the relationship between the three cycles, require negotiation and compromise. As such, institutional actors may apply new rule sets that facilitate globalization, while at the same time, act to offset some of its negative perceptions. In this context, a senior administrator from Kyiv-Mohyla Academy provided critical insight by making the following observations:

The structured PhD at Kyiv Polytechnic Institute and Taras Shevchenko is just a relabeling of the *kandidat nauk*. Doctoral reforms are happening in certain enclaves. They cannot do it since they do not have a critical mass and connections with labs and international contacts. All of the new requirements [of the structured PhD] are a challenge to the system... (NUKMA 2-12-16).

The internationalization strategies appeared to demonstrate a mixed pattern of centralized/decentralized activity across each university, with a fair degree of latitude and engagement at different academic and administrative levels. As such, Kyiv Polytechnic Institute and Kyiv National University appeared to have the most centralized strategies, while the management culture at Kyiv-Mohyla Academy placed a stronger accent on individual actorhood and ‘norm entrepreneurs’ (see Tamtik & Kirss 2015). This was evidenced by the collaborative initiatives analysed and the steering roles of individual actors.

As international strategies are unique to each university setting, a consistent attribute across them is that their success appeared to hinge on faculty-led, research-driven initiatives, and the ability to identify and adequately respond to international opportunities. In a similar vein, the strategies spoke to the negotiation processes and the capacity of differing institutional cultures at each university to internalize change. Specifically, this meant that international initiatives appeared to be most effective when aligned with existing institutional structures and priorities.

These developments imply that the involvement of institutional actors and a growing number of higher education stakeholder agencies were playing an increasingly important role in influencing spaces of action. Furthermore, the increased relevance of internationalization to the academic enterprise suggests the need for careful alignment of institutional culture(s) with international objectives and strategies selected by the university as essential elements to enhance the effectiveness of planned outcomes. In this context, the data suggest that the agency of institutional actors to influence change is a key determinant of success of a given collaborative initiative. The collective data sets revealed that the theme of institutional actorhood was repeatedly echoed in the interview data across all three universities, highlighting the important role of individual agency in the advancement of international initiatives.

A similar strategy across all three universities was evidenced in alterations to existing academic and administrative frameworks in order to adapt to an increasingly fluid external environment. This was manifest in the creation of new administrative structures and

professional cadres specifically developed to manage increasingly complex international transactions and objectives such as academic mobility, ECTS credit transfer, *cotutelle* doctoral training and research collaborations. A similar strategy was observed on the administrative side of the house with the creation of international economic cooperation offices, science parks and specialized personnel to manage the development of international projects, service procurement and marketing education services abroad.

The administrative interview data indicate that human and technical resources were augmented in all three universities to operationalize international strategies. Similarly, the interview data suggest that the level of sophistication of these units has grown over the course of the last decade to adapt to changing internal and external demands of the knowledge society and knowledge economy. These undertakings have manifested as new structures and cadres intended to strengthen the respective universities' constructive engagement with international issues and improve the coordination of international initiatives on campus.

Unpacking the strategy dimension further, the data suggest that the tactics employed were primarily derived from international rationales (see prior sub-section). This entails a shift from the conceptual to the operational in light of specific tactics university actors employ in order to achieve a pre-determined set of objectives. Nonetheless, the collective body of data also pointed to conflicting perceptions around the internationalization process, strategies employed, and tensions between adopted strategies and institutional constraints. Tensions were most pronounced when international initiatives were implemented in under-

reformed institutional frameworks. For example, institutional actors at Kyiv Polytechnic Institute and Kyiv National University voiced repeated concern over tensions with incompatibilities over the travel and translation of external higher education policies.

Despite evidence of formal and informal strategies, the analysis revealed the lack of an integrated, cohesive international strategy across all university settings. From this perspective, international strategies were largely centred on the intensification of cross-border activities, increase in global rankings and visibility, as well as participation in thematic networks and research consortia. A common thread among all university actors was their stated desire to position themselves more closely with EU framework programs and top-ranked global universities. And while Kyiv Polytechnic Institute and Kyiv National University devised formal international strategies, the interview data and university sources showed little evidence of how goals were to be achieved beyond official statements and declarations.

Despite internal challenges, internationalization strategies appear to have evolved into an increasingly central agenda item for the case study universities; however, efforts remained fragmented. The data indicate that internationalization strategies are most effective when aligned with the existing normative frameworks and institutional cultures of a given university setting. This element is critical to the understanding of how tensions between the planning and operationalization dimensions are resolved. From this perspective, Kyiv-Mohyla Academy demonstrated the most holistic approach in terms of planning its

international activities, despite the university's lack of a formal internationalization strategy.

According to the data, internationalization represented a legitimizing form of agency for the introduction of new training and research models, third-cycle reforms and leveraging resources in an effort to align more closely with the EHEA. For example, Kyiv-Mohyla Academy's approach intersects with the overall objective of integrating scholars and researchers within a global academic community, as well as facilitating an alternative to the Soviet model of higher education. This factor makes Kyiv-Mohyla unique among the other universities in this study since the tactics institutional actors employed were aligned with internal efforts to leverage strengths and advance the university's core mission and objectives.

Kyiv Polytechnic Institute's international strategy appeared to have been developed as a result of increasing responsiveness to the growing commodification of knowledge and the university's role as an arbiter and producer of practical-oriented, applied knowledge. The quasi-industrial approach adopted as part of its international planning strategy mimics entrepreneurial practices with the purpose of business development and the development of products and services for external stakeholders. The data indicated that Kyiv Polytechnic Institute's increased openness to commodifying knowledge, symbols, modified rule sets and legitimating discourses came about because of increased conceptual blurring between academic and commercial activities. However, comparable international

strategies have yet to materialize *vis-à-vis* Kyiv Polytechnic's approach to academic training, research and third-cycle reform efforts.

The data also revealed that Kyiv National University demonstrated considerable evidence of adaptation of its administrative structures to accommodate increased levels of international engagement. These strategic configurations include the creation of specialized administrative units and staff to connect with the phenomenon of internationalization in more informed and engaged ways. The university's active participation in international projects, scientific networks and thematic research clusters have brought significant depth and dimension to international efforts over the years. However, comparable efforts were visibly lacking where the internationalization of doctoral education was concerned. Kyiv National University's experience has been met with varied success, considering its risk-averse approaches to internationalization and slow pace of institutional change. The university's largely declarative international strategy, coupled with modular and piecemeal approaches to third-cycle reform suggests a degree of institutional unwillingness or inability to move ahead with more substantial structural change.

From an academic perspective, the data indicate that internationalization strategies are most dynamic at Kyiv-Mohyla Academy, despite the absence of a formal strategy. The university's approach to doctoral training has become a national model for third-cycle reform and its early adoption of Ukrainian and English as a medium of instruction has recently been emulated at the other two case universities. Furthermore, Kyiv-Mohyla

Academy appeared to be the most engaged in a well-defined pattern of prioritizing international operations and internalizing change in a way which is both systematic and informed. Evidence of this is manifest in hybrid doctoral programs, which combine elements of three higher education models (European, North American and Soviet) to the realities and directives of the Ukrainian tertiary environment.

Kyiv Polytechnic Institute demonstrated the most advanced operations model among the three case study universities in terms of meeting economic objectives. These activities were clearly manifest in terms of its advanced linkages with industry and government, as evidenced by the initiatives undertaken by the International Economic Activity Office and the Kyiv Polytechnic Science Park, as well as recent changes introduced to administrative units which were designed to bring the university closer to the knowledge economy. Less evident were Kyiv Polytechnic Institute's activities in the internationalization of doctoral training and third-cycle reforms, despite the administration's repeated references to the EHEA and European knowledge discourses as strategic vectors of development. A doctoral candidate provided additional insight on this element, noting:

[I]f a PhD in Europe is for conducting studies, in Ukraine it's considered as an occupation by the doctoral school. The system must be reformed to change this approach. The *trudovaya knizhka* (Soviet-era employment record book) still exists... there are inconsistencies in the system. Doctoral studies are still considered as a form of employment. This status might change in future... (KPI 28-11-16 | RU translated from original).

At the other end of the spectrum, Kyiv National University provided important introspective to the case study, considering the sheer volume of international engagement on the one hand, and its relatively limited institutional capacity to appropriate and

operationalize ‘borrowed’ higher education policies on the other. From this perspective, the piecemeal approach to doctoral reform, selective engagement with structural measures programs, coupled with a lack of an integrated, cohesive internationalization strategy appear to be some of the key challenges to moving current efforts beyond their present scope and scale. This appears to have had serious implications for the operationalization dimension as a whole and calls for greater administrative and academic coordination.

Interview data and university documents indicated that the European vector represented the most salient pathway for all three case study universities resulting in the development of new lines of action, institutional practices and funding sources. Academic consortia, thematic networks and EU-sponsored mobility programs have added significant dimension to the three case study universities’ respective international footprints. Closer alignment with the European knowledge system has prompted universities to adopt new policies and practices in order better position themselves within the EHEA and emerging ERA.

In a similar vein, the Europe of Knowledge acts as a ‘reference society’ from which ‘best practices’ or ‘international standards’ can be learned from other education systems (Steiner-Khamsi 2016, 383). By the same token, the practice of higher education borrowing and lending acts as a source of authority and legitimacy, as evidenced by Ukraine’s revised “Law on Higher Education” (Parliament of Ukraine 2014) which borrows heavily from the European knowledge discourse. In this regard, it can be argued that the transfer process is selective by nature, considering that institutional actors invoke “context-specific reasons for receptiveness” (Steiner-Khamsi 2016, 383).

While both Kyiv Polytechnic Institute and Kyiv National University developed extensive structural measures projects, the data indicated that policy borrowing often remained symbolic or piecemeal with a focus on the ‘spirit’ rather than the ‘letter’ of reform. From a Northian perspective, the interplay between the perception of institutional actors and the nature of their beliefs suggests that the role of cultural inheritance and varying degrees of bargaining strength to influence the institutional change matrix appear to underlie the persistence of formal and informal constraints (North 1990, 103-104). Furthermore, university actors are often placed in what Steiner-Khamsi (2016, 383) describes as “an awkward position of having to retroactively define the local problem that fits the already existing global solution or reform package”.

For example, the analysis revealed that while the two aforementioned universities developed extensive international portfolios, very few of them centred on third-cycle governance reform initiatives. Accordingly, EU project reports revealed that neither doctoral schools at Kyiv Polytechnic Institute and Kyiv National University were implicated in transformative third-cycle reform and structural reform initiatives such as *ASP2PhD* (2010–2013) and *DocHub* (2016–2019) (National TEMPUS/Erasmus⁺ Office in Ukraine 2014; National Erasmus⁺ Office in Ukraine 2016).

In a similar vein, performative discourses and entrepreneurial pathways have become increasingly normalized and mainstreamed over the course of recent years due to shrinking state contributions and continued economic challenges across the higher education sector. As universities calibrate their international activities for strategic purposes, the

international activities of each respective doctoral school provided important insights into current and potential future trajectories. While all three case universities lacked core funding for international scholarly activities, the data indicated that financial and human resources were increasingly made available for economic activities at Kyiv Polytechnic Institute and Kyiv National University. These developments suggest an increased preference for entrepreneurial approaches.

From this perspective, all three universities have become increasingly strategic in attracting international funding, as evidenced by a marked increase in entrepreneurial activities, such as the recent expansion of specialized administrative units and affiliated cadres specifically tasked with engaging in EU framework programs, higher education stakeholder agencies and the private sector, and increased receptivity to contractual services and international student recruitment. Accordingly, the data indicate that the gap between academic ‘centres’ and ‘peripheries’ has led to increased reliance upon external funding sources, suggesting the emergence of new forms of path dependence.

7.4 OUTCOMES

According to Rumbley (2010), internationalization outcomes are derived from the *Review* and *Reinforcement* dimensions of the Delta Cycle, which address *to what ends* international efforts are achieved in a given university. As internationalization outcomes are unique to each university’s institutional framework, the analysis revealed a varied set of results, which illuminated the scope and scale of the case study universities’ experiences with internationalization since Ukraine’s accession to the EHEA. From this perspective, the introduction of international activities has prompted the development of new structures,

cooperation patterns and modifications to existing institutional frameworks. Accordingly, the introduction of the Bologna Process into the institutional frameworks of the case study universities and alignment with the EHEA have led to increased contextual adaptation and hybridity. This is due to competing and often incompatible institutional logics rooted in the Soviet model of higher education and the logics presumed in European reforms.

The most evident set of outcomes that emerged from the data was the rapid expansion of international activities across all three universities over the last decade, specifically in the areas of academic mobility, thematic networks, knowledge alliances and scientific consortia. These activities have fostered the development of a range of new academic programs, symbols and identities, including those designed for the advancement of third-cycle reforms, capacity building, academic cooperation for innovation and exchange of best practices. Specifically, the EU framework programs have acted as catalysts by bridging different learning communities, reinforcing systems thinking and providing funding for international scholarship and research activities.

Unpacking the international outcomes dimension further revealed evidence of academic and administrative modifications at all three case universities, which demonstrated adaptations to a changing external environment. These shifts were clearly manifest in the creation and expansion of academic mobility and research offices, doctoral schools and specialized administrative units, along with administrators and faculty to oversee their respective activities. The case study universities also appeared to have modified their academic and administrative structures in order to facilitate more reflexive responses to the

EHEA and ERA. This was evidenced by the introduction of joint international programs and degrees, quality assurance frameworks, ECTS credit recognition and policy alignments to promote greater compatibility with EHEA norms and standards. The data also indicated that the prominent discourse around international academic activities was dominated by European framework initiatives, as evidenced by the scope and scale of the TEMPUS and Erasmus programs, as well as the Horizon 2020 research initiative.

In this regard, the EU framework programs have expanded dramatically across disciplinary fields and levels of study, bringing with them corresponding symbols and legitimizing discourses. It is necessary to note that interventions with specific focus on doctoral reforms emerged as early as 2005 with the introduction of the first ‘experimental’ PhD programs at Kyiv-Mohyla Academy (Talanova 2010, 333). In contrast, the earliest evidence of third-cycle structural measures programs was introduced at Kyiv Polytechnic Institute in 2010, and in 2012 at Kyiv National University (National TEMPUS/Erasmus⁺ Office in Ukraine 2015).

In this context, the main difference between the international outcomes at Kyiv-Mohyla Academy was the focus on *transformational* approaches versus the predominantly *transactional* approaches at Kyiv Polytechnic Institute and Kyiv National University. The analysis shows that Kyiv-Mohyla Academy took fundamental steps to introduce a national reform model for the structured PhD as an alternative to the Soviet-era *kandidat nauk*, while at the same time, instituting far-reaching modifications to its governance frameworks as part of its knowledge brand. On the other hand, Kyiv Polytechnic Institute and Kyiv

National University took a predominantly incremental and piecemeal approach to internationalizing doctoral studies and third-cycle reforms. International outcomes took the form of entrepreneurial pathways such as student recruitment and export of educational and contractual services. Over time, these initiatives have increased conceptual blurring between academic and business activities.

Furthermore, the data suggest that the introduction of the Bologna Process and Lisbon Protocols into the institutional settings of the three universities has led to increased contextual adaptation and hybridity. Broadly defined, hybridity can be described as an 'editing' process which involves the combination of different educational models into the normative, operational and institutional frameworks of the university (Gomilko, Svyrydenko & Terepyschchi 2016). These configurations can also be considered as a heuristic process which is used to adapt, rationalize and legitimize a set of actions within a given institutional framework.

These adaptive mechanisms are triggered by the introduction of multiple higher education models into the university environment, resulting in competing and sometimes incompatible institutional logics. Originally designed as a Western European innovation to the increasing challenges of global competitiveness, the implementation of the Bologna Process has undergone mutations in policy and practice, while facing resource asymmetries and different institutional realities than those university environments it was initially intended.

From a Northian perspective, hybrid logics suggest that new forms of negotiation and compromise need to manifest themselves for institutional change to truly take hold. It also helps to explain the institutional reasoning behind piecemeal third-cycle reforms. According to North (1990, 96), the path of institutional change is brought about by competitive political forces and very slowly changing mental constructs of the status of [both] parties combined to produce more efficient outcomes. The following passage summarizes the tensions between formal rules and informal constraints, which often conflict with one another when a complex phenomenon such as internationalization is introduced into existing institutional frameworks:

Perhaps most important of all, the formal rules change, but the informal constraints do not. In consequence, there develops an ongoing tension between informal constraints and the new formal rules, as many are inconsistent with each other. The informal constraints had gradually evolved as extensions of previous formal rules. An immediate tendency, as has been described, is to have new formal rules supplant the persisting informal constraints. Such change is sometimes possible, in particular in a *partial equilibrium* context, but ignores the deep-seated cultural inheritance that underlies many informal constraints. Although a wholesale change in the formal rules may take place, at the same time there will be many informal constraints that have great survival tenacity (North 1990, 91 | emphasis in original).

This passage is particularly salient when considering institutional legacies and the adoption of new rule sets encompassing complex transactions such as those which transpire in cross-boundary networked organizations. In this context, the international outcomes dimension provided critical feedback from the collective data sets in order to determine *to what ends* international activities are achieved in a given university. The analysis suggests that Kyiv-Mohyla Academy demonstrated the most advanced academic outcomes insofar as the internationalization project is closely aligned with the university's overall mission and

outlook. From this perspective, the data indicate that Kyiv-Mohyla has consistently leveraged its resources to position itself to formulate more nimble responses to the European knowledge system. The Academy's ability to internationalize deeply and comprehensively, while maintaining sufficient attention to quality and competitiveness, suggests that institutional leveraging plays a pivotal role in shaping its international footprint.

Furthermore, the interview data indicate that the Academy has aligned itself closely with the EHEA, beginning with the introduction of Ukraine's first hybrid PhD programs, to the development of a national model for third-cycle reform. Kyiv-Mohyla Academy has made significant institutional efforts at international outreach and at making academic programs and study cycles more comparable to EHEA and ERA standards and practices. These network externalities have provided additional stimulus for reform. In a similar vein, the data revealed economic outcomes resulting from internationalization efforts, ranging from funding procurement via higher education stakeholder agencies and increasingly closer ties to industry partners, to the development of the Kyiv-Mohyla Foundation, whose mission is to undertake philanthropic activities in order to raise private revenues and promote the mission of the Academy abroad (National University of Kyiv-Mohyla Academy 2015, 15).

The data from Kyiv Polytechnic Institute showed a decidedly mixed set of outcomes, as evidenced by incremental alignment with the EHEA, piecemeal third-cycle reforms and strong propensity for academic entrepreneurialism. International outcomes were also manifest in the development of EU framework programs, national positioning as the

Horizon 2020 contact point, and hosting agreements with Campus France, DAAD, joint institutes and other national higher education stakeholder agencies. Accordingly, the Polytechnic's internationalization outcomes were the most closely linked to performative discourses and entrepreneurial pathways out of all three universities selected for this case study. This was evidenced by a strong focus on global rankings, the need to keep pace with global science, as well as the export of educational and contractual services and international student recruitment to diversify revenue streams.

From this perspective, Kyiv Polytechnic Institute took important steps in shaping its international outlook, along with making incremental steps to bring its academic and administrative functions closer inline with the regional and global knowledge systems. At the same time, international efforts continue to face considerable obstacles. Despite recent changes to the formal rules and the validation of international scholarly activities, the analysis suggests that Kyiv Polytechnic Institute faces real limitations where international outcomes are concerned, since the phenomenon appears to have generated expectations, which the institution has difficulties keeping pace. Under-implemented Bologna reforms, resource asymmetries and piecemeal third-cycle changes appear to have hampered outcomes and stalled deeper internationalization efforts. From this perspective, the most common theme expressed by respondents centred on internal policies and procedures that often failed to keep pace with increasing levels of engagement and commitments attributed to internationalization.

University respondents noted increased validation of international activities in the form of remunerated release time for faculty, the addition of international scholarship and research in the evaluation criteria for tenure-track professors, and the creation of senior administrative positions to advance the international efforts. The analysis indicated that Kyiv National University has taken a largely evolutionary pathway to achieving its international outcomes. This was evidenced by the university's incremental pace of internationalizing teaching and research, as well as the apparent lack of institutional urgency to reform doctoral programs, particularly in the context of semi-implemented Bologna reforms.

Limitations to this end were also evidenced by mismatches between the model prescribed by the EHEA and the inherent incompatibility of existing state-centred management logics. Tensions have arisen as a result of misalignments between existing policies and practices, as well as the changing demands generated by Kyiv National University's *rapprochement* with the European knowledge system. And while closer alignment with the EHEA has promoted a certain degree of systems thinking among institutional actors, there is little evidence to suggest a far-reaching change agenda on the horizon.

The interview data suggest that these tensions appear to have curtailed the development of new spaces for individual agency and academic identities to emerge. These issues also spoke to a major challenge that institutional actors faced with incompatibilities linked to the introduction of external structures, procedures and norms into the university's existing frameworks. By the same token, these outcomes illustrate the degree to which the largely

unreformed academic and administrative institutional environments have misaligned with global approaches to higher education.

Nonetheless, the interview data and university reports indicated that the phenomenon of internationalization has played a catalytic role in stimulating new knowledge alliances and improving the university's visibility and positioning. Within this context, Kyiv National University has leveraged its international partnerships to achieve a range of outcomes. However, the data indicate that the combination of state-centred management logics and entrepreneurial pathways have placed greater pressure on international economic outcomes than on academic outcomes. This suggests that the ability of institutional actors to implement change and steer transformative outcomes across the structural boundaries of the university remains fragmented and often limited.

CHAPTER 8 CONCLUDING SUMMARY AND OBSERVATIONS

The concluding discussion provides a synthesis of the main findings and contributions of this case study. The discussion reverts to a number of contextual areas, current debates and foundational tenets which informed the inquiry. As such, this study is positioned in a rapidly developing area of Ukraine's higher education discourse. From this perspective, the insights obtained could help inform theoretic and empirical analyses on future directions of higher education in Ukraine.

The guiding assumptions that underpinned this study were validated over the course of the inquiry. The first guiding assumption maintained that internationalization promotes

institutional change by way of increased contextual adaptation and hybridity. Evidence of this is manifest in the institutional responses which were used as leverage to adapt external policies, practices and norms to existing structures and knowledge production patterns. This entailed a negotiation process whereby university actors developed legitimizing discourses and symbols in an attempt to internalize change and foster new academic identities. It also underscores the role of actor-based agency and the capacity to influence shifts in formal and informal rules through a process of critical engagement and self-transformation.

As this study illustrates, hybrid logics lend legitimacy to the practice of higher education policy borrowing and lending, considering the adaptive processes that take place when an educational discourse is transplanted from one context to another. Furthermore, this process facilitates space for negotiation that allows for the translation of knowledge discourses in a manner that is most advantageous to institutional priorities and peculiarities.

The second guiding assumption is inherently linked to the first, since university responses to globalization are strongly affected by the institutional culture and the adopted innovation. This point is especially salient in institutional settings which are under-reformed, resulting in misalignments with global higher education models. As such, the logics presumed in global knowledge discourses are often incompatible with existing institutional norms and structures. This requires tensions to be reconciled with competing structures, norms and identities, along with unique pathways to enable them function within specific university settings.

The research suggests that Ukrainian National Research Universities are becoming increasingly strategic in the way international strategies are devised and implemented. From this perspective, the insertion of the case study universities into the EHEA and the emerging global higher education space represents a dialectic process between the increasing need for academic institutions to position themselves within the emerging global system of higher education, while at the same time, preserving progressive national traditions and achievements. The result is a shifting landscape of policies, practices and (knowledge) alliances. This guiding assumption was confirmed by the distinctive ways in which the phenomenon of internationalization played out across the three case study universities. Furthermore, it illustrated the unique challenges and opportunities in adapting and implementing global higher education policies in Ukraine's non-linear, post-Soviet environment.

8.1 ADVANCING A NEW CONCEPTUAL MODEL FOR INTERNATIONALIZATION

This investigation was designed by using a combination of the Delta Cycle for Internationalization (Rumbley 2010) and the theory of institutional change (North 1990). A case study design (Yin 2015) facilitated a conceptual lens to gauge the internationalization experiences of three National Research Universities in Kyiv, Ukraine. Despite the pervasiveness of the phenomenon, higher education internationalization remains under-theorized and under-researched. Furthermore, there is a dearth of conceptual models to gauge internationalization experiences in the post-Soviet higher education space. The main contributions of this study are its attempt to include a reflexive account of university responses to knowledge society discourses; extending neo-institutionalist theory to higher education; and advancing conceptual understanding of

internationalization in Ukraine's non-linear, post-socialist setting. As such, the insights gained in this case study attempt to address a knowledge gap by designing a modified conceptual framework and putting it through its paces in the evolving Ukrainian higher education context.

This study attempted to advance and challenge current thinking on internationalization by providing a conceptual lens which could capture and map critical perspectives that would have been left unnoticed. The integration of Northian perspectives, combined with the Delta Cycle for Internationalization added an element of depth to the study that might have been lost had only one conceptual model been applied. The resulting hybrid model provided additional analytical rigour when engaging with the phenomenon of internationalization across different institutional environments. Furthermore, it highlighted the utility of extending the boundaries of neo-institutionalist theory into the study of higher education. In doing so, it captured new insights into the phenomenon of internationalization, as well as institutional- and organizational-specific factors to critically interpret the ways the phenomenon manifested across different case study universities.

While the Delta Cycle for Internationalization accurately reflects the experiences of the case study universities, the implementation of this model in practice suggests that the indicators (especially the *review* and *reinforcement* dimensions) often run ahead of the institutional processes occurring therein. As a result, these elements often remain underdeveloped or poorly defined. As such, structuring and classifying data with respect to the Delta Cycle's outcome indicators can be operationally challenging, especially in

cases where internationalization policies and practices are not yet fully developed. From a researcher perspective, this requires ‘reading between the lines’ and triangulating data in order to minimize errors and potential biases.

8.2 INTERNATIONALIZATION DISCOURSES IN CONTEXT

This study attempted to map the phenomenon of internationalization as it manifested across the institutional frameworks of three Ukrainian flagship universities. The analysis concludes that internationalization is complex and multiphase. Furthermore, when the phenomenon was introduced into a university setting, it demonstrated distinctive pathways and unique sets of outcomes. For this reason, it was important to situate internationalization discourses in their proper context in light of diverse institutional cultures, histories and action logics, as international outcomes were strongly affected by the interplay of these factors.

The interaction between local and global knowledge discourses has become increasingly important as Ukrainian research universities calibrate their international approaches for strategic purposes. Yet, specific challenges remain. The logics presumed in European and global knowledge discourses are often incompatible with existing institutional structures. In this regard, the data pointed to tensions rooted in the Soviet higher education legacy, the mental models of institutional actors and the logics prescribed by European reforms. From this perspective, the analysis demonstrated that the Bologna Process and its associated protocols have an alternative meaning than in the rest of Europe, considering different starting points and the broader political project aimed toward systemic change.

Drawing on Cowen's conception of the shape-shifting patterns of global higher education discourses as they *move* and *morph* from one university setting to another (Cowen 2009, 315), the study analyzed the phenomenon of internationalization over three conceptual levels – the individual, institutional, and organizational. In doing so, an attempt was made at situating internationalization discourses into proper context as the phenomenon manifested itself across three unique university settings. From this perspective, the analysis attempted to re-contextualize knowledge discourses by highlighting the interactions between global, regional and national contexts. By the same token, the analysis attempted to identify how universities self-organize and the means by which change is internalized and managed.

8.3 RECONCILING THE (POST-)SOVIET WITH THE GLOBAL

The empirical analysis revealed that internationalization placed the case study universities in an area of tension between European knowledge discourses and (post-)Soviet legacies. Resource and power asymmetries, state-centred management logics, and the introduction of Western higher education innovations into Ukrainian institutional realities often resulted in contextual adaptation and hybridity. These elements cast critical light on areas of policy borrowing and lending. But perhaps more importantly, the analysis illuminated the degree to which higher education policies were adapted, legitimized and implemented across different institutional settings. As such, the case study illustrated attempts by key institutional actors and external agencies at reconciling European values with management practices rooted in the Soviet legacy.

The latter point casts light on organizational boundaries, defined by Swart and Harvey (2011, 705-706) as:

[A] legal line; the limit of control, influence or activity... A defensive mechanism to prevent outside influence... [and] 'mental fences' that help people make sense of their world. Organizational boundaries help balance autonomy with dependence, external instability with internal order, and multiple role identities. Boundaries can be created by the people involved or imposed from outside. They can be deliberately changed, or left to evolve, but static boundaries are rare.

From this perspective, the research concludes that institutional change does not occur spontaneously, nor does it transpire in a vacuum. The analysis suggests that institutional actors, agents and stakeholders work within and between university structures to advance or resist change. In this regard, internationalization efforts appear to have brought about stronger lines of interplay between academic, research and administrative staff. As universities intensify international collaboration, institutions must adapt in order to manage increased knowledge flows across boundaries to maximize benefit. The rise of 'knowledge brokers' and 'academic entrepreneurs' (internal and external intermediaries) suggests a shift in academic identities against the backdrop of a changing higher education landscape. In this context, the study offered valuable insight into the interplay between national and international knowledge discourses, as well as the actors informing the process of institutional change.

Drawing on the theoretic tenets of North (1990, 8), the results revealed that tensions are often mediated by institutional actors who selectively adapt and modify the 'rules of the game' with the perception that improvements could be made at the margins by altering the existing institutional framework. It also brought attention to hybrid higher education

models, such as those employed at Kyiv-Mohyla Academy, which have up until recently gone unnoticed in the comparative higher education literature (see Gomilko, Svyrydenko & Terepyshchyi 2016). However, the data analysis suggests that tensions manifest when differing educational models intersected with European innovations and Soviet higher education practices. In some cases, state-centred management logics have proven resilient, which raises debate between the forces that seek to preserve elements of the previous system and those which are attempting to reshape it along the lines of the new imperatives of global science.

As the analysis concluded, contextual adaptation took into consideration the university's unique history, strategies, endowments, and alignment with the internal structures and culture of the institutional actors themselves. This suggests that new forms of negotiation and compromise need to take shape in order to legitimize and implement internationalization strategies into tangible outcomes. These processes also spoke to the diffusion of innovation across a given institutional framework, as well as the scope and pace which 'fast-moving' and 'slow-moving' institutions adapt and change (Rogers 2003; Roland 2004). By putting these discourses into specific institutional contexts, the study allowed for a finer-grained analysis of the phenomenon of internationalization as it played out across three distinct university settings. The resulting study provided a multi-faceted and nuanced approach to examining the complexity of internationalization from the perspective of Ukraine's non-linear, post-Soviet higher education environment.

8.4 EMERGING GEOGRAPHIES IN THE EUROPE OF KNOWLEDGE

This study attempted to direct scholarly discussion on the role of the case study universities as organizations that only produce and disseminate knowledge, but assimilate and adapt global knowledge to national needs. It also examined the function that Ukrainian research universities may play as arbiters of knowledge and as actors of change. The study resulted in a unique analysis of internationalization discourses explored through a multi-actor perspective. The empirical work facilitated a nuanced analysis of the processes informing and shaping the ways in which the case universities self-organized to meet the complex challenges presented by globalization. It also contributed to the scholarly literature and engaged current debates by examining the processes which advanced or impeded institutional change. The study attempted to redirect the academic discussion by illuminating the processes through which key actors manage institutional change across different university settings. And in doing so, gave voice to institutional actors which have been largely absent from the scholarly discourse, while at the same time, providing important insight into actor-based agency and their capacity to influence change.

In this context, the case study cast light upon the emerging *geographies* of the Europe of Knowledge, as related knowledge discourses have gained a renewed sense of urgency and visibility following passage of the revised “Law on Higher Education” (Parliament of Ukraine 2014). In this regard, the Europe of Knowledge has been described as a “complex and malleable term”, broadly defined as “an area in the making with contested boundaries” (Chou & Ulnicane 2015, 5). And while the EHEA is being built upon existing higher education systems, its construction depends, to a large extent, on the internal characteristics

of institutions, as well as “[i]nstitutions that authorize, and enable, as well as constrain change” (Olsen 2007, 106). This point is especially salient for this study, since knowledge boundaries are often challenged and re-contextualized by the agency of institutional actors. As such, the emerging (and as of yet unconsolidated) knowledge ‘landscape’ has become of increasing scholarly interest, especially in determining policy processes and modes of governance in areas where the West intersects with the East (see Chou 2016; Chou & Gornitzka 2016; Chou & Ulnicane 2015).

For the purposes of this study, a substantial amount of the inquiry focused on institutional strategies, knowledge alliances and patterns that emerged around a series of international collaborative initiatives linked to doctoral studies. The analysis revealed uneven patterns across the case study universities. As such, the study demonstrated significant variation on how internationalization was practiced and the means by which the phenomenon was negotiated, diffused and internalized at the institutional level. By the same token, it also demonstrated tensions between case study universities and knowledge constellations that were internationally connected, and at the same time, nationally embedded.

Furthermore, the study attempted to illustrate the editing process which took place according to the institutional realities knowledge discourses landed in, as well as the various coordinating varying mechanisms and processes that came to light in each university. This approach helped to identify and analyze institution-specific factors on how actors responded to the dynamics of a changing higher education environment. The encouragement of systems thinking, legitimizing discourses, along with formal and

informal enforcement mechanisms constituted a means of examining the ‘rules of the game’ and the processes by which the phenomenon of internationalization manifested itself across different university settings.

In this regard, the study attempted to capture the transmission and translation of higher education policies as they ‘traveled’ from one university environment to another. The analysis suggests that knowledge alliances and thematic networks reduced the transaction costs between actors and higher education stakeholder agencies by bringing them into a common playing field. From a Northian perspective, the intellectual and financial incentives embedded in these collaborative initiatives provided university actors with the perception that they could do better by changing the existing institutional framework at a given margin (North 1990, 8).

The perception of belonging to a common European knowledge area and the attractiveness of the Bologna knowledge brand resonated with the majority of case study respondents, despite the construct frequently being situated in an area of tension between overlapping external demands and internal realities. However, internationalization efforts appeared to work best when aligned with the institutional priorities at a given university. Thus, from an institutional perspective, the analysis provided key insights on the degree of bargaining power that university actors may or may not have to create new rules in order to benefit from network externalities such as membership in the EHEA. As such, the investigation attempted to gauge the degree to which internationalization acted as a function of institutional change, which not only (re)configured existing academic models and

administrative modes of operation, but influenced agentic actorhood, legitimized reforms and shaped institutional identities.

8.5 FUTURE AREAS OF RESEARCH

This case study was designed as a first step to explore and critically interpret the phenomenon of internationalization as it manifested across the institutional frameworks of three Ukrainian flagship universities. The investigation attempted to facilitate critical analysis on the improvement of knowledge on structural institutional change. In this context, internationalization represents an institutional construct and a political project requiring adequate support on individual, institutional and organizational levels. The investigation illustrated the importance of actors and agents who transferred and translated higher education policy across different institutional frameworks and epistemic communities. These complex and adaptive processes require intellectual risk-taking and monitoring, given the evolving definition(s) of internationalization in relation to knowledge mobilization strategies and institutional dynamics. It is hoped that future inquiries can build on the conceptual and empirical insights gained in this case study in order to reconceptualize internationalization discourses for application in different post-Soviet higher education contexts.

Secondly, further inquiry into areas of contextual adaptation and hybridity in higher education should be conducted, considering selective emulation patterns and mutations at the institutional level. For the purposes of this study, these elements simultaneously draw upon the Soviet higher education legacy and borrowed European reforms. Furthermore, they demonstrate varying sets of outcomes that play out across different university settings

over time. For internationalization efforts to succeed under these conditions, changes in rules and action logics are required, which in turn, provides the necessary space for institutional actors to negotiate resolution criteria. It also requires the efficient translation of educational policies and practices, as well as the identification of mismatches in order to resolve tensions. In this regard, the dearth of credible data and scholarly investigation on the subject represents an area of growing interest to academics, practitioners and policymakers alike. This emerging knowledge discourse could have important ramifications for the future development of higher education internationalization throughout the post-Soviet space, given policy implications and change management processes within complex adaptive systems such research universities.

Finally, additional research into the internationalization of doctoral studies in Ukraine's post-Soviet higher education context is crucial, considering the integral role of third-cycle programs at fostering innovation and direct link to the knowledge society discourse. Further academic inquiry into this area could have important implications for building and improving knowledge alliances, as well as altering formal and informal rules that may lower transaction costs. Additional studies could facilitate brokered knowledge on the state of doctoral programs, the internal dynamics of international knowledge clusters and strategic alliances, as well as the transition from one higher education model to another. Furthermore, future studies could facilitate mutual knowledge exchange through informed engagement with a broader community of institutional actors, scholars, practitioners and higher education stakeholders.

This in turn, has fundamental implications for the development and delivery of current and future third-cycle programs. While it is important to address the transmission and translation of international third-cycle discourses in the Ukrainian context, it is also critical to identify and explore policy mismatches, resource asymmetries, as well as university-level dynamics which may advance or impede institutional change.

REFERENCES

- Academic Council of Taras Shevchenko National University of Kyiv “Do zasidannya Bchenoi radi Kyivskogo natsionalnogo universitetu imeni Tarasa Shevchenka” [Before the meeting of the Academic Council of Taras Shevchenko National University of Kyiv] 6 February 2017.
- Academic Council of Taras Shevchenko National University of Kyiv “Pro formuvannya kontynhentu inozemnykh hromadyan na fakultetakh v instytutakh Kyivskogo natsionalnogo universytetu imeni Tarasa Shevchenka” [On the formation of a contingent of foreign citizens at the faculties and institutes of Taras Shevchenko National University of Kyiv] 18 January 2016. <http://senate.univ.kiev.ua/?p=117> (Accessed 1 August 2016).
- Academic Council of Taras Shevchenko National University of Kyiv “Pro mizhnarodne vyznannya naukovykh zdobutkiv spivrobitnykiv KNU imeni Tarasa Shevchenka” [On the International Recognition of Scientific Achievements of the Staff of Taras Shevchenko National University of Kyiv] 4 April 2016a. <http://senate.univ.kiev.ua/?p=155> (Accessed 1 August 2016).
- Altbach, Philip G. “Empires of Knowledge and Development” in *World-class Worldwide: Transforming Research Universities in Asia and Latin America*. P.G. Altbach & J. Balan (eds.) Baltimore: John Hopkins University Press (2007).
- Altbach, Philip G. “Higher Education and the WTO: Globalization Run Amok” *International Higher Education*. Vol. 23, 2001, pp. 2–4.
- Altbach, Philip G. “Peripheries and Centers: Research Universities in Developing Countries” *Asia Pacific Education Review*. No. 10, 2009, pp. 15–27.
- Altbach, Philip G. *The Knowledge Context*. Albany: State University of New York Press. (1987).
- Altbach, Philip G. & Knight, Jane. “The Internationalization of Higher Education: Motivations and Realities” *Journal of Studies in International Education*. No. 11, 2007, pp. 290–305.
- Altbach, Philip G; Reisberg, Liz & Rumbley, Laura E. *Trends in Global Higher Education: Tracking an Academic Revolution: A Report Prepared for the UNESCO 2009 World Conference on Higher Education*. Paris: UNESCO (2009).
- Altbach, Philip G; Reisberg, Liz & Rumbley, Laura E. *Trends in Global Higher Education: Tracking an Academic Revolution*. Paris: UNESCO (2010).
- Altbach, Philip G. & Salmi, Jamil (eds.). *The Road to Academic Excellence: The Making of World-Class Research Universities*. Washington: IBRD/World Bank (2011).

- Altbach, Philip G. & Teichler, Ulrich. "Internationalization and Exchanges in a Globalized University" *Journal of Studies in International Education*. Vol. 5, No. 1, Spring 2001, pp. 5–25.
- Appadurai, Arjun. "Disjuncture and Difference in the Global Cultural Economy" *Theory Culture & Society*. No. 7, 1990, pp. 295–310.
- Bain, Olga. "Education after the fall of the Berlin Wall: The end of history or the beginning of histories?" in *Post-Socialism is not Dead: (Re)Reading the Global in Comparative Education*. Vol. 14. I. Silova (ed.) Bingley: Emerald Group Publishing (2010), pp. 27–57.
- Bartell, Marvin. "Internationalization of universities: A university culture-based framework" *Higher Education*. No. 45, 2003, pp. 43–70.
- Bartelse, Jeroen & Huisman, Jeroen. "The Bologna Process" in *Toward a Global PhD? Forces & Forms in Doctoral Education Worldwide*. M. Nerad & M. Heggelund (eds.) Seattle: University of Washington Press (2008).
- Bazhal, Iurii. *Innovation Entrepreneurship: Creativity, Commercialization, Ecosystem – Handbook for Universities*. Kyiv: Pulsary (2015).
- Beatty, Paul & Willis, Gordon B. "Research Synthesis: The Practice of Cognitive Interviewing" *Public Opinion Quarterly*. Vol. 71, Issue 2, January 2007, pp. 287–311.
- Bekh, Petro; Shnyrkov, Oleksandr & Chugaiev, Oleksii. "Elaboration of a Strategical Framework for International Cooperation in Taras Shevchenko National University of Kyiv" in *Quality Assurance Tools for the Management of Internationalization*. B. Bruns (ed.) Kyiv: Mohyliv-Podilskyi (2011).
- Bégin-Caouette, Olivier. *Small and Mighty Centres in the Global Academic Capitalist Race: A Study of Systemic Factors Contributing to Scientific Capital Accumulation in Nordic Higher Education Systems*. Unpublished PhD thesis. Toronto: Ontario Institute for Studies in Education (2017).
- Bergen Communiqué. The European Higher Education Area: Achieving the Goals. Communiqué of the Conference of European Ministers Responsible for Higher Education. Bergen: Conference of Ministers Responsible for Higher Education (2005).
- Berlin Communiqué. Realising the European Higher Education Area: Communiqué of the Conference of Ministers responsible for Higher Education. Berlin: Conference of Ministers Responsible for Higher Education (2003).

- Biddle, Sheila. "Internationalization: Rhetoric or Reality?" American Council of Learned Societies. ACLS Occasional Paper, No. 56, (2002).
- Bologna Declaration. Joint declaration of the European Ministers of Education. Brussels: European Union (1999).
- Braun, Virginia & Clarke, Victoria. "Using Thematic Analysis in Psychology" *Qualitative Research in Psychology*. Vol. 3, No. 2, 2006, pp. 77–101.
- Breton, Gilles. "Higher Education: From Internationalization to Globalization" in *Universities and Globalization: Private Linkages, Public Trust*. G. Breton, M. Lambert & D.E. Bloom (eds.) Paris: UNESCO (2003).
- Breton, Gilles. "Les universités et la mondialisation: un bilan sous forme d'essai" in *Réflexions sur l'internationalisation du monde universitaire: Points de vue d'acteurs*. M. Laforest; G. Breton & D. Bel (eds.) Paris: Éditions des archives contemporaines (2014), pp. 17–28.
- British Council. *Higher Education in Ukraine: Briefing Paper*. Kyiv: British Council. December 2015.
- Bruns, Brigit (ed.). "Preface" in *Quality Assurance Tools for the Management of Internationalization*. Kyiv: Mohyliv-Podilskyi (2011).
- Bulgakov, Makarii. *Istoria Kievskoi Akademii*. [History of the Kievan Academy] Saint Petersburg: Tipografii Konstantina Zhernakova (1843).
- Burnett, Sally-Ann & Huisman, Jeroen. "University's Responses to Globalisation: The Influence of Organisational Culture" *Journal of Studies in International Education*. Vol. 14, No. 2, May 2010, pp. 117–142.
- Cabinet of Ministers of Ukraine. "Deyaki pitannya nadannya vishchim navchalnim zakladam statusu samovryadnogo (avtonomnogo) doslidnitskogo natsionalnogo universitetu" [Some Issues of higher education institutions on the status of the self-governing (autonomous) national research university] Decree No. 277, 24 March 2010. <http://zakon2.rada.gov.ua/laws/show/76-2010-%D0%BF> (Accessed 20 April 2017).
- Cabinet of Ministers of Ukraine. "Pro zatverdzhennya Statustu Natsionalnogo tekhnichnogo universitetu Ukraïni 'Kyivskiy politekhnichnii institut'" [On approval of the Statute of the National Technical University of Ukraine 'Kyiv Polytechnic Institute'] Decree No. 1332, 21 November 2007. <http://zakon3.rada.gov.ua/laws/show/1332-2007-%D0%BF> (Accessed 2 March 2017).

- Cameron, Kim S. "Organizational adaptation and higher education" *Journal of Higher Education*. Vol. 55, No. 2, March–April 1984, pp. 122–144.
- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada. *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*. December 2014.
- Capello, Roberta; Olechnicka, Agnieszka & Gorzelak, Grzegorz. *Universities, Cities and Regions: Loci for Knowledge and Innovation Creation*. R. Capello, A. Olechnicka & G. Gorzelak (eds.) New York: Routledge (2013).
- Castells, Manuel. "The University System: Engine of Development in the New World Economy" in *Revitalising Higher Education*. J. Salmi & A.M. Verspoor (eds.) Oxford: Emerald Group Publishing Limited (1994), pp. 14–40.
- Chaffee, Marvin W. & Jacobson, Ellen. *Planning and Management for a Changing Environment: A Handbook on Redesigning Postsecondary Institutions*. M.W. Peterson, D.D. Dill & L.A. Mets (eds.) San Francisco: Jossey-Bass Publishers (1997).
- Chanphirun, Sam & van der Sijde, Peter. "Understanding the Concept of the Entrepreneurial University from the Perspective of Higher Education Models" *Higher Education*. March 2014, pp. 891–908.
- Chou, Meng-Hsuan. "Mapping the terrains of the Europe of Knowledge: An analytical framework of ideas, institutions, instruments, and interests" *European Journal of Higher Education*. 28 March 2016.
- Chou, Meng-Hsuan. "Transformation through layering? The case of researcher mobility in the construction of European Research Area" in *Effects of Higher Education Reform: Change Dynamics*. M. Vukasovic, P. Maassen, M. Nerland & B. Stensaker (eds.) Rotterdam: Sense Publishers (2012), pp. 79–96.
- Chou, Meng-Hsuan & Gornitzka, Åse. "Building a European knowledge area: An introduction to the dynamics of policy domains on the rise" in *Building a Knowledge Economy in Europe: New Constellations in European Research and Higher Education Governance*. Cheltenham: Edward Elgar Publishing (2014).
- Chou, Meng-Hsuan & Ulnicane, Inga. "New Horizons in the Europe of Knowledge" *Journal of Contemporary European Research*. Vol. 11, Issue 1, 2015, pp. 4–15.
- Clark, Burton R. *The Higher Education System: Academic Organization in Cross-national Perspective*. Berkeley: University of California Press (1986).

- Collins, Isabelle; Zaporozhe, Elisabeth & Larrue, Philippe. *Study on the organisation of doctoral programmes in EU neighbouring countries*. Paris: Technopolis Group (2010).
- Cowen, Robert. "The transfer, translation and transformation of educational processes: and their shape-shifting?" *Comparative Education*. Vol. 45, No. 3, August 2009, pp. 315–327.
- Creswell, John W. & Plano Clark, Vicki L. *Designing and Conducting Mixed Methods Research*. 2nd edition. Thousand Oaks: Sage Publications (2011).
- Crosier, David; Purser, Lewis & Smidt, Hanne. "Universities Shaping the European Higher Education Area" Brussels: European University Association (2007).
- Czarniawska, Barbara & Joerges, Bernward. "Travels of Ideas" in *Translating Organizational Change*. B. Czarniawska & G. Sevó (eds.) Berlin: de Gruyter (1996).
- Dakowska, Dorota & Harmsen, Robert. "Laboratories of reform? The Europeanization and internationalization of higher education in Central and Eastern Europe" *European Journal of Higher Education*. Vol. 5, No. 1, 2015, pp. 4–17.
- Dale, Roger. "Globalisation, Knowledge Economy and Comparative Education" *Comparative Education*. Vol. 41, No. 2, May 2005, pp. 117–149.
- Delanty, Gerard. *Challenging Knowledge: The University in the Knowledge Society*. Buckingham: SRHE & Open University Press (2001).
- Delgado-Serrano, Maria (et al.). "Understanding international postgraduate studies. Drivers from the supply and the demand side" *Communications in Agriculture and Applied Biological Sciences*. January 2010.
- de Wit, Hans. *Internationalization of Higher Education in the United States of America and Europe: A Historical, Comparative, and Conceptual Analysis*. London: Greenwood Press (2002).
- de Wit, Hans & Callan, Hillary. "Internationalisation of Higher Education in Europe" in *Strategies for Internationalisation of Higher Education: A Comparative Study of Australia, Canada, Europe and the United States of America*. H. de Wit (ed.). Amsterdam: European Association for International Education (1995).
- Dobbins, Michael. *Higher Education Policies in Central and Eastern Europe: Convergence towards a Common Model?* New York: Palgrave Macmillan (2011).

- Dobbins, Michael & Knill, Christopher. "Higher Education Policies in Central and Eastern Europe: Convergence Toward a Common Model?" *Governance: An International Journal of Policy, Administration, and Institutions*. Vol. 22, No. 3, July 2009, pp. 397–430.
- Dobbins, Michael; Knill, Christoph & Vögtle, Eva Maria. "An Analytical Framework for the Cross-Country Comparison of Higher Education Governance" *Higher Education*. No. 62, 2011, pp. 665–683.
- Dobko, Taras. "Emancipating Higher Education in Ukraine from the post-Soviet Legacy: A Problem of Trust and Academic Excellence" *Univesidade em Debate*. Vol. 1, No. 1, 2013, pp. 76–86.
- Donert, Karl. "Thematic Network Projects in European Higher Education: An Analysis of Agents of Change" *Higher Education in Europe*. Vol. 34, No. 1, April 2009, pp. 105–111.
- Drucker, Peter F. *The Age of Discontinuity: Guidelines to Our Changing Society*. New York: Harper & Row (1969).
- Egron-Polak, Eva. "Internationalization of Higher Education: A Few Global Trends and Regional Perspectives" in *The Globalization of Higher Education*. C. T. Ennew & D. Greenaway (eds.) London: Palgrave Macmillan (2012), pp. 57–69.
- Enders, Jürgen. "Higher Education, Internationalisation, and the Nation-State" *German Policy Studies/Politikfeldanalyse*. Vol. 2, Issue 3, 2002, pp. 1–32.
- Enders, Jürgen. "Higher Education, Internationalisation, and the Nation-State: Recent Developments and Challenges to Governance Theory" *Higher Education*. No. 47, 2004, pp. 361–382.
- Ennew, Christine T. & Greenaway, David. *The Globalization of Higher Education*. in C.T. Ennew & D. Greenaway (eds.) London: Palgrave Macmillan (2012).
- Etzkowitz, Henry & Leydesdorff, Loet. "The dynamics of innovation: from National Systems and 'Mode 2' to a Triple Helix of university–industry–government relations" *Research Policy*. No. 29, 2000, pp. 109–123.
- European Commission. "Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 'Towards a European Research Area'" COM/2000/0006 final. (2000). <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52000DC0006&rid=4> (Accessed on 3 April 2017).

- European Commission. *Higher Education in Ukraine*. Kyiv: National TEMPUS Office in Ukraine (2012).
- European Commission. *Implementation Overview of TEMPUS Programme Projects: Over 20 Years in Ukraine 1993–2014*. Kyiv: National TEMPUS/Erasmus⁺ Office in Ukraine (2015a).
- European Commission. *TEMPUS Higher Education Reform Experts Activity Report 2013*. Brussels: Education Audiovisual and Culture Executive Agency (2013).
- European Commission. *Towards a Europe of Knowledge*. Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions. COM (97) 563. 12 November 1997.
- European Commission. “Ukraine joins Horizon 2020 to work with EU in science and research” Press release. 20 March 2015.
- European University Association. *Doctoral Programmes for the European Knowledge Society: Report on the EUA Doctoral Programmes Project 2004–2005*. Brussels: EUA (2005).
- Fell, Elena “Macro-reasoning and cognitive gaps: understanding post-Soviet Russians’ communication styles” *Journal for Communication Studies*. Vol. 7, No. 1, 2014, pp. 91–110.
- Fimyar, Olena. “Policy Why(s): Policy Rationalities and the Changing Logic of Educational Reform in Postcommunist Ukraine” in *Post-Socialism is not Dead: (Re)Reading the Global in Comparative Education*. Vol. 14. I. Silova (ed.) Bingley: Emerald Group Publishing (2010), pp. 61–91.
- Finikov, Taras & Sharov, Oleksandr. *Monitoring the Integration of Ukrainian Higher Education System into the European Higher Education and Research Area: Analytical Report*. Kyiv: International Foundation for Education Policy Research (2014).
- Forssell, Anders & Jansson, David. “The Logic of Organizational Transformation: On the Conversion of Non-Business Organizations” in *Translating Organizational Change*. B. Czarniawska & G. Sevón (eds.) Berlin: de Gruyter (1996), pp. 93–116.
- Gao, Yuan. “Toward a Set of Internationally Applicable Indicators for Measuring University Internationalization Performance” *Journal of Studies in International Education*. Vol. 19, No. 2, 2015, pp. 182–200.
- Giddens, Anthony. *The Consequences of Modernity*. London: Polity Press (1990).

- Gleason, William. "Ukrainian Higher Education in Transition: Perspectives and Policy Implications" *Demokratizatsiya*. Vol. 9, No. 3, Summer 2001, pp. 434–445.
- Gomilko, Olga; Svyrydenko, Denys & Terepyschyi, Sergii. "Hybridity in the Higher Education of Ukraine: Global Logic or Local Idiosyncrasy?" *Philosophy & Cosmology*. Vol. 17, 2016, pp. 177–199.
- Greenwald, Igor. "A University's Rebirth: International Kiev-Mohyla Academy Mixes Ukrainian Nationalism with Western-style Teaching" *Chronicle of Higher Education*. Vol. 27, 15 March 1996, pp. 43–44.
- Grodal, Stine & O'Mahony, Siobhan. "From Field Consensus to Fragmentation: How Means-ends Decoupling Hinders Progress on Grand Challenges" 15 August 2015.
- GuideStar. "GuideStar Premium Report Generated for Kyiv-Mohyla Foundation of America" EIN: 31-1802810. 16 October 2017.
- Guile, David. "What is Distinctive about the Knowledge Economy: Implications for Education" in *Education, Globalization and Social Change*. H. Lauder, P. Brown, J. Dillabough & A.H. Halsey (eds.) Oxford: University of Oxford Press (2006).
- Gwyn, Rhys. "TEMPUS: An Overview" *Innovations in Education and Training International*. Vol. 33, No. 2, 1996, pp. 132–143.
- Hazelkorn, Ellen. *Rankings and the Reshaping of Higher Education: The Battle for World-Class Excellence*. Basingstoke: Palgrave Macmillan (2011).
- Hladchenko, Myroslava. "The organizational identity of Ukrainian universities as claimed through their mission statements" *Tertiary Education and Management*. Vol. 22, No. 4, 2016, pp. 376–389.
- Hladchenko, Myroslava; deBoer, Harry F. & Westerheijden, Don F. "Establishing research universities in Ukrainian higher education: The incomplete journey of a structural reform" *Journal of Higher Education Policy and Management*. Vol. 38, No. 2, 2016, pp. 111–125.
- Hladchenko, Myroslava & Westerheijden, Don. F. "Means-ends decoupling and academic identities in Ukrainian university after the Revolution of Dignity" *European Journal of Higher Education*. 1 September 2017, pp. 1–16.
- Holdsworth, Nick. "Academy Reborn as it Shakes Off Navy Blues" *Times Higher Education*. 27 July 1998.
- Hudzik, John. K. *Comprehensive Internationalization: From Concept to Action*. Washington: NAFSA (2011).

- Iaremenko, Maksym. "Key Dates in the History of the Kyiv-Mohyla Academy" *Kyiv-Mohyla Humanities Journal*. No. 2, 2015, pp. 31–41.
- Internal Revenue Service. Return of Organization Exempt From Income Tax 2015 – Kyiv Mohyla Foundation of America. OMB No. 1545-0047, DLN: 93493319058756. (Accessed on 10 October 2017).
- International Association of Universities. "Affirming Academic Values in Internationalization of Higher Education: A Call for Action" IAU Briefing Note. Paris. April 2012.
- Jessop, Bob; Fairclough, Norman & Wodak, Ruth (eds.). *Education and the Knowledge-based Economy in Europe*. Rotterdam: Sense Publishers (2008).
- Jessop, Bob & Sum, Ngai-Ling. "Competitiveness, the Knowledge-based Economy and Higher Education" *Journal of the Knowledge Economy*. Vol. 4, No. 1, 2013, pp. 24–44.
- Johnson, Mark S. "Historical legacies of Soviet higher education and the transformation of higher education systems in post-Soviet Russia and Eurasia" in *The Worldwide Transformation of Higher Education*. D. Baker & A. Wiseman (eds.) Bingley: Emerald Group (2008), pp. 159–176.
- Johnson, Mark S. & Tereshkovich, Pavel. "The modern university as an imagined community: European dreams and Belarusian realities" *European Journal of Higher Education*. Vol. 4, No. 3, pp. 235–248.
- Jones, Glen & Oleksiyenko, Anatoly. "The Internationalization of Canadian University Research: A Global Higher Education Matrix Analysis of Multi-level Governance" *Higher Education*. Vol. 61, No. 1, 2011, pp. 41–57.
- Jones, Susan R.; Torres, Vasti & Arminio, Jan. *Negotiating the Complexities of Qualitative Research in Higher Education: Fundamental Elements and Issues*. 2nd edition. New York: Routledge (2014).
- Kalashnikova, Svitlana; Kovtunets, Volodymyr; Luhovy, Volodymyr; Prokhor, Iryna; Satsyk, Volodymyr & Talanova, Zhanna. "Transformations of the Higher Education Landscape in Ukraine" *International Scientific Journal of Universities and Leadership*. No. 2, April 2016, pp. 1–19.
- Kanet, Roger E. "The Soviet Union and the Developing Countries: Policy or Policies" *The World Today*. Vol. 31, No. 8, 1975, pp. 338–346.
- Kehm, Barbara M. "Internationalisation in Higher Education: From Regional to Global" in *The Dialogue between Higher Education Research and Practice*. R. Begg (ed.) Dordrecht: Kluwer Academic (2003).

- Kehm, Barbara & Teichler, Ulrich. "Research on Internationalisation in Higher Education" *Journal of Studies in International Education*. Vol. 11, No. 3–4, Fall–Winter 2007, pp. 260–273.
- Knight, Jane. *Higher Education in Turmoil: The Changing World of Internationalization*. Rotterdam: Sense Publishers (2008).
- Knight, Jane. "Internationalisation of Higher Education" in *Quality and Internationalisation in Higher Education*. J. Knight & H. de Wit (eds.) Paris: OECD/IMHE (1999), pp. 13–28.
- Knight, Jane. "Internationalization: Elements and Checkpoints" *CBIE Research*. No. 7, 1994.
- Knight, Jane. "Internationalization Remodeled: Definition, Approaches, and Rationales" *Journal of Studies in International Education*. Vol. 8, No. 1, Spring 2004, pp. 5–31.
- Knight, Jane & de Wit, H. (eds.). *Internationalization of Higher Education in Asia Pacific Countries*. Amsterdam: European Association for International Education (1997).
- Knutson, Sonja & Kushnarenko, Valentyna. "Ukraine: The New Reforms and Internationalization" *International Higher Education*. No. 79, Winter 2015, pp. 28–29.
- Kopiika, Valeryi (ed.). *Institut mizhnarodnikh vidnosin* [Institute of International Affairs] Kyiv: TOV Vidavnitsvo Ukrblankovidav (2014).
- Komljenovič, Janja & Milavič, Klemen. "Imagining Higher Education in the European Knowledge Economy: Discourse and Ideas in Communications of the EU" in *The Globalisation Challenge for European Higher Education: Convergence and Diversity, Centres and Peripheries*. P. Zgaga, U. Teichler & J. Brennan (eds.) Frankfurt am Main: Peter Lang GmbH (2013), pp. 33–54.
- Korodenko, Maksim. "Mychailo Wynnnyckyi: Nova evropeiska aspirantura mae stati dvigunom pokrashchennya yakosti ukraïnskoi vishchoi osviti" [Mychailo Wynnnyckyi: The new European PhD can become the driver for improving the quality of Ukrainian higher education] *Osvita Ukraïni*. No. 29. 25 July 2016.
- Kotvun, Olena & Stick, Sheldon. "Ukraine and the Bologna Process: A Case Study of the Impact of the Bologna Process on Ukrainian State Institutions" *Higher Education in Europe*. Vol. 34, No. 1, April 2009, pp. 91–103.
- Kravchenko, Andriy. "Internationalization of Higher Education. Mobility, Educational Programs and Projects" Yerevan. November 2015.

- Kurbatov, Sergiy. "University Rankings and the Problem of Competitiveness of National Universities of Post-Soviet Countries in Global Education Space: The Case of Ukraine" *Evaluation in Higher Education*. Vol. 6, No. 2, December 2012, pp. 59–75.
- Kvit, Serhiy. "A roadmap to higher education reform via autonomy" *University World News*. Issue No. 497, 16 March 2018.
- Kvit, Serhiy. "Zakon 'Ob obrazovanii' dast nam tselostnuyu kartinu reform" [The Law 'On education' will provide us with a holistic picture of reform] *RBK–Ukraïna*. 30 March 2015. <http://www.rbc.ua/rus/interview/ministr-obrazovaniya-sergey-kvit-ramochnyy-1427196174.html> (Accessed 2 April 2015).
- Kwiek, Marek. "Social and Cultural Dimensions of the Transformation of Higher Education in Central and Eastern Europe" *Higher Education in Europe*. Vol. 26, No. 3, 2001, pp. 399–410.
- Kyiv-Mohyla Academy Foundation of America. *Kyiv-Mohyla Academy: Four Centuries of Achievement 1615-2015*. I. Jorosewich, M. Farion & O. Khanas (eds.) Kyiv: Falcon Graphics Inc. (2014).
- Kyiv-Mohyla Academy Foundation of America. "Kyiv-Mohyla Academy Ranked No. 1 in University Transparency" <http://kmfoundation.org/2016/9068> (Accessed 2 March 2016).
- Kyiv Polytechnic Institute. *Strategiya rozvitku NTUU "KPI" na 2012-2020 roki*. [Development strategy NTUU "KPI" for 2012–2020] Y.I. Yakimenko, M.Y. Ilchenko, G.B. Varlamov (eds.) Kyiv: Kyiv Polytechnic Institute (2012).
- Kyiv Polytechnic Institute. *Kontseptsiya proektu Prohramy rozvytku zovnishnoekonomichnoyi diyalnosti NTUU "KPI" na 2016-2018 roku* [Concept of the project of the Program of foreign economic development of NTUU "KPI" for 2016-2018] Kyiv: Kyiv Polytechnic Institute (2016).
- Laitinen, Markus. "The End of the International Office?" *The Chronicle of Higher Education*. 28 March 2012.
- Lincoln, Yvonna S. & Guba, Egon G. *Naturalistic Inquiry*. Newbury Park: Sage Publications (1985).
- Lisbon Convention on the Recognition of Qualifications concerning Higher Education in the European Region. Council of Europe. 11 April 1997.
- Maksimovtsova, Ksenia. "Language Policy in Education in Contemporary Ukraine: A Continuous Discussion of Contested National Identity" *Journal of Ethnopolitics and Minority Issues in Europe*. Vol. 16, No. 3, 2017, pp. 1–25.

- Marginson, Simon & Rhoades, Gary. "Beyond National States, Markets, and Systems of Higher Education: A *Glonacal* Agency Heuristic" *Higher Education*. Vol. 43, No. 3, 2002, pp. 281–309.
- Maringe, Felix & Foskett, Nick (eds.). *Globalization and Internationalization in Higher Education: Theoretical, Strategic and Management Perspectives*. London: Continuum International Publishing Group (2010).
- Marsh, Natalie. "Ukrainians now account for over half of international students in Poland" *The Pie News*. 1 May 2015.
- Marshall, Catherine & Rossman, Gretchen B. *Designing Qualitative Research*. 5th edition. Thousand Oaks: Sage Publications (2011).
- Mathison, Sandra. "Why Triangulate?" *Educational Researcher*. Vol. 17, No. 2, 1988, pp. 13–17.
- Matiaszek, Petro. "Ukraine's Legal Terminology Commission adopts official transliteration system" *The Ukrainian Weekly*. No. 42, Vol. LXIV, 20 October 1996.
- McCarney, Patricia. "Global Cities, Local Knowledge Creation: Mapping a New Policy Terrain on the Relationship between Universities and Cities" in *Creating Knowledge: Strengthening Nations: The Changing Role of Higher Education*. G. Jones, P. McCarney & M. Skolnik (eds.) Toronto: University of Toronto Press (2005), pp. 205–224.
- McCarthy, Desmond, F.; Bader, William & Pleskovic, Boris. *Creating Partnerships for Capacity Building in Developing Countries: The Experience of the World Bank*. World Bank Policy Research Working Paper No. 3099. 9 July 2003.
- Meleshevyh, Andriy & Myklebust, Jan Petter. "Modernising PhD Training in Ukraine: TEMPUS Project" in *Doctoral Programs in Europe and Ukraine: International Conference Proceedings*. Kyiv: Pulsary (2007).
- Merriam, Sharan B. *Case Study Research in Education*. San Francisco: Josey-Bass Inc. (1988).
- Merton, Robert K. "Insiders and Outsiders: A Chapter in the Sociology of Knowledge" *American Journal of Sociology*. Vol. 78, No. 1, July 1972, pp. 9–47.
- Miles, Matthew B. & Huberman A. Michael. *Qualitative Data Analysis: An Expanded Sourcebook*. 2nd edition. Thousand Oaks: Sage Publications (1994).

- Ministry of Education and Science of Ukraine. “Pro zatverdzhennya Poryadku prysvoyennya vchenykh zvan naukovym i naukovo-pedahohichnym pratsivnykam” [On approval of the Procedure for assigning scientific titles to scientific-pedagogical workers] 14 January 2016.
<http://zakon2.rada.gov.ua/laws/show/z0183-16> (Accessed 1 August 2017).
- Ministry of Education and Science, Youth and Sport of Ukraine. “Pro opublikuvannya rezultativ dysertatsyi na zdobuttya naukovykh stupeniv doktora i kandidata nauk” [On publishing the dissertation results for achieving the scientific degrees of doctor and candidate of sciences] 2 November 2012.
<http://zakon2.rada.gov.ua/laws/show/z1851-12> (Accessed 1 August 2017).
- Morenets, Volodymyr. “Outlooks and Trends in the Development of Third Cycle Studies in Ukraine” in *Doctoral Programs in Europe and Ukraine: International Conference Proceedings*. Kyiv: Pulsary (2007).
- Moroziuk, Yuliya. “Mychailo Wynnycky: ‘A degree from Cambridge or Sorbonne is no good in Ukraine’” *Den*. 20 May 2008.
- Moulier-Boutang, Yann. *Le capitalisme cognitif. La nouvelle grande transformation*. Paris: Éditions Amsterdam (2007).
- Mrinska, Olga. “The Innovative Potential of Kyiv in Universities” in *Cities and Regions: Loci for Knowledge and Innovation Creation*. R. Capello, A. Olechnicka & G. Gorzelak (eds.) New York: Routledge (2013).
- National Bank of Ukraine. “Pro vrehulyuvannya sytuatsiyi na hroshovo-kredytnomu ta valyutnomu rynkakh Ukraïny” [On regulating the situation of monetary-credit and the hard currency market in Ukraine] Regulation No. 863. 4 December 2015.
<https://bank.gov.ua/doccatalog/document?id=24641508> (Accessed 5 December 2016).
- National Erasmus⁺ Office in Ukraine. *Erasmus⁺ KA2. Cooperation projects: Capacity Building in the Field of Higher Education Projects Profiles*. Kyiv: European Commission (2016).
- National TEMPUS/Erasmus⁺ Office in Ukraine. *94 TEMPUS Projects – TEMPUS IV Projects Compendia*. Kyiv: European Commission (2014).
- National TEMPUS/Erasmus⁺ Office in Ukraine. *Implementation Overview of TEMPUS Programme Projects: Over 20 Years in Ukraine 1993–2014: Findings and Recommendations*. Kyiv: European Commission (2015).

- National University of Kyiv-Mohyla Academy. *Richnii zvit Nationalnogo Universitetu 'Kievo-Mogilyanska Akademiya': Osnovni pidsumki diyalnosti v 2015 rotsi*. [Annual report of the National University of 'Kyiv-Mohyla Academy': Activity highlights of 2015] Kyiv: NUKMA (2015).
- Nerad, Maresi. "It takes a global village to raise the next generation of PhDs and postdoctoral fellows" *Acta Academica Supplementum*. Vol. 2, 2011, pp. 198–216.
- North, Douglass C. *Institutions, Institutional Change, and Economic Performance*. Cambridge: Cambridge University Press (1990).
- North, Douglass C. "The New Institutional Economics and Third World Development" in *The New Institutional Economics and Third World Development*. J. Harriss, J. Hunter & C. Lewis (eds.) London: Routledge (1997).
- North, Douglass C. "Towards a Theory of Institutional Change" *Quarterly Review of Economics and Business*. Vol. 31, No. 4, Winter 1991, p. 3.
- Nowotny, Helga; Scott, Peter & Gibbons, Michael. "'Mode 2' Revisited: The New Production of Knowledge" *Minerva*. No. 41, 2003, pp. 179–194.
- Oleksiyenko, Anatoly. "Academic partnerships in the age of globalization: Exploring policies for cross-border collaboration in Hong Kong" in *Competition and Cooperation among Universities in the Age of Internationalization*. Proceedings of the AC21 International Forum 2010. K. Yu & A.L. Stith (eds.) Shanghai: Shanghai Jiao Tong University Press (2011), pp.186–206.
- Oleksiyenko, Anatoly. "Enhancing University Staff Capacities for Critical Inquiry: Organizational Change, Professional Development and Cumulative Powers in Higher Education" in *The Changing Academic Profession in Hong Kong*. G.A. Postiglione & J. Jung (eds.) Dordrecht: Springer (2017).
- Oleksiyenko, Anatoly. "Socio-economic Forces and the Rise of the World-Class Research University in the post-Soviet Higher Education Space: The Case of Ukraine" *European Journal of Higher Education*. Vol. 4, No. 3, 2014, pp. 249–265.
- Olsen, Johan P. *Europe in Search of Political Order. An Institutional Perspective on Unity/Diversity, Citizens/Their Helpers, Democratic Design/Historical Drift, and the Co-Existence of Orders*. Oxford: Oxford University Press (2007).
- Organization for Economic Cooperation and Development. *Higher Education to 2030*. Vol. 2: Globalization. Paris: OECD Centre for Educational Research and Innovation (2009).

- Organization for Economic Cooperation and Development. *The Knowledge-Based Economy*. Paris: OECD (1996).
- Parliament of Ukraine. “Pro zatverdzhennya Polozhennya pro doslidnytskyi universytet” [On establishing a research university in Ukraine] Decree No. 163, 17 July 2010. <http://zakon4.rada.gov.ua/laws/show/163-2010-%D0%BF> (Accessed 28 March 2016).
- Parliament of Ukraine. “Pytannya Natsionalnoho universytetu ‘Kievo-Mohylyanska Akademiya’” [The question of the National University of ‘Kyiv-Mohyla Academy’] Decree No. 799, 29 July 2009. <http://zakon4.rada.gov.ua/laws/show/799-2009-%D0%BF> (Accessed 28 March 2016).
- Parliament of Ukraine. “Zakon Ukraïny Pro vishchu osvitu” [Law of Ukraine On Higher Education] No. 928-VII, 2014. 25 December 2015. <http://zakon4.rada.gov.ua/laws/show/1556-18> (Accessed 1 March 2016).
- Parliament of Ukraine. “Pro naukovy i naukovo-tekhnichnu diyalnist” [On scientific and technical activity] No. 848-VIII, 26 December 2015. <http://zakon5.rada.gov.ua/laws/show/848-19> (Accessed 1 December 2017).
- Pestre, Dominique. “Regimes of Knowledge Production in Society: Towards a More Political and Social Reading” *Minerva*. Vol. 41, No. 3, 2003, pp. 245–261.
- Phillips, David. “Comparative Education: Method” *Research in Comparative and International Education*. Vol. 1, No. 4, 2006, 304–319.
- Pierson, Paul. “Increasing Returns, Path Dependence, and the Study of Politics” *The American Political Science Review*. Vol. 94, No. 2, June 2000, pp. 251–267.
- Popova, Yuliya. “Education Problems Deeper than Language” *Kyiv Post*. 2 April 2010.
- Prague Communiqué. “Towards the European Higher Education Area” Communiqué of the Meeting of European Ministers in Charge of Higher Education (2001).
- President of the National University of Kyiv-Mohyla Academy. *Report of the President of the National University of Kyiv-Mohyla Academy 2016*. Kyiv: NUKMA (2017).
- President of Ukraine. “Pro Kyivskyi Politechnichnii Institut” [On the Kyiv Polytechnic Institute] Decree No. 289/95. 8 April 1995. <http://zakon3.rada.gov.ua/laws/show/289/95> (Accessed 2 April 2016).

- President of Ukraine. “Pro Kyivskiy natsionalnyy universitet imeni Tarasa Shevchenko” [On the Taras Shevchenko National University of Kyiv] Decree No. 1496/99. 25 November 1999. <http://zakon3.rada.gov.ua/laws/show/412/2008> (Accessed 21 July 2017).
- President of Ukraine. “Pro Kyivskiy universitet imeni Tarasa Shevchenko” [On the Taras Shevchenko University of Kyiv] Decree No. 176/94. 21 April 1994. <http://zakon3.rada.gov.ua/laws/show/176/94> (Accessed 21 July 2017).
- President of Ukraine. “Pro naukovi park ‘Kyivska politekhnika’” [On the scientific park ‘Kyiv Polytechnic’] Decree No. 523-V. 22 December 2006. <http://zakon2.rada.gov.ua/laws/show/523-16> (Accessed 21 April 2016).
- President of Ukraine. “Pro ogoloshennya 2016 roku Rokom angliiskoi movi v Ukraïny” [On the declaration of 2016 as the Year of the English language in Ukraine] Decree No. 641/2015. 16 November 2015. <http://zakon2.rada.gov.ua/laws/show/641/2015> (Accessed 21 September 2016).
- President of Ukraine. “Pro Universitet Kievo-Mogilyanska Akademiya” [On the University of Kyiv-Mohyla Academy] Decree No. 238/94. 19 May 1994. <http://zakon4.rada.gov.ua/laws/show/238/94> (Accessed 29 March 2016).
- President of Ukraine. “Pro zakhody shchodo pidvyshchennya statusu Kyivskoho natsionalnoho universytetu imeni Tarasa Shevchenka” [On raising the status of Taras Shevchenko National University of Kyiv] 5 May 2008. <http://zakon3.rada.gov.ua/laws/show/412/2008> (Accessed 21 July 2017).
- Repečkaite, Daiva. “Reframing European doctoral training for the new ERA” *European Journal of Higher Education*. Vol. 6, No. 3, 2016, pp. 256–270.
- Richards, Lyn & Morse, Janice. *Readme First for a User’s Guide to Qualitative Methods*. Thousand Oaks: Sage Publications (2013).
- Robertson, Susan L; Mundy, Karen; Verger, Antoni & Menashy, Francine (eds.). *Public Private Partnerships in Education: New Actors and Modes of Governance in a Globalizing World*. Cheltenham: Edward Elgar Publishers (2012).
- Rogers, Everett M. *Diffusions of Innovation*. 5th edition. New York: Simon & Schuster (2003).
- Roland, Gérard. “Understanding Institutional Change: Fast-Moving and Slow-Moving Institutions” *Studies in Comparative International Development*. Vol. 38, No. 4, Winter 2004, pp. 109–131.
- Rosen, Seymour. “The USSR and International Education: A Brief Overview” *The Phi Delta Kappan*. Vol. 51, No. 5, 1970, pp. 247–250.

- Rosser, Vicki. "A National Study on Midlevel Leaders in Higher Education: The Unsung Professionals in the Academy" *Higher Education*. Vol. 48, 2004, pp. 317–337.
- Rumbley, Laura E. "'Intelligent Internationalization': A 21st Century Imperative" *International Higher Education*. No. 80, Spring 2015, pp. 16–17.
- Rumbley, Laura E. "Internationalization in the Universities of Spain: Changes and Challenges at Four Institutions" in *Globalization and Internationalization in Higher Education: Theoretical, Strategic and Management Perspectives*. F. Maringe & N. Foskett (eds.) London: Continuum International Publishing Group (2010).
- Sadlak, Jan. "Globalization and Concurrent Challenges for Higher Education" in *The Globalization of Higher Education*. P. Scott (ed.) SRHE/Open University Press: Buckingham (1998), pp. 100–107.
- Salmi, Jamil. "The Challenge of Establishing World-Class Universities" in *Leadership for World-Class Universities: Challenges for Developing Countries*. P.G. Altbach (ed.) New York: Routledge (2009).
- Santiago, Rui & Carvalho, Teresa. "The 'Dark Side of the Moon': The non-teaching structures in the Portuguese Higher Education Institutions" in *Global Challenges, National Initiatives, and Institutional Responses*. C. Sarrico et al. (eds.) Rotterdam: Sense Publishers (2016), pp. 55–76.
- Schiermeier, Quirin. "Conflicting laws threaten Ukrainian science" *Nature*. Vol. 531, Issue 7592. 2 March 2016.
- Schiermeier, Quirin. "Ukraine joins flagship European research programme: Horizon 2020 agreement is part of a European Union effort to strengthen ties between Ukraine and the West" *Nature*. 20 March 2016a.
- Scott, Peter. "Massification, Internationalization and Globalization" in *The Globalization of Higher Education*. Buckingham: SRHE/Open University Press: (1998), pp. 108–129.
- Shaw, Marta A. "Flawed Implementation or Inconsistent Logics? Lessons from Higher Education Reform in Ukraine" *European Education*. Vol. 45, No. 1, Spring 2013, pp. 7–24.
- Shaw, Marta A., Chapman, David W. & Rumyantseva, Nataliya L. "Organisational Culture in the Adoption of the Bologna Process: A Study of Academic Staff at a Ukrainian University" *Studies in Higher Education*. Vol. 39, No. 1, 2013, pp. 1–15.

- Shchepetylnykova, Ielyzaveta. "Higher Education Reform: On the Slow Road to Bologna" *University World News*. Issue No. 379. 28 August 2015.
- Shinn, Terry. "The Triple Helix and New Production of Knowledge: Prepackaged Thinking on Science and Technology" *Social Studies of Science*. Vol. 32, No. 4. August 2002, pp. 599–614.
- Shkolnyi, Volodymyr. "Pro aktualni zavdannya rozvitku mizhnarodnoi diyalnosti universitetu" [On the actual development of international activity of the university] *Kyivskyi Politekhnik*. 24 November 2016, pp. 4–5.
- Sidorenko, Sergyi. "Pro pidsumki mizhnarodnoi diyalnosti universitetu v 2014 rotsi ta zavdannya na 2015 rik" [Summary of international activities of the university in 2014 and plans for the year 2015] *Kyivskyi Politekhnik*. 19 February 2015.
- Sidorenko, Sergyi; Shukayev, Sergyi; Zelenska, Marina; Oleshkevich, Anna; Romanko, Anastasiya & Vladimirskyi, Igor. *Rekomendatsiyi z pidhotovky proektnykh propozyitsiy za prohramoyu "Horizont 2020": metodychni vkazivky* [Recommendations for the preparation of project proposals under "Horizon 2020": methodological instruments] Kyiv: Kyiv Polytechnic Institute (2014).
- Silova, Iveta. "The Manipulated Consensus: Globalisation, local agency, and cultural legacies in post-Soviet education reform" *European Educational Research Journal*. Vol. 1, No. 2, 2002, pp. 308–330.
- Silova, Iveta. "Varieties of Educational Transformation: The Post-Socialist States of Central/Southeastern Europe and the Former Soviet Union" in *International Handbook of Comparative Education*. R. Cowen & A.M. Kazamias (eds.) Dordrecht: Springer (2009), pp. 295–320.
- Slaughter, Sheila & Leslie, Larry L. *Academic Capitalism: Politics, Policies, and the Entrepreneurial University*. Ann Arbor: John Hopkins University Press (1997).
- Söderqvist, Minna. *Internationalization and its Management at Higher Education Institutions: Applying Conceptual, Content and Discourse Analysis*. Helsinki: Helsinki School of Economics (2002).
- Srivastava, Prachi. "Reconciling Multiple Researcher Positionalities and Languages in International Research" *Research in Comparative and International Education*. Vol. 1, No. 3, 2006, pp. 210–222.
- Stake, Robert. "The Case Study Method in Social Inquiry" *Educational Researcher*. Vol. 7, Issue 2, February 1979, pp. 5–8.

- Steiner-Khamsi, Gita. "New directions in policy borrowing research" *Asia Pacific Education Review*. No. 17, 2016, pp. 381–390.
- Steiner-Khamsi, Gita (ed.). *The Global Politics of Educational Borrowing and Lending*. New York: Teachers College Press (2004).
- Stefanovich, Dmitro. "Vizit prezidenta korporatsii 'Boeing'" [Visit of the president of the Boeing corporation] *Kyivskyi Politekhnik*. 18 February 2016.
- Sutton, Susan & Deardorff, Darla K. "Internationalizing Internationalization: The Global Context" *IAU Horizons*. Vol. 17, No. 3, February–March 2012, pp. 16–17.
- Sutton, Susan & Obst, Daniel. "The Changing Landscape of International Partnerships" in *Developing Strategic International Partnerships: Models for Initiating and Sustaining Innovative Institutional Linkages*. S. Sutton & D. Obst (eds.) New York: Institute of International Education (2012).
- Swart, Juani & Harvey Philippa. "Identifying knowledge boundaries: The case of networked projects" *Journal of Knowledge Management*. Vol. 15, No. 5, 2011, pp. 703–721.
- Sychikova, Yuliya; Henni, Adrien & Sysoyev, Yevgen (eds.). *IT Ukraine: IT Services and Software R&D in Europe's Rising Tech Nation*. Version 1.11, April 2016.
- Sydoreko, Alexander. *The Kievan Academy in the Seventeenth Century*. Ottawa: University of Ottawa Press (1977).
- Talanova, Zhanna V. *Doktorska pidgotovka u sviti ta Ukraïni*. [Doctoral training in the world and in Ukraine] Kyiv: Milenium (2010).
- Tamtik, Merli & Kirss, Laura. "Building a Norm of Internationalization: The Case of Estonia's Higher Education System" *Journal of Studies in International Education*. Vol. 20, No. 2, 20 May 2015, pp. 164–183.
- Taras Shevchenko National University of Kyiv. "Kontseptsiya rozvitku mizhnarodnikh zvyazkiv Kyivskogo natsionalnogo universitetu imeni Tarasa Shevchenka" [Concept of international cooperation development of Taras Shevchenko National University of Kyiv] 16 November 2009.
- Teichler, Ulrich. "Internationalisation as a Challenge for Higher Education in Europe" *Tertiary Education and Management*. No. 5, 1999, pp. 171–185.
- Teichler, Ulrich. "The Changing Debate on Internationalisation of Higher Education" *Higher Education*. Vol. 48, 2004, pp. 5–26.

- Temple, Bogusia. "Watch Your Tongue: Issues in Translation and Cross-Cultural Research" *Sociology*. Vol. 31, No. 3, August 1997, pp. 607–618.
- The Royal Society. *New Frontiers in Science Diplomacy: Navigating the Changing Balance of Power*. London: The Royal Society (2011).
- UNESCO. *Higher Education in Ukraine*. V. Kremen & S. Nikolajenko (eds.) Bucharest: UNESCO (2006).
- UNESCO. *Towards Knowledge Societies*. Paris: UNESCO (2005).
- Välimaa, Jussi & Hoffman, David. "Knowledge Society Discourse and Higher Education" *Higher Education*. No. 58, 2008, pp. 265–285.
- van der Wende, Marijk. "Internationalisation Policies: About New Trends and Contrasting Paradigms" *Higher Education Policy*. No. 14, 2001, pp. 249–259.
- van der Wende, Marijk. "Missing Links: The Relationship between National Policies for Internationalisation and those for Higher Education in General" in *National policies for the Internationalisation of Higher Education in Europe*. T. Källemark (ed.) Stockholm: Högskoleverket Studies, National Agency for Higher Education (1997).
- Wildavsky, Ben. *The Great Brain Race: How Global Universities Are Reshaping the World*. Princeton: Princeton University Press (2010).
- Wooldridge, Adrian. "The Brains Business" *The Economist*. 8 September 2005.
- World Bank. *Constructing Knowledge Societies: New Challenges for Tertiary Education*. Washington: IBRD/World Bank (2002).
- Wynnycky, Mychailo. "Ukraine: Radical New PhD programme" *University World News*. Issue 104. 6 December 2009.
- Yegorov, Igor. "Innovation Policy and Problems of Creation and Development of the National Innovation System in Ukraine" Paper for the Second Session of the UNECE Team of Specialists on Innovation and Competitive Policies. Geneva. 14–15 February 2008.
- Yegorov, Igor. "Post-Soviet science: Difficulties in the transformation of the R&D systems in Russia and Ukraine" *Research Policy*. No. 38, 2009, pp. 600–609.
- Yegorov, Igor & Ranga, Marina. "Innovation, politics and tanks: The emergence of a Triple Helix system in Ukraine and the influence of EU cooperation on its development" *International Journal of Transitions and Innovation Systems*. Vol. 3, No. 4, 2014.

Yerevan Communiqué. Communiqué of the Conference of Ministers responsible for Higher Education. Yerevan: Conference of Ministers Responsible for Higher Education (2015).

Yin, Robert. *Applications of Case Study Research*. 3rd edition. Thousand Oaks: Sage Publications (2012).

Yin, Robert. *Case Study Research: Design and Methods*. 5th edition. Thousand Oaks: Sage Publications (2015).

Zgurovskyi, Mikhail (ed.). *Kyivskyi Politechnichny Institut: Naris istorii* [Kyiv Polytechnic Institute: A short history] Kyiv: Kyiv Polytechnic Institute (1995). <http://kpi.ua/en/node/10289> (Accessed 1 May 2017).

Zgurovskyi, Mikhail. “Ukraïna shche maye shans” [Ukraine still has a chance] *Zerkalo Nedeli*. 27 May 2005.

Zgurovskyi, Mikhail. “Issledovatelskiye universitety: Shans dlya Yevropy” [Research universities: A chance for Europe] *Zerkalo Nedeli*. 13 October 2006.

APPENDIX I: INTERVIEW SCHEDULE (ENGLISH)

Rectors and Vice-Rectors

1. How does this university define internationalization? *(Please explain)*
2. Do you believe the university considers the international dimension to be important? Why or why not? In what ways?
3. Which international activities (if any) are prioritized and how are they sustained? Have these priorities changed over time? If so, why? If not, why do you think this is so?
4. Do you believe there are any external drivers motivating this university to internationalize? *(Please explain)*
5. What examples could you provide that best illustrate this university's approaches to internationalization?
6. How does this university operationalize and measure internationalization strategies and outcomes?
7. In what ways does this university make decisions regarding the development of international partnerships?
8. Which international activities are prioritized and how are they sustained? Have these priorities changed over time? If so, why?
9. To what extent is this university's internationalization strategy shared across campus?
10. Has there been any resistance to internationalization at this university? If yes, can you provide examples? If not, why do you think this is so?
11. What organizational changes (if any) have emerged as a result of this university's internationalization efforts?
12. What example could you provide that best demonstrates innovation through international collaboration at this university? In what ways (if any) are doctoral schools involved?
13. Would you say that any recent changes to the national higher education legal framework have shaped this university's internationalization strategies and priorities? Why or why not?
14. Would you say that the university's approach to internationalization has changed since joining the European Higher Education Area (EHEA)? If so, in what ways? If not, why do you think this is so?

15. Would you say that this university's internationalization strategy is adequate with regards to the changing global context of higher education?
16. What are the future challenges facing this university's internationalization efforts?

Directors and Mid-Level Leaders

1. What is the role of this office and what are its main activities?
2. How does this office define internationalization? (*Please explain*)
3. Do you believe there are external drivers motivating this university to internationalize? (*Please explain*)
4. Which international activities (if any) are prioritized and how are they sustained? Have these priorities changed over time? If so, why? If not, why do you think this is so?
5. Is the university administration supportive towards the activities of this office? In what ways? Why or why not?
6. How does this university operationalize and measure internationalization efforts and outcomes?
7. Has there been any resistance to internationalization at this university? If yes, can you provide examples? If not, why do you think this is so?
8. What approaches does this office use to achieve the internationalization strategies of this university?
9. How does this office make decisions regarding the development of international partnerships?
10. Which international activities are prioritized and how are they sustained? Have these priorities changed over time? If so, why?
11. What organizational changes (if any) have emerged as a result of this office's internationalization efforts?
12. What best evidence illustrates the international dimension of knowledge exchange and innovation at this university? In what ways (if any) are doctoral schools involved?
13. To what extent have recent changes to the national higher education legal framework shaped this university's internationalization strategies and priorities?

14. To what degree has this university's approach to internationalization changed since joining the European Higher Education Area? (*Please explain*)
15. What are the future challenges facing this university's internationalization efforts?

Doctoral Schools

1. How does this doctoral school define internationalization? (*Please explain*)
2. What role does the doctoral school play in shaping higher education internationalization at this university (if at all)? In what way(s) does it support the internationalization strategy of this university?
3. What are the external drivers motivating this university to internationalize?
4. In what ways does this university make decisions regarding the development of international partnerships?
5. Has there been any resistance to internationalization at this university? If yes, can you provide examples? If not, why do you think this is so?
6. How widely supported is this university's internationalization strategy among faculty members? Please identify the sector(s) and reasons.
7. What tools does this doctoral school use to measure internationalization efforts and outcomes?
8. What organizational changes have emerged as a result of this university's internationalization efforts (if any)?
9. What best evidence illustrates the international dimension of knowledge exchange and innovation at this university? In what ways (if any) are doctoral schools involved?
10. To what degree has the faculty's approach to internationalization changed (if at all) since Ukraine joining the European Higher Education Area? (*Please explain*)
11. To what extent have recent changes to the national higher education legal framework shaped this doctoral school's internationalization strategies and priorities?
12. What are the future challenges facing this university's internationalization efforts?

Doctoral Candidates

1. Why did you decide to pursue doctoral studies at this university? *(Please explain)*
2. Do you believe internationalization to be an important element to your doctoral studies (if at all)? If yes, can you provide examples? If not, why do you think this is so?
3. To what degree is the presence of international professors, researchers, students and higher education stakeholder agencies on campus important?
4. To what degree are you aware of international training or research opportunities at this university?
5. What service(s) (if any) does your university provide to support the internationalization of doctoral training and research?
6. What type(s) of international training or research opportunities (if any) have you participated in during the course of your doctoral studies?
7. What initiatives (if any) have you undertaken to advance your international learning and/or research objectives?
8. To what degree have your perceptions of doctoral training and research changed (if at all) since taking part in an international learning or research activity? *(Please explain)*
9. What best evidence illustrates this university's approach to internationalization in comparison with other Ukrainian national research universities? *(Please explain)*

APPENDIX 2: INTERVIEW SCHEDULE (RUSSIAN)

Rectors and Vice-Rectors

1. Как ваш университет определяет интернационализацию? *(Пожалуйста объясните)*
2. Считает ли ваш университет международный вектор важным? Почему или почему нет? Каким образом?
3. Какие международные направления вашего университета являются приоритетными и как они поддерживаются (если таковые имеются)? Изменились ли эти приоритеты со временем? *(Пожалуйста объясните)*
4. Верите ли вы что есть какие-либо внешние факторы, которые мотивируют ваш университет к интернационализации? *(Пожалуйста объясните)*
5. Какие примеры вы можете привести которые наилучшим образом иллюстрируют подходы вашего университета к интернационализации?
6. Каким образом ваш университет измеряет стратегию и результаты интернационализации?
7. Каким образом ваш университет принимает решения, касающиеся развития международного партнерства?
8. Какие международные аспекты являются приоритетными и как они поддерживаются? Изменились ли эти приоритеты с течением времени? *(Пожалуйста объясните)*
9. В какой степени стратегия интернационализации вашего университета поддерживается по всему университету/ другими факультетами?
10. Было ли какое либо сопротивление со стороны вашего университета к процессу интернационализации? Пожалуйста приведите примеры.
11. Какие организационные изменения (если таковые имеются) появились в результате усиления интернационализации вашего университета?
12. Какой пример Вы можете привести который наилучшим образом демонстрирует инновации в рамках международного сотрудничества в вашем университете? Каким образом отдел аспирантуры/докторантуры вовлечён в этот процесс (если вовлечён)?
13. В каких направлениях недавние изменения в нормативно-правовой базе высшего образования Украины повлияли на стратегию интернационализации вашего университета и его приоритеты?

14. Как Вы думаете – изменился ли подход вашего университета к процессу интернационализации (если вообще изменился) после вступления Украины в Европейское пространство высшего образования? *(Пожалуйста объясните)*

15. Могли бы Вы сказать, что стратегия интернационализации вашего университета является адекватной по отношению к меняющемуся глобальному контексту высшего образования?

16. Каковы будущие задачи/вызовы стоят перед вашим университетом по усилению интернационализации?

Directors and Mid-Level Leaders

1. В чем заключается роль вашего офиса/отделение и какие его основные направления деятельности?
2. Как ваш офис/отделение определяет интернационализацию? *(Пожалуйста объясните)*
3. Верите ли вы что есть какие-либо внешние факторы, которые мотивируют ваш офис/отделение к интернационализации? *(Пожалуйста объясните)*
4. Какие международные аспекты являются приоритетными и как они поддерживаются? Изменились ли эти приоритеты с течением времени? Если да, то почему?
5. Поддерживает ли администрация университета направления деятельности вашего офиса? В каких случаях? Почему или почему нет?
6. Каким образом вы измеряете стратегию и результаты интернационализации?
7. Было ли какое-либо сопротивление вашего офиса/отделение к интернационализации? Если да, приведите пожалуйста примеры? *(Пожалуйста объясните)*
8. Какие подходы ваш офис/отделение предпринимает для усиления интернационализации?
9. Каким образом ваш офис принимает решения касающиеся развития международного партнерства?
10. Какие международные аспекты являются приоритетными и как они поддерживаются? Изменились ли эти приоритеты с течением времени? Если да, то почему?

11. Какие организационные изменения (если таковые имеются) появились в результате усиления интернационализации вашего офиса/отделения?
12. Какой пример Вы можете привести который наилучшим образом демонстрирует инновации в рамках международного сотрудничества в вашем офисе/отделении? Каким образом отдел аспирантуры/докторантуры вовлечён в этот процесс (если вовлечён)?
13. В каких направлениях недавние изменения в нормативно-правовой базе высшего образования Украины повлияли на стратегию интернационализации и приоритеты вашего офиса/организации?
14. Как Вы думаете – изменился ли подход вашего офиса/отделения к интернационализации (если вообще изменился) после вступления Украины в Европейское пространство высшего образования? *(Пожалуйста объясните)*
15. Каковы будущие задачи/вызовы стоят перед вашим офисом/отделением по усилению интернационализации?

Doctoral Schools

1. Как ваш отдел аспирантуры/докторантуры определяет интернационализацию? *(Пожалуйста объясните)*
2. Какую роль играет отдел аспирантуры/докторантуры в формировании интернационализации в этом университете? Каким образом он поддерживает стратегию интернационализации этого университета?
3. Верите ли вы что есть какие-либо внешние факторы, которые мотивируют ваш университет/отдел аспирантуры/докторантуры к интернационализации? *(Пожалуйста объясните)*
4. Каким образом ваш отдел аспирантуры/докторантуры принимает решения, касающиеся развития международного партнерства?
5. Было ли какое-либо сопротивление вашего университета к интернационализации? *(Пожалуйста объясните)*
6. Насколько широко поддерживается стратегия интернационализации вашего отдела аспирантуры/докторантуры среди профессорско-преподавательского состава? Пожалуйста укажите причины.
7. Какие инструменты использует ваш отдел аспирантуры/докторантуры для измерения усилий и результатов интернационализации?

8. Какие организационные изменения (если таковые имеются) появились в результате усиления интернационализации вашего университета?
9. Какой пример Вы можете привести который наилучшим образом демонстрирует инновации в рамках международного сотрудничества в вашем университете? Каким образом отдел аспирантуры/докторантуры вовлечён в этот процесс (если вовлечён)?
10. Как Вы думаете – изменился ли подход вашего отдела аспирантуры/докторантуры к интернационализации (если вообще изменился) после вступления Украины в Европейское пространство высшего образования? *(Пожалуйста объясните)*
11. Каким образом недавние изменения в нормативно-правовой базе высшего образования Украины повлияли на стратегию интернационализации и приоритеты отдела аспирантуры/докторантуры?
12. Каковы будущие задачи/вызовы стоят перед вашим отделом аспирантуры/докторантуры по усилению интернационализации?

Higher Education Stakeholder Agencies

1. Какие основные направления деятельности вашей организации?
2. Как ваша организация сотрудничает с украинскими исследовательскими университетами? Каковы цели этого сотрудничества?
3. Каким образом ваша организация определяет и создаёт альянсы /партнерство с украинскими исследовательскими университетами? Какие механизмы используются для интерпретации и для оценки их результатов?
4. Какие международные мероприятия (если таковые имеются) являются приоритетными и как они поддерживаются? Изменились ли эти приоритеты со временем? Если да, то почему? Если нет, то почему вы думаете, это так?
5. Каким образом интернационализация способствует формированию отношений между вашей организацией и университетом?
6. Как ваша организация принимает решения касающиеся развития международного партнерства?
7. Какое лучшее доказательство иллюстрирует подход вашей организации к обмену знаниями и инновациями? Каким образом отдел аспирантуры/докторантуры вовлечён в этот процесс (если вовлечён)?

8. В каких направлениях недавние изменения в нормативно-правовой базе высшего образования Украины повлияли на стратегию интернационализации и приоритеты вашей организации?
9. В какой степени изменился подход вашей организации к интернационализации после вступления Украины в Европейское пространство высшего образования?
10. Какие будущие вызовы ваша организация видит по взаимодействию с украинскими исследовательскими университетами?

Doctoral Candidates

1. Почему вы решили продолжить учёбу в докторантуре в этом университете? *(Пожалуйста объясните)*
2. Вы уверены, что интернационализация является важным элементом для вашей докторантуры? Если да, то можете ли вы привести примеры? Если нет, то почему вы думаете, это так?
3. В какой степени присутствие международных профессоров, исследователей, студентов и агентств по высшему образованию важно на территории университета?
4. Знаете ли вы если есть какие либо возможности для международного обучения или исследований в вашем университете?
5. Какие услуги (если таковые имеются) ваш университет предоставляет для поддержки интернационализации докторской подготовки и научных исследований?
6. Каких типов международного обучения или исследования (если таковые имеются) вы участвовали в течении вашей докторантуры?
7. Какие инициативы (если таковые имеются) вы предпринимаете чтобы продвигать своё международное обучение или научное исследование?
8. В какой степени ваши представления о докторской подготовке и исследовании изменились, поскольку после принятия участия в международной учебной или научной деятельности? *(Пожалуйста объясните)*
9. Какое лучшее доказательство иллюстрирует подход этого университета к интернационализации по сравнению с другими украинскими национальными исследовательскими университетами? *(Пожалуйста объясните)*