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Catalysts of Change: Entrepreneurial Problem-Solving for Unscripted Futures

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EXECUTIVE SUMMARY

This occasional paper explores how SIOs engage in entrepreneurial problem-solving to create viable, productive, and sustainable initiatives that advance internationalization. Authors identify major trends in global higher education and the role of entrepreneurial problem-solving for today's SIOs. Different institutional contexts from a research study of 34 SIOs from a variety of four-year HEIs and community colleges across the United States (U.S.) are explored. Researchers discuss the themes of how institutional context impacts revenue-generating expectations, SIOs as creators and risk-takers, the degrees of institutional risk-taking, and strategies for success, considering the global situation and their institutional context. Several future directions and takeaways are offered based on the SIO interviews and global trends.

The Internationalization of Higher Education and the Response of SIOs and HEIs within a Shifting Global Environment

Major Trends in Global Higher Education and the Response of SIOs

The SIO position inhabits two professional worlds: (a) the field of higher education and the particular higher education institution (HEI), and (b) internationalization efforts, including the field of international education more broadly

There are four major trends and challenges within these two worlds that SIOs must navigate:

- *Global Uncertainty* - The future is riddled with uncertainties, including immigration challenges, geopolitical volatility, and potential health emergencies.
- *Technology and Virtual Mobility* - Networked technologies are creating new forms of virtual mobility and exchange, as well as introducing new providers, partners, and competitors to traditional HEIs
- *Funding Austerity and Employability* - Universities and international offices have taken on more responsibility for generating revenue to fund their operations, which will only accelerate as universities experience the economic aftershocks of COVID-19
- *Critiques of Internationalization* - Internationalization has been criticized for its recent focus on market-driven rationales, including profit generation, prestige building, and commercialization, rather than the humanitarian rationales of cooperation, partnership, and exchange

A New Era for the SIO Profession

Table 1 (pp. 8-9) highlights how the SIO position has changed during four identified eras (Before 2000, 2000-2009, 2010-2019, 2020 and beyond), including the SIO position and background, graduate degree and professional training, demographics, and the top challenges.

Eras of Internationalization

Table 2 (pp. 10-13) uses the same four identified timeframes to describe the eras of internationalization that are relevant for SIOs. This includes globalization,



internationalization strategies, HEI internationalization focus, community college periods of internationalization, models of transnational education, waves of student mobility, and majors reports and initiatives.

Entrepreneurial Problem-Solving for a New Era

Entrepreneurial SIOs work with what they have to create something new. They see a role for human action in shaping the future with an inherent belief that what people do makes a difference. They start with the resources they have – not just money, but also people, networks, and knowledge – and use what they learn through those relationships to shape their vision of the future.

Higher Education Institutions' Response to External Financial Challenges

Financial challenges are pressuring colleges and universities to adopt a new mindset and inculcate more entrepreneurial ways of thinking. Entrepreneurial cultures are shaped by institutional type, organizational structure, and the state policy landscape of HEIs, which creates different contexts where an entrepreneurial culture is constructed and manifested. As a result of international student numbers declining in recent years (IIE, 2019), SIOs have been pressed to think in entrepreneurial terms about how to continue to provide the services and funding the university now expects.

Part 2: The Research Study

The second section of this paper is informed by interviews with 34 SIOs as a part of a research case study.

Research Questions

- (a) How do senior international officers (SIOs) think and behave as entrepreneurs in opportunity identification and new venture creation in the process of internationalization?
- (b) How do different higher education institutional contexts influence the entrepreneurial and innovative activities of SIOs?

Brief Profile of Study Participants

34 SIO participants hailed from research universities, private liberal arts colleges, regional universities, minority-serving institutions, and community colleges.

Expressions of SIO Entrepreneurship

- *Institutional Context Impacts Revenue-Generating Expectations* - Private institutions often had greater resources, with the tolerance for risk dependent on the campus culture. Most public universities and community colleges had a lower risk tolerance but expected SIOs to be innovative and budget-conscious
- *Entrepreneur as Creator* - Virtually all participants viewed themselves as creators, innovators, and leaders. SIOs created various projects, including those that were directly or indirectly related to generating revenue
- *Entrepreneur as Risk-Taker* - Risk-taking can vary greatly depending on the SIO and the HEI culture. However, when risk and institution culture work harmoniously, sustainable and long-lasting change can occur.



- *Degrees of Institutional Risk-Taking* - University SIOs indicated a strong link between the interaction of financial resources and risk tolerance, and community college SIOs indicated that funding was often linked to evidence of student success.
- *Strategies for Success* - Participants highlighted several strategies for success, including fostering collaborative relationships with senior-level administration, the importance of professional development, and building an innovative and collaborative team

Future Directions

This paper suggests future directions for exploration as well as recommendations for SIOs as they traverse a new era in internationalization and higher education. Recommendations include (a) building trust with their teams and senior leadership; (b) developing sustainable partnerships inside and outside of the university; and (c) understanding the university context.

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ABSTRACT

Senior international officers (SIOs) serve as catalysts for change in a volatile higher education environment. AIEA's 2017 SIO Survey indicates that entrepreneurship and creativity are among the top personal characteristics valued in SIOs, along with the ability to attract financial resources. This occasional paper explores how SIOs engage in entrepreneurial problem-solving to create viable, productive, and sustainable initiatives that advance internationalization. We identify major trends in global higher education and the role of entrepreneurial problem-solving for today's SIOs. We also explore different institutional contexts from a research study of 34 SIOs from a variety of four-year HEIs and community colleges across the United States (U.S.). We discuss the themes of how institutional context impacts revenue-generating expectations, SIOs as creators and risk takers, the degrees of institutional risk-taking, and strategies for success, considering the global situation and their institutional context. Several future directions and takeaways are offered based on the SIO interviews and global trends.

Keywords: entrepreneurship; innovation; international education; leadership; partnerships; problem-solving



INTRODUCTION

Higher education institutions (HEIs) desire nimble and effective leaders in today's turbulent global landscape. Within all universities and colleges, senior international officers (SIO) are catalysts for change at their institutions (DiMaria, 2019; Heyl & Hunter, 2019; Raby & Valeau, 2019). Entrepreneurial SIOs are the link between “a fast-changing reality and the slow change of universities” (Brandenburg, 2019, p. 14), taking innovative ideas and turning them into action to create a new reality (Alvarez & Barney, 2007). Most HEIs are embarking on entrepreneurial initiatives and forming new partnerships, and SIOs increasingly are taking on key leadership roles in these ventures with responsibilities akin to the vice president of international operations at large multinational corporations (DiMaria, 2019).

In this AIEA Occasional paper, we explore the idea of the SIO as an entrepreneur and innovator situated within structured HEIs. An SIO is a person at an HEI who is in charge of internationalization efforts and initiatives (AIEA, 2017). The term SIO is commonly used in the literature and in professional associations like AIEA and NAFSA, but many SIOs actually have varying titles. SIO titles range broadly, with examples such as Vice Provost of International Affairs, Director of Global Education, Dean of International Education, and International Relations Manager, among many others (AIEA, 2017). Today's SIOs are asked to do more with less and are often tasked with providing financial resources for campus-wide initiatives, as well as leading decentralized and under-prioritized campus internationalization efforts (Harvey & Pynes, 2018).

The first section of this paper identifies some of the main trends of the shifting global and internationalization contexts and how embracing these ideas can lead to entrepreneurial problem-solving in today's HEIs. In the second part, we explore different themes and contexts from a research study where we interviewed 34 SIOs from U.S. colleges/universities and U.S. public community colleges across the country. Community colleges are identified as postsecondary tertiary institutions that offer two to four years of instruction and are similar to colleges of further education, universities of applied sciences, and technical and vocational education and training (TVET) colleges/institutes in other countries (UNESCO, 2011). For the purpose of this paper, we use the term higher education institution to describe 4-year colleges and universities, and community colleges, but distinguish between 4-year HEIs and community colleges (CC) HEIs in the research section. We discuss the themes of how institutional context impacts revenue-generating expectations, SIOs as creators and risk takers, degrees of institutional risk-taking, collaborative relationships with upper administration, and strategies for success, considering the global situation and their institutional context. Several success strategies and takeaways are offered based on the SIO interviews and identified global trends.



PART 1: THE INTERNATIONALIZATION OF HIGHER EDUCATION AND THE RESPONSE OF SIOS AND HEIS WITHIN A SHIFTING GLOBAL ENVIRONMENT

Global Trends Impacting SIOs

The SIO position intersects two professional worlds. In the first, the SIO is a leadership position within higher education which requires knowledge about the particular HEI, as well as general higher education issues and needs. The needs and particulars are often unique to each type of HEI. In the second, the SIO leads internationalization efforts, which requires knowledge about the field of international education, international educational issues, and how it impacts their students, faculty, staff, and community (Tran & Nghia, 2020). In unpacking the needs of these two worlds, we have identified major trends and challenges ahead for today's SIOs.

Global Uncertainty

SIOs face a growing sense of urgency to prepare for a future riddled with uncertainties and hazards that threaten efforts to advance internationalization. They must navigate upheavals resulting from health emergencies, changing immigration policies, and geopolitical volatility. They must prepare for the immediate, short-term impacts of these changes while leading visionary, long-term transformations of the cultures, processes, and structures that have long defined their institutions. Finally, they need to be knowledgeable about their respective national and local funding practices that align with economic growth and recession periods.

Technology and Virtual Mobility

In recent years, internationalization at a distance has become a core component of campus internationalization strategies. Prior to the COVID-19 pandemic, many in the field suggested that virtual mobility might not be as far away as it seems. The current pandemic quickly made virtual mobility and online learning a part of daily higher educational operations. New forms of networked international education and exchange are poised to see exponential growth in the next several years (Mittelmeier et al., 2020). Networked technologies are creating new forms of virtual mobility and exchange, as well as introducing new providers, partners, and competitors to traditional HEIs. In the coming decades, the number of students who have a cross-border experience will continue to increase, but the vast majority of those experiences are predicted to involve virtual – rather than physical – mobility (Bradenburg, 2019). Although it is hard to imagine a future where study abroad is predominately virtual, current trends and technological capabilities point toward a massive increase in virtual mobility.

Funding Austerity and Employability

Over the past two decades, universities and international offices have taken on more responsibility for generating revenue to fund their operations, which will only accelerate as universities experience the economic aftershocks of COVID-19. As governments have introduced austerity measures, international offices have been central to generating revenue to support HEI operations (Charles & Pynes, 2018). At the same time, there has been an increasing emphasis on employability outcomes that result from investments in international initiatives (IIE & AIFS, 2018). It is undeniable that jobs and



job requirements are changing, and international education has a critical opportunity to prepare students for the jobs of the future (Matherly & Tillman, 2019).

Critiques of Internationalization

Internationalization has received harsh criticism that market-driven rationales, spurred in-part by government disinvestment, have incentivized behaviors that focus on profit generation, prestige building, and commercialization, rather than the humanitarian rationales of cooperation, partnership, and exchange (Hudzik, 2014). Altbach and de Wit (2018) have gone so far as to suggest that international education faces an identity crisis, and it is imperative for the field to reimagine internationalization and ensure that it is up to the task of preparing graduates to respond to today's numerous overlapping global challenges (Stein, 2019). Postcolonial perspectives and inclusive excellence work on global citizenship education are a current focus in terms of whose voices are served and whose are minimized (Stein, 2019). Critiques of internationalization are also embedded within the general higher education context, where neoliberal and academic capitalism criticisms are rampant (Deschamps & Lee, 2015; Glass & Lee, 2018; Stein, 2019). This affects the changing constructs in which SIOs are trained and work.

A New Era for the SIO Profession

Although the senior international officer position was initially conceived in 1976 as a dedicated campus administrator assigned to lead international programs (Jack Van de Water, 2015), there is a long history of campus faculty, staff, or administrators who had international education duties within their portfolio (Hess, 1967). What began as a start-up field with undesignated job skills has evolved to include specific skill sets, educational requirements, and leadership demands. There is also emerging research in terms of who SIOs are (gender, educational background, and disciplinary backgrounds), how faculty and staff became SIOs (career pathways), and what current positions support the SIO (Lambert et al., 2008; Kumari, 2017). Within Table 1, we identify four generations of SIOs that coincide with the different eras of globalization (Knight, 2015) and the rationales used for international education advocacy (Raby & Valeau, 2007; Treat & Hagedorn, 2014; Raby & Zhang, 2019). In the post-COVID era (2020 and beyond), as described in Table 2, influences will be shaped by major forces like financial challenges, virtual mobility, employability, global uncertainty, nationalism, and internationalization reconfiguration.



Table 1
Generational Shifts in Senior International Officer (SIO) Profiles

	Before 2000	2000-2009	2010-2019	2020 and beyond
SIO Profession – Generational Change – Demographics and Roles	Founding of AIEA (1982); First SIO-type role created in 1976	The SIO role becomes more common as international efforts grow	AIEA creates mentoring and professional growth programs to train the next generation	Diversification of SIOs in terms of race, ethnicity, and gender
SIO Position & Background (AIEA, 2017; Raby & Valeau, 2019)	Directors of a central office; Directors of a specific international office; Deans or other senior level positions	Chief International Education Administrators with traditional pathways where faculty move into full-time administration; Less years working in international education than in their academic discipline/field	Senior International Officers, with about half serving in the international higher education field for over 20 years.	New generation of SIOs whose careers begin in mid-level international higher education positions rather than traditional faculty pathways
Graduate Degree and Professional Training	At the university level, doctoral degrees in specialized discipline or academic field; At the community college, few have doctoral degrees	About half have doctoral degree, mostly in humanities or social sciences	Most have doctoral degrees in humanities, education, or social sciences	Most have degrees from international higher education doctoral programs and/or certification from



				formal association-led training programs
SIO Demographics	Less than one-fourth female; Almost all White	About one-fourth female; Over three-fourths White	About one-half female; About three-fourths White; More racial diversity and majority female at CCs	About one-half female; Increasing racial and ethnic diversity with new generations
SIO Top Challenges (AIEA, 2017)	Institutional relations and linkages; Study abroad and exchange organizations; Foreign student and scholar affairs	Financial resources; Faculty and administrator “buy-in”; Decentralization; Health-safety risk management	Financial resources; International enrollment management; Increasing & diversifying study abroad participation and international student composition	Innovation and entrepreneurship – opportunity creation and resource generation; Recruiting international students; Diversifying Study Abroad, Health-safety risk management



Table 2

Eras of Internationalization Relevant to SIOs

Era	Before 2000	2000-2009	2010-2019	2020 and beyond
Globalization (Stromquist & Monkman, 2014)	Recognition of the inter-connectedness of the world resulting from increased travel, communication, global economy	Growth in use of internet for everyday use, shifting to knowledge economy, ease of travel around the world; out-sourcing; Post-9/11 focus on national security	Disruptive industries based on digital platforms become widespread; Social media and video platforms connects people easily; Paperless world becomes a reality; Post-Great Recession recovery	Growth in virtual mobility without the physical movement of workers; Automation impacts all industries; Uncertainty with climate change, pandemics, nationalism and deglobalization
Internationalization Stages (Bedenlier et al., 2018)	Delineation of the field	Institutionalization and management; Student needs and support structures	Moving from the institutional to the transnational context; Cross-border education	Virtual mobility; Shifting networks of students and scholars; Transnational scholars and students
HEI Internationalization Focus (Hudzik, 2014)	Internationalization Abroad (IA) traditional international student and scholar exchange programs	Internationalization Abroad (IA) imperative to make study abroad the norm and not the exception for all students	Internationalization at Home (IaH) with internationalizing curriculum and international student engagement and support	Internationalization at a Distance (IaD) – technology-supported activities, COIL, virtual intercultural exchange, micro campuses



Community College Periods of Internationalization

(Raby, 2102; Raby & Valeau, 2007; Raby & Zhang, 2019; Treat & Hagedorn, 2013)

Models of Transnational Education

(Knight, 2015)

Recognition Phase (1967-1984): Advocacy focus on importance of internationalization;

Expansion and Publication Phase (1980-1990): How-to implementation guides; Augmentation Phase (1990-2000): Focus on specific issues of the field focusing on humanitarian and neo-liberalism perspectives

The classic model – mostly at private, prestigious, and research institutions with long-standing international partnerships

Institutionalization Phase (2000-2007): Adoption of practices and revision of mission statements; Post-9/11 world (2007-2010): Influenced by economic and social globalization and by global terrorism which made internationalization a fundamental part of skills development for employability for jobs created by the new global economy

The classic model widely-adopted internationalization imperative for all institutions; Impacts all of campus life

Global Economic Events (2008-2012): Showed the catastrophic effects that resulted from the sharp decline in state budgets combined with lowered international student enrollments; Economic Gain Years (2013-2018): Both domestic and international student enrollment grew and increasing reliance on profit from international student tuition; Post-Flat World (post-2013): Political and economic factors brought a focus on students employability skills and student success measures

The satellite model – many universities add satellite offices around the world in the form of branch campuses, research centers, and management offices

COVID-19 Global Pandemic and World Recession and beyond: Once again showed how intricately connected international student enrollment is to the institution

Internationally co-founded universities – some HEIs create stand-alone institutions co-developed with partner institutions from different countries; hubs and networks



Waves of Student Mobility (Choudaha, 2017; McMahon, 1992)	International student mobility increased steadily; U.S. received large majority of students; Mostly developing – developed country mobility	High-skilled mobility; Driven by national security and economic competitiveness concerns; Emphasis on financial support	Surge in undergraduates from China and use of recruitment agents; Growth in English-medium instruction; Focus on academic and career support for international students	Demographics and destinations; Institutional driver: Innovation and competitive intensity; Shift from U.S. to other destinations
Major Reports and Initiatives	IIE Open Doors Report; UNESCO and OECD student mobility reports; AACC Building Communities Report	Lincoln Commission Report; Paul Simon Award; IIE Heiskell Award; ACE Internationalization Lab; AACC/ACCT - Community colleges in international education	IIE Generation Study Abroad; Brazil Scientific Mobility Program; AIEA Standards of Professional Practice; NAFSA Professional Competencies; AACC American Dream report	AIEA efforts for generation planning

Entrepreneurial Problem-Solving for a New Era

AIEA’s 2017 *Senior International Officer (SIO) Survey* indicates that entrepreneurship and creativity are among the top personal characteristics valued in SIOs, along with demands to generate financial resources (AIEA, 2017). The entrepreneurial mindset as applied to the SIO profession has changed over time. In this paper, we view *entrepreneurship* as “the pursuit of opportunity beyond the resources you currently control” (Stevenson, 2000, p. 1), and we argue that entrepreneurship is an essential skill for SIOs to navigate the volatile era to come. Entrepreneurship is often paired with another term: *innovation*. Innovation simply means introducing something new (Dyer et al., 2019). *Entrepreneurial problem-solving* works just like the scientific method; it is a way of problem solving and a skill that can be developed and strengthened through practice (Sarasvathy, 2008).

The move to the professionalization of the SIO position mirrors the emphasis that many boards of trustees and search committees place on finding an institutional leader who has experience running a business and has a resources-focused mindset. The idea of a HEI as a business can be quite controversial, but the financial challenges that many HEIs face are an existential threat to the continuance of higher education, so business-minded steps often must be taken. Table 3 illustrates how rapid change demands that SIOs catalyze leaders to shift from traditional problem-solving towards more entrepreneurial problem-solving.

Table 3

Comparison of Traditional and Entrepreneurial Problem-Solving

Traditional Problem-Solving	Entrepreneurial Problem-Solving
Focused on “borrowing” best practices and benchmarking; historical precedent	Focused on differentiating from other institutions; future-orientation
Emphasizes strategic planning -- bias for data gathering and planning	Emphasizes cultural adaptability – iterative approaches to planning
Invests in “cash cows” in stable environment	Invests towards future-oriented in emerging environment
Operates with slow and inflexible decision-making structures	Operates with adaptable and more flexible decision-making structures
Low tolerance for risk and avoids failure; little margin for failure	Open to risk and “affordable losses”; margin for low stakes failure with sufficient resources
Solves traditional problems with bias towards predictable success	Solves wicked problems with a bias for action towards discovery



Entrepreneurial SIOs work with what they have to create something new. They see a role for human action in shaping the future with an inherent belief that what people do makes a difference. They start with the resources they have – not just money, but also people, networks, and knowledge – and use what they learn through those relationships to shape their vision of the future. They are not necessarily risk takers in the popular sense, or primarily driven by money, but they do know who they are and what they are willing to lose in order to pursue their vision of the future. New generations of SIOs are asking, “*What does it mean to think and act entrepreneurially in the emerging global context?*” As the next section demonstrates, SIOs are situated within their institutional context and system. They must find a way to balance their own entrepreneurial drive and increased funding expectations in the environment around them.

Higher Education Institutions’ Response to External Financial Challenges

Financial challenges are pressuring colleges and universities to adopt a new mindset and inculcate more entrepreneurial ways of thinking. Entrepreneurial cultures are shaped by institutional type, organizational structure, and the state policy landscape of HEIs, which creates different contexts where entrepreneurial culture is constructed and manifested. SIOs navigate the organizational context of their institutions and work with their teams to infuse a culture of innovation and entrepreneurship.

With the advent of the 2008 recession, state funds decreased dramatically and HEIs intensified efforts to recruit international students. The decrease in each U.S. state’s appropriations amounted to \$6.6 billion less funding in 2018 compared to 2008, when adjusted for inflation (Mitchell et al., 2019). In recent years, tuition has surpassed U.S. state appropriations and comprises the majority of higher education funding (SHEEO, 2018). Community college funding is largely based on local income tax and federal support, but due to decreased funding from these sources, community colleges are under-funded and increasingly overwhelmed by doing more with less. The importance of entrepreneurial activity has grown exponentially to cope with less state funding (AACC, 2020) and HEIs have become more commercialized with links to a culture of accountability, performativity, efficiency, and effectiveness policies (Spellings, 2016).

The prevalence of the SIO role and the focus on comprehensive internationalization grew in the 1990s and early 2000s as more institutions recognized the importance of internationalization for prestige, diversity, and cultural competence in a rapidly globalizing world. Although globalization brings volatility, international education has flourished in these circumstances. Today, many SIOs lead comprehensive internationalization on campus and enlist the support of others who have concerns about academic capitalism and the marketization of higher education (Deschamps & Lee, 2015; Glass & Lee, 2018).

Some forms of internationalization have been characterized as academic capitalism, whereby faculty and international educators focus on revenue generation in response to austerity and increased competition. The surge in international undergraduate enrollments as ‘cash cows’ has increased expectations for SIOs to generate revenue for their institutions (Cantwell, 2015; Glass & Lee, 2018). Financial officers looked to the initiatives of the international offices to supplement and to maintain expenditures



(Charles & Pynes, 2018), and empirical studies have shown how the decrease in appropriations aligned with the increase in international students (Macrander, 2017; Manns, 2014).

Public, four year HEIs often shared similarities with community colleges in their risk-taking nature and financial challenges, which is discussed further in the subsequent section. In particular at community colleges, tuition gains once interwoven in advocacy campaigns have become an expected source of revenue that hurt the institution during times of decreased enrollment (Raby, 2012). Some of the major funding mechanisms, particularly for public institutions, include state funds, tuitions, institution foundations, fundraising, Intensive English Programs (IEP) enrollment, education abroad enrollment, and international student fees (Lutabingwa, 2019). As a result of international student numbers declining in recent years (IIE, 2019), SIOs have been pressed to think in entrepreneurial terms about how to continue to provide the services and funding the university now expects.

This new era of higher education that SIOs must traverse will be rife with global uncertainties, virtual and technological opportunities, austerity measures, and evolving higher education contexts and expectations. SIOs must learn to operate with an entrepreneurial problem-solving mindset, as opposed to the traditional problem-solving mindset which is prevalent within HEIs. The second half of this paper presents findings and recommendations from new and seasoned SIOs who have engaged in entrepreneurial initiatives in a variety of HEI contexts.

PART 2: THE RESEARCH STUDY

The second section of this paper is informed by interviews with 34 SIOs as a part of a research case study. First, the study methodology and brief profiles of the interviewed SIOs are discussed. Next, five different themes and insights are highlighted from the interviews about how SIOs behave as entrepreneurs and navigate today's challenging higher education landscape. Finally, study limitations and future directions are discussed.

Study Methodology

This qualitative study was a naturalistic, interpretivist case study because it aimed to gather an in-depth understanding of the meanings and experiences of humans and their social worlds (Willis, 2007). The following research questions were developed for the study:

- (a) How do senior international officers (SIOs) think and behave as entrepreneurs in opportunity identification and new venture creation in the process of internationalization?
- (b) How do different higher education institutional contexts influence the entrepreneurial and innovative activities of SIOs?

The interview protocol was created through drawing upon the effectuation framework (Sarasvathy, 2008) and piloting the study with a veteran SIO and revised the interview protocol based on their feedback. Effectuation encourages flexible goals and a

continual reevaluation of the resources needed amidst the financial landscape (Sarasvathy, 2008). The interview questions focused on three main areas: (a) an entrepreneurial initiative that the participant had created; (b) the risk tolerance level and entrepreneurial culture of their current and former HEIs; and (c) new and emerging trends and challenges. We used convenience, criterion, purposeful, and snowball sampling methods to reach the goals of the study (Etikan et al., 2016). Since one of the primary goals of the study was to understand how SIOs operate in different types of HEIs, we purposefully interviewed participants from a sampling of institutions (i.e. public, private, CC, four-year universities and liberal arts colleges, etc.). The semi-structured interview structure allowed for a natural conversation to emerge between the researchers and participants, and it enabled us to ask probing questions to clarify participants' answers. Interviews were conducted via Zoom, in person, or by telephone from March to October 2019, when it was deemed that there were enough interviews to reach a saturation point (Strauss & Corbin, 1998). We triangulated the data by consulting our field notes, and by analyzing SIO's CVs and previous work experiences. We individually coded and analyzed the interview transcripts using descriptive coding techniques (Saldaña, 2009).

Profiles of SIOs in this Study

The 34 SIO participants represent diverse backgrounds in terms of gender, age, geographical location, and institutional type. The latter included research universities, private liberal arts colleges, regional universities, minority-serving institutions, and community colleges. Table 4 outlines relevant participant demographic information, and Table 5 provides summaries of the institutional contexts of the SIOs.

Table 4

Institutional Demographics of Participants

Descriptor	n	%
Type		
4-year	22	65
2-year	12	35
Funding		
Public	24	70
Private	10	30
Region		
Northeast	6	17
South	18	54
Midwest	3	9



West	6	17
Other	1	3
Size		
Small (1,000-2,999)	2	6
Medium (3,000-9,999)	7	21
Large (>10,000)	25	73
Carnegie Class		
R1: Doctoral Universities – Very high research activity	9	26
R1: Doctoral Universities – High research activity	8	23
M1: Master’s Colleges and Universities – Larger Programs	3	9
Arts & Science Focus	1	3
Associates	12	36
Other	1	3
Other Status		
Historically Black College and University (HBCU)	1	3
Minority Serving Institution (MSI)	2	6
Hispanic Serving Institution (HSI)	8	23
Not Applicable	23	68

Table 5

Participant Demographics



Descriptors	University		Community Colleges	
	n	%	n	%
Age				
30-39	4	18	2	16
40-49	5	23	5	42
50-59	9	41	3	25
60-69	4	18	2	16
Gender				
Male	12	55	4	40
Female	10	45	6	60
Race				
White/Caucasian	16	73	7	59
Asian/Middle Eastern	2	9	3	25
Hispanic/Latinx	2	9	1	8
Black/African-American	2	9	1	8
Other	0	0	0	0
Doctoral Degree				
Yes	17	77	6	50
No	4	18	3	25
In Doctoral Program	1	5	3	25

For this paper, we distinguish between SIOs at U.S. four-year HEIs (U-SIOs), e.g. liberal arts colleges, comprehensive universities, and research universities, and those at two-year community colleges (CC-SIOs), e.g. public postsecondary institutions and technical/vocational institutions. U-SIOS and CC-SIOs face different demands, reflect different profiles, and approach entrepreneurial problem-solving in different ways. For example, the most recent AIEA (2017) survey of SIOs indicates that universities honor the skills of institutional finance, budgeting, organizational strategy, resource



management, legal and risk analysis knowledge, social media, country-specific knowledge, intercultural training, and language proficiency. At the same time, a survey of community college international educational leaders demonstrated that experience and knowledge of community college teaching and curriculum development were also incredibly important (Raby & Valeau, 2019).

Nonetheless, SIOs at all institutional types often have a core set of life experiences that influence their work and may lead them to work in international education. These could include being an international/visiting faculty member, international student, study abroad student, volunteering or working internationally, travelling personally, or working with international student populations. As outlined above in Table 1, the pathways and context for the SIO position have changed profoundly in the past few decades. What began as a start-up field has evolved to include specific skill sets, educational requirements, and leadership demands in its subsequent iterations. No matter the personal, professional, or institutional context of the SIO participants, they all grappled with how to be successful in a changing higher education landscape with increased financial and political challenges.

Expressions of SIO Entrepreneurship

From the data, we identified five themes relating to the entrepreneurial culture: (1) institutional context impacts revenue-generating expectations; (2) entrepreneur as creator; (3) entrepreneur as risk-taker; (4) degrees of institutional risk-taking; and (5) strategies for success.

Institutional Context Impacts Revenue-Generating Expectations

There were trends in our interviews in the revenue-generating expectations for different types of institutions, which are outlined by institutional type and the interaction of risk-taking and financial resources in Figure 1. Public universities were not typically mandated to generate revenue or fund their own operations, but most public U-SIOs felt financially strained and were encouraged to balance their budgets and be fiscally conservative. If revenue was generated, it was usually channeled to the overall HEI budget, where it would then be dispersed among all constituents. Many participants were not bothered by this approach and often preferred that they did not have to worry about funding their expenditures, even if it meant they did not reap all of the benefits of their entrepreneurial activities. The notable exception of “soft-money” funded expenditures for public and private institutions are IEPs. IEPs have been the most hard-hit by the decline in international student numbers, with a 41% decline in students from 2015-2018 (IIE, 2019). Many U-SIOs have an IEP in their portfolio and have had to deal with the recent challenges, including several that had to close.



Figure 1

Risk Tolerance, Financial Resources, and University Institutional Types

Financial Resources

Tolerance for Risk

	Low	High
Low	<p>Description Little support for new initiatives; Increased expectation for SIOs to produce revenue</p> <p>Common Institutional Types Public 4-year institutions with strong campus identity and leaders</p>	<p>Description Deeply entrenched culture; Healthy budget and endowment; Not as much need for entrepreneurial endeavors</p> <p>Common Institutional Types Larger, prestigious, private institutions, often from a conservative or Jesuit environment</p>
High	<p>Description Not afraid to take calculated risks or fail; Turns successes into capital for more endeavors; Often watched by other institutions to emulate when successful</p> <p>Common Institutional Types Younger public institutions, guided by an innovative leader with a goal to transform institution and culture; Most community colleges</p>	<p>Description Able to lean on endowments and accolades to engage in entrepreneurial initiatives; Less bureaucracy to create new endeavors</p> <p>Common Institutional Types Smaller institutions with high undergraduate population or a liberal arts focus; larger, prestigious, less conservative institutions</p>

In this study, U-SIOs from private and/or liberal arts institutions often viewed entrepreneurial expectations as superfluous to their job and did not feel the same financial pressure as SIOs at public institutions. For example, one private, liberal arts U-SIO shared that their institution was happy for them to generate funds, but there was not any expectation for them to bring in revenue.

Public universities often shared a similar funding context with CCs, but there were differences. CC-SIOs linked entrepreneurial activity to increasing revenue but saw their entrepreneurial work as “not about making money, but about creating new projects.” Most community college international education offices receive their funding from a college general fund. In this way, only a very small portion of the tuition/fees generated by international students are in fact returned to the international office. The international education office budget funding can be augmented by external grants and by community supported foundations. Only one interviewee operated their international office exclusively from international student tuition and fees, and yet even in this situation those funds were first sent to the general fund upon which the international office could draw.



The CC-SIOs interviewed shared a concern about their own ability to manage revenues and expenditures appropriately, funding formulas adopted by the college/district/state, fundraising strategies, and the external sources of funding for higher education internationalization. One interviewee summarized that necessary skills included "mastering knowledge to manage human and fiscal resources to promote the achievement of college goals." Finally, a common refrain from the CC-SIO interviewees was that their job is *not* to generate income. However, that was obscured with the expectations that each international office grows international students, education abroad numbers, or other international partnerships. Such growth in numbers translates into increased income for the college or district.

Many SIOs considered a myriad of ways to generate revenue by forging partnerships outside of the institution and by increasing international student numbers, study abroad, or other activities. This expectation may be different based on their institutional context, but expectations have increased since the 2008 financial recession. Nonetheless, when profit becomes an expectation of international education offices, it can lead to ethical compromises and a shift away from the intention of campus internationalization (Glass & Lee, 2018). This is a delicate line that SIOs need to walk.

Entrepreneur as Creator

Although the institutional context often changed the entrepreneurial expectations of the SIOs, all participants viewed themselves as creators, innovators, and leaders. In general, the SIO is viewed as a change agent who can operate within bureaucratic, decentralized, and fiscally conservative structures (Heyl & Hunter, 2019). Yet, within the community college, literature favors the transformational leader who can create change by using personal vision to ground facilitated action that stimulates long-term and systematic change (AACCC, 2013; Boggs & McPhail, 2016). The change agent has a vision (Valeau, 2020), is intentional in action (Mathis & Roueche, 2013), and inspires others to believe in the same vision (Kwai, 2015). The transformational leader is a concept that both the U-SIOs and CC-SIOs self-identified.

The interviews found that every SIO was entrepreneurial in a variety of ways. Many of the U-SIOs created projects that were directly related to increasing revenue while CC-SIOs created projects that were indirectly related. Public U-SIOs were often more focused on revenue-generating initiatives, which aligns with some of the funding challenges of public institutions mentioned previously. Several examples included pathway programs for students from IEPs or working with for-profit organizations and agents in order to increase international student enrollment numbers. While it is critical to build partnerships within the HEI and tap into other office's resources to advance initiatives, many U-SIOs found it helpful to look outside their HEI such as by seeking federal grants, special non-degree international student programs, partnerships with local industries, and charging for services like training or processing passports.

The SIOs at community colleges showed a process where revenue generation was not the primary concern. Only one CC-SIO said that all programs had to connect directly with financial gain. At the same time, all CC-SIOs were concerned with increasing student numbers, which did lead to financial gain. The process of the CC-SIO entrepreneur as a creator begins with a vision. They then identify an opportunity to build something that did



not previously exist, use decision-making skills to influence a range of college stakeholders intentionally to create something based on a specific need, and intentionally and strategically re-envision alternatives during the implementation stage. Creating new initiatives also required honest and frequent communication with stakeholders, openness to new ideas, and approachability. Most of the CC-SIO interviewees self-identified as pioneers who look at problems differently, try things that others have not, and have the ability to think two steps ahead to mitigate potential problems. In this context, the CC-SIOs reported creating a climate of innovation, experimentation, and failing together.

The creation of new programs is at the foundation of a culture of innovation. All those interviewed mentioned that the process involved seeing a need, envisioning how to address the need, and responding to the need by creating something new. Among the examples given by CC-SIOs, one saw a need to recruit international students and realized that without a budget to support travel there was a need for innovation. The CC-SIO created collaborative relationships with a local four-year HEI partner who also saw the benefit in collaborative recruiting and paid for the corresponding CC-SIO to be part of the HEI recruiting trip to strategically promote the 2+2 agreement. A 2+2 agreement is a policy that allows students to easily transfer (also known as flexible pathways) from a two-year to a four-year HEI. This can make attending a community college attractive, both as a way to save money on student fees at the four-year institution, and to obtain admission for those not admitted directly into their preferred four-year university or college. A second example was described by a CC-SIO who raised the status of the community college to increase enrollment, and then realized that the targeted prospective international student audience did not understand the transfer process. The CC-SIO created a four-year HEI partnership with two world-class, flagship HEIs to build status and advocacy for the student transfer pathway, which is a foundational principle of the U.S. community college.

The U-SIOs at smaller, undergraduate focused institutions and private universities often focused on advancing campus internationalization through indirect revenue-producing activities. Many discussed how they partnered with faculty for international initiatives related to the curriculum. Several U-SIOs from larger private and prestigious institutions created international programs or short trips for faculty or upper-level administrators to encourage them to support campus internationalization initiatives. Extrapolating from the 22 interviews of U-SIOs, public institutions were more focused on the financial bottom line and how their initiatives contributed to the budget, while liberal arts institutions or private institutions had more flexibility and did not feel as much urgency to increase revenue streams. Figure 1 illustrates the interaction between the risk-taking nature of institutions combined with the available financial resources.

U-SIOs created new programs and structures, often with a clear differentiation according to their type of institution. Participants from better-resourced institutions and/or a stronger focus on a liberal arts curriculum tended to create new projects that were tied to the curriculum and involved faculty collaboration. Although some of these projects generated revenue, that was not the original intention. At larger public institutions, the interviewees focused on building new structures, pathways, or projects that would help with creating or streamlining resources at their institution. Even though these U-SIOs were not necessarily mandated to generate revenue, their entrepreneurial creations looked quite differently than SIOs at more resource stable institutions. The interviews demonstrated that all SIOs were entrepreneurial in different ways, often because of their institutional context,



resources, or skill sets. The entrepreneurial nature of an SIO is not necessarily tied to whether their initiatives created revenue, but rather they created something novel and of value to their institutions.

Entrepreneur as Risk-Taker

A second theme that stood out in the interviews was the idea of an entrepreneur as a risk-taker. Institutional risk-taking culture in the university is complicated. Most universities are bureaucratic, slow-moving organizations steeped in history and culture, where a commonly heard phrase is “That’s not how we do it here”. This runs counter to the ideal ecosystem that fosters innovation and entrepreneurialism. One U-SIO shared that, “You have to show success before you take a risk and try something entrepreneurial, as opposed to the other way around”. Institutional risk-taking at two-year institutions is also complicated. All the CC-SIOs agreed that risk-taking is an inherent component of their institution because, “community colleges are entrepreneurial and so thus is the position.” In doing so, the CC-SIO uses that risk to develop a presence that defines 'leader' and then uses that presence in both the general college community and in the local community to maintain advocacy for international education.

Risk taking includes making changes to the way things are run in the college and creating new programs. According to the interviewees, some of their risks worked well, such as building new partnerships and collaborative opportunities within and outside of the college community. Other risks were less successful. One CC-SIO tried to build better relations between the college and regional international offices by instituting a policy to distribute international student tuition/fees to campus international offices, community college district international offices, and the district general budget. The district and colleges’ distrust of change resulted in rejection of the new policy. In response, the SIO launched an international education committee that failed because no one wanted to participate. However, when risk and institution culture work harmoniously, sustainable and long-lasting change can occur.

Degrees of Institutional Risk-Taking

The risk-taking nature of the SIO and the level of risk their HEI espoused was an important determination of what the SIO could accomplish. All the participants in the study agreed that it was important to have knowledge about their particular institutional type, and as a system that extended to the institutional risk-taking culture. The current internationalization moment and uncertainty does shed light on how the field of international education and higher education is in flux. The interviews with 22 U-SIOs showed a strong link between the interaction of financial resources and risk tolerance. How institutions pursue entrepreneurial initiatives can also be described as a “hunter-gatherer” analogy, which one of the public U-SIO interviewees explained. The institutions with a lower tolerance for risk are “gatherers”, where they wait for other foreign universities or offices to approach them with partnerships, rely on their prestige and brand name for success in internationalization initiatives, or hope what has functioned well in the past will continue to work. The institutions with higher risk tolerance are more like “hunters”, where they seek out partnerships and opportunities, often in unexpected places. They do not rely on their history or accolades to provide resources. These are the institutions that are likely to survive and thrive in this new era of declining enrollment and uncertain global circumstances.



Virtually all of the public U-SIOs, particularly in the larger state institutions, described their campus as risk averse or with a low tolerance for risk. In this situation, they reported that, “change occurs slowly.” Several U-SIOs shared that while their campuses as a whole were risk averse, new presidents or leaders could actively change the culture and encourage the U-SIOs to embrace new ventures. Another U-SIO shared how there were segments or individuals who embraced risk-taking, but as a whole the HEI was risk-averse, particularly the board of trustees. A veteran U-SIO who had worked at several institutions recounted instances where his former HEI lost or did not pursue several innovative partnerships and initiatives because of an aversity for risk. In hindsight, he can clearly see that the concern with being compliant and staying out of legal trouble caused the HEI to miss out on profitable and innovative opportunities.

Several U-SIOs described how their HEI did not embrace risk but heralded innovation. This leaves a very small margin of error for U-SIOs and can result in a fear of failure. One private U-SIO described how their institution would watch other HEIs try a new idea before doing it themselves: “We look at what those schools do and then we decide what works and then we bring it here and then we fund it.” This does minimize risk, but also leaves the HEI a step behind. This particular SIO had a mentality that often conflicted with their institution, which they described as: “...the wall technique is what I call it. You know, where you throw a bunch of ideas out and then see what resonates. And then you go with that. And I think that nimbleness and that, that intellectual flexibility you know, becomes really important.” This speaks to how a U-SIO often straddles a line where they have to respect the tradition and culture of the HEI but may also desire to create entrepreneurial endeavors within the confines of the institutional culture and processes (Cruz, 2019).

For community colleges, when the institution is moderately risk-supportive, funding is linked to evidence of student success, “which is shown by increased numbers,” as well as by assessment of persistence, transfer, and completion. Knowledge of assessment practices is very important in these situations. When the institution is highly risk tolerant or risk-supportive, there is freedom to make choices and “see them through without the fear of failure.” Many of the CC-SIO interviewees noted that institutional risk tolerance is linked to responding to local community interests. In this context, there is an understanding that international education changes: it responds to economics, politics, and social perceptions. All of the CC-SIOs agreed that the position, “has to be entrepreneurial because you are running a business.” Examples of risk-taking ranged from creating the first transfer agreement with universities locally and internationally, to raising the international profile of a community college. While some of the interviewees stated that the focus on recruitment is a shift away from the idea of public good, they all recognized the opportunity to link it to student success measures.

Although most U-SIO interviewees did not describe their HEI as risk-supportive, there were a few examples. One interviewee described how their prior entrepreneurial successes had facilitated a risk-supportive environment, but this was more unique to their office as opposed to the whole institution. Other participants worked in institutions that had built a reputation by innovating and taking risks and felt a freedom to innovate without worrying about failure. One private U-SIO described how the leadership of their HEI encouraged risk-taking and had a market mindset, with the HEI even choosing to benchmark against entrepreneurial businesses like Google, Apple, and Amazon as opposed to traditional HEIs. These examples of risk-taking, however, were not as



common within the U-SIO institutional contexts. Although the institutions of the SIO participants often looked different in terms of risk levels, an SIO's ability to build collaborative relationships across the institution was a critical component of successful entrepreneurial ventures.

Strategies for Success

Participants highlighted several strategies for success, including fostering collaborative relationships with senior-level administration, the importance of professional development, and building an innovative and collaborative team. In line with previous scholarship identified in this paper (AACC, 2013; AIEA, 2017; Raby & Valeau, 2019; Tran & Nghia, 2020), the SIO interviewees agreed that leaders need to have strong knowledge of organizational behavior, managerial skills, and budgeting so that they can push their offices and initiatives forward. Another key area identified by all SIOs was to have an understanding of institutional funding formulas, priorities, and opportunities so they know "about how far to risk." It was also important to have executive knowledge and experience to interface with executive administration.

The importance of building strong and collaborative relationships with senior-level administration continued to surface during almost all of the interviews. This included the president, provost, deans, or leaders of other divisions on campus. One U-SIO discussed how they used leadership techniques from other cultures to inform their practice in the U.S. They built consensus with the key players and team members about a decision, initiative, or idea before even stepping foot in the meeting to discuss it. This led to high success in the quest to change the status quo and do what was best for their department and team. Another example involved a public U-SIO who had been so successful in their entrepreneurial initiatives that the president and senior leaders came to them with ideas and prioritized giving them resources and the opportunity to achieve the departments' goals. A final example is a CC-SIO who created a program where they collaborated with college executives and board members to travel together to help with recruiting. This turned the leaders into advocates that allowed for the creation of other programs in the future. These examples show how SIOs should prioritize building trust and strong relationships with senior-level administration. SIOs felt more freedom to take risks and embrace their inner entrepreneur with the support of the president, provost, or other critical players. A high level of trust, collaboration, and previous results could provide an entrepreneurial pathway for SIOs even within the most risk-averse institution (Cruz, 2019).

A doctorate degree was viewed as an important way to gain more knowledge for their SIO role, and it is increasingly preferred by U-SIOs. All CC-SIOs agreed that the degree was not necessarily essential to obtain the job, but that critical analysis skills learned in the dissertation process could apply to risk taking as well as "building people skills", "bringing status to the position", "teaching the importance of having a goal", "informing the process of managing tasks", and "strategically implementing processes." Similarly, community college literature links specific personality skills to leadership capabilities such as being passionate, committed, and having social judgement, courage, confidence, perseverance, and grit. Many of the important skills needed to be an SIO, however, are not necessarily taught in a doctoral program, but are gained through years of experience.

The new professional pathway for SIOs was certainly evident in the U-SIO participants' experiences. All of the SIOs under age 40 had advanced through the international



education practitioner route, whereas the participants over age 50 typically heralded from a faculty background or had been appointed by the provost. A quest for knowledge related to their role permeated throughout both types of SIOs and all levels. Most of the participants had doctoral degrees or had aspirations to obtain a terminal degree in the future.

While many agreed that their knowledge was learned “on the job”, they sought to expand their understanding of the international higher education field and continue to learn as they progressed in their profession and in their current role. Professional and administrator-focused organizations like AIEA and NAFSA were critical to SIOs’ professional development and ongoing knowledge acquisition. Many SIOs spoke of the value they found with being involved in professional associations, and often shared their research and knowledge through publications, presentations, and practitioner-focused books.

Some U-SIOs felt inhibited not only by the external university and bureaucratic processes, but also by the sentiment inside their teams. Some common strategies enlisted by SIOs to build a culture of innovation within their teams included: (a) create transparency and an open discussion around decisions and deliberations of the senior leadership team; (b) encourage people to work in teams to accomplish initiatives that cuts across different content areas; (c) reward calculated risk-taking; (d) turn failure into teachable moments and encourage “failing forward” to build confidence in employees; and (e) prioritize hiring new staff who have an entrepreneurial mindset. One excerpt from a CC-SIO interview sums up several of the points well: “Telling them... look I don't have all the answers. I'm relying on you. You have to do more than lip service here; you have to let people make mistakes and you have to not be punitive when that happens but regroup and say what can we learn from this?”

Research Study Summary

The 34 SIOs interviewed for this study provided numerous examples and best practices of how to navigate their institutional context and create new entrepreneurial initiatives. The main themes were institutional context impacts revenue-generating expectations, SIOs as creators and risk takers, degrees of institutional risk-taking, the importance of collaborative relationships with upper administration, and strategies for success. While the cases illustrated here were based in the United States., SIOs worldwide will have to continue to grapple with financial challenges and global uncertainties, but success is possible with an entrepreneurial mind-set.

Study Limitations

This research study added to the brief but growing academic literature body about SIOs and higher education entrepreneurship (Deschamps & Lee, 2015; Glass & Lee, 2018). Although there were novel findings, several limitations must be noted. The interviews were conducted prior to the onset of the COVID-19 pandemic and since then the higher education landscape has dramatically changed. As a result, some recommendations or findings may not be as relevant. Participants were selected mostly through convenience and purposive sampling techniques, which can lessen the validity of the data. Finally, the interviews were conducted over a longer period of time and by different researchers, which could lead to inconsistencies. All measures were taken, however, to lessen the impact of these limitations and ensure data trustworthiness.



Future Directions

This paper suggests future directions for exploration as well as recommendations for SIOs as they traverse a new era in internationalization and higher education.

Recommendations include (a) building trust with their teams and senior leadership; (b) developing sustainable partnerships inside and outside of the university; and (c) understanding the university context.

The risk tolerance of the institution has an impact on the ease in which SIOs engage in entrepreneurial endeavors. Entrepreneurship has long been considered one of the top five most valued skills of an SIO (AIEA, 2017), and this paper highlights that in 2020 and beyond it will be even more so the case. This is especially due to the economic aftershocks of the COVID-19 pandemic and its implications on traditional forms of mobility like education abroad programs and international student enrollment.

Given the differences between CC-SIOs and U-SIOs in our study, it is also clear that entrepreneurial cultures are shaped by institution type, organizational structure, and state policy context of HEIs. SIOs inhabit two professional worlds – the world of their specific HEI and the world of the international education field. SIOs will continue to be pressed on all sides to generate revenue, especially with stagnant or declining international student enrollment. Our findings highlight the important role of trust and creativity for SIOs who find themselves at a crossroads as college and universities adapt to a volatile and uncertain environment. Partnerships and trust are essential to accomplish initiatives as SIOs act as catalysts for change. SIOs are most successful when they engage their staff in innovative thinking and build trust with their senior leaders.

In the future, it is imperative to continue to track changes in the field and differences in institutional types, organizational structures, and state funding contexts. Future researchers could take a broader view of the field by surveying more SIOS to further understand how entrepreneurship is manifested in different institutional contexts. It is also important to identify opportunities to update professional development and training to incorporate entrepreneurial-problem-solving mindsets and cultures. Finally, it is critical to build support for leadership at different levels (entry, mid, senior) so all international educators can effectively respond to changes in their roles and responsibilities.



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