The 2nd Biennial Conference of Comparative Education Society of Cambodia

Envisioning Education 2030: New Models of Education

📅 **14-15 October 2021**

📍 **Kirirom Institute of Technology/Online**

CESCam
Comparative Education
Society of Cambodia

CDRI
Cambodia Development Resource Institute

Kirirom
Institute of
Technology

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Welcome Message

Dear Esteemed Colleagues,

I would like to warmly welcome you all to the second biennial conference of the Comparative Education Society of Cambodia co-hosted by the Kirirom Institute of Technology and the Cambodia Development Resource Institute on October 14-15, 2021. Over the past two years, the global pandemic has greatly impacted every aspect of our lives, and education has been transformed, shifting from physical classroom to the online delivery. The ongoing changes which we are now living through may remain, requiring all of us to think about the types and modality of education that fit with the "new normal" in education. Hence, our CESCam Conference this year will highlight critical discussions on the theme "Envisioning Education 2030: New Models of Education."

The upcoming Conference will be an opportunity for education scholars, policymakers, practitioners and researchers to be reconnected in person and virtually to reflect on and share their experiences, including both challenges and best practices during this transformational period. The Conference is a platform where we can promote our communication and collaboration which further open up our dialogic space and insight in the development of education and institutional practices, particularly concerning the digital turn in higher education. The conference also serves as a proof that our tenacity, commitment and resilience have enabled us to overcome the turmoil caused by the global pandemic, making CESCam a stronger community.

On behalf of the Conference Committee, I would like to wish everyone success and good health, and I look forward to meeting everyone both virtually and in person at the Kirirom Institute of Technology – a green campus with beautiful scenery and nice weather.

With regards,
Leng Phirom
President of CESCam

Acknowledgements

This conference would have never been possible without the support from a number of people and institutions. Our thanks go to all members of the CESCam Scientific Committee and the Organising Committee for spending valuable time and efforts in planning and organising the conference. We are grateful to the following institutions who support us financially and technically:

About CESCam

The Comparative Education Society of Cambodia (CESCam) was established in 2018 by a group of researchers of Cambodia Development Resource Institute (CDRI) and scholars of some Cambodian universities. It was inaugurated during the 11th Biennial Conference of Comparative Education Society of Asia (CESA) hosted by CDRI in Siem Reap in May 2018. Approximately 350 participants from over 150 academic institutions across Asia and beyond attended this regional conference.

With a vision to promote comparative education for higher learning in Cambodia, CESCam intends to foster teaching and research in the area of comparative education in Cambodia, produce publication about Cambodian education and beyond, contribute to advancing philosophy, methodology and methods in comparative education in Cambodia, and establish networks with local and international research and educational institutions and other counterpart societies.

The first biennial conference of CESCam on "Education for Shared Community and Prosperity" was hosted by CDRI in Siem Reap on 6–7 December 2019, with the financial contributions from the Australian's Department of Foreign Affairs and Trades (DFAT) through The Asia Foundation, the Swedish International Development Cooperation Agency (Sida), the Lancang-Mekong Cooperation Special Fund through the Embassy of China in Cambodia and Cambodia's Ministry of Foreign Affairs and International Cooperation, and the Swiss Agency for Development and Cooperation (SDC). It was attended by over 100 participants from 12 different countries, discussing a range of topics, such as curricular and pedagogical innovation, (global) citizenship education, globalisation and internationalisation of education, and vocational and technical education. This academic discourse has contributed significantly to theoretical and methodological perspectives in the development of comparative education as a field of study in Cambodia and beyond.

To further promote the debate among scholars, researchers, practitioners and policymakers about the vital role of education in a rapidly changing world, largely driven by technological innovation and the ongoing COVID-19 pandemic, CESCam is organising its Second Biennial Conference on the theme "Envisioning Education 2030: New Models of Education", to be held on 14-15 October 2021. Given the current situation of COVID-19 pandemic in Cambodia, CDRI will co-host the conference with the Kirirom Institute of Technology (KIT) in hybrid format (physically at KIT and virtually via Zoom), supported financially by Australian DFAT through The Asia Foundation's Ponlok Chomnes Initiative.

For more information about CESCam, please visit: www.ces-cam.org

About CDRI

CDRI works to produce independent, objective, high quality policy-relevant development research, to maximise its accessibility to policy makers, influencers and stakeholders and to have it affect policy in interrelated areas that are key for Cambodia's sustainable development.

- Policy Research in Agriculture and Rural Development
- Development Economics and Trade
- Educational Research and Innovation
- Natural Resource and Environment
- Governance and Inclusive Society

CDRI undertakes its programmes and projects in partnership with Cambodian government institutions and their international development partners, other research and tertiary education institutions and civil society organisations. It disseminates its research knowledge and products through a number of communication strategies: conferences, workshops, seminars, broadcast media, print media, library collection and information sharing, small group communication and interpersonal communication.

Our Vision for Cambodia: CDRI is an independent and resilient center of research excellence for innovative ideas to influence policy that impacts on Cambodia's development.

Our Vision: Inclusive and sustainable development through independent policy research and developing capacity.

Our Mission: CDRI's mission is to generate high quality, influential and impactful knowledge through policy research and capacity development to contribute to Cambodia's prosperity.

Our Core Values: MERIT

- We create the professional conditions that nurture merit.
- We foster excellence, as a professional and personal habit.
- We practice a culture of respect and responsibility.
- We pledge to live and act with independence and integrity.
- We build deep trust and transparency, capable of achieving the mission and vision of the Institute.

About CESCam2021

The ongoing global COVID-19 pandemic has caused major disruptions to education around the globe. The necessity of social distancing to prevent the spread of COVID-19 has forced many educational establishments to close and adopt online and distance education. It has been argued that technology-assisted distance education has had various benefits, including the increase in teaching efficiency, flexibility in time and place, and expansion in education accessibility. On the other hand, the forced adoption has also posed a wide range of challenges and obstacles. For instance, students have different levels of computer literacy, most of whom are still at a basic level. This has made online learning extremely difficult as they have had to navigate and self-administer their own learning online. A lack of infrastructure such as internet connections and access to technology are other challenges presented in digital education with COVID-19 highlighting even further the digital divide between urban and rural communities.

It is not just education that has been changed by the need to rapidly adopt new technologies, but also the increasing evolvement towards Industry 4.0, which will require graduates with new knowledge and skills particularly when it comes to using technology. A recent study by the World Economic Forum identified that by 2025, over 80 million professions will become less relevant or disappear; and that these will be replaced by new jobs, some of which have yet to exist. Hence, in the next 5 to 10 years there will be an increasing role for education to prepare graduates with the new employment skills, to meet the challenge of the projected dramatic transformation of local and global economies, knowledge and technologies and future career and job opportunities.

Programme

08:00-09:00	**On-Site Registration**
09:00-09:30	• Welcoming Remarks by Dr Eng Netra, Executive Director, Cambodia Development Resource Institute • Opening Remarks by Ms Meloney Lindberg, Country Representative, The Asia Foundation
09:30-10:10	**Keynote Presentation: From the Origins of Comparative Education to the Cambodian Pioneers** Speaker: Prof. Dr Chhem Kieth Rethy, Honorary Distinguished Fellow, Asian Vision Institute • Group Photo
10:10-10:30	**Coffee Break**
10:30-12:00	**Plenary Discussion 1: Reimagining Education for 2030 and Beyond** **Moderator**: Dr Leng Phirom, President, Kirirom Institute of Technology **Panelists:** • H.E Dr Hul Seingheng, Director General of Science, Technology and Innovation, Ministry of Industry, Science, Technology and Innovation • H.E Dr Sann Vathana, Under Secretary of State, Ministry of Education, Youth and Sport • Dr Song Sopheak, Centre Director, Cambodia Development Resource Institute • Dr Ky Ravikun, Vice-Rector for International Relations and Research, Phnom Penh International University • Ms Eng Muyngim, Research Officer, University of Puthisastra
12:00-13:30	**Lunch**
13:30-15:00	**Parallel Session 1**
15:00-15:30	**Coffee Break**
15:30-17:00	**Plenary Discussion 2 – Entrepreneurial Leaders of the Future** **Moderator**: Dr Khieng Sothy, Founding President, Cambodia University of Technology and Science **Panelists:** • Dr Taing Nguonly, Executive Director, Techno Startup Centre • Dr Sam Chanphirun, Deputy Director, Phnom Penh Teacher Education College • Mr Seang Sopagna, President, Young Entrepreneurs Association of Cambodia • Ms Peng Lody, Deputy Chief of Party, PACT Cambodia • Mrs Chea Ratha, Representative, Cambodia Women Entrepreneurs Association
18:00-20:00	**Conference Dinner**

Day 2: 15 October 2021

08:00-09:30	**Plenary Discussion 3 – Building Ecosystem for Higher Education Research** **Moderator**: Dr Tineke Water, Director of Research, University of Puthisastra **Panelists:** • Prof. Dr Lars Balzer, Head of the Evaluation Unit, Swiss Federal University for Vocational Education and Training • Dr Heng Kreng, Head of Department of Scientific Research, Ministry of Education, Youth and Sport • Dr Or Chanmoly, Director of Research, Institute of Technology of Cambodia • Dr Bradley Jensen Murg, Provost and Director of Research, Paragon International University • Ms Pich Charadine, Deputy Executive Director, Cambodian Institute for Cooperation and Peace
09:30-10:00	**Coffee Break**
10:00-11:30	**Parallel Session 2**
11:30-12:00	• Announcement of the New President of CESCam • Closing Remarks by H.E. Dr Hang Chuon Naron, Minister of Education, Youth and Sport
12:00-13:30	**Lunch**

Distinguished Guests

H.E. Dr Hang Chuon Naron
Minister of the Ministry of Education, Youth and Sport

Dr Hang Chuon Naron is currently Minister of Education, Youth and Sport and the Vice-Chairman of the Supreme National Economic Council (SNEC). He holds master's and PhD degrees in international economics from the Moscow State Institute of International Relations (1982-1991), an advanced diploma in insurance from the Chartered Insurance Institute (CII), United Kingdom, and the Malaysian Insurance Institute (MII). Since 2008, he has been an associate of the CII and the MII. In 2012, he received a master's degree in international law (LLM) from the Royal University of Law and Economics and the University of Lyon 2, France, and was awarded a diploma in the Law of the Sea by the Rhodes Academy of Oceans Law and Policy. He has also worked in various diplomatic missions and research institutions as a political and economic analyst. From 1999, he held various positions at the Ministry of Economy and Finance, such as research coordinator of the economic advisory team and first deputy director of the Budget and Financial Affairs Department. Since 2000, he introduced reform to school financing by channelling funds directly to schools, leading to the establishment of the school operating budget. He is the author of a number of government policy papers and socio-economic development strategy and books on Cambodian economy and public finance.

Prof. Dr Chhem Kieth Rethy
Honorary Distinguished Fellow, Asian Vision Institute

Professor Chhem Kieth Rethy is a medical doctor, science diplomat, educator and historian with extended experience in Digital Science & Technology, Global Health Diplomacy, Nuclear Technology Policy, and Executive Education. He holds a MD, a PhD in Education and a PhD in History. He has published more than 100 scientific articles, edited 17 textbooks and has been invited as a keynote speaker in more than 70 countries. He was a Professor of Radiology in Canada (McGill), Singapore (NUS), Austria (Vienna Medical University) and Japan (Hiroshima, Nagasaki, Fukushima Medical University) for 30 years. He was the Director of the Division of Human Health at the International Atomic Energy Agency (IAEA) from 2008 to 2014. From 2014 to 2019, he was the Executive Director of the Cambodian Development Resource Institute (CDRI). Currently, he is an Honorary Distinguished Fellow at the Asian Vision Institute and a member of the Advisory Board of the International Centre for Higher Education Innovation (UNESCO) at the Southern University of Science and Technology in Shenzhen. In May 2019, Professor CHHEM Kieth Rethy was appointed Minister Delegate, Attached to the Prime Minister. In August 2020, he was also appointed as Secretary of State at the newly created Ministry of Industry, Science, Technology and Innovation.

Dr Eng Netra
Executive Director, Cambodia Development Resource Institute

Dr Eng Netra has a long and distinguished career in development policy research specialising in governance and inclusive society, along with research management and policy influencing. Her appointment as Executive Director of CDRI caps a history of managerial and leadership positions over a 15-year research career at CDRI. She began her journey with CDRI in 2003 as a research associate in the Policy Oriented Decentralisation Research Programme. From 2006-2010 and from 2015-18, Dr Eng was research fellow and the head of the governance unit (now the Centre for Governance and Inclusive Society). She oversaw many research studies that have produced original, high quality and locally-owned research focusing on Cambodia's political and institutional transformation over the past 20 years, particularly on the critical sub-national governance reforms. Dr Eng is also active in a range of international and regional networks of governance and development scholars, and has published in international peer-reviewed journals and books. Prior to her appointment as the Executive Director, she served as Director of Research. Dr Eng has a PhD in political science from Monash University.

Ms Meloney Lindberg
Country Representative, the Asia Foundation

Ms Meloney Lindberg has been the Foundation's country representative in Cambodia since 2017. She oversees a diverse portfolio of projects including the capacity development of knowledge sector institutions to undertake quality research to inform public policy analysis and dialogue. She also engages with private waste collection firms and local stakeholders to test interventions to increase accountability and responsiveness in municipal solid waste collection and management. Her women's empowerment portfolio includes projects that advance women's economic opportunities through skill development programs for tech entrepreneurs and high school students. She also works to improve women's safety and security by building government capacity to deliver legal services to survivors of gender-based violence and conducts public safety audits to highlight the safety of urban women at the sub-national level. The Cambodia country office of the Asia Foundation has also been focusing on increasing environmental resilience, and has conducted a household level survey to better understand the gender dimensions of water and poverty. To further strengthen regional cooperation, the office supports Cambodians to participate in study exchanges, workshops and research across Asia and the United States.

Plenary Discussion Panelists

Dr Leng Phirom
President, Kirirom Institute of Technology

Dr Leng Phirom is currently the President of the Kirirom Institute of Technology. He holds a PhD in comparative and international higher education from the Ontario Institute for Studies in Education (OISE), University of Toronto, in Canada. Prior to joining KIT, he was a research fellow and the head of CDRI's education unit, where he led a number of research projects on higher education governance and management, comparative education, internationalisation, and science and innovation education. In the past, he worked as a higher education consultant at the Southern University of Science and Technology in Shenzhen, China, where he helped with the establishment of the International Centre for Higher Education Innovation – A UNESCO Category II Institute - whose role is to support the development of ICT in higher education in developing countries. At present, Dr Leng also serves as the president of Comparative Education Society of Cambodia (CESCam) – a Cambodian association of scholars, researchers, and practitioners with a keen interest in comparative and international education. He is an advisor to the National Council for Science Technology and Innovation (NCSTI), the National Institute for Science Technology and Innovation (NISTI), the Centre for Inclusive Digital Economy (CIDE, AVI) and the Comparative Education Society of Asia (CESA).

H.E. Dr Hul Seingheng
Director General of Science, Technology and Innovation,
Ministry of Industry, Science, Technology and Innovation

Dr Hul Seingheng is currently director general of the General Department of Science, Technology and Innovation at the Ministry of Industry, Science, Technology and Innovation. He has more than ten years' experience in teaching and research in higher education and in policy development and implementation, particularly, more recently, with a focus on science, technology and innovation (STI). His passion is the promotion of STI education and research for industries, and for micro, small and medium enterprises (MSMEs), and he endeavours to boost the socio-economic development of Cambodia. Academically, Dr Hul's formal engineering education includes a PhD (2010), a master's degree (2006), and a bachelor's degree (2004).

H.E. Dr Sann Vathana

Under-Secretary of State, Ministry of Education, Youth and Sport

Dr Sann Vathana served as under-secretary of state, at the Ministry of Education, Youth and Sport (MoEYS), overseeing the science and research portfolio in the higher education. From 2008 to 2016, he was the deputy secretary general of the Council for Agricultural and Rural Development of the Council of Ministers, and in charge of the secretariat for the Social Protection Coordination Unit. He was responsible for the development of the first National Social Protection Strategy and is the author of a number of books and articles relating to social protection in Cambodia. From 2017 to 2018, he was assigned to the newly established National Social Protection Council, where he was involved in the development and implementation of the National Social Protection Policy Framework. Currently, at the MoEYS, he manages the Centre for Digital and Distance Education (CDDE) and the Research Creativity and Innovation Fund (RCI-Fund). Furthermore, in 2015, he became the president of the GoGoCambodia social movement, campaigning for the togetherness and unity of youth from all segments of Cambodia to promote national pride. Under the spirit of "Believe to Achieve", in July 2018, GoGoCambodia claimed the Guinness World Record for the longest hand-woven scarf (or krama). Dr Sann received his MSc in tropical agriculture and PhD in international agriculture from the Georg-August University Goettingen. He has also been

Dr Song Sopheak,

Director of the Centre for Educational Research and Innovation, Cambodia Development Resource Institute

Dr Song Sopheak is director of CDRI's Centre for Educational Research and Innovation. He joined CDRI as a research fellow in October 2016 after undertaking post-doctoral research at the Global Career Design Centre of Hiroshima University. He is currently leading a long-term research project on technical and vocational education and training with a focus on workforce development and employer engagement. He also manages several research projects on higher education in Cambodia. His research has focused on teaching and learning, workforce development, vocational and professional education, and the links between universities and industry. Dr Song holds a PhD in education and human science from Hiroshima University, Japan.

Dr Ky Ravikun
Vice-Rector for International Relations and Research,
Phnom Penh International University

Dr Ky Ravikun earned her bachelor's, master's and PhD degrees from People's Friendship University (formerly Patris Lumumba Friendship University). In higher education management, she started as academic coordinator, and moved on to be vice-president for students' affairs, academic affairs and international relations, and vice-rector for international relations and research, a position she was appointed to in 2020. She also lectures to undergraduate and postgraduate students. Dr Ky has been much involved with quality assurance (QA) since 2005, when she was selected as one of the external assessors by the Accreditation Committee of Cambodia (ACC), which was established by the Royal Government of Cambodia and whose mandate is to administer accreditation to all higher education institutions (HEIs). This is to ensure and promote the quality of higher education in Cambodia. Since then, she has been involved in assessment of the foundation year programs (from 2005 to 2010) and institutional assessments in 2015 to 2019, which required her to assess more than 60 HEIs in Cambodia in her assigned capacity by ACC as a team member and subsequently as team leader. She has also attended many seminars/workshops/forums on higher education management and QA at national and international levels. In addition, she has played an active role in the framework of SHARE

Dr Sam Chanphirun
Deputy Director, Phnom Penh Teacher Education College

Dr Sam Chanphirun is currently a deputy director of Phnom Penh Teacher Education College. He earned his PhD at Vrije Universiteit, Amsterdam, in the Netherlands in 2016, prior to which, from 2014 to 2016 he was an international research fellow at Griffith University, Australia. He completed his master's degree in educational administration from Hiroshima University, Japan, in 2010. He also obtained a bachelor's degree in education in teaching English as a foreign language at the Royal University of Phnom Penh, in 2004. His research focuses on educational issues, ranging from primary to tertiary education. His research interests are centred on educational planning and policy, teacher education, institutional governance, higher education, and English education.

Dr Khieng Sothy
Founding President, Cambodia University of Technology and Science

Dr Khieng Sothy is the founding president of Cambodia University of Technology and Science and advises the National Council of Science, Technology and Innovation. He served as the vice-president (research and administration) at Kirirom Institute of Technology between 2019 and 2021. Dr Khieng is an experienced and accomplished scholar, educator and higher education administrator. Before joining KIT, he spent ten years at CDRI, where he co-founded and was the head of the education unit from 2014 to 2018, and was also the co-editor of a book entitled "Cambodian Education 2015: Employment and Empowerment". In addition, he was the author of a book called "The dawn of social enterprise in Cambodia?" which was published based on his doctoral research. His inter-disciplinary field of research interest includes post-secondary education, social entrepreneurship and innovation, and science and technology. He has held several research fellowship appointments, including at Griffith University, and the University of Melbourne (Australia), and the Swiss Federal Institute for Vocational Education and Training (Switzerland). Dr Khieng has published peer-reviewed articles in various international journals. He co-founded Comparative Education Society of Cambodia and is currently serving as its board member and as an international advisory board member in "Compare: A Journal of

Mr Seang Sopagna
President, Young Entrepreneurs Association of Cambodia

Mr Seang Sopagna is the president of the Young Entrepreneurs Association of Cambodia, the president of the Cambodia-ASEAN International Institute and managing director of Bridge International Translation Company. He is also a co-director for public and international relations of the Asian Association of the Translation Industry, based in Bangkok, Thailand. In addition, he serves as a member of the Board of Directors at Cambodia Development Center. He holds a master's degree in public policy and management from Carnegie Mellon University, Australia, and a master's degree in economics from the Royal Academy of Cambodia.

Ms Eng Muyngim
Research Officer, University of Puthisastra

Ms Eng Muyngim has a bachelor's degree in pharmacy from the University of Health Science, Phnom Penh, and a master's degree in physical activity and health science from the University Paul Sabatier, Toulouse III. She also has work experience in pharmacy, community and public health, as well as adapted physical activity. Her focus is on "green prescriptions" and how physical activity can contribute to better health for communities. She is a UNESCO youth and sport taskforce member and was recently awarded a grant to write culturally responsive physical activity guidelines for Cambodians based on the strategy from the WHO. Munge has experience of managing research projects and teams for the Netherlands Development Organisation (SNV) on the impact of the Behaviour Change Communication Towards Improved Cooking Practices and Clean Cook-stove Adoption among rural Cambodian households. She has also been involved in proposal writing and the management of recruitment and data collection for a youth leadership program, called "Just for Kicks", with Children's Future and took a major role in co-ordinating the Youth Mental Health project at UP which is currently in progress. In addition, she has been working on a current research project based on the performance of Covid-19 diagnostics in Cambodia with the University of California, Davis, USA.

Dr Taing Nguonly
Executive Director, Techno Startup Centre

Dr Taing Nguonly has recently been appointed as executive director of the Techno Startup Centre, a government-funded startup accelerator under the Ministry of Economy and Finance, Cambodia. Under the framework of the Techno Startup Centre, he has initiated the concept of an API Economy model to accelerate tech startup development in Cambodia. In addition, he leads a technical team to implement and operate the Cambodia Data Exchange (Comdex) Platform to facilitate a secure data exchange between multiple information systems for both the public and private sectors. Data exchange in Comdex is legalised through a sub-decree to pave the way for innovation through an open data model enabling digitalisation, not only for public services but also for the business operations of the private sector. He has more than 15 years of working experience in the software industry. Since 2009, he has also been a visiting lecturer at the Royal University of Phnom Penh, Cambodia. He received his bachelor's degree in computer science from the Royal University of Phnom Penh, his master's degree in ICT from Waseca University, Japan, and his PhD in computer science from the Dresden University of Technology, Germany. His research areas are run-time variability, anticipated adaptation, unanticipated adaptation, context-aware application, the programming model for IoT, and software evolution. He is especially interested in applying research and experimental development to explore the source of innovation for startups.

Ms Peng Lody
Deputy Chief of Party, PACT Cambodia

Ms Peng Lody is deputy chief of party at Pact Cambodia for the Women Entrepreneurs Act (WE Act) project, funded by USAID. She graduated from the Institute of Foreign Languages with a bachelor's degree in education in English in 2008, and pursued a master's degree in social work in 2016 at the RUPP. She has over ten years of experience working for diverse NGOs including Oxfam GB, the International Labor Organization (ILO), and World Vision. The development areas she has worked in cover gender equality and natural resource management, youth employment and entrepreneurship, national employment policy, and so on. She is passionate about promoting livelihoods and economic stability for young people and women through skills development, employment and entrepreneurship. Ms Peng has a desire to empower young women and young people in general, and to achieve a greater social impact through a strong and healthy entrepreneurship ecosystem in Cambodia. She believes that every actor in the system contributes to improving the economic, social, and environmental status in which our people can work and live: and that those conditions will reap benefits. She has been dedicated to working to promote the constructive engagement of various key stakeholders, especially those from the entrepreneurship ecosystem, to engage in dialogue and interventions to address the issues of concern together.

Dr Or Chanmoly
Director of the Research and Innovation Center
Institute of Technology of Cambodia

Dr Or Chanmony graduated from Kyushu University, Japan, in 2014, with a PhD in petroleum engineering. Prior to his PhD studies, he completed a master's degree in petroleum geology at Gadjah Made University, Indonesia, and an engineering degree in geotechnical engineering at the Institute of Technology of Cambodia (ITC). After graduation, he returned to the Institute of Technology of Cambodia and became a lecturer and then lecturer-researcher. He was promoted to deputy director of the Research and Innovation Center (RIC) and continued in this role for several years. Currently, he is director of the RIC at the ITC, where he is responsible for its smooth management. The Research and Innovation Center has a Techno-Science Research Journal, an incubation center, and five research units with 100 researchers including senior researchers, lecturer-researchers and full-time researchers. More importantly, Dr Or's role is to lead the research and innovation at the RIC to meet the needs of the private sector and society for the development of Cambodia.

Dr Tineke Water
Director of Research, University of Puthisastra

Dr Tineke Water is the director of research at the University of Puthisastra. She holds a PhD from Auckland University of Technology (AUT). For the last 25 years she has worked as a health professional, lecturer and researcher in child/youth and maternal health, public health, and humanitarian environments. Dr Water is the current chair of the academic board at UP. Her research focuses primarily on using qualitative, participatory approaches to undertake research with vulnerable communities. Her current research includes a PACT/USAID funded study for mentorship programs to support women in research and youth-led research to increase civic engagement and to influence policy-/decision-makers. In addition, she is working with partners in the UK, Uganda and SEA on a One Health approach to managing current and future disease outbreaks. Dr Water continues to work with policy think tanks such as the Future Forum and Protocolary SEA to support emerging young researchers. She has a strong background in research ethics and has contributed to publications on ethical research with children and young people, which has been used by organisations such as Ethical Research Involving Children (ERIC) (the Child and Youth Centre, Australia), and the UNICEF research office – Innocentia - as well as developing an institutional review board (IRB) for UP. She continues to supervise international PhD students undertaking participatory research. She is the managing editor for the new Journal of Cambodian Health, director of Hub for One Health, and co-director of the Centre for Child and Youth Health (New Zealand).

Dr Heng Kreng,
Head of Department of Scientific Research,
Ministry of Education, Youth and Sport

Dr Heng Kreng was educated in both Cambodia and abroad. He gained his bachelor's degrees in English language teaching and accounting in Cambodia before he achieved his master's and doctoral degrees in education, majoring in student assessment, from Hiroshima University, Japan. Since graduating in 2014, Dr Heng has worked extensively as a university teacher, academic supervisor, researcher and consultant in the field of education and social policy. His academic and consulting experience includes student assessment, school effectiveness, curriculum development, education policy evaluation, social policy and skills development, and the Program for International Student Assessment for Development (PISA-D). He has written a number of research reports, including the highly-rated reports for the OECD (Organisation for Economic Cooperation and Development) and UNICEF and other publications in peer-reviewed international journals. Currently, he is the director of the Department of Scientific Research (DSR) at the Ministry of Education, Youth and Sport (MoEYS). His research is centred on curriculum development, STEM education, student assessment, school effectiveness, R&D in higher education and comparative higher education.

Mrs Chea Ratha
Founder and CEO of Khmum Technology

Mrs Chea Ratha is an accomplished software executive with over 10 years' experience in software development. She holds a bachelor's degree in information and computer science from the University of California, Irvine, and a master's degree in business administration from California State University, Fullerton. She has worked as a senior financial analyst in California and in Sydney. In each of her workplaces, she has used the synergy of her skills as a software developer and financial analyst to help to grow and improve the business processes of the relevant company. In 2011, she co-founded Versita Pty. Ltd., a software development company, in Australia, and after returning to Cambodia in 2016 she founded Khmum Technology Co., Ltd., a company specialising in e-commerce. Khmum - eShop is an e-commerce platform with an app-based, end-to-end marketplace that connects micro, small and medium enterprises (MSMEs), with a particular focus on women-led businesses, to consumers in Cambodia and beyond. It is driven by a mission to increase digital literacy, promote local products, and create more jobs and opportunities. Besides working in the private sector, Mrs. Chea Ratha is also an advisory board member of the National Council of Science, Technology and Innovation. In addition, she volunteers her time as vice-president with organisations such as the Cambodia Women Entrepreneur Association (CWEA), and the

Dr Bradley Jensen Murg
Provost and Director of Research, Paragon International University

Dr Bradley J. Murg is provost and director of research at Paragon International University. Dr Murg holds positions as the senior academic advisor at Future Forum. He is also a distinguished fellow and senior advisor for research at the Cambodia Institute for Cooperation and Peace, lead editor of the Journal of Greater Mekong Studies, and is a member of the Advisory Board of the International Relations Institute of Cambodia (IRIC) at the Royal Academy of Cambodia. His work is supported by grants from the Social Science Research Council and the International Research and Exchanges Board (both US-based), and focuses on: contemporary international relations in Southeast Asia; the political economy of foreign aid; and the politics of the Greater Mekong Subregion as a whole. Dr Murg graduated Phi Beta Kappa from Emory University, USA, with a BA/MA in philosophy, received a master's degree in economic history from the London School of Economics, and a master's and PhD in political science from the University of Washington. He co-edited the three volume Cambodia 2040 book series – an analysis of Cambodia's future development and foreign relations. He regularly writes about Southeast Asian affairs in The Diplomat, Asia Times, Nikkei, and South China Morning Post.

Prof. Dr Lars Balzer, Head of the Evaluation Unit, the Swiss Federal University for Vocational Education and Training

Prof. Dr Lars Balzer is head of the evaluation unit at the Swiss Federal University for Vocational Education and Training (SFUVET), where he and his team are responsible for questions of evaluation in research, teaching and internal as well as external project work. He studied psychology at the University of Koblenz-Landau / Germany. Then he became research assistant at the Centre for Educational Research (ZepF) at the University of Koblenz-Landau. In 2005 he achieved a doctorate in psychology with a thesis on the evaluation process. Since 2005, he has worked at the SFUVET (formerly the Swiss Pedagogical Institute for Vocational Education SIBP and Swiss Federal Institute for Vocational Education and Training SFIVET). In 2011, he acquired the SVEB-1 certificate from the Swiss Federation for Adult Learning, and from 2014 to 2016 he was senior research fellow at the University of Johannesburg / South Africa. Since 2017 Dr Balzer has worked as a professor at SFUVET. He has more than 20 years of teaching experience, first as an IT trainer and later as a lecturer in various academic and other institutions in the fields of evaluation, diagnostics, social science research methods, and statistics. His projects, research and publications include the evaluation of reform projects in vocational education and training, advice on evaluation projects, the analysis of conditions for successful evaluation projects, and the development and testing of a concept for the early detection and promotion in basic vocational training to prevent apprenticeship drop-out.

Ms Pich Charadine, Deputy Executive Director, Cambodian Institute for Cooperation and Peace

Ms Pich Charadine is the deputy executive director for the Cambodian Institute for Cooperation and Peace (CICP), where she is in charge of research, training and publications. She concurrently serves as the coordinator of the Global Centre for Mekong Studies (GCMS-Cambodia Centre, an official Track II think tank network of the Lancang-Mekong Cooperation). Ms. Pich obtained her bachelor's degree in political science and international relations with High Honours from the Zaman University (Cambodia) and holds a master's degree in dialogue studies (concentrating on political dialogue) (with Merit) from Keele University (United Kingdom). She was nominated for the 2019 US Department of State International Visitor Leadership Program (IVLP) on ASEAN-Nations of the South China Sea – Sovereignty and Rules-based Order. In addition, she was a visiting fellow at the China Institute for International Studies (CIIS) in 2018, and visiting scholar at the China Foreign Affairs University (CFAU) in 2019. She has written and published on various issues relating to Cambodia's political development and its subsequent foreign policy implications. Her focus is on Sino-Cambodia relations (particularly political economy dilemmas, foreign aid policy, and economic statecraft), the ASEAN Regional Framework and the ASEAN-China Partnership, Cambodia's politics and foreign relations, and Mekong sub-regional cooperation, especially with an emphasis on Mekong-Lancang Cooperation.

Parallel Session 1: 14 October 2021, 13:30-15:00

SESSION 1.1: Employability Skills and Labour Market	SESSION 1.2: Evidence-informed Practice and Policy
Moderator: Dr Chea Vatana	**Moderator: Dr Bradley Jensen Murg**
Chea Sathya Student Engagement and Employability Skills Development at a Department of English at a University in Cambodia	*Chea Phal, Hun Seyhakunthy, and Song Sopheak* Permeability in Cambodian Post-secondary Education and Training: A Growing Convergence
Dzhamshed Salomov Examining the Skills Gap in Cambodian Higher Education: A Case Study from Paragon International	*Seng Lyhour, Tep Piseth, Long Panha, Chher Tepirou, and Callum Durward* Knowledge and Perceptions about Cross Infection Control among Patients Attending the University of Puthisastra Dental Clinic
You Saokeo Khantey Determinants of Entrepreneurship Career Intention of Cambodian Undergraduates	*Chea Panhavon , Noy Chorvin, Liv Sopheap, and Chen Vary* Residential College: Case study of Kirirom Institute of Technology (KIT)
Phun Sipha, Srorn Chantrea, Chom Thida, and Kong Kalyan Workforce Survey of Young Cambodian Dentists One Year after Graduation	*Ros Vutha* Research Capacity Building on the Periphery: Strategic Resource Allocation and University Research Productivity in Cambodia and Kazakhstan

SESSION 1.3: STE(A)M Education	SESSION 1.4: The Development of Research Culture
Moderator: Dr Leng Phirom	**Moderator: Dr Heng Kreng**
Ung Uy Lim, Ryuto Minami and Chea Phal Exploring Student Persistence in STEM Programs in Cambodia	*Ros Vutha* Research Capacity Development and Scholarship Building in Disadvantaged Post-Colonial Academic Systems: The Case of Foreign-Trained Cambodian Researchers
Nhem Davut and Nutsa Kobakhidze New Generation School education reform in Cambodia: A farewell to shadow education?	*Norng Sokha and Sam Chanphirun* Promoting Research Culture at a Cambodia Higher Education Institution from a Leadership Perspective: The Case of ACLEDA Institute of Business

Pamela T. Hundana STEAM Education to PK- 6 Learners	*Iana Galai* Teaching Creative Problem-Solving, Research and Collaboration through UX Design Projects in the Context of Online Learning
Ros Dimong, Roma Rino, Oeurn Pheaktra, and Koeun Kalyan Peer-Assisted Learning in General Anatomy Course of Year 2 Dental Students at University of Puthisastra	*Nok Sorsesekha, Tek Muytieng, Chea Phal* Research Engagement of Faculty Member in Cambodian Higher Education

SESSION 1.5: Innovative Model of Education	SESSION 1.6: Professional Education and Training
Moderator: Dr Khieng Sothy	**Moderator: Dr Song Sopheak**
Christian Darnel S. David Facebook as a Supplementary Tool for Online Education	*Khiev Panhavath, Nop Chanpheakhdey, Theng Thanavorntey, Chher Tepirou, and Hak Sithan* An Investigation of the Use of Alcohol and Tobacco among the Students of Faculty of Health Science at University of Puthisastra
Soeun Sopharith The Use of Mobile Text Messaging for Improving Oral Health Behaviors of Students at University of Puthisastra	*Kuon Vannsy* Systematic Review of Skill Sets Required by the Tourism Industries
Mahmudul Hassan and Alamgir Hossain Personalised Virtual Reality-based Training Using an AI-Enabled Reinforcement Learning Framework	*Ing Kvanthai* Skill Formation Systems and Employability at the Company and Industry Levels: the Capacity Development and Challenges of Medium and Higher-skilled Employees
Ouch Dara, Ly Sovanna, Chhoun Thavy, Soy Rasy, Callum Durward Student Perceptions Following the Introduction of Dental Clinical Competency Assessments at the University of Puthisastra	

Parallel Session 2: 15 October 2021 10:00-11:30

SESSION 2.1: Panel Discussion Teacher Education	SESSION 2.2: Gender and Inclusiveness in Education
Moderator: Dr Takayoshi Maki	**Moderator: Dr Tineke Water**
Takayoshi Maki, Yoshitsugu Hirata, Kiichiro Okahana, Ryota Tsukawaki, Asami Shimoda, Sopheak Sophorn, and Nguyen Thi Lan Ngan Exploratory Comparative Study on Teacher Educators' Professional Identity in Southeast Asian Countries	*Nguon Rothsophal, Mech Samphors, Kelly Grace, Whitney Szmodis, and Ung Kimkanika* Feminist Perspectives for the Co-decolonization of Gender Equality in Cambodian Higher Education
	Ryuto Minami Analysis of Parental Involvement in Early Childhood Development in Cambodia
	Chiaki Miwa An Analysis of Classroom Observations at Public Preschools and Community Preschools in Rural Cambodia
	Chea Dara Re-imagining Cambodia's Future Education Under a Lifelong Learning Ecosystem

SESSION 2.3: Language Education	SESSION 2.4: Online Education and Training
Moderator: Chea Sathya	**Moderator: Dr Ky Ravikun**
ខួយ ប៊ុនឡួត វិចារណកថាទៅលើកម្រិតនៃភាពអាចអានបាននៃអត្ថបទអំណានរបស់សៀវភៅគោលភាសាខ្មែរ	*Balzer Lars, Kuon Vannsy, Leng Phirom, Khieng Sothy, Noy Chhorvin, and Chea Panhavon* Teaching and Learning Challenges at TVETS and HEIs During the Covid-19 Pandemic:
Sovann Pichpisey Educational Action Research and Its Utilitarian Roles in English as a Foreign Language Institution: A Study of a Higher Education Institution in Cambodia	Be Borey Teachers' Perception of Readiness in Online Teaching and Learning in Higher Education in Cambodia

Chihiro Hasebe
The Development of Language Policies about Non-dominant Languages in Thailand: The Historical Significance of Mother Tongue-Based Multilingual Education (MTB-MLE) for Hill Tribes

Water, T., Eng, M., Hoeur, S., Saut, S., Boy, V., Smith, E., & Collins, R.
The Experience of Having to Rapidly Adapt to Online Learning for Teachers at a Private HEI in Cambodia: A Hermeneutic Phenomeno-logical Study.

SESSION 2.5:
Blended Learning

Moderator: Dr Chea Phal

Norng Sokha, Hok Pisith, and Sau Lay
Adoption of the Theory of Planned Behaviour on the Study of Blended Learning at Higher Education Institutions in Cambodia

Kaing Sopheap
Implementing Conditions of a Hybrid Teaching and Learning Environment in Cambodian Higher Education

Phoeun Marady
Students' Perceptions of a Flipped Classroom and a Communicative Language Teaching (CLT) Approach in an Undergraduate English Class

Abstracts

The 2nd Biennial Conference of Comparative Education Society of Cambodia 2021

Student engagement and the acquisition of skills to enhance employability at a university English department in Cambodia

Chea Sathya

Education University of Hong Kong, Hong Kong SAR

Abstract

This paper aims to examine the development of skills to enhance employability in English education in Cambodia - a context and discipline that have been under-explored. It draws in-depth data from the various perspectives and experiences of three main higher education stakeholders: the program management team; faculty members; and students and graduates. The main research question is: What role does student engagement play in the development of skills to enhance employability in the context of teaching and learning at university? The results of the present study reveal how engagement plays a mediational role in the influence of institutional, classroom, and personal factors in the development of skills to enhance employability as the learning outcome. The higher education student engagement framework, based on Kahu's (2013) framework, was employed. In this framework, student engagement is assumed to effect learning outcomes, and that varies depending on institutional, classroom, and personal factors. Institutional factors can include the institutional culture, environment, and curriculum, while personal factors include background knowledge, prior English proficiency, and interest. Classroom factors include teaching, workload, and assessment. The study used a mixed-method approach to address the research question. A qualitative study was conducted to elicit the list of skills to enhance employability, the constructs of engagement, and the institutional, classroom, and personal factors from the departmental management team, lecturers, year-three and year-four students and graduates. In the quantitative study, a survey questionnaire was administered and 373 responses were received. Principal component analysis was conducted to validate the construct of skills to enhance employability, student engagement, and institutional, classroom, and personal factors. Finally, the main mediational analyses were conducted through PROCESS. The main findings were as follows: Good teaching was the most influential factor to affect the development of skills to enhance employability through student engagement, while appropriate workload and assessment showed a negative correlation with student engagement and the development of skills to enhance employability. In other words, if students feel that the workload and assessment are too heavy, they do not engage adequately in their study, which then leads to the poor acquisition of such skills. Personal and institutional factors were also found to exert an effect on the development of skills to enhance employability through student engagement.

Examining the Skills Gap in Cambodian Higher Education: A Case Study from Paragon International University.

Dzhamshed Salomov

Paragon International University, Cambodia

Abstract

This study seeks to find gaps, if any, between the skills/competencies required in the workplace and the skills/competencies acquired from Paragon International University. It is based on the experiences and views of the university's alumni and current new graduates. It aims to track Paragon International University graduates and develop a database that is as thorough as possible concerning our alumni, e.g., their workplaces, further education, and so on. It is important for universities to provide skills that are actually required in the workplace. This study will determine if the tailoring of the Paragon International University curriculum is based on the needs of the labour market. The results of this study will be used as part of an overall curriculum review to determine where gaps exist in learning outcomes. The approach taken could be of use as a model for other universities in Cambodia who are seeking to ensure that learning outcomes match the needs of private sector employers. This paper is an attempt to replicate a study conducted by Teijeiro, Rungo and Freire (2013), in which the authors asked their university alumni to rate the importance of 19 skills in their workplace. We will also ask our alumni and current freshmen to rate those 19 skills to identify any gaps. This study will be survey-based. It will cover all Paragon International University alumni and current graduates. The word "alumni" in this study is conceptualised and ultimately operationalised to relate to students who have successfully graduated from Paragon International University's undergraduate programs. An online survey will be designed to collect the requisite data. We are still in the process of data collection. However, our findings will be ready before the start of the conference. We expect to have the results by mid-September.

Determinants of Entrepreneurship Career Intentions of Cambodian Undergraduates

You Saokeo Khantey

Cambodia Development Resource Institute, Cambodia

Abstract

Considering entrepreneurship's potentials for economic resilience and growth, many higher education institutes in Cambodia have expanded their provision of entrepreneurship education. One major promise under entrepreneurship education is that it can enhance entrepreneurial motivation and related competences among students which ultimately facilitate the business or firm creation. In recent years, despite increasing interest of Cambodian university students in business start-up, little empirical study has been done to identify entrepreneurship education and other support factors that can foster their entrepreneurial intention. In addition, basic statistics to understand student entrepreneurship also remains underexplored. The research questions proposed in this study are i). How do students plan and prepare for pursuing a career option as entrepreneur? and ii). What are the determinants of entrepreneurial career intention? This study will take a preliminary step to explore and identify students' entrepreneurship plan, engagement, and perception towards taking entrepreneurship as a career option as well as analyze the factors that associate their intentions. The main contribution of this study to provide a better understanding student entrepreneurship. Furthermore, by analyzing the influential factors, some insights could be gained for university leaders and policy makers on how to foster academic environments and entrepreneurial learning in the universities. Theoretical/conceptual framework: A Theory of Planed Behavior by Ajzen (1991), which mostly has been used to predict entrepreneurial behavior throughout the intention, is used to construct the study's conceptual model that combines both personally and contextually relevant factors. The study also deploys a quantitative approach with two stages of sampling technique to gather an approximation of 834 students from 19 public and private universities in Phnom Penh and six provinces–Kampong Speu, Siem Reap, Takeo, Batambong, Svay Reang and Prey Veng. Due to physical meeting restriction, the field study was mainly done online with Kobo Toolbox and Zoom and taken between June and July 2021. Our findings show the desire to become entrepreneur is mostly set as a long-term goal and to approach such goal, significant proportion of them are engaging in the early stage of business foundation while some others are operating their online-and-micro business. Additionally, the study shows entrepreneurship intention is greatly influenced by individual-related factors such as perceived appropriateness, consistence, effectiveness and soft-skills followed by the family-and-university-related factors.

Workforce Survey of Young Cambodian Dentists One Year after Graduation

Phun Sipha, Srorn Chantrea, Chom Thida, and Kong Kalyan
University of Puthisastra, Cambodia

Abstract

Little is known about the employment situation of new graduates in dentistry. Yet such information could usefully inform educators, policymakers and planners. Therefore, it is the objective of this study to explore the work situation and perceptions of Cambodian dentists one year after graduation. A cross-sectional study was conducted involving 123 new dental graduates from two universities. Following consent, a questionnaire was used to collect information from the participants face-to-face, or via phone call or video call interviews. The questionnaire included 38 questions relating to the background, employment situation, conditions and challenges, clinical experiences, educational aspirations, and professional support. A total of 97 out of 123 graduates consented to participate. Among them: 78.4 percent were male; 88.7 percent were working only in private dental clinics; and 10.3 percent also worked for government hospitals. The dentists worked each week on average 49.4 hours, and 38.7 hours at private and hospital clinics, respectively. However, most were under-employed. Most (70.1 percent) worked in Phnom Penh. Two-thirds were registered with the Dental Council of Cambodia (DCC), and 47.4 percent had experienced difficulties in dental practice since graduation. One-quarter of the participants said that their undergraduate dental education had prepared them for working as a dentist "a little" or "not at all". As for income, 45.7 percent earned USD500 per month or less, and 11.3 percent over USD1000 per month. In terms of postgraduate training, 61.9 percent expressed a wish to undertake this, especially in orthodontics (55 percent), implantology (43.3 percent), periodontics (13.3 percent), and oral surgery (11.7 percent). Most dental graduates identified cost as a major barrier to further study (75.0 percent). Thus, most graduates were working long hours in private dental clinics in Phnom Penh, but were under-employed. Their incomes were generally low. Most were satisfied with their undergraduate training and many wished to conduct post-graduate study, particularly in orthodontics and implantology.

**Permeability in Cambodian Post-Secondary Education and Training:
A Growing Convergence**

Chea Phal, Hun Seyhakunthy, and Song Sopheak
Cambodia Development Resource Institute, Cambodia

Abstract

Permeability in education and training refers to the possibility for learners to transfer between different types of education and between different levels of qualifications. This study intends to identify existing permeability pathways between technical and vocational education and training (TVET) and academic higher education sub-systems in Cambodia. It also aims to highlight hindrances that hamper the smooth permeability between the two sub-systems. Adopting a hybrid process, the study combines both inductive and deductive thematic analysis approaches in coding transcribed interviews at 15 sampled TVET institutes and universities. The study finds that the most common route to higher learning for post-secondary TVET students is through the higher qualification programs under the same track. Although a cross-system transfer system is in place - thanks to the establishment of the qualifications framework and adoption of credit system in both systems - it is a pathway much less walked. Challenges that thwart the cross-system horizontal mobility of students include: the lack of inter-ministerial collaboration and coordination; issues related to the recognition of students' prior qualifications; and the difference in quality assurance mechanisms between the two sub-systems. More or less, these barriers have contributed to the academisation of TVET and the vocationalisation of higher education in the country. For policy implications, the paper proposes the establishment of common guidelines on the recognition of prior learning and credit transfer that all key stakeholders, including MoEYS and the MLVT, agree on. Rather than drifting too far away from their original missions, both sub-systems should continue to enhance the quality of their programs based on their strengths and uniqueness.

Knowledge and Perceptions about Cross-Infection Control among Patients Attending the University of Puthisastra Dental Clinic (UPDC)

Seng Lyhour, Tep Piseth, Long Panha, Chher Tepirou, and Callum Durward
University of Puthisastra, Cambodia

Abstract

The transmission of infections in dental clinics is an ever-present danger. The public are becoming more aware of the importance of good cross-infection control (CIC). The purpose of this study was to investigate patients' knowledge and perceptions regarding cross-infection control in the UPDC. CIC is an important issue in dental clinics, especially since the arrival of Covid-19. Hence, it is important to understand what patients' knowledge, thoughts and expectations are about CIC, an issue that has not previously been investigated in Cambodia. A convenience sample of 200 adult participants attending the Dental Clinic was selected. Following consent, and after a treatment session, patients were interviewed by one of three investigators about CIC in the clinic. The mean age of participants was 28.52 (SD 12.32), and 63.5 percent of participants were students. All participants agreed or strongly agreed that cleanliness in dental clinics is very important, that dentists should always wear gloves and a facemask while treating a patient, and that all instruments used in the dental clinic should be sterilised. Among the participants, 78 percent agreed that serious infections can be transmitted during dental treatment, including HIV (72.6 percent), Hep. B (61.9 percent), Hep. C (8.8 percent), and tuberculosis (8.8 percent). Asked about the appearance of the UPDC, 96 percent of the participants agreed that it looked clean and hygienic and 94 percent that all the instruments looked clean. However, 49.5 percent of the participants thought that the clinic looked "tatty" and 37.5 percent expressed fear about contracting a serious infection while having treatment. Participants gave the UPDC a mean score of 8.3 out of 10 for its CIC. Patients mostly had positive perceptions of CIC in the UPDC, and expected dental students and staff to demonstrate good CIC practices. However, patients were able to identify some areas for improvement. Dentists need to consider patient perceptions and strive to improve CIC in their clinics.

Residential College: Case Study of Kirirom Institute of Technology

Panhavon Chea, Noy Chorvin, Liv Sopheap, and Chen Vary
Kirirom Institute of Technology, Cambodia

Abstract

The purpose of this study was to examine the residential college system in Cambodia, looking particularly at the case of Kirirom Institute of Technology (KIT). The study adopts a broad conceptual framework of a residential college consisting of: (1) resources and other characteristics of residences; (2) involvement/participation; (3) integration/connectedness; (4) the impact of connectedness on educational outcomes; and (5) residential settings: resources and other characteristics. The residential college of KIT consists of two main components: (1) the Academic Program; and (2) the Resident Life Program. The two core components of the residential college of the Kirirom Institute of Technology have been identified that have greatly promoted student learning, leadership and entrepreneurship skills: (1) academic life which includes (a) the KIT curriculum, (b) the KIT internship program, and (c) the academic support service. The second component -(2) the Resident life Program – includes: (a) KIT orientation; (b) student housing and meals; (c) organisation clubs; and (d) activities, the KIT counselling service, transportation, laundry, and clinic care and insurance. According to the study, KIT students are well trained and prepared for the workplace, with all graduates – 100 percent - employed. The successful management of a residential college not only requires more than just basic cleaning, repairs and maintenance, but also includes strategies to enhance the livelihoods of the residents through the organisation of resident life programs and other initiatives. Cambodian higher education institutions are recommended to adopt a residential college system to support students' learning and future employability, as well as to reduce the simultaneous enrolment at two or three universities of many students - a practice that is more costly but less efficient.

Research Capacity Building on the Periphery: Strategic Resource Allocation and University Research Productivity in Cambodia and Kazakhstan

Ros Vutha

Faculty of Education, The University of Hong Kong, Hong Kong SAR

Abstract

This presentation examines dilemmas in the post-totalitarian (and simultaneously post-colonial) contexts of Cambodia and Kazakhstan as they seek to build the research capacities of their universities and experience multiple challenges while moving away from colonial legacies. Few studies have addressed in comparative terms the participation of peripheral countries in global knowledge production. A comparative analysis of the research expenditure and performance data of the two countries is guided by a theoretical framework that examines how the multi-level capacity building creates or hinders opportunities for alignment of strategic forces and resources, from top to the bottom. This presentation compares the data of the R&D funding and performance of the two countries, which are reported by UNESCO Institute for Statistics, the World Bank, and the Web of Science. The data analysis is placed against the framework of performance in their respective regions and neighbouring countries such as Kyrgyzstan, Malaysia, Singapore, Vietnam and Uzbekistan. The preliminary findings suggest that knowledge production at universities in Kazakhstan stresses prestigious international publications, while Cambodian universities tend to pay more attention to local problems. The findings give insight into differences between national and institutional strategies on mobilising the participation of individual scientists in knowledge production that result from the different trajectories of research capacity building.

Exploring Student Persistence in STEM Programs in Cambodia

Ung Uy Lim, Ryuto Minami and Chea Phal

Cambodia Development Resource Institute, Cambodia

Abstract

As the global economy has become more and more technology-oriented, there is increasing demand for competent STEM graduates to drive the economy forward. Cambodian STEM enrolment at post-secondary level is relatively low in comparison with other countries in the region. To realise its goals of becoming an upper-middle-income country by 2030 and a high-income country by 2050, the Cambodian government has put efforts into attracting Cambodian youths into STEM programs and careers. After the introduction of the tracking system in high schools in 2010 - as a strategy to encourage and prepare students to pursue STEM majors in higher education – the majority of high school senior students have opted for the science track. Nevertheless, a few of them have pursued STEM majors when they have undertaken higher education. This study intends to examine students' learning pathways and explore the probable causes that affect the decisions of science-track students to switch track in higher education. The study adopts the conceptual framework that major choice decisions are influenced by individual aptitude and preference, subjective norms, and perception of STEM. Using the undergraduate student survey conducted by CDRI in 2020 at 21 higher education institutes in Cambodia, the study employs descriptive statistics and statistical tests for data analysis. The preliminary findings reveal that less than 20 percent of science-track students choose STEM subjects as their majors in higher education, while nearly 90 percent of social-track students continue to pursue non-STEM majors. Science-track females are far more likely to switch to a non-STEM track in comparison with their male counterparts. There is no clear evidence that high-performing students are more likely to enrol in STEM majors.

New Generation School Education Reform in Cambodia: A Farewell to Shadow Education?

Nhem Davut and Nutsa Kobakhidze

Abstract

For some decades, basic education in Cambodia has suffered from financial difficulties, a perceived low quality, overloaded curriculum and educational inequalities (Brehm 2021; Bray et al. 2016). Students and their families have sought private tutoring, or so-called "shadow education", which has been supplementing the basic education system. Over the years, private tutoring has become part of a school culture leading to more social and educational inequalities. Driven by equity and quality concerns, the Ministry of Education, Youth and Sports of Cambodia has recently introduced a novel education reform known as a New Generation School (NGS) initiative. This reform aims to provide quality education for students in order to enable them to obtain essential knowledge and skills to be ready for 21st-century job markets. At the same time, the initiative aims to eliminate the private tutoring culture ingrained in schools oftentimes offered by public school teachers for their own students, creating potential risks of corruption (Dawson 2009; Kobakhidze 2014). Drawing on a qualitative interview with 14 students (Grade 11 and 12) from two NGS initiatives, this paper analyses the implementation of NGS reform with reference to whether shadow education is likely to exist continuously with, or be subjugated by such an education reform. The interviews were conducted remotely using Zoom and lasted around 30 minutes. The findings demonstrated that the majority of the students interviewed were participating in private classes. Students interviewed reported the following reasons for attending private classes: exam preparation; the need to complete more exercises; inability to catch up with lessons in NGS initiatives; the necessity to undertake private classes; and more. It seems that private tutoring has not been eliminated by the new reform. Students and families do not fully trust the public education system, and private tutoring has been helping to keep the NGS initiative running; challenges associated with it have not disappeared in New Generation Schools. This evidence raises questions regarding the reform and calls for more policy, scholarly and public attention to be given to this topic.

STEAM Education for PK- 6 Learners

Pamela T. Hundana

Kirirom Institute of Technology, Cambodia

Abstract

The purpose of this paper is to present the impact of STEAM integration on PK – 6 students' self-efficacy. This paper sought to answer the following questions: 1). Why is STEAM (Science, Technology, Engineering, the Arts and Mathematics) education important for children? 2). To what extent does exposing students to STEAM outreach content, correlate with a strong sense of self-efficacy? And 3). What are the factors affecting effective STEAM education? A conceptual framework for STEAM education will be proposed around learning theories and pedagogies that will lead to achieving key learning outcomes that requires a deep understanding of the complexities surrounding how the students learn, especially relating to teaching and learning STEAM content. The sample used for quantitative research includes primary students, teachers from elementary schools, heads of institutions, and other pedagogical specialists, and produced 100 responses. The survey was conducted via the internet and directly (face-to-face). The teachers in this research ranked the application of innovative practices that are based on exploratory activities of natural sciences in pre-school to primary education. The research revealed a group of factors promoting innovative pedagogical practices that embrace this aspect: educational policy-related, managerial and methodological factors. The research revealed groups of obstacles hindering implementation of innovative pedagogical practices. They can be categorised into three groups: a.) Obstacles related to the structure and finances of institution, and professional development. Out-dated events relating to professional development; b.) Obstacles revolving around a teacher's age, motivation and abilities; c.) Outdated culture of institutions and insufficient support from institutional authorities and parents. These factors negatively correlate with all factors of STEAM activities. The correlation is not strong but it is statistically significant. The findings of this study will redound to the benefit of society considering that STEAM education plays an important role in current educational trends. Thus, administrators/teachers who apply the recommended approach that is derived from the results of this study will be better able to train their students.

Peer-Assisted Learning in the General Anatomy Course of Year 2 Dental Students at the University of Puthisastra

Ros Dimong, Roma Rino, Oeurn Pheaktra, And Koeun Kalyan
Faculty of Dentistry, University of Puthisastra, Cambodia

Abstract

This study evaluates the impact of peer-assisted learning (PAL) on the learning and perceptions of Year 2 dental students undertaking a General Anatomy course at the University of Puthisastra (UP). If peer-assisted learning can improve students' ability to learn, it could be used more widely in classrooms, especially where class sizes are large. A retrospective descriptive study was conducted using a convenience sample of 56 Year 2 students from UP who provided written consent. Three senior students volunteered to assist the lecturer by engaging in PAL during anatomy classes. During each session, the senior students were trained to take the role of tutor over a period of three months. After the conclusion of the course, all participants were asked to complete a written questionnaire comprising 16 questions to evaluate the impact of PAL on their learning experience. A total of 54 students (96.4 percent) agreed that introducing peer-assisted learning to anatomy classes improved the way they studied and increased their interest in the subject. Of those, 52 students (92.9 percent) indicated that they had enjoyed the learning experience and believed that the PAL small group activities gave them a better opportunity to learn. In addition, 53 students (94.7 percent) would recommend this strategy of learning for other courses and 51 students (91.1 percent) agreed that PAL enhanced team work and that PAL tutors made a big contribution to improving their learning. A total of 47 students (83.9 percent) would like to be PAL tutors themselves to help other students in the future. All participants agreed that they were satisfied with the overall program. This study showed that PAL applied in a General Anatomy course over a period of three months resulted in enhanced student learning, and provided support for the lecturer in a large-class situation. The PAL tutors also benefited from the experience.

Research Capacity Development and Scholarship Building in Disadvantaged Post-Colonial Academic Systems: The Case of Foreign-Trained Cambodian Researchers

Ros Vutha

Faculty of Education, University of Hong Kong, Hong Kong SAR

Abstract

This study examines how Cambodian scholars learn to develop their scholarly competence during their doctoral studies abroad and seek opportunities to demonstrate their intellectual leadership in both local and global academic communities. Active Cambodian researchers have to rely on their ability to secure funding from external donor agencies by themselves in order to conduct research. Thus, the experience of a small group of researchers who have published, and have been seeking more opportunities to publish, is worth exploring. The analysis is driven by the theory of accumulative advantages that explain how scholars rely on their earlier-acquired reputation to further accumulative resources for their scientific development. We interviewed 16 foreign-trained PhD Cambodian holders who have experienced publishing in international peer-reviewed journals. The interviews reveal that their publication experience relies on the nature of their PhD program and relationship with their supervisors and peers. Their publication records serve as a resource for them to land research posts in well-funded research institutes, while others use this resource to form collaborations and secure funding for research activities in order to increase their publication outputs.

Promoting Research Culture at a Cambodia Higher Education Institution from a Leadership Perspective: The Case of the ACLEDA Institute of Business

Norng Sokha[1] and Sam Chanphirun[2]

[1]ACLEDA Institute of Business

[2]Phnom Penh Teacher Education College, Cambodia

Abstract

This study examines how institutional and leadership characteristics influence the research culture at a Cambodian higher education institution, using the ACLEDA Institute of Business (AIB) as the case study. It adopts the Model of Bland et al. (2002), which illustrates how research culture and productivity can be fully developed through the interaction between individual, institutional and leadership characteristics. Individual characteristics include socialisation, motivation, content knowledge, basic and advanced research skills, simultaneous projects, orientation, autonomy and commitment, and work habits. It employs a document analysis in order to examine the policy, strategy, research operating manual and procedures of the AIB. An interview and a focus group discussion were conducted with the key participants who are the top leadership of the AIB. The data collected have been analysed using thematic analysis. It has been revealed that research at the AIB is currently in the very early stages of development, in which research articles are mainly produced by both lecturers and students. Further, faculty members are motivated to participate in the research activity even though their research skills and knowledge of statistical tools are limited. Leadership characteristics such as scholarship, research orientation, capability in fulfilling all critical leadership roles, and participative leadership, do play important roles in promoting research culture and productivity at the AIB. Other institutional characteristics, such as clear coordinating goals, research emphasis, culture, a positive group climate, communication with professional networks, resources, sufficient work time, communication, and rewards, among others, do exist at the AIB. However, some characteristics were found to be missing concerning the institutional factor. This study contributes to the advancement of knowledge in literature pertinent to research culture and productivity at the institutional level. Meanwhile, it can shed light on how the research culture can be promoted at Cambodian higher education institutions to enhance their quality.

Teaching creative problem-solving, research and collaboration through UX Design projects in the context of online learning

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Abstract

The recent abrupt transition to online learning has left many students feeling dissatisfied. One of the common student criticisms of online learning is that it is repetitive (Derakhshan et al. 2021) and impersonal (Waddington, Porter, 2021). The Graduate Immersion Model (Sanabria and Sánchez-Escobedo 2017) has the potential to improve online learning experiences by training collaboration and creativity, which can result in higher performance (Oyelere et al. 2021). This paper seeks to answer two research questions: 1). Can the UX Design Process (represented by the GIM Model) serve as an effective framework for training collaboration and creative problem-solving in Cambodian university students? And 2). Can the perceived increase in collaboration and creative problem-solving skills positively affect student attitudes towards online learning? It analyses the six-month project sequence administered to students on the English preparatory course in the period between May and August 2021. This sequence is an extended version of an Educational-Digital Gradual Immersion Model (Sanabria and Sánchez-Escobedo 2017), which uses the elements of UX Design to train creative problem-solving and collaboration in university students. The research data was gathered via metacognitive self-reports and instructor-led observations of 89 students. The sample was assessed twice – before and after completing the project sequence. The data analysis confirmed that UX Design projects, created under the Gradual Immersion Model, are effective in enhancing the skills of collaboration and creative problem-solving in students. Over two-thirds of the students self-reported an increase in creativity and team work skills. Instructor-led observations confirmed the self-reported leap in these skills. Additionally, the overall student attitudes towards online learning shifted from mostly negative to increasingly positive upon the completion of the six-month project sequence. The findings of this research can be applied while designing and assessing digital collaborative activities for university students in Cambodia. The conducted self-reports and observations demonstrated that GIM-based UX Design projects do not only improve student collaboration and creative problem-solving skills, but also result in increasingly positive attitudes towards online learning. Therefore, university programs with creative components (e.g., courses on architecture, design or engineering) as well as the ones seeking to enhance student attitudes towards online learning should consider adopting such projects as a part of their coursework.

Research Engagement of Faculty Members in Cambodian Higher Education

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Abstract

Despite the fact that "publish or perish" is seen as an essential element in academia, very few Cambodian faculty members engage in research activities. Hence, this study examines the challenges that hinder the research participation of faculty members in Cambodian higher education institutions (HEIs), taking an explanatory mixed-method approach. A total of 370 survey responses and 27 key informant interviews were conducted with faculty members in 21 Cambodian HEIs. Data is being analysed against Blackburn and Lawrence (1995) faculty decision-making and behaviour framework. Preliminary findings suggest that challenges that hinder Cambodian faculty members include research capacity, English language proficiency, the mindset of faculty members, funding sources, and lack of incentives and pressure. We also found that faculty members at public universities are more active in research activities than their peers at private universities, for there is more financial and technical support from development partners and a higher ratio of full-time faculty members at public universities. The study is expected to provide ideas to promote a research culture among Cambodian faculty members.

Facebook as a Supplementary Tool for Online Education

Christian Darnel S. David

Abstract

This study aimed to evaluate the effectiveness of Facebook as a supplementary tool for online education. Additionally, it described the level of acceptance, the level of engagement in terms of consumption and use, the level of effectiveness in terms of academic performance, and the level of challenges in terms of health and navigation issues. Given the drastic changes in the landscape of education brought about by Covid-19, the study is beneficial to the academic community who may integrate social media platforms in their academic framework. Hence, education may become more inclusive for those whose resources are limited. The three theories - namely: Diffusion of Innovation Theory; Theory of Reasoned Action; and Sociocultural Theory - were used to analyse the data from the level of acceptance, the level of engagement in terms of consumption and use, the level of effectiveness in terms of academic performance, and the level of challenges in terms of health and navigation. Moreover, the evaluated results determined whether or not Facebook could be a supplementary tool for online education. The study used the quantitative method of research, specifically a survey questionnaire conducted through Google Form. In addition, the data were given standard deviation and "mean" as their statistical treatments. Moreover, college students were the participants, and ethical considerations were observed. The results of the study revealed that both the level of engagement and the level of acceptance garnered positive responses. In addition, both the effectiveness of Facebook as a supplementary tool for online education in terms of academic performance and the level of challenges in terms of health and navigation garnered neutral results. Thus, it was concluded that in the new normal (Covid-19) landscape of education, Facebook may be used as a supplementary tool for online education.

The Use of Mobile Text Messaging for Improving the Oral Health Behaviours of Students at the University of Puthisastra

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Abstract

This paper aims to improve the oral health behaviours of students at the University of Puthisastra through the use of text messages over a period of three months. If this low-cost intervention is successful in improving oral health behaviours and reducing the risk of disease, it could be used more widely to promote health in Cambodia. A longitudinal study was conducted using a convenience sample of 150 students from the UP who provided written consent. Participants were interviewed about their diet, oral hygiene practices, visits to the dentist and understanding of oral health. Plaque scores were recorded. During the intervention each participant received one oral health-related text message per day over three months, after which they were recalled for a second interview to measure any change in oral health behaviours, and to assess their plaque levels. Overall improvements in oral health behaviours were observed. There was a significant increase in the frequency of brushing, flossing, use of sugar-free gum, and fluoride toothpaste. In addition, the frequency of sugary drinks and snacks consumption decreased between baseline and follow up. The amount of sugar added to tea was significantly reduced, but not for coffee. The mean plaque score decreased from 1.9 at baseline to 1.1 at three months (p=0.001). Knowledge regarding oral health had mostly improved in the follow-up interviews, compared with the baseline. The greatest improvements were related to tongue cleaning, sugar free gum, gingival bleeding, regular dental visits and water fluoridation. By the three months follow-up, an additional six students had been to the dentist prompted by the text messages. Students were generally very happy with the text messaging program, which, over a period of three months, resulted in improved oral health behaviours, reduced plaque scores and increased awareness among this group of Cambodia university students.

Personalised Virtual Reality-based Training Using an AI-Enabled Reinforcement Learning Framework

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Abstract

The core aim of this research was to investigate the optimum feedback strategy in VR-based reinforcement-learning for personalised training. Due to the surge in the availability of consumer-grade hardware and the predicted boom in the industry in the post-pandemic era, immersive technologies i.e., Virtual Reality (VR), have experienced unprecedented popularity. These are used in various domains, e.g., in construction, industrial education, occupational safety training, etc. Recent research in empirical psychology (Human Factor) outlines the benefit of errors in the learning process: incorporating "Error management" contrary to the "Error avoidance" in training is becoming popular. One deterministic factor in error management is the Feedback strategy - there are currently two main schools of thought: immediate feedback, and delayed feedback. So far, there have been no studies that have analysed appropriate feedback methods to enhance efficiency (i.e., memory retention) in personalised VR-based learning. To achieve the aim of this research, a "Gamified VR Scenario" regarding "baby feed preparation" has been developed, in which a trainee performs nine activities (i.e., filling up a kettle, scooping baby feed formula, etc.) in VR to prepare baby feed. While the trainee is doing this, an automated backend AI (Artificial Intelligence) module is recording all of the activities (i.e., the time of each step, the number and types of errors, etc.). There are three versions of the game, which can be performed by three discrete groups: (1) without feedback; (2) with instant feedback; and (3) with analytical feedback at the end of each training session. After that, the trainees again perform the same task with no feedback intervention. Depending on their performance during the second attempt, the VR-based learning will evaluate the feedback strategies that are needed to reinforce to improve the trainees' performance. Though it is in the early stages of research, the results show a statistical significance in the effectiveness of the immediate feedback strategy.

Student Perceptions Following the Introduction of Dental Clinical Competency Assessments at the University of Puthisastra

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Abstract

This study aimed to evaluate the perceptions of dental students regarding the new clinical competency assessments at the University of Puthisastra (UP) Dental Clinic. UP is the only Cambodian dental school with clinical competency assessments, and the perceptions of the students towards competency assessment in a UP dental clinic would improve the confidence and clinical skills of dental students. Year 6 and 7 dental students were interviewed by three trained interviewers about their perceptions of the competency assessments. A total of 31 competency assessments were conducted in dental clinics as the clinical requirement and part of their graduation. To complete the study, 100 year 6 and year 7 dental students (73 percent male) were interviewed. Of those, 88 percent perceived that the assessments helped to improve clinical skills, and 85 percent made the same judgement about clinical knowledge. However only 40 percent were happy when they were introduced: 71 percent felt that the assessments were fair, but 93 percent said that they took too long. Most agreed that finding a tutor was sometimes difficult (91 percent), that some competencies were too difficult (95 percent) and that there were too many (90 percent). However few students could suggest items that should be dropped from, or added to the list. One-quarter of the students wanted tutors to explain each step carefully before each assessment. Tutors were generally very positive about the competency assessments, which were believed to be an important part of the training to be a competent dentist by both students and tutors: the view was that these should be continued, albeit with some improvements.

An Investigation of the Use of Alcohol and Tobacco among the Students of the Faculty of Health Science at the University of Puthisastra

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Abstract

Alcohol and tobacco use are common world-wide, and have significant impacts on health. Habits often start in adolescence and early adulthood. Hence, the study investigated alcohol and tobacco use among Foundation Year (Fo-Y) and Final Year (Fi-Y) students at the University of Puthisastra (UP). Smoking and alcohol use can significantly impact health, and high alcohol consumption may affect learning. Little is known about the use of alcohol and tobacco among university students in Cambodia. A cross-sectional study was conducted using a self-report questionnaire to measure practices and perceptions regarding alcohol and tobacco use among junior and senior UP students. A total of 412 students participated in this study, of whom 286 (69.41 percent) reported drinking alcohol (50.7 percent males and 49.3 percent females) and only 30 students (7.28 percent) smoked (96.7 percent males and 3.3 percent females). Among the participants, 39.5 percent of students reported first drinking alcohol before attending university (<18 years old). However, most drinkers reported consuming very little alcohol (87 percent had less than one drink/day), and 71.4 percent of smokers smoked less than one cigarette/day. Of greater concern, 41.5 percent of drinkers reported that they sometimes drove when they were drunk. The factors that had influenced the decision to take up smoking and drinking included curiosity, peer pressure, feeling bored and family problems, although 84 percent knew about the impact of these risk habits on their health. The main sources of information about negative impacts were from TV and social media. There were statistically significant differences in the proportions of Fo-Y and Fi-Y students who drank and smoked, with 58.7 percent vs 84.3 percent reporting drinking, and 4.6 percent vs 11.1 percent reporting smoking, respectively (p<.001, Chi-Square Test). Fi-Y students reported drinking and smoking behaviours more than Fo-Y students, but it was generally at a low level. Almost all smokers were male. Excessive alcohol consumption could interfere with students' learning. Health promotion activities at schools and universities might help to prevent young adults from adopting these high-risk behaviours.

Systematic Review of Skill Sets Required by the Tourism, Hospitality and Events Industries

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Abstract

A mismatch between the knowledge and skills acquired by university graduates and those actually needed by the markets has become manifest (Kuoch 2014; ADB & ILO 2015; Wang and Ryan 2007). The prolonged problem of skills mismatch has recently been exacerbated by the abrupt turn to the Industry 4.0 due to the impacts of Covid-19: educational institutions find it increasingly difficult to provide knowledge and skills that are highly relevant to current market needs. Thus, redesigning and updating the curricula to align with market needs has become a necessity and warrants an inspection of changing market needs within the hospitality, tourism and event industries. Hence, this review sets out to identify what the necessary skills are now. A qualitative systematic review (QSR) of the knowledge, skills and personal qualities needed will be conducted through an examination of the job advertisements/job listings posted by both local and international recruitment agencies (e.g., topjobcambodia.com; bongthom.com; pelprek.com; hrinc.asia; ziprecruiter.com; seek.com; indeed.com; prospects.ac.uk; simplyhired.co.uk), as well as vacancy announcements on the websites of business establishments in the tourism and hospitality (THE) industries in 2021. Google Search will be used, beginning first with the scoping search to determine the most relevant keywords and controlled vocabulary/phrases in the title search [e.g., job ad* (job vacancies OR careers) AND tourism (OR hospitality OR event OR travel OR leisure OR recreation)]. The job adverts will be further filtered through inclusion criteria, for example, in terms of timeframe (i.e., 2021), industries (i.e., tourism, hospitality, events), and the types of business establishments (i.e., luxury hotels, mega-event companies, top-rated airlines, international attractions). The analysis of the skills required from the job adverts is further enhanced by expert commentaries, keynote speeches, and relevant grey literature on THE skills and crystallised by peer-reviewed articles on THE knowledge and skills and reviews of academic curricula, e.g., Wattanacharoensil (2014); Dredge, Airey and Gross (2015); Yusuf, Samsura and Yuwono (2018); and Tsai (2018), using Google Scholar. The PRISMA's (2020) flow diagram will be used to record, identify and select the search results. The systematic review of literature search results will be intensively conducted up to October 2021. Preliminary findings relating to the job skills analysis - planned for October 2021 - are expected to provide insights about relevant training institutions and, particularly, to guide the trainers, developers and designers to tailor their THE curricula/syllabi/training programs to meet current market needs and to bridge the skills gap between universities and industries. The findings may also contribute directly to a better understanding by the potential workforce to enable them to attune their skill sets to the industry needs and to boost their opportunities for employment.

Skill Formation Systems and Employability at the Company and Industry Levels: Skill Development Opportunities and the Challenges Facing Medium- and Higher-skilled Employees

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Abstract

Industry plays a significant role in contributing to GDP growth and is expected to transform Cambodia into a middle-income economy by 2030 and a high-income by 2050. Given the importance of industry, the capacity building of medium-skilled employees (MSE) and higher-skilled employees (HSE) is considered to be the backbone of the sector. Without an insight into the capacity development and challenges faced by these employees, the industrial development goal will be hard to meet. This research aims to explore the skill development opportunities and challenges of HSE and MSE at the company and industry levels in Cambodia. The results of skill development will be shared, particularly among skill providers. Once skill providers are better informed about the skills required from HSE and MSE, they will improve skill provision and eventually reduce skill gaps and skill shortages in the industry. Moreover, the findings will enrich discussions about skill development among scholars, policymakers, and development practitioners, consequently bringing empirical knowledge to improve industry sectors. The study analyses skill development through the lens of the theory of change, which includes inputs, outputs and outcomes. The input factors combine the relationship of skill providers to industry, governance and funding, the labour market, education and social development. The immediate outputs are types of training, features and fees for this, as well as the interrelation between types of training. Thereby, the outcomes are addressing skill gaps and shortages that hamper industry growth and transformation. This research is exploratory and uses data from 36 in-depth interviews with key informants from human resource and production departments. The interviews aim to capture the capacity development opportunities and challenges of MSE and HSE including formal, informal and non-formal by the UNESCO (1970). The study purposively covers the electronic and electrical assembly, garment manufacturing, and food processing industries that together account for a large percentage of export and GDP growth. The findings reveal preferences for hiring qualifications, programs, and skill providers. Then, they illustrate skill development programs such as formal dual-type programs, non-formal company-based training, other non-formal training, informal on-the-job training or relating to new technology, ongoing informal company-based training, induction type training, and work experience programs. Finally, the opportunities and challenges of each skill development program relating to industrial growth and transformation are explored in a way that enables the author to propose some recommendations.

Exploratory Comparative Study on Teacher Educators' Professional Identity in Southeast Asian Countries

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Abstract

This session explores teacher educators' professional identities in Cambodia, Thailand, and Vietnam through a comparative analysis of open recruitment documents. The research questions are as follows: 1). What are the prerequisites for becoming a teacher educator? And 2). What measures could be implemented to support teacher educators' research culture and practices in their respective countries? Prior research has used life stories and self-study methods to elucidate teacher educators' professional identities and to identify the challenges and opportunities in pursuing professional development (e.g., Bates et al. 2010). Furthermore, studies show that the professional identities of teacher educators grow through the support of individuals and various communities (Izadinia 2014). However, these findings in affluent societies do not apply to the country-specific working conditions and support systems for teacher educators in Southeast Asia. There is no single definition of professional identity; rather, it is the self that is constructed and reconstructed within a context (Izadinia 2014). On the other hand, previous research has focused on individual narratives and overlooked the significance of context (Beijaard et al. 2004). Therefore, this session focuses on the context by delving into the research questions above. This study employs the four-step comparative analysis method (Bereday 1964), which is appropriate for interpreting educational phenomena (Manzon 2014). We described, interpreted, and juxtaposed in a table and conducted a comparative analysis of teacher educators' open recruitment documents between 2018 and 2021 in their respective countries. The study revealed that teacher educators are commonly required to have a master's degree or higher, English language skills, teamwork, and professional ethics. However, experience as a schoolteacher is not required in Thailand or Vietnam, although it is necessary in Cambodia. As a result, Thailand and Vietnam face challenges in guiding teaching practice, and Cambodia requires action research training.

Feminist Perspectives for the Co-decolonisation of Gender Equality in Cambodian Higher Education

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Abstract

With the rapid reconstruction, growth and expansion of higher education institutions (HEI) in Cambodia, it is time to explore the intricacies of gender and its impact on colonised practices in higher education. This study examines the experiences of actors in the construction of a co-decolonising framework for gender. Co-decolonisation, the practice of co-creating responsive pedagogies that integrate local traditions with internationally developed policies and frameworks, allows for an assessment of current practices around gender and explores these mechanisms through a decolonisation lens. This study answers the question: How do currently used co-decolonising frameworks apply to Cambodian Higher Education practices? This question is particularly important given the limited academic specialisation in gender studies in Cambodian higher education, the lack of research using a co-decolonisation approach, and the limited opportunity for local cultural gender discourses to shed light on the ways that the co-creation of responsive pedagogies may lead to gender equity. While gender advocates and feminists attempt to mainstream gender knowledge and practice, and to influence policymakers, there is a lack of research identifying how gender is perceived and constructed in HEIs. This gap in the literature necessitates an examination of the gender discursive literature in Cambodia to cultivate local gender knowledge with interdisciplinary perspectives. This research provides an opportunity to re-examine and critically discuss Khmer gender literature. It is a qualitative study that uses feminist participatory action research (FPAR) as a method to explore researchers' perspectives and practices from their related fields with a combination of reflections from the experiences of participants during a "co-decolonising gender in higher education" workshop. Within the study's limitation, workshop organisation is the platform on which various convenience-selected participants share their practices, perceptions and the impact they exert when they return home. The workshop allows the researchers to identify and understand the potential of higher education spaces to shift the inequitable, gender-related power dynamics though a feminist and participatory lens.

Analysis of Parental Involvement in Early Childhood Development in Cambodia

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Abstract

The purpose of this study is to determine how parental involvement, captured by their activities with children at home, affect the children's cognitive and non-cognitive development. The implications of this study lead to recommendations relating to early childhood education policy, especially parenting at home from the perspective of parents in Cambodia where the expansion of early childhood education institutions and the quality of teachers are inadequate. During Covid-19, there has been an increasing need for parental involvement with children at home. In addition, the father's involvement, which has not been covered in previous studies, has also been included in the analysis to create a new perspective. Regarding the theoretical framework, this study examines whether "Parental Role Construction" is adaptable or not to guide the participation of parents in Cambodia. This study uses the Demographic and Health Survey (DHS), and has adopted the probit model, for the data analysis to identify whether child development is either on- or off-track. Binary variables of whether or not parents are involved in learning activity with their children at home has been employed as an independent variable to determine how it affects children's cognitive and non-cognitive development, which is a dependent variable. The hypothesis is that parental participation in learning activity with their children at home is an important factor, not only for the development of the children's cognitive abilities, but also for the progression of their non-cognitive abilities. The effect is even more noticeable in respect of cognitive abilities. Furthermore, it was found that the educational activities of fathers at home influenced their children's development, especially their cognitive development, although, in Cambodia, this was not as much as the mother's involvement.

An Analysis of Classroom Observations at Public Pre-schools and Community Pre-schools in Rural Cambodia

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Abstract

The purpose of the study is to understand the characteristics of Early Childhood Care and Education (ECCE) practices in rural Cambodia by identifying commonalities and differences between public pre-schools (PPS) and community pre-schools (CPS) through an analysis of classroom observations. The following three research questions are asked: 1) What are the common characteristics of ECCE practices between PPS and CPS? 2) What are differences of ECCE practices between PPS and CPS? and 3) What are the challenges in improving the structural and process quality of ECCE in rural Cambodia? This study provides important empirical evidence of ECCE practices inside classrooms, which largely remain a "black box" in many developing countries. Despite the increasing number of studies on ECCE quality in these countries, the focus has tended to be on the outcomes measured by child development tests, leaving process quality issues aside. As a conceptual framework, the current study looks into the structural quality and the process quality of ECCE, which are closely related to classroom practices among the seven perspectives for a comprehensive understanding of ECCE quality proposed by the OECD (2006). The presenter observed and videotaped the ECCE practices in two PPS and three CPS in two districts of Province A in March 2018. The total observation time was 12.2 hours. The classroom activities and dialogs were transcribed and analysed based on the Flanders' interaction analysis method and a qualitative thematic analysis using NVivo. The results show discrepancies in ECCE practices not only between the two modalities but also within each group of PPS and CPS. Direct instructions relating to letters and numbers dominated the activities in PPS and CPS, and few teacher-child interactions were observed except in children's answers to teachers' questions. Although PPS used play, it was invariably teacher-led without promoting child initiatives or other aspects of child development.

Re-imagining Cambodia's Future Education Under a Lifelong Learning Ecosystem

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Abstract

This paper aims to explore how Cambodia can re-imagine its future education under a lifelong learning ecosystem. It is pertinent to ask the following questions: 1) To what extent is the lifelong learning ecosystem applied in Cambodia? 2) How can this model be implemented? Numerous studies have scrutinised lifelong learning in terms of its concept and environments, skills framework, delivery methods, and the measurements that can foster the conditions for an adequate lifelong learning ecosystem. Lifelong learning remains under-explored in Cambodia, while the government has merely adopted a lifelong learning policy that lacks a coherent approach and framework for action. The present study has thus been undertaken in this context in order to inform decisions about anticipated changes to future education delivery and policy, and to improve social outcomes for all. To measure the adequacy of a lifelong learning ecosystem, the paper employs a framework of exclusive indicators seen through the lens of 21st century skills, curricula, pedagogy, the measurement of learning gains, and the learning environments. This paper follows a sequential mixed-method approach, combining a literature review, an online survey involving 262 university students, and interviews conducted through semi-structured and structured questionnaires with ten key informants and experts in the field to triangulate and enrich the findings. Findings reveal that the application of lifelong learning in Cambodia is in its infancy, the concept is amorphous and is confined to non-formal education. Re-imagining Cambodia's future education under a lifelong learning ecosystem is as necessary as identifying essential skills/competences needed by learners in the 21st century. The focus of these skills should be the ability for critical thinking, metacognition, analytical thinking, problem-solving, English language capability, creativity, teamwork, ICT literacy and personal and social responsibility. Skills should also be trans-disciplinary, the curriculum should be oriented towards global citizenship, and pedagogies should be student-centred, project-based and focused on experiential learning. The learning approach should be based on the results of student surveys, and the activation of direct assessments. The learning environment, accordingly, needs to allow for open and distance delivery, to be multimodal and to embrace lifelong learning experiences. These findings imply a need for the government to shift the paradigm of Cambodia's education, but a further feasibility study is needed.

វិចារណកថាទៅលើកម្រិតនៃភាពអាចអានបាននៃអត្ថបទអំណានរបស់សៀវភៅគោលភាសាខ្មែរ

ខួយ ប៊ុនឡ្អាត

មហាវិទ្យាល័យវិទ្យាសាស្ត្រសង្គម និងមនុស្សសាស្ត្រ សាកលវិទ្យាល័យភូមិន្ទភ្នំពេញ

សង្ខិត្តន័យ

ការជ្រើសរើសសៀវភៅសម្រាប់អ្នកសិក្សា គឺពិតជាសំខាន់ណាស់ពីព្រោះសៀវភៅ មានតួនាទីច្បាស់លាស់ក្នុងការ ជំរុញឲ្យអ្នកបង្រៀន និងអ្នករៀនប្រកបដោយជោគជ័យ និងមានប្រសិទ្ធភាពខ្ពស់។ គោលបំណងនៃកិច្ចការ ស្រាវជ្រាវនេះ គឺវិចារណកថាទៅលើកម្រិតនៃភាពអាចអានបាន នៃអត្ថបទអំណានរបស់សៀវភៅគោលភាសាខ្មែរ ដោយប្រើប្រាស់រូបមន្តរបស់អ្នកនិពន្ធ Flesch (1948) [ពិន្ទុ = 206.835-1.015 (ចំនួនពាក្យសរុប/ចំនួនឃ្លាៈ សរុប) - 84.6 (ចំនួនពាក្យសរុប/ចំនួនព្យាង្គសរុប)] និង Kincaid, Fishburne, Rogers និង Chissom (1975) [ថ្នាក់ = 0.4 (ចំនួនពាក្យសរុប/ចំនួនឃ្លាៈសរុប) + 12 (ចំនួនពាក្យសរុប/ចំនួនព្យាង្គសរុប) - 15] ដើម្បី កំណត់រកកម្រិតភាពអាចអានបាន និងកម្រិតថ្នាក់។ កិច្ចការស្រាវជ្រាវនេះ បានជ្រើសរើសសៀវភៅសិក្សាគោល ភាសាខ្មែរថ្នាក់ទី៣ ទី៦ និងទី៩ របស់ក្រសួងអប់រំ យុវជន និងកីឡា ដោយប្រើប្រាស់បរិមាណវិស័យ។ កិច្ចការ ស្រាវជ្រាវនេះ ត្រូវបានគេប្រើប្រាស់ស្ថិតិពណ៌នា និងស្ថិតិ correlation ទៅលើសំណុរស្រាវជ្រាវចំនួន 3 ។ លទ្ធ ផលនៃសំណួរដំបូង បានបញ្ជាក់ថាកម្រិតនៃភាពអាចអានបាននៃអត្ថបទអំណានរបស់សៀវភៅគោលភាសាខ្មែរ ទាំង 3 កម្រិតនេះ មិនត្រឹមត្រូវនឹងកម្រិតសិក្សារបស់សិស្សានុសិស្សនោះទេ។ លទ្ធផលសិក្សាមួយបន្ថែមទៀត បានបង្ហាញថា ចំនួនពាក្យស្ទួងដាសម្រាប់ភាសាខ្មែរដែលត្រូវបានគេវិភាគទៅលើសៀវភៅសិក្សាគោលទាំង 3 ថ្នាក់ មានចំនួន 20 ពាក្យក្នុងមួយឃ្លាៈ និងត្រូវនឹងកម្រិតថ្នាក់ទី១០។ លទ្ធផលសិក្សាចុងក្រោយ បានបញ្ជាក់ថា ទំនាក់ ទំនងរវាងឃ្លាៈ ៣ក្យ និងឃ្លាៈនៃអត្ថបទអំណាននៃសៀវភៅគោលភាសាខ្មែរ ពុំមានទំនាក់ទំនងរវាងៗក្យ និង ឃ្លាៈនៃអត្ថបទអំណាននោះទេ។ ប៉ុន្តែ មានភាពទំនាក់ទំនងរវាងៗក្យ និងៗក្យនៃអត្ថបទអំណាននៃសៀវភៅ សិក្សាគោលភាសាខ្មែរ។ សរុបជារួម លទ្ធផលសិក្សានេះ គួរតែត្រូវបានគេពិចារណាទៅលើកម្រិតនៃភាពអាចអាន បាន និងកម្រិតថ្នាក់នៃភាសាខ្មែរ ដើម្បី ផ្ដល់ជាមាគ៌ាសម្រាប់ស្វែងក្នុងការសិក្សាបន្ថែម និងផ្ដល់ផលជះជាវិជ្ជមាន សម្រាប់សិស្សានុសិស្ស និងគ្រូប្រង្រៀនផងដែរ។

Educational Action Research and Its Utilitarian Roles in an English as a Foreign Language Institution: A Study of a Higher Education Institution in Cambodia

Sovann Pichpisey

Royal University of Phnom Penh, Cambodia

Abstract

In the context of teaching English as a Foreign Language (EFL), findings of action research contribute to progress made in critical issues including curriculum development or reform, encouraging under-achievers, understanding the psychology of learners and teachers, adapting effective teaching methods, and improving the management dynamic in the educational sector (Boykin 1972). It is the purpose of this study to investigate the roles of educational action research, and how it is relevant to teaching EFL in the classroom. This case study focused on extensively exploring and understanding the roles of educational action research through one-on-one interviews. It addressed the significance of educational action research among academics, specifically the teaching profession, in Cambodia. The inter-relations reflected how these actors contribute to society. The findings demonstrate that teachers can enhance their understanding of their profession and adapt the theories in their career by engaging in action research, in line with the findings of Somekh and Zeichner in 2009. This study sheds light on how educational action research and researchers respond to the demands of innovation, especially in the field of education. It also serves as an introduction to the utilitarian roles of educational action research in Cambodia and how educational action research benefits society. As teachers are empowered to conduct their own research to professionally develop themselves, they are able to contribute to their school, industry, community and society.

The Development of Language Policies Relating to Non-dominant Languages in Thailand: The Historical Significance of Mother-Tongue-Based Multilingual Education (MTB-MLE) for Hill Tribes

Chihiro Hasebe

Hiroshima University, Japan

Abstract

This presentation clarifies the historical significance of a recently introduced MTB-MLE for hill tribes in Thailand. The research questions are: (1) Who are the hill tribes? (2) How has language policy developed? (3) What are the characteristics of MTB-MLE as seen from a comparison with conventional language policy? The hill tribes are a minority in Thai society and have been disadvantaged by the lack of attention given to their own culture and language in education. However, the importance of the mother tongue as the language of instruction is implied in Sustainable Development Goal (SDG)-4. Therefore, this study is significant as it sheds light on recent attempts to develop MTB-MLE for hill tribes. To examine the development of language policy around non-dominant languages in Thailand, this study adopts the tripartite language policy model, which maintains that "language policy consists of language practices, language ideology, and language planning" (Spolsky 2004 as cited in Shohamy 2006, p. 53). The three research questions are explored by reviewing the related literature, a content analysis of some policy documents, and a report from an NGO that conducted the pilot projects of MTB-MLE for hill tribes. This is a review that includes information from multiple sources. Concerning the model of language policy, this study examines its development for non-dominant languages in Thailand, with particular attention to language planning. Since 1959, the hill tribes referred to nine ethnic groups; however, from the 2010s, 13 ethnic groups have been covered by this description. The education of hill tribes, which was initiated in the 1950s, had assimilation policy implications. However, from the 1970s, consideration was also given to their culture and language, a trend that accelerated from the late 1990s. As a part of that trend, the pilot project of MTB-MLE started in 2007.

Teaching and Learning Challenges at TVETS and HEIs During the Covid-19 Pandemic: Case Studies from Switzerland and Cambodia

Balzer Lars, Kuon Vannsy, Leng Phirom, Khieng Sothy, Noy Chhorvin, and Chea Panhavon
Kirirom Institute of Technology, Cambodia

Abstract

The purpose of this study is to: (1) investigate the teaching and learning (T&L) challenges faced by TVET schools and HEIs in Switzerland and Cambodia; (2) understand how those institutions solve the T&L challenges; and (3) explore innovative responses to the challenges. E-learning was not brand-new before the hit of the Covid-19 pandemic but this did compel an immediate shift to e-learning. This has accelerated the use of digital media, particularly in the education sector. The educational delivery of many institutions in the world, including in Switzerland and Cambodia, has been disrupted and their response has been to go online. This has posed significant challenges - for instance, in terms of the technological and methodological capabilities of the institutions, teachers and students (Zhong 2020; Abbasi et al. 2020; Bao 2020). Therefore, a more formal understanding of the challenges and how the institutions have dealt with the rapid switch to online learning and teaching has been needed to document a more organised body of knowledge, experiences, and practices: the results could serve as important feedback for education policymakers. The research was influenced and framed by Dhanaranjan (2011), Burns (2011), Ismail, Bakar and Wafa (2020) and others, who have provided a framework around which the challenges can be grouped. Categories include, but are not limited to, investment, the internet and learning devices, contents delivery, assessments, motivations, and social support. Our questionnaire used these frames as a focal point for reference. The data were collected via online questionnaire surveys (i.e., Qualtrics) from students (apprentices), parents, teachers, and school directors in Switzerland from March to August 2020. The data are also being collected in Cambodia to provide the datasets necessary for the first two objectives of this comparative study. Key informant interviews will be mainly employed for the last objective to explore the contextual innovative responses to the online learning during the pandemic in Cambodia, which have not yet been studied. All TVET schools in Switzerland and 14 TVET schools and HEIs in Cambodia were included in Qualtrics surveys using the mailing lists of the participating institutions, with an expected total of more than 24,000 participants. The datasets from the surveys are expected to be available for extracting preliminary results in September 2021. It is anticipated that the results will provide the bigger picture relating to the challenges, solutions and innovative responses to enhance our understanding and to provide better insights for education policymakers and others who are involved.

Teachers' Perception of Readiness in Online Teaching and Learning in Higher Education in Cambodia

Be Borey

Phnom Penh International University, Cambodia

Abstract

The Covid-19 pandemic has forced a shift to online teaching and learning (OTL) in universities across Cambodia, requiring teachers to change their teaching delivery in a short time. This rapid transition to OTL - since March 2020 – began with an order from MoEYS for nationwide school closures. This study seeks to address the research questions: 1). To what extent are teachers confident in OTL concerning their own technological, pedagogical and content knowledge (TPACK), their perceived online presence, and institutional support? And 2). Are there significant differences in teacher backgrounds relating to their readiness? The rapid shift in all teaching methods consequently presents a significant opportunity to investigate the extent to which teachers felt prepared for online teaching and learning. It is crucial to note that teachers' readiness to teach online is critical: the rapid transition to full online teaching constituted major changes in teaching practice. Three dimensions of the conceptual framework underpinning the current study are: TPACK self-efficacy; teaching practice (online presence); and institutional support (the context). This study quantitatively examines a sample of 150 teachers and measures their readiness for OTL. The sample was randomly selected and teachers' responses to the survey questionnaires were collected. Findings will provide key insights and evidence of the related teaching practice, and will spark further studies into OTL in the Cambodian higher education context. Identifying such indicators of teacher readiness is key to suggesting different approaches and in identifying substantial support needs for teaching and learning online.

The Experience of Having to Rapidly Adapt to Online Learning for Teachers at a Private HEI in Cambodia: A Hermeneutic Phenomenological Study.

Water, T., Eng, M., Hoeur, S., Saut, S., Boy, V., Smith, E., & Collins, R.

University of Puthisastra, Cambodia

Abstract

The aim of this study was to identify the experiences of teachers in adapting to new online teaching and learning environments. Many teachers who moved rapidly to Emergency Online Teaching due to Covid-19 had little, if any, prior experience of online teaching, and the competencies and familiarity of classroom teaching were replaced with doubt and uncertainty. Greenberg et al. (2014) say that when teachers first begin teaching, they are often overwhelmed by trying to engage students in learning through dynamic interactions while also managing classroom behaviour. This has also been the experience of many teachers moving from expert to novice in teaching in online environments. Hermeneutic phenomenology seeks to understand reality through individuals' narratives of their lived experience of a phenomenon. This is underpinned by the assumption that how people live and act is mostly pre-reflective – it is not until there is a disruption such as Covid-19 that the aspects that are taken for granted, such as being a teacher, are brought explicitly into view. Hermeneutic Phenomenology and van Manen's (1997) four lifeworld existentials of lived body, lived time, lived space, and lived human relations were used as a framework to structure the teachers' stories. Data were collected via two Focus Group Discussions with 14 teachers. Data were analysed using the Braun and Clarke (2016) approach for thematic analysis. Findings: Teachers discussed often feeling "invisible" or "muted" (lived body); that not "seeing" the students had an impact on interactions with students (lived human relations); time was more flexible but more time was needed (lived time); and there were challenges relating to the "lived space" of online environments. The HEIs recognise that moving to online learning and teaching is not just transposing a classroom into a virtual environment: therefore, ongoing support and training should be provided for teachers alongside finding better ways to connect teachers and students in online environments.

Adoption of the Theory of Planned Behaviour on the Study of Blended Learning at Higher Education Institutions in Cambodia

Norng Sokha, Hok Pisith, and Lay Sau
ACLEDA Institute of Business

Abstract

This study determines the factors that influence students' intention to adopt blended learning in Cambodia. The findings of this study will contribute significantly to the university lecturers as they could select particular activities relating to blended learning for their classes. More importantly, it benefits academic program designers and the management teams of the higher education institutions as it would help them to integrate blended learning activities within a course or a program. The Theory of Planned Behaviour (TPB), developed by Ajzen (1985), has been employed to pave the way for the study. In this sense, the impact of attitude, subjective norm, and perceived behaviour control in supporting the intention to adopt blended learning have been the central focus. The study employed a correlational design, which provides an opportunity to predict scores and explain the relationship among variables (Cresswell 2012). A Questionnaire with 46 questions, adapted from previous studies, was designed using a nine-point Likert scale to meet statistical requirements. This survey was sent to 400 students at three targeted higher education institutions, namely the ACLEDA Institute of Business, Beltei International University, and the Institute of Foreign Languages. However, only 204 students who live in Phnom Penh City completed the survey questionnaire. First, confirmatory factor analysis (CFA) was used to validate the instrument, and then a structural equation modelling (SEM) was employed to test the specified hypotheses by running a path analysis in AMOS software. Regarding the demographic factor, the students use their mobile phone at 50.50 percent and laptop at 41.70 percent to study online via Zoom Meeting at 50 percent and Microsoft Teams at 46.60 percent. After running the path analysis, the study found that three hypotheses were supported and one hypothesis was partially supported; in other words, attitude and subjective norm have a significantly positive effect on the intention to adopt blended learning at (β=0.42) and (β=0.39), respectively, while perceived behavioural control partially influences the intention to adopt blended learning at (β=0.20). Moreover, behavioural intention has a positive impact on the actual adoption of blended learning at (β=0.67).

Implementing Conditions of a Hybrid Teaching and Learning Environment in Cambodian Higher Education

Kaing Sopheap

Department of Educational Sciences, University of Fribourg, Switzerland

Abstract

The purpose of this article is to scrutinise and interpret the present conditions of the Hybrid Teaching and Learning Environment (HTLE) in Cambodian higher education. Therefore, the main research question is framed as follows: In which conditions are Cambodian Higher Education lecturers implementing a hybrid teaching and learning environment? The sub-questions include: A). Could we observe changes in the type of environment related to the new situation created by the Covid-19 crisis? How can we understand these changes? and B). How was this innovation process supported according to them? This research study will provide significant outcomes for Cambodian higher education institutions where hybrid courses apply in the following ways: 1). To contribute to an understanding of how Cambodian higher education institutions are adapting to society in the 21st century of teaching and learning; 2). To cultivate knowledge and skills relating to pedagogical practices in the service of quality improvement in higher education; and 3). To provide recommendations to higher education institutions where a hybrid teaching and learning environment is implemented. To understand the implementation conditions, this research integrates and enhances the Depover and Strebelle (1997) and Ely (1999) systemic model of the university innovation process. The main conditions are related to entrants (at micro, meso, and macro level), the processes (the adoption phase, the implementation phase, and the routinisation phase) and on-going support from the meso-system and macro-system. Concerning the learning design, this research employs the HY-SUP typology, differentiating six types of HTLE (Deschryver and Charlier 2012). A total of 20 Cambodian lecturers participated in this study from six higher education institutions (four universities and two institutes) using online semi-structured interviews held from June to September 2020. To identify the type of HTLE, this research adopted a Self-Positioning tool (HY-SUP). MAXQDA 2020 was also used to analyse teachers' discourses on conditions, the support they received, and recommendations for implementing HTLE. Based on preliminary results from the interviews, we have drawn the conclusion that the main implementation conditions that were needed, related mostly to the individual characteristics of the lecturer (technological knowledge, engagement, openness to innovation, and self-confidence in a teaching and learning hybrid environment) even though they received less support or no support from their institutions. This result will be used to develop better support for teachers in Cambodian higher education.

Students' Perceptions of a Flipped Classroom and a Communicative Language Teaching (CLT) Approach in an Undergraduate English Class

Phoeun Marady

Department of Foreign Languages, ACLEDA Institute of Business

Abstract

This research investigates the perceptions undergraduate students have about learning English using a flipped classroom with a Communicative Language Teaching (CLT) approach at the Royal University of Phnom Penh, Cambodia. It is expected to provide insights about the framework for teachers, educators, curriculum or course developers who wish to help students to enhance their ability and learning experiences relating to English. The flipped classroom and CLT can be applied to classroom settings to improve students' English language so that it can be adapted to the current society in which English is needed. The conception of a "flipped classroom", which initially originated from America in 2000, and Communicative Language Teaching (CLT) by Hymes (1972), were used by this study to explore students' views about English learning. This study was designed to employ pre-class online videos to replace live "chalk and talk" lectures, with a variety of CLT activities implemented during class time, including discussion-based learning, pair and group work, presentations, educational games and role play. A qualitative method was used to analyse different sources of data, including interviews, students' self-reports, and observation. The experiment was employed with 21 freshmen in the academic year of 2017 to 2018 (n=21). The findings demonstrate that the students' experience in the flipped classroom and CLT is positive and that it benefits students' language growth. Self-learning, self-confidence, English enhancement, and enjoyment were found to be involved in the perception the students had of their learning experience. It is important for Cambodia to consider the flipped classroom as a teaching model - and what the participants had to say about learning English in the flipped classroom with CLT - and to possibly apply this model prospectively.

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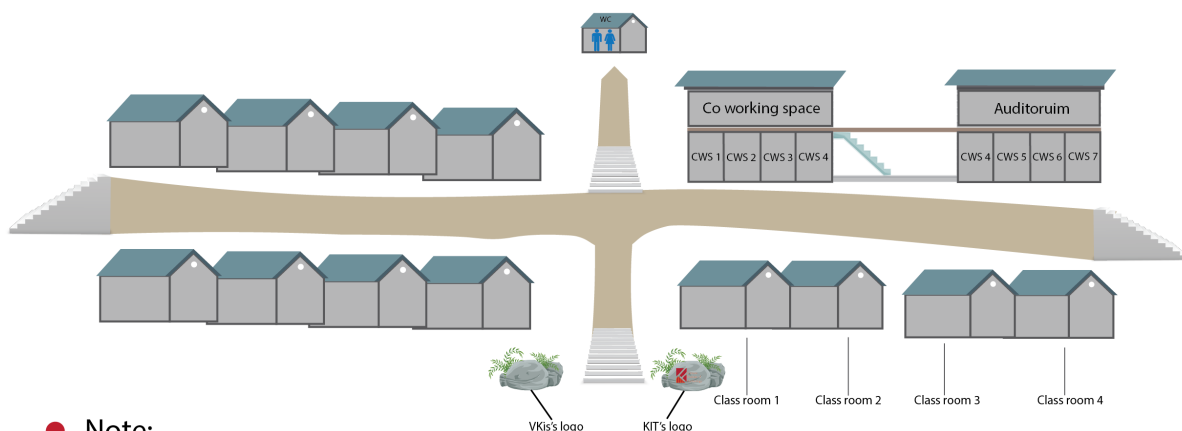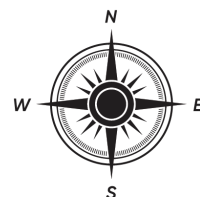|	
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Conference Venue

White Shop(reception)

Borey M

Borey R ❷

❸

Borey V

Activity

PVK restaurant ❶

Moringa ❹

Garden of Wonders

Luxury tent

KIT Campus ❺

KIT Campus

WC

Co working space

Auditoruim

CWS 1 | CWS 2 | CWS 3 | CWS 4

CWS 4 | CWS 5 | CWS 6 | CWS 7

VKis's logo

KIT's logo

Class room 1

Class room 2

Class room 3

Class room 4

● Note:

- CWS 1 : Co working space 1	- CWS 5 : Co working space 5
- CWS 2 : Co working space 2	- CWS 6 : Co working space 6
- CWS 3 : Co working space 3	- CWS 7 : Co working space 7
- CWS 4 : Co working space 4	- CWS 8 : Co working space 8

Covid-19 Safety Measures

The following basic principles of COVID-19 security and prevention have been established, which will guide the establishment of measures for the operation of the face-to-face part of Conference:

1. Contact limitation A major effort has been made to offer the Conference in a hybrid format through a user-friendly platform that approximates physical participation in order to meet the limited number of contacts required. In addition, seating capacities have been established in the parallel session rooms and safety distance between seats in the plenary sessions, leaving it to the contribution of those attending in person to avoid crowds in the corridors of the buildings.

2. Personal prevention measures **Proper use of the mask**, which will be compulsory during the Conference, and **frequent and meticulous hand hygiene** are basic measures to avoid transmission, as well as respiratory hygiene. To encourage this, a mask and hand gel can be found at the **Conference reception.**

World Health Organization

When going to a
health care facility of any kind

In areas where **COVID-19** is spreading

at least 1 m

Maintain a distance of at least 1 metre from others   **+**   **Clean hands frequently**   **+**   **Wear a mask**

Notepad

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