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The Role of Higher Education Institution Leaders in Building Human Capital in Cambodia: Challenges and Strategies

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ABSTRACT

Cambodia envisions to becoming an upper-middle-income country by 2050 and a highincome country by 2050. It needs to invest in its human capital to achieve such a vision. This study aims to examine the roles and competencies for higher education institution (HEI) leaders to best prepare Cambodian graduates to contribute to achieving Cambodia's development vision. It also aims to identify key challenges faced by HEI leaders and appropriate strategies to help them prepare Cambodian graduates to be qualified human capital. The study employed a Delphi method, with a focus on qualitative data. A total of 57 participants (panelists) who were educational leaders, senior academics, and doctoral students participated in the study. The findings showed several key roles that Cambodian HEI leaders need to play and a number of competencies they need to possess in order to serve their roles effectively and make a difference to Cambodian higher education. Several key challenges faced by HEI leaders were also identified. The study also revealed a number of strategies that should be adopted for HEI leaders to best prepare Cambodian graduates for the world of work and enable them to be able to meaningfully contribute to achieving Cambodia's development vision. This study concludes with implications for policy and research.

Keywords: Cambodia, Challenges, Higher Education Leaders, Human Capital, Strategies

INTRODUCTION

The advent of the Fourth Industrial Revolution, the embrace of 21st-century skills, and the need to cope with other driving forces, such as regional market competition, have created significant challenges for developing countries like Cambodia. According to Cambodia Economic Update, December 2022: Navigating Global Economic Headwinds (2022), before the COVID-19 pandemic, Cambodia blossomed economically over the last two decades. As a result, Cambodia reached a lower middle-income status in 2015 and set its plan on attaining an upper middle-income status by 2030 and becoming a high-income country by 2050 (Rectangular Strategy for Growth, Employment, Equity, and Efficiency: Building the Foundation toward Realizing the Cambodia Vision 2025 (Phase IV), 2018). Over the past few decades since 1998, Cambodia's economy grew at an average rate of 7.7% annually, making it one of the world's fastestgrowing economies. Thanks to garment exports and tourism post-pandemic, Cambodia's economy has recovered and gained momentum but remains uneven. It is noted that the tourism sector has improved but remained well below the prepandemic level. The economy was forecast to grow at around 5 percent in 2022, facilitated by the export sector and domestic economic activities (Cambodia Economic Update, December 2022: Navigating Global Economic Headwinds, 2022). However, the country's export-orientated manufacturing sector continues to face challenges due to economic slowdowns in China and the United States. Moreover, energy and food prices have increased due to the Ukraine-Russia war.

Cambodia has recently redefined its poverty line as outlined in its most recent report of the Cambodia Socio-Economic Survey for 2019/20 (Ministry of Planning, 2020). The new national poverty line is US\$2.70. Based on the new poverty line, about 18% of the Cambodian population is identified as poor. However, the poverty rates vary considerably across the country, from the lowest poverty rates in Phnom Penh (4.2%) and other urban areas such as provincial towns (12.6%), whereas the highest poverty rates are in rural areas (22.8%). From 2009 to 2019, the poverty rates had declined by 1.6 percent per year, as wage earnings had increased (*Report of Cambodia Socio-Economic Survey 2019/20*, 2020).

In terms of human capital, Cambodia has made considerable improvement in health care, early childhood education, primary education, and higher education, particularly in terms of institutional expansion. Despite new developments, Cambodia's human capital indicators lag behind those of other developing countries. In the academic year 2021-2022, net enrolment rates for primary education were 93%, lower secondary education 46.7%, and upper secondary education 28.6% (*Cambodia Economic Update, December 2022: Navigating Global Economic Headwinds*, 2022). For Cambodia to maintain pro-poor growth, it is important to promote competitiveness, responsibly manage natural resources, enhance public service quality and accessibility, and implement structural reforms.

Moreover, more physical and digital connectivity as well as investments in infrastructure development are critical to national development (*Cambodia Economic Update, December 2022: Navigating Global Economic Headwinds*, 2022). Further economic diversification is needed, and it will require the need to enhance entrepreneurship, promote the use of technology, and develop new skills among the citizens to meet the demands of labor market. It is also crucial to increase investments in human capital to contribute to achieving Cambodia's vision to become an upper-middle-income country by 2030 (*Cambodia Economic Update, December 2022: Navigating Global Economic Headwinds*, 2022).

Given some economic constraints, the Cambodian government has initiated and developed several policies, frameworks, and guidelines aimed at improving the living standard of people through fostering the country's economic growth. These include the Rectangular Strategy - Phase IV; Pentagonal Strategy - Phase 1; National Policy on Science, Technology and Innovation 2020-2030; Cambodia's Economic and Social Digital Policy Framework 2021-2035; Cambodia Governmental Digital Policy 2022-2035; and Agricultural Development Policy 2021-2030. Cambodia has experienced strong economic growth for the last few decades. Such as a remarkable economic growth, supported by political stability, has enabled the country to improve its social sector (*Cambodia Economic Update, December 2022: Navigating Global Economic Headwinds*, 2022).

Education is one of Cambodia's prioritized sectors, which has been viewed as one of the country's success stories. In terms of higher education expansion, there are now 189 higher education institutions (HEIs) in Cambodia, of which 110 are private (Education Congress: The Education, Youth and Sport Performance in the Academic Year 2022-2023 and Goals for the Academic Year 2023-2024, 2023). While these HEIs are supervised by 17 different ministries and state institutions, MoEYS is in charge of 90 HEIs, with 284,599 students (52.27% were females) enrolled in the academic year 2022-2024 (Education Congress: The Education, Youth and Sport Performance in the Academic Year 2022-2023 and Goals for the Academic Year 2023-2024, 2023).

Higher education plays a vital role in equipping students with the necessary knowledge and skills to be functional and effective in the workplace. However, the limited quality of higher education and the heavy focus of HEIs on profit-making have led to graduates' limited quality, leading to critical issues, such as skills mismatches and job dissatisfaction (Heng & Sol, 2023).

To achieve its development vision for 2030 and 2050, Cambodia needs highly productive human capital, and HEIs are the major places where Cambodian human capital is built. Unfortunately, Cambodia still faces a shortage of a highly skilled labor force. According to Asian Development Outlook 2018 Update (2018), of the 10.3 million active labor force, most of them are low-skilled, in low-wage jobs, inadequately prepared for further studies or the labor market. There has also been a mismatch between the number of qualified graduates from HEIs compared to the

labor market needs (Madhur, 2014; Matching Aspirations: Skills for Implementing Cambodia's Growth Strategy, 2012).

Within this context, the present article aims to examine the roles and competencies for HEI leaders to best prepare Cambodian graduates to achieve the country's vision and propose strategies for HEI leaders to best prepare the students to achieve the country's vision.

The study attempts to answer the following three questions:

- 1. What are the key roles and competencies of HEI leaders in building qualified graduates in Cambodia?
- 2. What are the key challenges faced by HEI leaders in building qualified graduates in Cambodia?
- 3. How do HEI leaders best prepare graduates to achieve Cambodia's development vision?

This study is significant for three main reasons. First, findings from the study will inform policymakers at the ministerial level, especially those at the Ministry of Education, Youth and Sport, to formulate appropriate policies or revise existing policies to address the current challenges facing Cambodian higher education. Second, findings from this study will help HEI leaders and relevant stakeholders, such as lecturers and educational staff, to identify key challenges and develop appropriate strategic responses to ensure the quality of university graduates so that they can contribute to achieving the Cambodian vision for 2030 and 2050. Third, this study will contribute to the existing literature on Cambodian higher education and provide insights for further research into similar topics that aim to understand the challenges facing Cambodian higher education and the mechanisms to address such challenges.

LITERATURE REVIEW

Human Capital Development

Robbins (1997) defined the economics of education as the study of choice under conditions of scarcity. Due to limited time and financial resources, families and the public sector will decide how much money and how long to spend on education when making decisions about the education of their children and workers. Education helps to increase a person's abilities, knowledge, and understanding. The development of those skills and knowledge enables the citizen to have an opportunity and choice to pursue their desired levels of education. In addition, McMahon (2009) stated that economics of education focus on how decisions are made that impact this stock of knowledge and skills for both the people who are seeking education and the teachers and organizations that are providing it. The model for education is grounded in the human capital theory, defined in terms of the knowledge, skills, and attributes accumulated through lifelong investment in education and health. Formal education, including primary, secondary, and

university education, as well as informal learning at home, on-the-job training, and other forms of learning, is essential for helping people acquire knowledge and skills.

The Role of Higher Education

The importance of education for development has been recognized internationally. According to the United Nations Millennium Declaration (2000), the universally agreed Millennium Development Goals (MDGs) aim at achieving universal primary education, and the target was to be attained by 2015. As the MDGs mainly focus on primary education, there are some criticisms of this specific goal because it seems to neglect the role of higher education. With the MDGs expired in 2015, the new Sustainable Development Goals (SDGs) have taken their place. The SDGs were first formally brought to the discussion at the United Nations Conference on Sustainable Development, as the ultimate goal is not simply to promote primary education but also to "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (The Sustainable Development Goals Report 2017 – Goal 4, 2017).

Given the significance of higher education on economic development, more attention is placed on the role of higher education in driving socio-economic development. Burchi (2006) viewed that education is essential for economic growth and social development. He noted that "the basic idea is that being educated improves rural people's capacity to diversify assets and activities, to access information on health and sanitation, to enhance human agency in addition to increasing productivity in the agricultural sector; these are all essential elements to ensure food security in the long run" (p. 193). Tilak (2016) considered higher education to be key human development indicators, shaping other dimensions of human poverty and contributing to reducing infant mortality or increasing life expectancy. Therefore, investment in higher education in developing countries is critical to the development of human capital in such societies.

Much of the literature that supports the critical role of higher education in driving socio-economic development is linked with human capital theory with two basic approaches: the micro and macro levels. For the micro level, it focuses on the rate of return to investment in education, while the macro one estimates the contribution of higher education to growth. Research by Azcona et al. (2008) found that in many countries there is a low level of funding in research and development in the higher education sector; as a result, many graduates are not well-prepared for the labor market. In addition to higher education graduates entering the labor market unqualified, Wang (2012) found that graduates should possess key skills such as teamwork, creative thinking, problem solving, writing, communication, negotiation, information and communication technology, leadership, and autonomy.

The rates of returns generated by higher education are significant in helping a country's economic growth. The role of higher education in national development is undoubtedly crucial, from the perspectives of the human capital theory or the human development approaches. Specifically, previous research has shown that HEIs in developing countries could play a vital role in promoting competitiveness, innovation, social mobility, and economic growth (Heng, 2023).

The Development of Cambodian Higher Education

The Cambodian higher education system is a mixture of several different educational models. The most obvious features of the present system are a legacy of the French colonial period and the Soviet system introduced by Vietnamese after 1979 (Rany et al., 2012). Later, the unregulated growth of the private sector as a result of the national shift toward a market economy has resulted in massification mostly following a North American model (open access, self-selection by students).

Even though the education system that was created by the French and then expanded by King Norodom Sihanouk was officially abolished by the Khmer Rouge regime, much of the educational ideology from that time has remained in the minds of present-day administrators who belong to that generation that received their education during the 1960s (Dy, 2004). French influence can still be seen in the preference of senior administrators for highly selective exams in which a very small number do extremely well and most students score around an average mark. After the Khmer Rouge regime, it was the period of rehabilitation of the education sector, including HEIs. It was then that a popular slogan was used: "Those who know more, teach those who know less and those who know less, teach those who do not know at all (Dara, 2022).

After Cambodia had embraced a democratic system after the UN-sponsored election in the early 1990s, there was a transformation in the country's politics and economy with higher education beginning its gradual reforms, including the introduction of privatization in the sector (Dy, 2004). Later, with an increase of foreign investment and economic reforms in the country, there is a big demand for human resources and human capital. Since then, the privatization of higher education has introduced a gradual growth in both student enrolments and institutional expansion (Dy, 2004).

MoEYS in its Education Strategic Plan 2019-2023 outlined three key policy objectives for the higher education sector, namely (a) an increase in access and equity of higher education enrolments; (b) improvement in quality assurance in the sector; and (c) improvement in institutional development and governance. As Cambodia is moving from a lower-middle-income to an upper-middle-income country, it will significantly need the human capital with soft skills as well as technical and vocational skills to support socio-economic development (Hangchuon, 2022). However, the Cambodian higher education system is facing the challenges of producing graduates with the knowledge, technical, soft, and life

skills responsive to the level of social and economic development of Cambodia (Heng & Sol, 2023). Moreover, many young people migrate to the urban areas and overseas and are not committed to the sustainable development of their communities. The Cambodian economy is small and open and is therefore facing the impact of global challenges, such as climate change, global terrorism, and backlashes against globalization (Hangchuon, 2022). As a member of the Association of Southeast Asian Nations (ASEAN), Cambodia is required to be integrated into the region and the world. Cambodian graduates must learn to appreciate divergent cultures and values (Hangchuon, 2022). Thus, HEIs are expected to modernize and respond to the demands of an emerging market economy; they also need to fulfill the Cambodian government's public responsibility to provide free higher education to the most able students and achieve both without significant government support. As a consequence, HEIs are expected to become increasingly self-funding and to orient their courses to market needs (Ban & Heng, 2023; Chamnan & Ford, 2004).

Human Capital Development in Cambodian Higher Education

Although Cambodian higher education has considerably progressed, the system needs considerable improvement to be aligned with Cambodia's transformation toward becoming a knowledge-based society and a digital economy (Fostering an Inclusive Digitalisation Transformation in Cambodia, 2020; Heng, 2023, 2024). Cambodia is in the process of promoting digital transformation in various sectors, including in higher education (Heng & Doeur, 2022). The Cambodian government's Rectangular Strategy (Phase IV) outlined the need for Cambodia to prepare for the Fourth Industrial Revolution and the digital economy to ensure sustainable economic development and diversification (*Rectangular Strategy for Growth, Employment, Equity, and Efficiency: Building the Foundation toward Realizing the Cambodia Vision 2025 (Phase IV)*, 2018). The need for such preparation is to ensure the country can realize its vision of becoming an upper-middle-income country and a high-income country by 2030 and 2050, respectively.

Under its National Strategic Development Plan and the Education Strategic Plan 2019-2023, Cambodia has a vision to develop its human capital to ensure it can achieve its development goals for 2030 and 2050 (Hangchuon, 2022). The key factor in the coming years, as Cambodia envisions to transform itself to become an upper-middle-income country, will be related to the increase in the number of Cambodian young people with strong soft and hard skills that can ensure employment (Hangchuon, 2022). Given the lack of research investigating how HEI leaders can best prepare Cambodian graduates to achieve the country's vision, this study aims to examine this topic as well as explore the key roles of HEI leaders in building qualified graduates in Cambodia.

RESEARCH METHODOLOGY

This study is part of a larger study designed as a mixed-method study using a Delphi method as a research technique to collect data to answer the research questions. The Delphi method involves both quantitative and qualitative designs with both types of numerical and textual data (Franklin & Hart, 2006). In this article, the qualitative data are analyzed to answer the research questions.

In this study, which used a Delphi method, it is important to choose appropriate individuals or experts for the study (Hsu & Sandford, 2007). Therefore, the criteria for choosing the experts are those who are knowledgeable about the the key issue of higher education interventions, thereby being able to contribute meaningful inputs to improve higher education in Cambodia. The expert participants were educational leaders, senior academics, and doctoral students who had at least 10-15 years of experience in higher education. Based on these criteria, 65 potential participants were approached and invited to participate in the study; however, only 57 higher education practitioners or experts were able to participate in the study.

The main source of data for this study came from four rounds of the Delphi method with 57 participants (panelists) who were educational policymakers, experts, senior officers of MoEYS and HEIs, and doctoral students who were working as lecturers or educational leaders. A questionnaire with close- and openended questions was used for data collection. There were three main sections in the questionnaire aiming to address the following areas: (a) the key roles of HEI leaders in building qualified human capital, (b) the key challenges faced by HEI leaders in building qualified human capital, and (c) strategies for Cambodian HEI leaders to best prepare graduates to achieve the country's vision.

The design of the initial questionnaire was based on three main premises. First, the questions include the key topics for assessing HEI leaders' roles and competencies. Thus, the questionnaires are based on an extensive review of relevant literature. Second, the questionnaires had to be brief and simple to maintain the motivation and engagement of the participants, who had to spend less than 30 minutes in each round to complete the survey. Third, the questionnaires were designed with both closed and open options to explore quantitative and qualitative approaches to request the experts to provide specific evidence about their views on the questions/items asked.

A Delphi pilot survey was conducted before the four rounds of the Delphi method conducted between August 2022 and February 2023 as follows:

1. The Delphi method (Round 1): From August to September 2022. After Round 1, the data were analyzed to formulate the questionnaire for the Delphi method (Round 2).

- 2. The Delphi method (Round 2): From September to November 2022. After Round 2, the data were analyzed to formulate the survey for the Delphi method (Round 3).
- 3. The Delphi method (Round 3): From November 2022 to January 2023. After Round 3, the data were analyzed to formulate the survey for the Delphi method (Round 4).
- 4. The Delphi method (Round 4 or Final Round): From January to February 2023. After Round 4, the data were analyzed and interpreted for the research report.

There are different approaches and applications of measures that need to be aligned with the aim of the study. According to Dalkey (1972), one key characteristic of the Delphi method is the use of a variety of analytical techniques to interpret the data, particularly the utilization of qualitative data, as open-ended questions were employed to gather expert inputs from the participants. In addition, the statistical analysis could be used to supplement the qualitative data (Hsu & Sandford, 2007), while the qualitative analysis allowed for more in-depth views of the items/questions asked. As mentioned above, although both quantitative and qualitative data were collected for this study, the qualitative data were analyzed and interpreted in this article.

It is important to note that ethical considerations were observed in the study. The participants were well-informed about the purpose of the study, and they provided a written consent form to indicate their voluntary participation in the study. In addition, they were advised that they had the right to withdraw from the study whenever they wished to without incurring any consequences and that their identity and anonymity would be protected during and after the study.

RESULT AND DISCUSSION

Research Result

Participant Profiles

There were 57 participants or panelists (11 were females), and nine (14%) were foreign academic experts who participated in the study. Their ages varied from 30 to over 60 years old, with about one third (36.84%) being 31-40 years old. In terms of qualifications, all panelists hold at least bachelor's degrees, with those holding master's degrees making up 38.60% and PhD 40.35%. In terms of their positions, 22 held leadership positions (Rector or Vice-Rector, Dean or Vice Dean, Head or Deputy Head of Department), six were Chief of Office, 17 were lecturers, and 12 held other positions such as educational leaders or doctoral students. They came from the public sector (16 participants) and the private/non-governmental organization (NGO) sector (41 participants). Their seniority or experience in their field varied from about 5 years to more than 21 years, with 45.61% having between

11 and 20 years of experience. Table 9 shows the demographic information of the participants.

Table 1. Demographic Information of the Participants (n = 57)

Demographic Value Engagement Page			Domoomtooo
Information	Value	Frequency	Percentage
Gender			
	Male	46	80.70
	Female	11	19.30
Nationality	•		
	Cambodian	48	84.21
	Foreigner	9	15.79
Age			
	Below 30 years old	12	21.05
	31-40 years old	21	36.84
	41-50 years old	13	22.81
	51-60 years old	10	17.54
	61 years old or above	1	1.75
Qualification	•	•	•
	Bachelor	12	21.05
	Master	22	38.60
	PhD	23	40.35
Position			
	Rector/Vice Rector	3	5.26
	Dean	4	7.02
	Vice Dean	1	1.75
	Head of Department	5	8.77
	Deputy Head of	9	
	Department		15.79
	Chief of Office	6	10.53
	Lecturers		29.82
	Others	12	21.05
Sector			
	Public	16	28.07
	Private/NGO	41	71.93
Seniority	•		•
	About 5 years	7	12.28
	6 to 10 years	11	19.30
	11 to 20 years	26	45.61
	More than 21 years	13	22.81

Source: Processed Data by Researchers

Roles of HEI Leaders

As shown in Table 2, there are six key roles of HEI leaders, as perceived by the participants. These roles included (a) producing the workforce, (b) boosting graduates' earning power, (c) developing the best learning platform, (d) increasing employability, (e) improving economic prosperity and social cohesion, and (f) building research capacity to drive innovation. There are also sub-roles that support

the six key roles. This finding is interesting as it sheds light on how the roles of HEI leaders are perceived and how these roles can be achieved by HEI leaders.

Table 2. Roles of HEI Leaders

No.	Roles of HEI Leaders	Sub-roles
	Leauers	Being the driving force of the country's economic
1	Producing the workforce	 development Dealing with present and future local/regional/global challenges and labour markets Increasing the productivity/boosting output and propelling growth in the wider economy
2	Boosting graduates' earning power	 Demanding higher salaries Making significant contributions to the revenue/growth of their organization Contributing to the country's economic growth
3	Developing the best learning platform	 Creating intensive knowledge and skills through learning Pushing the development Promoting higher skills through learning to enable learners to work at different organization; thus, contributing to economic development of a country
4	Increasing employability	 Providing and increasing employability/job opportunity Creating new jobs through the collaboration between education and other sectors (private/public institution, factories/industries/ enterprises/ associations/ entrepreneurs) Securing the desired work in the highly-competitive job market.
5	Improving economic prosperity and social cohesion	 Providing learning opportunities for diverse learners to build the new skills needed and changing demand for the society, thus improving the economy Leading highly educated people to have the ability to create something new/more modern, an innovation system, enhancing quality of life, addressing significant social and international concerns, thus contributing to improving the country' economic prosperity
6	Building research capacity to drive innovation	 Being sources of power and creativity/innovation Leading research to identify skills gaps and the needs of stakeholders Leading research to build the foundation of the economic competitiveness/wealth of localities/nations/regions/world

Source: Processed Data by Researchers

Competencies of HEI Leaders

The data analysis revealed several competencies of HEI leaders, as shown in Table 3. Specifically, the expert participants believed that the key competencies of HEI leaders concern the need to lead academic study or work, lead or manage physical resources and facilities, promote stakeholder engagement and network

liaison with local and international partners, oversee institutional administrative work, oversee educational research and innovation, provide instructional leadership, lead or manage financial resources and business activities, and monitor and evaluate education activities. This particular finding shows that to achieve their roles effectively, HEI leaders need to possess a number of competencies related to various roles and responsibilities as educational leaders.

Table 3. Competencies of HEI Leaders

No.	Competencies of HEI Leaders
1	Lead academic study or work
2	Lead or manage physical resources and facilities
3	Promote stakeholder engagement and network liaison with local and
	international partners
4	Oversee institutional administrative work
5	Oversee educational research and innovation
6	Provide instructional leadership
7	Lead or manage financial resources and business activities
8	Monitor and evaluate education activities

Source: Processed Data by Researchers

Key Challenges Faced by HEI Leaders in Building Qualified Graduates

When asked to discuss the challenges faced by HEI leaders, the participants mentioned a number of challenges that can be classified into 10 categories, as shown in Table 4. These challenges were related to leadership quality and capacity, customer service quality, research and development (R&D), and stakeholders' commitment and involvement. They also pertained to human resource management, team spirit building and best practice/sharing, teaching and learning support, infrastructure and facility development, financial problems, and network cooperation/linkages. These challenges were linked to a number of reasons summarized in Table 4.

Table 4. Key Challenges Faced by HEI Leaders in Building Qualified Graduates

No.	Key Challenges	Reasons
1	Leadership quality and capacity	 The driving force of the country's economic development Dealing with present and future local/regional/global challenges and labor markets Increasing the productivity/boosting output and propelling growth in the wider economy
2	Customer service quality	 Demanding higher salaries Making significant contributions to the revenue/growth of their organization Contributing to the country's economic growth
3	Research and Development (R&D)	 Creating intensive knowledge and skills through learning Pushing the development

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		Promoting higher skills through learning enables learners to work at different organization; thus, contributing to the economic development of the country
4	Stakeholders' commitment and involvement	 Providing and increasing employability/job opportunity Creating new jobs through the collaboration between education and other sectors (private/public institution, factories/industries/enterprises/associations/entrepreneurs) Securing the desired work in the highly-competitive job market.
5	Human resource management	 Providing learning opportunities for diverse learners to build the new skills needed and changing demand for the society, thus improving the economy Leading highly educated people having the ability to create something new/more modern, an innovation system, enhancing quality of life, addressing significant social and international concerns, thus contributing to improving the the country' economic prosperity
6	Team spirit building and best practice/sharing	 Being sources of power and creativity/innovation Leading research to identify skills gaps and the needs of stakeholders Leading research to build the foundation of the economic competitiveness/wealth of localities/nations/regions/world
7	Teaching and learning support	 Using inappropriate tools/material in teaching/learning, e.g., technology supports student-centered learning Dealing with academic challenge/low demand-driven e.g., inappropriate curriculum/textbooks/library Addressing students' poor learning outcomes
8	Infrastructure and facility development	 Addressing poor building/facilities/infrastructure/standards poor working conditions Addressing poor and small campus environments
9	Financial problem	 Addressing low staff's salaries Dealing with low students' tuition fees Dealing with the decline of students' enrolment and increasing numbers of competitors Addressing the shortage of sources of investment funds from the public/donors/partners for infrastructure/modern facilities/staff development/R&D
10	Network cooperation/linkages	Addressing the limited/inactive engagement with related sectors

Source: Processed Data by Researchers

Strategies for HEI Leaders to Best Prepare Cambodian Graduates

When discussing the strategies to support HEI leaders to best prepare Cambodian graduates, the participants provided various suggestions that could be summarized into 10 strategies, as shown in Table 5. These included the need to have strong leadership competency, set the institution's clear vision and prioritized work, support research and development (R&D) and innovation, lead human resource management, and provide teaching and learning support. In addition, there are strategies related to the need to ensure adequate infrastructure and facilities, ensure sustainable financial resources, promote network cooperation/linkages, provide professional development for all staff, and focus on quality productivity/services. Areas of focus for each strategy were also identified as summarized in Table 5.

 Table 5. Strategies for HEI Leaders to Best Prepare Cambodian Graduates

No.	Strategies	Areas of Focus
1	Have strong leadership competency	 Build high leadership/management capacity including emotional intelligence Lead by example (including upgrading one's own capacity in research, innovative, ICT, staff support through ongoing coaching, etc.) to inspire and motivate others Have high professional ethics (morality, loyalty, treat staff fairly) Empower staff to service the clients, create new products and innovation Have a passion for the work they do
2	Set institution's clear vision and prioritized work	 Set HEI's vision, mission, and goal in line with the local/national/regional/global trend Ensure well-alignment of mission, vision, goal among units under the institution Well align curriculum (lower school levels, labour market demand).
3	Support Research & Development (R&D) and innovation	 Introduce and apply ICT integration in all aspects of the institution (admin, teaching, learning) Promote and support the creativity and innovation culture, Ensure all staff have ICT competence and advocate, promote, and encourage the use of digitalization (human digital, government digital, etc.)
4	Lead human resource management	 Recognize and provide awards (promotion, monetary/in-kind rewards, badges, etc.) to outstanding staff Recruit a diverse workforce and ensure staff retention Forecast demand-supply of staff in the institution Take care of staff well-being/safety/health

5	Provide teaching and learning support	 Support appropriate use of the academic resources (curriculum, textbooks, learning/teaching materials aligned with local and international standards Encourage the application of update/effective teaching techniques Ensure the proper use of academic staff based on their qualifications/levels of expertise or experience Facilitate and help students (developing a conducive learning environment) Increase students' enrolment (local and international) with quality
6	Ensure adequate infrastructure and facilities	 Invest on needed infrastructure/modern facilities to meet the set standards Improve working conditions Provide free internet access on campuses
7	Ensure sustainable financial resources	 Secure financial resources for the institution's prioritized development activities (e.g., research & innovation projects, modern infrastructures, professional development, etc.) Oversee situation analysis (e.g., send staff to train overseas, invite experts to come, balance an increase in the tuition fee to attract qualified students with equity
8	Promote network cooperation/linkages	Expand network/partnership with all key stakeholders to maximize students' benefits
9	Provide professional development for all staff	 Ensure regular professional development of all staff (including educational leaders) to meet the set standards Promote a lifelong learning culture and best-practice sharing in the institution/network
10	Focus on quality productivity/services	 Ensure that the quality of students' learning outcomes is the top priority Ensure quality assurance of the product (qualifications issued to graduates) Focus on social benefits (quality first) rather than a businesses or profits Balance the institution's political engagement with its vision, mission, and goal

Source: Processed Data by Researchers

Research Discussion

This study has shown that there are a number of roles that HEI leaders should play to be effective in their capacity as educational leaders to support Cambodian graduates and prepare them for contemporary Cambodia. These roles are central to the need to produce university graduates who are capable of contributing to the development of Cambodia and helping it to achieve its development vision and aspirations to become a knowledge-based society (Heng, 2023, 2024; Heng &

Doeur, 2024; Rectangular Strategy for Growth, Employment, Equity, and Efficiency: Building the Foundation toward Realizing the Cambodia Vision 2025 (Phase IV), 2018). It is important to note that one of the roles of HEI leaders is to develop research capacity to drive innovation. This is in line with the current trend toward research and innovation that the MoEYS and relevant stakeholders are trying to promote (Heng et al., 2023).

This study has also revealed that HEI leaders need to possess a range of competencies in order for them to play their roles effectively. These competencies reflect the need to ensure that HEIs can function well, particularly in terms of teaching, research, and service. For instance, the findings showed that promoting stakeholder engagement is one of the key competencies for academic leaders. This aligns with the global trend toward the internationalization of higher education, in which universities need to expand their international cooperation by engaging both local and international partners (Sok & Bunry, 2021). In addition, leading and managing financial resources is crucial for the sustainability and survival of HEIs, as most HEIs in Cambodia are privately operated and rely mainly on tuition fees for operation (Sam & Dahles, 2017).

The present study identified a number of challenges faced by HEI leaders in their efforts to build qualified graduates to contribute to developing human capital in Cambodia. This finding is in line with previous research investigating the higher education landscape in Cambodia. For example, one of the challenges is related to leadership quality and capacity, as this is a critical skill for effective leadership. Ban & Heng (2023) have noted that many university leaders in Cambodia were appointed based on a political basis or network. Some of them lacked the capacity to lead their institutions; thus, leadership quality is a challenge that needs to be addressed. Another area of challenge is related to research and innovation – a critical issue requiring considerable attention from concerned stakeholders to ensure academic leaders in Cambodia can promote research among academic staff and students. As Sok & Bunry (2024) noted, to promote Cambodian higher education, it is important to address several challenges, one of which is to address "the lack of a supportive national funding model for the higher education sector" (p. 20).

Regarding the strategies to ensure HEI leaders can best prepare Cambodian graduates for the world of work, this study has identified a number of important strategies that could help educational leaders in Cambodia serve their roles well. One strategy worth highlighting is the need to set the institution's clear vision. This is important for Cambodian HEIs to improve the quality of higher education in Cambodia. As Kian-Woon et al. (2010) found, Cambodian universities lacked a clear vision and mission for research and development, preventing them from playing a critical role in promoting higher education research. Thus, this deficiency needs to be addressed. Heng & Sol (2021) also noted that Cambodian universities need to "develop a clear research policy that defines research expectations,

requirements, and rewards" (p. 16). In addition, it is essential to develop clear institutional and national research visions to contribute to promoting research and the quality of higher education in Cambodia.

CONCLUSION

This study has examined the roles and competencies of HEI leaders in Cambodian higher education. The findings showed that Cambodian educational leaders need to play several critical roles and possess a number of competencies for them to ensure they can contribute to building human capital in Cambodia more effectively. The study also identified several areas of key challenges that need to be addressed to promote effective educational leadership. In addition, the study found a number of strategies that HEI leaders need to attend to in order to best prepare Cambodian graduates for the real world after university.

While the present study contributes to the existing body of work concerning educational leadership and the challenges facing higher education in Cambodia, it provides insights into what should be done to ensure higher education leaders can play their roles more effectively to contribute to achieving Cambodia's vision for 2030 and 2050. The study also sheds light on the roles and competencies that HEI leaders should play and possess. This is important for leadership training and professional development programs aimed at developing leadership capacity and quality of educational leaders in Cambodian higher education.

In addition, the present study provides insights for future research that is needed to gain a deeper understanding of what should be done to improve the higher education landscape in Cambodia, particularly in terms of promoting the quality of teaching, enhancing higher education research, and increasing the scope and effectiveness of services provided by universities to the community and society at large. Only when institutions of higher learning can play their roles effectively can the Cambodian higher education sector effectively contribute to building human capital in Cambodia.

REFERENCES

- Asian Development Outlook 2018 Update: (Asian Development Outlook). (2018). Asian Development Bank. https://doi.org/10.22617/FLS189567-3
- Azcona, G., Chute, R., Dib, F., Dookhony, L., Klein, H., Loyacano-Perl, D., Randazzo, D., & Reilly, V. (2008). *Harvesting the Future: The Case for Tertiary Education in Sub-Saharan Africa*. https://www.foresightfordevelopment.org/sobipro/54/358-harvesting-the-future-the-case-for-tertiary-education-in-sub-saharan-africa
- Ban, T., & Heng, K. (2023). Improving the quality of Cambodian higher education: Key challenges and suggestions. *Cambodian Journal of Educational Research*, *3*(2), 35–61. https://doi.org/10.62037/cjer.2023.03.02.03

- Burchi, F. (2006). Identifying the role of education in socio-economic development. *International Conference on Human and Economic Resources*, 193–206. https://www.idos-research.de/fileadmin/migratedNewsAssets/Files/Burchi_Intern.Conf.pdf
- Chamnan, P., & Ford, D. (2004). Cambodian Higher Education: Mixed Visions. In *Asian Universities: Historical Perspectives and Contemporary Challenges*. The Johns Hopkins University Press.
- Cambodia Economic Update, December 2022: Navigating Global Economic Headwinds. (2022). World Bank Group. https://www.worldbank.org/en/country/cambodia/publication/cambodia-economic-update-december-2022-navigating-global-economic-headwinds
- Dalkey, N. C. (1972). The Delphi method: An experimental study of group opinion. In *Studies in the quality of life: Delphi and decision-making* (pp. 13–54). Lexington Books.
- Dara, V. (2022). *PM hails Cambodian teachers' invaluable sacrifices, devotion*. The Phnom Penh Post. https://www.phnompenhpost.com/national/pm-hails-cambodian-teachers-invaluable-sacrifices-devotion
- Dy, S. (2004). Strategies and Policies for Basic Education in Cambodia: Historical Perspectives. *International Education Journal*, *5*, 90–97. https://eric.ed.gov/?id=EJ903840
- Education congress: The education, youth and sport performance in the academic year 2022-2023 and goals for the academic year 2023-2024. (2023). https://planipolis.iiep.unesco.org/sites/default/files/ressources/cambodia_ed ucation_congress_report_2022-2023_eng.pdf
- Fostering an Inclusive Digitalisation Transformation in Cambodia. (2020). https://set.odi.org/wp-content/uploads/2020/06/Fostering-an-Inclusive-Digitalisation-Transformation-in-Cambodia-Final.pdf
- Franklin, K. K., & Hart, J. K. (2006). Idea Generation and Exploration: Benefits and Limitations of the Policy Delphi Research Method. *Innovative Higher Education*, 31(4), 237–246. https://doi.org/10.1007/s10755-006-9022-8
- Hangchuon, N. (2022). Education reform priorities.
- Heng, K. (2023). Cambodia's aspirations to become a knowledge-based society: Perspectives of Cambodian university students (138). https://cdri.org.kh/storage/pdf/Wp 138_Aspirations to Become a Knowledge-Based Society_1683818200.pdf
- Heng, K. (2024). Understanding Cambodian Provincial University Students' Perspectives on Cambodia's Vision to Become a Knowledge-Based Society. *Sage Open*, 14(2). https://doi.org/10.1177/21582440241242197

- Heng, K., & Doeur, B. (2022). Digital transformation in higher education: Key to enhancing Cambodia's higher education sector. *Cambodian Journal of Educational Research*, 2(1), 146–156. https://doi.org/10.62037/cjer.2022.02.01.09
- Heng, K., & Doeur, B. (2024). Cambodia's aspirations to become a knowledge-based society: Challenges and recommendations. *Policy Futures in Education*, 22(8), 1647–1661. https://doi.org/10.1177/14782103241234408
- Heng, K., Meas, S., & Heng, K. (2023). Developing a Vibrant Research Ecosystem in Cambodia: Recent Initiatives and Future Directions. *Cambodian Journal of Education and STEM*, 1(2), 81–104. https://doi.org/10.62219/cjes.2023127
- Heng, K., & Sol, K. (2021). Academic research in Cambodia: Progress, challenges, and ways forward. *Cambodian Journal of Educational Research*, 1(2), 6–23. https://doi.org/10.62037/cjer.2021.01.02.02
- Heng, K., & Sol, K. (2023). Skills mismatches in Cambodian higher education: Major causes and possible solutions. *Cambodian Journal of Educational Research*, *3*(1), 76–91. https://doi.org/10.62037/cjer.2023.03.01.04
- Hsu, C., & Sandford, B. A. (2007). The Delphi Technique: Making Sense of Consensus. *Practical Assessment, Research, and Evaluation*, 12(1), 10. https://doi.org/https://doi.org/10.7275/pdz9-th90
- Kian-Woon, K., Sopheap, C., Chinda, H., Sedara, K., Baromey, N., & Vimealea, T. (2010). *Scoping study: Research capacities of Cambodia's universities*. http://hdl.handle.net/10625/48371
- Madhur, S. (2014). *Cambodia's Skill Gap: An Anatomy of Issues and Policy Options* (98; 98). https://cdri.org.kh/publication/cambodia-s-skill-gap-an-anatomy-of-issues-and-policy-options
- Matching aspirations: Skills for implementing Cambodia's growth strategy. (2012). http://documents1.worldbank.org/curated/en/918971468232487028/pdf/673 490SR0P11740lish021Mar120preview.pdf
- McMahon, W. (2009). Higher Learning, Greater Good: The Private & Social Benefits of Higher Education. *Http://Lst-liep.liep-Unesco.Org/Cgi-Bin/Wwwi32.Exe/[In=epidoc1.in]/?T2000=027209/(100)*.
- Rany, S., Zain, A. N. M., & Jamil, H. (2012). Cambodia's Higher Education Development in Historical Perspectives (1863-2012). *International Journal of Learning and Development*, 2(2), 224. https://doi.org/10.5296/ijld.v2i2.1670
- Rectangular Strategy for Growth, Employment, Equity, and Efficiency: Building the foundation toward realizing the Cambodia vision 2025 (Phase IV). (2018). Royal Government of Cambodia. http://cdc-crdb.gov.kh/en/strategy/documents/Rectangular_Strategy_Phase_IV_Eng.p

df

- Report of Cambodia Socio-Economic Survey 2019/20. (2020). National Institute of Statistics, Ministry of Planning. https://www.nis.gov.kh/nis/CSES/Final Report of Cambodia Socio-Economic Survey 2019-20_EN.pdf
- Robbins, L. (1997). Consumption and the Trade Cycle. In *Economic Science and Political Economy* (pp. 117–132). Palgrave Macmillan UK. https://doi.org/10.1007/978-1-349-12761-0_9
- Sam, C., & Dahles, H. (2017). Stakeholder involvement in the higher education sector in Cambodia. *Studies in Higher Education*, 42(9), 1764–1784. https://doi.org/10.1080/03075079.2015.1124851
- Sok, S., & Bunry, R. (2021). Internationalization of higher education in Cambodia: toward an agenda for higher education development. *International Journal of Comparative Education and Development*, 23(3), 193–211. https://doi.org/10.1108/IJCED-08-2020-0049
- Sok, S., & Bunry, R. (2024). Higher Education in Cambodia. In L. Pe Symaco (Ed.), *Higher Education in Southeast Asia* (Vol. 49, pp. 5–18). Emerald Publishing Limited. https://doi.org/10.1108/S1479-367920240000049002
- The Sustainable Development Goals Report 2017 Goal 4. (2017). https://unstats.un.org/sdgs/report/2017/Goal-04/
- Tilak, J. B. G. (2016). *Public-Private Partnership in Education: A Rigorous Review*. https://headfoundation.org/wp-content/uploads/2020/11/thf-papers_Public_Private_Partnership_in_Education.pdf
- *United Nations Millennium Declaration.* (2000). https://www.un.org/en/development/desa/population/migration/generalasse mbly/docs/globalcompact/A_RES_55_2.pdf
- Wang, Y. (2012). Education in a changing world: Flexibility, skills, and employability. http://documents.worldbank.org/curated/en/517491469672142098