Proceedings for the
University of the
Philippines President
Edgardo J. Angara
Fellowship Roundtable
Series

8, 15, 22, and 29 May | 8 AM onwards Room UG-03, UNIVERSITY OF THE PHILIPPINES BGC, TAGUIG CITY





Proceedings for the University of the Philippines President Edgardo J. Angara Fellowship Roundtable Series

8, 15, 22, and 29 May | 8 AM onwards
Room UG-03, UNIVERSITY OF THE PHILIPPINES BGC, TAGUIG CITY

### **UP CIDS Proceedings** is published by the

University of the Philippines
Center for Integrative and Development Studies
Lower Ground Floor, Ang Bahay ng Alumni
Magazyan Aranya, University of the Philippines

Magsaysay Avenue, University of the Philippines Diliman, Quezon City 1101

**Telephone:** (02) 8981-8500 loc. 4266 to 4268 / (02) 8426-0955

Email: cidspublications@up.edu.ph

Website: cids.up.edu.ph



cids.up.edu.ph

Copyright 2025 by the UP Center for Integrative and Development Studies.

The views and opinions expressed in this discussion paper are those of the author/s and neither reflect nor represent those of the University of the Philippines or the UP Center for Integrative and Development Studies. No copies can be made in part or in whole without prior written permission from the authors/editors and the publisher.

ISSN 2718-9295 (Print) ISSN 2718-9309 (Online)

### **Table of Contents**

1	Higher Education Roadmap, Industry, and
	Agriculture

1	Present	ations
	Fresem	anons

1 Leveraging Higher Education to Resolve Healthcare Constraints

Carmencita D. Padilla, MD, MAHPS

2 Cultivating Innovation in the Philippines by Addressing Policy Gaps and Creating Pathways for Collaborative Progress between Academe and Industry

Luis Sison, PhD

Strengthening Higher Agriculture Educational Institutions and Vocational-Technical Training Programs on Entrepreneurship for Greater Contributions Towards Agriculture and Fisheries Productivity

Luis Rey I. Velasco, PhD

3 Navigating the Generative Artificial Intelligence Era: Charting the Course for Curricular Reform in Higher Education in the Philippines

John Paul Vergara, PhD

4 Developing Regional Economic Complexity through Product Specialization

Krista Danielle S. Yu, PhD

- 5 Open Forum
- 11 Synthesis
- 11 Closing Remarks

### 13 Higher Education Regulation and Tuition

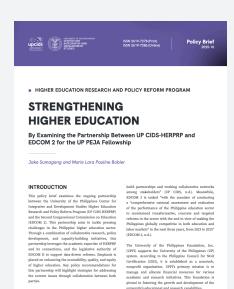
#### 13 Presentations

13	The Economic Regulation of Philippine Higher Education
	Michael Alba, PhD
13	Exploring Socialized Tuition Models as an Alternative to the Free Tuition Regime
	Geoffrey Ducanes, PhD
14	Using Artificial Intelligence to Support Basic Education Teachers in Underresourced Contexts
	Maria Mercedes T. Rodrigo, PhD
15	From Pixels to Policies: GIS Analysis of Education Access Points and Disparities
	Felicia Yeban, PhD
15	Open Forum
21	Synthesis
22	Closing Remarks
23	Government and Finance
<b>23</b>	Government and Finance Presentations
23	Presentations Systems Analysis Of The Philippine Basic Education System:
23	Presentations  Systems Analysis Of The Philippine Basic Education System: The Role Of School Leadership
<b>23</b> 23	Presentations  Systems Analysis Of The Philippine Basic Education System: The Role Of School Leadership  Maria Assunta C. Cuyegkeng, Dr.rer.nat  Innovations and their Enablers and Barriers in Philippine
<b>23</b> 23	Presentations  Systems Analysis Of The Philippine Basic Education System: The Role Of School Leadership  Maria Assunta C. Cuyegkeng, Dr.rer.nat  Innovations and their Enablers and Barriers in Philippine Basic Education: Policy Governance Implications
23 23 24	Presentations  Systems Analysis Of The Philippine Basic Education System: The Role Of School Leadership  Maria Assunta C. Cuyegkeng, Dr.rer.nat  Innovations and their Enablers and Barriers in Philippine Basic Education: Policy Governance Implications  Maria Regina M. Hechanova-Alampay, PhD  Can Decentralization Improve Philippine Education?
23 23 24	Presentations  Systems Analysis Of The Philippine Basic Education System: The Role Of School Leadership  Maria Assunta C. Cuyegkeng, Dr.rer.nat  Innovations and their Enablers and Barriers in Philippine Basic Education: Policy Governance Implications  Maria Regina M. Hechanova-Alampay, PhD  Can Decentralization Improve Philippine Education? Lessons from Global Experience

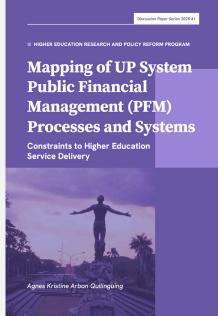
25	Kakayanin Natin: Empowering Citizens to Participate in Improving Education Governance in the Philippines			
	Kenneth Isaiah Ibasco Abante, MA, and Riz Supreme Balgos Comia, LPT			
26	Governance Cultures, Perspectives & Practices in Philippine Basic Education Settings: Focus on Teacher-in-Service Training and Development			
	Ma. Glenda Lopez Wui, PhD and Enrique Niño P. Leviste, PhD			
27	Open Forum			
32	Synthesis			
32	2 Closing Remarks			
33	Technical and Vocational Education and			
	Training and Lifelong Learning			
33	Presentations			
33	Navigating/Negotiating the Lifelong Learning Terrain in the Philippines: Path of Optimism and Caution			
	Carolyn Medel-Añonuevo, MA			
34	Understanding Labor Market Outcomes of Graduates in the Informal Economy			
	Lisa Grace Bersales, PhD			
34	Centering Youth Aspirations in Education Reform: Gen Z Perspectives on the Future of Education, Work, and Life			
	Joel Paulin Mendoza, LPT, MA			
35	Centering Youth Aspirations in Education Reform: Gen Z Perspectives on the Future of Education, Work, and Life Cleve V. Arguelles, MA			
35	Open Forum			
42	Synthesis			
42	Closing Remarks			

### Download related policy papers

### for free



Strengthening Higher Education by Examining the Partnership Between UP CIDS-HERPRP and EDCOM 2 for the UP PEJA Fellowship



Mapping of UP System Public Financial Management (PFM) Processes and Systems: Constraints to Higher Education Service Delivery

cids.up.edu.ph/collection-database

of UP President Edgardo J. Angara Fellowship (UP PEJA).
This prestigious fellowship program is designed to support the research endeavors of distinguished fellows.

### Get your policy papers published.

### Download open-access articles.

The Philippine Journal of Public Policy: Interdisciplinary Development Perspectives (PJPP), the annual peer-reviewed journal of the UP Center for Integrative and Development Studies (UP CIDS), welcomes submissions in the form of full-length policy-oriented manuscripts, book reviews, essays, and commentaries. The PJPP provides a multidisciplinary forum for examining contemporary social, cultural, economic, and political issues in the Philippines and elsewhere. Submissions are welcome year-round.

For more information, visit cids.up.edu.ph.

All issues/articles of the PJPP can be downloaded for free.

### Get news and the

### latest publications.

Join our mailing list to get our publications delivered straight to your inbox! Also, you'll receive news of upcoming webinars and other updates.

bit.ly/signup\_cids

### We need

### your feedback.

Have our publications been useful? Tell us what you think.

bit.ly/dearcids

## Higher Education Roadmap, Industry, and Agriculture

### **PRESENTATIONS**

### Leveraging Higher Education to Resolve Healthcare Constraints

Carmencita D. Padilla, MD, MAHPS

Dr. Padilla is a national scientist and a world-renowned clinical geneticist. She is currently the Chancellor and a professor of Pediatrics at the University of the Philippines Manila. Her research aimed to create a policy responding to these two objectives. First is to evaluate healthcare workforce deficits by comparing data from the Department of Health with the output of healthcare professionals from higher education institutions. Second is to identify gaps and opportunities in public and private higher education provisions. Dr. Padilla surveyed 14 stakeholders through a focus group discussion from the education sector, government agencies, and public and private organizations. Her findings highlighted a need for unified data to coordinate an integrated approach for retaining healthcare professionals, managing migration, and aligning healthcare workforce supply with demand. In concluding her study, Dr. Padilla recommended establishing an agency aggregating healthcare human resources (HHR) data. This agency will facilitate data-sharing among relevant organizations, ensure better workforce distribution, and promote service-return programs and micro-credentialing initiatives to meet workforce needs.

### Cultivating Innovation in the Philippines by Addressing Policy Gaps and Creating Pathways for Collaborative Progress between Academe and Industry

Luis Sison, PhD

Dr. Sison is a professor at the Electrical and Electronics Engineering Institute of the University of the Philippines Diliman, director of the UP System Technology Transfer and Business Development Office, and a program leader of the UPSCALE Innovation Hub. Dr. Sison's paper discussed the need to establish collaborative frameworks between academic institutions and industries for translating research and development (R&D) into practical applications that will benefit the national economy. He highlighted a few barriers that limit collaboration, including bureaucratic challenges, insufficient industry engagements, institutions' funding constraints, mismatched student and industry expectations, and complex institutional structures. At the end of his presentation, Dr. Sison proposed several solutions to advance sustainable growth and position the Philippines as a competitive player in the global knowledge economy: First is to conduct a targeted survey to gather insights from various Higher Education Institutions (HEIs) on industry collaborations. Second is to foster entrepreneurial education and practical training to align students with industry demands. Third is to establish a centralized data system for HEI R&D projects and industry collaborations to enhance transparency and coordination.

# Strengthening Higher Agriculture Educational Institutions and Vocational-Technical Training Programs on Entrepreneurship for Greater Contributions Towards Agriculture and Fisheries Productivity

Luis Rey I. Velasco, PhD

Dr. Luis Velasco is a retired professor of agricultural entomology and former dean and chancellor of the University of the Philippines Los Baños. His study noted the decline in agricultural productivity due to limited youth engagement, the aging farming population's weak entrepreneurial mindset, reduced farming lands, inadequate agricultural education leading to

workforce mismatch, and a limited extension system for higher agricultural education. He pointed out that these challenges place the Philippines at a disadvantage in agricultural productivity growth compared to neighboring countries. To address these issues, Dr. Velasco proposed maximizing human intellectual capital through experiential learning, enhancing formal and lifelong education systems, adopting effective technology transfer methods such as business incubation, and strengthening partnerships with Technical-Vocational Education and Training (TVET). He emphasized the need to prioritize entrepreneurial education within higher agricultural educational institutions (HAEIs), asserting that students increasingly seek education that provides economic value. He also highlighted that cultivating a mindset toward innovation and job creation can enhance productivity and food security. Concluding his presentation, Dr. Velasco recommended investing in faculty development on entrepreneurship, fostering a new generation of technopreneurial farmers, and expanding agribusiness collaborations with local government units (LGUs), the Department of Trade and Industry (DTI), and the private sector.

### Navigating the Generative Artificial Intelligence Era: Charting the Course for Curricular Reform in Higher Education in the Philippines

John Paul Vergara, PhD

Dr. Vergara is a Professor of Computer Science and a former Vice President at the Ateneo de Manila University. His research highlighted how Philippine institutions must adapt by revising curricula, strengthening academic integrity, and incorporating generative artificial intelligence (GenAI) tools to enhance teaching, research, and administration. Dr. Vergara proposed a framework for the Commission on Higher Education (CHED) technical panels and higher education institutions (HEIs) to guide adjustments in course content, teaching methods, and degree programs. The framework aims to equip students with knowledge of AI technologies and their societal impact, ensuring they are prepared for an AI-integrated world. To support GenAI's responsible integration, Dr. Vergara recommended that government agencies like the Department of Science and Technology (DOST) and CHED prioritize GenAI-related research. He advocates for interdisciplinary studies and the development of GenAI tools tailored to Philippine contexts—encompassing local languages, culture, and historical content.

## Developing Regional Economic Complexity through Product Specialization

Krista Danielle S. Yu, PhD

Dr. Yu is a full professor at the De La Salle University Manila School of Economics. She is also a senior expert at the Oscar M. Lopez Center for Climate Change Adaptation and Disaster Risk Management Foundation. She also heads the Economics and Business Administration Section of the National Research Council of the Philippines. Dr. Yu's study aimed to answer questions regarding the level of economic complexity across Philippine regions, the presence of higher education institutions (HEIs) programs to support industry needs, and the role of the government in promoting academe-industry partnerships. Her research emphasized that while many regions produce export-quality goods, especially rubber, the Philippines lags behind its neighbors in the volume of export-ready domestic products. However, Dr. Yu noted that the passage of the Tatak Pinov Act has spurred diversification efforts, providing support for globally competitive local products. Dr. Yu proposed solutions to advance regional economic growth in the country: strengthen academe-industry linkages, focusing on product specialization aligned with regional economic needs, conduct further research to identify high-opportunity products in each region, and implement policies that support local enterprises through product diversification.

### **OPEN FORUM**

#### PART 1

(Presentations of Dr. Velasco, Dr. Yu, and Dr. Sison)

The open forum was facilitated by Ms. Jeriesa Osorio, co-convenor of the UP CIDS Higher Education Research and Policy Reform Program and an assistant professor of Communication Research at the University of the Philippines Diliman.

Dr. Bautista proposed that promoting agribusiness could appeal more to younger generations if poverty concerns are addressed alongside agricultural technology. She also suggested that Dr. Velasco's research could benefit from feedback from agricultural networks. In a discussion with Dr. Yu, Dr. Bautista raised the need to clarify the country's objectives, such as prioritizing human resource development or product complexity. Additionally, she advised Dr. Sison to explore ways the industry could build trust with academia, noting that Singapore's Nanyang Technological University (NTU) has achieved strong partnerships with the industry. Finally, she recommended that government procurement policies support academia by prioritizing products developed within five years.

Dr. Yee shared Congressman Mark Go's interest in how agri-forestry and fisheries programs can prevent duplicative investments and specialization. He highlighted an upward trend in agriculture-related programs in the Commission on Higher Education (CHED) and the Technical Education and Skills Development Authority (TESDA), but questioned whether existing graduates are adequately supported in transitioning to the workforce. He suggested prioritizing skill transfer and higher-level training in TVET. Dr. Yee also mentioned Senator Sonny Angara's emphasis on research as a job-creation engine. For Dr. Sison, Dr. Yee proposed specifying types of institutions involved in industry collaboration, examining relevant laws, procurement guidelines, and suggesting potential tax and import incentives for research-aligned HEIs.

Dr. Hall emphasized the importance of clearly defining competencies in HEIs, mainly where there are established industry partnerships, especially for scholars who are receiving grants from government agencies. Recommended policies can be centered on inter-university and state-university collaborations. Dr. Yu advised mapping HEI involvement in regions with high agricultural

potential, such as Mindanao State University, to support rubber production and other specialized industries.

Atty. Benitez-Jaro advised Dr. Sison to identify the most impactful industry-academe linkages among 73 documented cases. She noted that while the Innovation Council offers grants, many proposals merely reengineer and recreate existing solutions. She stressed the need to foster an innovative mindset within the academe and to guide HEIs and state university colleges (SUCs) in identifying high-potential areas for industry linkage. Mabalacat City College's nomination for the Times Higher Education Awards Asia 2024 was highlighted as an example of digital innovation in higher education. Atty. Benitez-Jaro also encouraged Dr. Yu to consider cohort models requiring less lead time than traditional four-year programs. Currently, CHED and TESDA have the Philippine Credit Transfer System.

Dr. Yu supported mapping HEIs to optimize rubber industry support, emphasizing the need for hands-on training. She noted that while TESDA offers agriculture programs, the lecture-based approach limits practical skills crucial for private sector investment.

Dr. Velasco advocated for programmatic support within HAEIs to develop agribusiness, stressing the need for innovation and partnerships with the private sector. He suggested that HAEIs could help students adopt an entrepreneurial mindset, noting that current TESDA graduates often pursue overseas work rather than domestic agribusiness opportunities.

Dr. Sison highlighted the success of UP Manila's lagundi cough syrup as an example of academe-industry collaboration. Responding to Dr. Hall's suggestion, Dr. Sison noted that government agencies' support for academic efforts could mitigate challenges when private funding is unavailable. In response to Dr. Yee, Dr. Sison admitted there are biases in looking at the HEIs, but Dr. Sison said he will look at the best practices from the TVET. He added that procurement has been one of the biggest challenges for a long time. In terms of insights, they can look at policy support, which they can also consider. Regarding Dr. Bautista's suggestion in the NTU model, Dr. Sison responded by examining the initiatives and seeing how those are implemented at the operational and staff levels. Their thesis, he said, is that trust and reputation building cannot be done with initial and small engagements. For example, small agricultural products can be bought in China, but do not reach our farmers. Dr. Sison reiterated that the first innovation stage is adapting to existing technologies and addressing the supply chain issue.

Dr. Ramos inquired whether the study could incorporate an analysis of whether the institution is successfully attracting the most talented and capable students to pursue agriculture. He questioned whether students selected this field due to a lack of acceptance into their preferred programs. Additionally, he expressed interest in understanding the demographic characteristics of students currently enrolled in agriculture programs. To other presenters, he also asked if regulatory barriers affect industry participation in academe-industry partnerships.

For agriculture, Atty. Estrada mentioned that CHED issued a CMO on the policy standards and guidelines for the Bachelor of Science in Agriculture program. The CMO focuses on a skills-based curriculum. One of the key changes is that it provided a diploma program in Bachelor of Science in Agriculture. After two years of completing the course, the completers can immediately be employed as technicians or get into practical agribusiness. Estrada then asked Dr. Velasco if he had checked how many completers the program has or if they pursue agribusiness. About the increasing number of enrollees, Republic Act (RA) No. 10931, or the Universal Access to Quality Tertiary Education Act, can direct that trend. He also suggested looking into the distribution of HAEIs geographically. This will help build into priority programs, including agriculture.

For academe-industry linkages, he mentioned that this concern is more of HEIs. He suggested looking into policies or laws that lead to academe-industry linkages, particularly in CHED. Two from the industry should be part of the curriculum-building in the law. Look at how the curriculum across courses has considered the industry perspective and helped translate into employable graduates.

For Dr. Velasco, Mr. Uy merits highlighting the over 2,000 Higher Agricultural Education Institutions (HAEIs) and Technical and Vocational Education and Training (TVET) establishments to enhance agricultural productivity. He continued by discussing that agriculture accounts for more than 20 percent of our workforce and only contributes to less than 10 percent of our gross domestic product (GDP). His question to Dr. Velasco is how HAEIs can contribute more, given the landscape of each HAEI, offering agri-programs. He questioned how public funding could better support HAEIs to contribute to the broader sector. Responding to Dr. Sison, Mr. Uy made a pitch by suggesting that the industry (manufacturing, construction, utilities) should go to the academe. Because the industry, as Mr. Uy noted, has the highest economic multiplier.

Dr. Rodrigo responded to Atty. Benitez-Jaro's comments regarding product innovation. Dr. Rodrigo highlighted that the grant structure in the country requires fellows to know the outcomes before they engage in the research. They have to adhere to a very strict timeline and very strict deliverables. Dr. Rodrigo suggested that room for mistakes is part of the innovation process in other countries, and provisions like this can be considered in reviewing agripolicies in the future.

#### PART 2

(Presentation of NS Padilla)

Dr. Yee proposed several scholars who could assist Dr. Padilla in her study. He also noted that during their visit to Vietnam to examine its success in basic education, a focus group discussion was hosted for the Filipino teachers. They emphasized that they primarily chose to teach in Hanoi due to favorable working conditions rather than salary. A similar migration trend is observed in healthcare, with professionals moving from private to public hospitals. This pattern parallels workforce attrition between the healthcare and education sectors. While a 40 percent attrition rate is not unprecedented, understanding the reasons and timing of dropouts across healthcare education—whether in pre-med, medical studies, or other four-year programs—could offer insights. Dr. Yee added that there is a growing discussion about providing qualifications for students exiting programs in their second year, allowing them to enter the workforce with relevant training rather than shifting to unrelated fields. Exploring this idea could present new opportunities. Additionally, the public sector's trust in board examination quality and in analyzing graduates' competencies across various healthcare programs might benefit from closer collaboration with the Professional Regulation Commission (PRC), which could support impactful interventions.

NS Padilla recognized significant gaps in data collection, limiting their ability to make concrete recommendations. To address this, they will propose several research topics to guide policymaking. Internal migration is notably high, with much discussion focused on healthcare workers transitioning to the BPO sector—not due to salary, but due to better working conditions. NS Padilla added that the focus group discussion was valuable, as each submission reflected thoughtful community input. This may mark the beginning of a more solution-focused approach to challenges within the health sector.

Dr. Bautista mentioned that the education challenges are, fundamentally, societal issues and extend beyond the education sector alone, encompassing labor, employment, and working conditions. In the final report, Dr. Bautista requested that it would be essential to include proposals for operationalizing managed migration. She recognizes that NS Padilla's study can help materialize the 2040 Health Master Plan and address the government system's data fragmentation. NS Padilla's study could also possibly contribute to recommending legislative measures or structural reforms.

NS Padilla recognized the challenges in addressing complex questions because of the limited time to complete the paper. As a physician and a management team member, NS Padilla acknowledged that she may not have definitive answers then. Instead, she said she could outline additional issues that warrant careful consideration to avoid hasty decisions. She added that her study aims to create a sustainable ongoing analysis and discussion platform. The National Academy of Science and Technology (NAST) has committed to organizing a forum on data, with all relevant societies agreeing to share their information as a starting point. Dr. Eloy Marcelo, according to NS Padilla, has noted that, with contributions from all societies, they could establish an initial dataset to build on.

Dr. Yee suggested including comprehensive data from CHED, covering enrollment and graduation statistics across all higher education institutions nationwide.

Dr. Hall also recommended considering the public financing aspect of healthcare education. In discussions with the UP VP for Legal Affairs, it was highlighted that the return on investment for training a physician far exceeds that of equivalent investments in other professions, such as engineering or political science. Including an analysis of government spending on the education of healthcare professionals and the corresponding national benefits could add a valuable perspective, especially in the context of migration trends.

### PART 3

(Presentation of Dr. Vergara)

Dr. Bautista shared her insights on artificial intelligence by recounting her meeting with NVIDIA. It indicated that the country needs a unique plan rather

than relying on ASEAN-wide resources. Dr. Bautista also asked if templates or guidelines for AI implementation in schools could be developed, with examples applicable across various disciplines. The HEIs should also consider a comprehensive review of the General Education (GE) program, ensuring it is aligned with 21st-century competencies. Courses such as sciences and society may be too broad for algorithm discussions, and a deeper technological understanding should be integrated rather than merely appended to existing courses. Dr. Vergara answered that while an AI roadmap was presented by the Department of Trade and Industry (DTI), the Department of Information and Communications Technology (DICT) has yet to issue its own. He also added that CHED plans to reconvene a technical working group on AI for GE subjects, including a potential review of the GE curriculum over a decade old. This review could include templates for embedding AI within disciplines, utilizing a multidisciplinary approach with sample descriptions and methods. Dr. Vergara reiterated that although teaching modalities might be sensitive, he believes CHED should also consider them.

Atty. Estrada mentioned that he attended the DICT's launch of an industry skills framework, and alignment with this could be beneficial. Existing laws on AI primarily leave innovation to the private sector with minimal regulation. The concern now is managing AI-related risks, especially in areas like transparency and safety. In the U.S., discussions are underway about regulating AI to protect the Bill of Rights. He asked Dr. Vergara if his study addressed these concerns. From a curricular standpoint, Dr. Vergara reiterated that the research's focus is on the application and adaptation of AI rather than on creating the technology itself. He also reminded the panels that the Philippines is unlikely to control AI developments like in first-world countries, so we may need to address how to adapt responsibly. It would be valuable to have locally relevant datasets, such as looking into a standard corpus for Tagalog, that could support AI training specific to Philippine needs.

Dr. Bautista mentioned that avoiding the overregulation of AI in ways that might hinder development is critical. She proposed reviewing AI-related legislation to ensure it supports rather than restricts adaptation. Dr. Vergara recognizes widespread concern about AI's impact on labor and the need to manage its integration responsibly. Courses in development studies, economics, or ethics could address these implications. He shared his experiences in his AI classes, where he dedicated several lectures to AI's societal impacts, including labor, ethical concerns, and the promotion

of critical thinking. Dr. Bautista recommended a GE course on AI that is not overly prescriptive but encourages critical thinking and foundational understanding.

Dr. Hall praised Dr. Vergara's research because the presented initiatives uniquely target CHED and curriculum reform. This reform could incorporate AI as a tool across disciplines, aligning competencies with the distinct goals of each field.

Atty. Benitez-Jaro reminded the audience that while AI is at the forefront, other emerging technologies could supersede it. Critical thinking remains essential across disciplines, and introducing these skills from primary education onward may provide a stronger foundation. Currently, there are no changes to GE subjects, but she said she welcomes any initiatives that promote critical thinking within GE.

### **SYNTHESIS**

Atty. Estrada thanked the panel and fellows, noting EDCOM II's efforts to accelerate recommendations within the legislative timeline. This dialogue on often-overlooked subjects emphasizes the significant role of policy-making at EDCOM II.

### CLOSING REMARKS

Dr. Hall expressed gratitude to the five UP PEJA Fellows and highlighted the upcoming brown bag series in collaboration with EDCOM II. She emphasized UP CIDS's satisfaction with the PEJA Fellowship's reboot and reconfiguration of its agenda-driven research approach, which supports concrete policy outputs. UP CIDS will receive 15 program portfolios at the end of the program. She ended by highlighting that this series marks a promising start to future collaborations in other policy areas.

# **Higher Education Regulation and Tuition**

### **PRESENTATIONS**

### The Economic Regulation of Philippine Higher Education

Michael Alba, PhD

Dr. Michael Alba's presentation dives into how the Commission on Higher Education (CHED) can better regulate higher education in the Philippines to achieve key societal and institutional goals. His study focuses on addressing market failures and improving CHED's practices by analyzing its mandate, laws, and regulatory framework. He emphasizes the need for regulatory independence and fair treatment of public and private institutions, pointing out issues like regulatory capture and lack of transparency. Dr. Alba also calls for updates to CHED's legal framework to reflect modern aspirations, enhance access and quality, and ensure accountability through annual reports and better data collection. Supported by a team of experts and funding from the Far Eastern University (FEU) Public Policy Center, his research involves reviewing laws, analyzing data, and engaging with stakeholders. The work aims to deliver not just a detailed book but also essays tackling CHED's regulatory challenges and offering practical reforms.

## Exploring Socialized Tuition Models as an Alternative to the Free Tuition Regime

Geoffrey Ducanes, PhD

Dr. Geoffrey Ducanes presented a thoughtful critique of the Universal Access to Quality Tertiary Education Act (UAQTEA), highlighting concerns about its sustainability as enrollment in public higher education institutions continues to rise due to population growth, increased college participation, and the appeal of free tuition. He proposed socialized tuition as a more sustainable alternative, where tuition fees would depend on household income. Using examples from both local and international programs, he showed how setting an income threshold, such as \$\mathbb{P}250,000\$ per year, could redirect funds from wealthier students to those who need it most. This approach could save billions, allowing the government to better support low-income students through subsidies and invest in improving the quality of education. Ultimately, Dr. Ducanes emphasized that this system aligns with the spirit of UAQTEA: prioritizing financially disadvantaged but academically capable students while ensuring the program's long-term viability.

### Using Artificial Intelligence to Support Basic Education Teachers in Underresourced Contexts

Maria Mercedes T. Rodrigo, PhD

Dr. Maria Mercedes T. Rodrigo's study explored the role of AI in addressing challenges faced by educators in underfunded schools. Drawing insights from interviews with 48 Filipino teachers across urban and rural settings, she highlighted the "bring-your-own-AI" trend, where educators independently adopt tools like ChatGPT and Kahoot, often at personal expense. She identified the potential of AI to support teachers by streamlining tasks such as lesson planning, assessments, and student engagement while ensuring these tools complement rather than replace educators. Dr. Rodrigo underscored the importance of developing AI solutions that align with current teaching practices, cater to diverse learner needs, and automate repetitive tasks. She argued that these tools should be accessible, work under low-connectivity conditions, and minimize the need for advanced IT skills. Recognizing the need for consistent teacher training and localized AI solutions, she advocated for creating customized retrieval-augmented generation (RAG) applications for education. Emphasizing collaboration with policymakers and stakeholders, she urged prioritizing investments in teacher-centered AI solutions over one-to-one student-device ratios, fostering a future where technology empowers educators and enhances classroom impact.

## From Pixels to Policies: GIS Analysis of Education Access Points and Disparities

Felicia Yeban, PhD

Dr. Felicia Yeban delved into how schools are distributed across the country and how this affects literacy and education levels. Using tools like Power BI and Esri for analysis, she uncovered significant gaps in access to education, especially in rural areas and regions with lower literacy rates. Dr. Yeban pointed out that while the presence of elementary schools does not strongly influence educational attainment—largely due to high dropout rates by grade 2—better access to junior high schools has a clear positive impact. She also highlighted inequities in higher education, where programs are largely focused on business administration and teacher education, with very few doctoral programs available. To address these issues, Dr. Yeban advocated for moving beyond traditional school-building approaches. She suggested innovative strategies like online education, regional school planning, and creating education scorecards for local governments to tackle these longstanding challenges more effectively.

### **OPEN FORUM**

### PART 1

(Presentation of Dr. Maria Mercedes T. Rodrigo)

Mr. Elvin Uy discussed the challenges and opportunities of leveraging technology, particularly ICT and generative AI, to address systemic issues in Philippine education. Drawing from his experience in the Department of Education (DepEd) and the private sector, he highlighted the potential of tools like ChatGPT to enhance education through accessible, device-agnostic solutions. However, he noted the gap between policy and practice, as well as challenges in funding and tailoring solutions to schools' needs. He cited DepEd's progress in ICT integration but stressed that its current implementation remains basic, leaving room for innovation. Uy also pointed to the PISA 2022 findings, showing that while the Philippines ranks high in device use for learning, excessive leisure use negatively impacts performance, emphasizing the need to shift behaviors for better learning outcomes.

Dr. Orbeta discussed the challenges of integrating technology into Philippine education, particularly during the pandemic. He highlighted that over 80 percent of public schools outside Metro Manila relied on print-based learning due to poor internet connectivity, with less than 20 percent of households having reliable broadband. Dr. Orbeta emphasized the potential of low-tech, mobile phone-based solutions, as most Filipinos have access to cellphones. While AI-based solutions hold promise, he advocated for practical, context-specific approaches like sending electronic files for teachers to print and distribute. He encouraged further experimentation with technology tailored to Filipino households' needs.

Dr. Bautista highlighted the recent visit to the U.S. by an EDCOM II delegation, where they learned about Khan Academy's potential for the Philippines. She noted its effectiveness in pilot schools, especially in areas with broadband access, thanks to its individualized tutorials aligned with the Matatag curriculum. However, she also stressed the importance of considering regions without reliable internet access, where cell phone–based solutions might be more suitable. Dr. Banzon-Bautista suggested that Dr. Rodrigo's study explore the ongoing Khan Academy pilot project with DepEd, particularly its adaptive AI features that help students stay engaged and manage their learning pace.

Dr. Rodrigo acknowledged the points raised by Dr. Orbeta and Mr. Uy, particularly regarding investment in technology. She shared her familiarity with the Khan Academy project in the Philippines and mentioned her discussions with Harvard researchers about it. Dr. Rodrigo also introduced other applications, like Assistance from Worcester Polytechnic and Book Rule from Kyoto University. Assistance monitors student behaviors, providing interventions based on the types of mistakes students make, while Book Rule tracks electronic textbook usage. She emphasized the need for educational data mining and learning analytics within DepEd to guide policy, development, and expenditure on educational tools, which she plans to include in her report.

Dr. Ramos shared his Makati's successful implementation of Khan Academy AI in public schools, despite limited interest from DepEd and other local officials. He stressed the importance of proper infrastructure and a supportive environment to ensure AI is not seen as threatening to students or faculty. He also highlighted the critical role of local government units and school boards in driving the success of such initiatives.

Dr. Didith Rodrigo shared her experience with implementing AI-based applications in schools, particularly a two-year project funded by DOST to bring Minecraft into classrooms. She highlighted the significant effort required to support teachers, from helping them create lesson plans to providing ongoing tech support during lessons. Despite the success of the project, Dr. Rodrigo expressed disappointment that, after the project concluded in 2023, many teachers struggled to continue using the tool without the support they received during the project. She pointed out that there are many external factors creating barriers to sustained usage, which will be addressed in their report.

Dr. Roman suggested that Dr. Rodrigo and her colleague include the key factors necessary for successfully implementing AI in schools in their paper. These factors include teacher and student readiness, financial considerations, and other critical ingredients that legislators could address when drafting laws. She emphasized the importance of such insights for creating supportive and effective policies.

### PART 2

(Presentation of Dr. Geoffrey Ducanes)

Mr. Uy reflected on the economic and political implications of applying means testing to education subsidies, acknowledging both the potential "winners," like underprivileged private school students, and "losers," such as fully subsidized SUC students. He emphasized the need for evidence-based policymaking, praising Dr. Ducanes for adding rigor to the discussion. He also highlighted the utility of Listahanan as a starting point for targeting disadvantaged households, while noting its limitations and suggesting complementary tools from NGOs for more precise poverty identification. He also adds that access to higher education in our country is among the highest compared to other nations with similar per capita income. However, this level of access is not efficient.

Pres. Orbeta emphasized the importance of targeting higher education resources for sustainability and equity, highlighting the original recommendation of scholarships for the bright, grants for the poor, and loans for others. He noted that while the Tertiary Education Subsidy (TES) was designed to support the poor with both tuition and living expenses, its implementation has not prioritized them, often favoring students in areas without SUCs or LUCs. He expressed concern over recent policy changes,

such as the reduction of subsidies under CHED Memorandum Circular 5 (2023), which he argued further marginalize poor students and undermine their ability to pursue higher education.

Dr. Fabella pointed out that surveys conducted by Pacqueo and Orbeta suggest that many students enrolled in state universities and colleges (SUCs) are willing to cover up to 50 percent of their education costs, viewing it as a fair exchange. He also inquired if there is a theoretical argument against free tertiary education beyond just budgetary savings.

Executive Director Karol Mark Yee thanked Dr. Ducanes for the insightful study and recommendations, emphasizing the low number of the poorest beneficiaries in the TES program. He raised two questions. He first asked whether it is possible to estimate how many college-eligible 4Ps and Listahanan individuals could have gone to college with TES support, to highlight the barriers they face in accessing higher education. He then inquired whether it is feasible to estimate whether families in the 7th decile and upwards could afford college tuition, based on data from the Family Income and Expenditure Survey (FIES), to better understand the financial challenges for higher education.

Dr. Ducanes responded to Executive Director Yee's questions, explaining that using APES data, he could estimate how many college-eligible poor individuals could have attended college with TES. He also acknowledged the political challenge, noting that while free tuition in SUCs and LUCs benefits many, there is an opportunity cost to using funds for universal higher education instead of other priorities like improving basic education or enhancing higher education quality. Dr. Ducanes proposed using a proxy means test based on the Family Income and Expenditure Survey to better target TES beneficiaries, but cautioned that the instrument's transparency could lead to manipulation. He also mentioned that Dr. Orbeta's team is currently studying the process for identifying TES beneficiaries.

He raised concerns about setting the right income threshold for free tertiary education, pointing out that it's important to ensure the poor actually know about and can access the program. He also stressed that quality education should be a top priority, warning that the free tuition policy might unintentionally undermine the goals of senior high school and lead to unsustainable higher education institutions. Ramos emphasized that any solution should include safeguards to ensure these schools don't rely too

heavily on government subsidies and noted that the income threshold would play a big role in determining the savings generated by the policy.

Atty. Estrada discussed issues with the implementation of the Tertiary Education Subsidy (TES) under RA 10931, particularly in areas without SUCs or LUCs. He highlighted that the law's lack of prioritization in these areas led to an influx of students from private institutions, causing the TES budget to be stretched thin. Atty. Estrada emphasized the need for a more targeted approach to ensure that the poorest and most deserving students are prioritized, and suggested that eligibility should be determined before enrollment to prevent backlog and inefficiencies.

VP Bautista acknowledged the challenges of withdrawing free tertiary education in an election year, emphasizing the ideological debate between state-provided tuition for all and prioritizing funds for basic education. She highlighted the need for clearer thresholds and more accurate targeting of the poor, noting that UP has developed a system to assess student eligibility through household characteristics and income projections. She also mentioned that political resistance remains strong, but efforts to amend the system are underway to ensure sustainability.

### PART 3

(Presentation of Dr. Michael Alba)

Asst. Dir. Aranjuez emphasized the need for CHED to develop a visionary sectoral plan aligned with national goals like Ambisyon 2040, highlighting the gap since the last higher education sector plan was created two administrations ago. He pointed out CHED's underutilized capacity for data analytics, which could help forecast and address emerging needs. He noted that tasks like collecting tuition data should be CHED's responsibility rather than UNIFAST's. He also raised concerns about the functionality and effectiveness of technical panels, citing issues like outdated curricula and unimplementable policies, as exemplified by the seafarer compliance issue, which undermined national credibility.

OIC Domingo emphasized the need for CHED to improve its collection of administrative data, particularly from SUCs, which currently do not submit student records. She also mentioned ongoing discussions about linking data from DENR, DepEd, TESDA, and CHED to better track learners' progress and develop appropriate programs.

Dr. Orbeta emphasized the importance of regulatory independence, highlighting the principle that a body cannot act as both "boxer and referee" for fair governance, and cited the BSP as a model for autonomy. He supported Dr. Alba's proposal for private institutions to provide upfront full program costs for transparency and better household decision-making. Dr. Orbeta also discussed the idea of price cap regulation, suggesting a framework that ties tuition increases to inflation minus a quality improvement factor (X) and recommended using past inflation data for better accuracy.

Atty. Joseph Noel M. Estrada questioned CHED's authority to regulate tuition, pointing out that RA 7722 does not clearly give CHED this power, apart from setting minimum academic standards. He explained that deciding tuition fees is part of an institution's academic freedom, with government regulation only meant to ensure transparency and prevent abuse, as seen in landmark cases. He emphasized the need to balance public interest with the autonomy of schools, arguing that while regulation is important, it shouldn't override their right to determine fees or manage their financial decisions.

Dr. Alba highlighted the need for clearer legal interpretations of CHED's authority to regulate tuition and school fees, citing laws and Supreme Court rulings. He also called for CHED to take a more proactive role by creating systems to track higher education performance, requiring schools to submit data, and ensuring transparency in tuition costs to improve accountability and help students make informed decisions.

Dr. Bautista expressed gratitude to Dr. Michael Alba for addressing key issues in higher education, including the need for greater transparency through data, such as licensure exam results, and the risks of regulatory capture. She highlighted the challenges of technical panels working in silos without holistic oversight, which hampers reforms, and emphasized the importance of independent assessments to ensure educational quality. She also supported the idea of upfront tuition cost disclosures for students and acknowledged the unique challenges of maritime education, which must comply with global standards. She also indicated that EDCOM is in talks with the PRC for alternative pathways for learners who have not passed their respective licensure exams in response to Dr. Alba's suggestion.

Mr. Uy pointed out some key issues in early childhood care and development (ECCD), like the lack of government funding, low enrollment rates, and the scattered approach to implementation. He stressed the importance of having

better data, using tools like GIS for geographic analysis, and suggested more focused policies and strategies to improve access, transparency in costs, and overall quality in ECCD programs.

Dr. Orbeta mentioned that EDCOM II has been looking for more detailed data, which this work could help provide. He suggested that understanding factors like school, home, and community characteristics could give a clearer picture of how school presence affects education outcomes. Dr. Orbeta also emphasized the growing importance of other types of literacy, like ICT and financial literacy, and encouraged further research in these areas to improve future educational policies.

Dr. Bautista appreciates Dr. Yeban's GIS work and suggested exploring how private higher education institutions are distributed alongside SUCs and LUCs to identify gaps and overlaps in educational programs. She also recommended connecting Dr. Yeban with the Resilience Institute at UP, which is using GIS to map disaster-prone areas, as there might be opportunities for collaboration between their efforts.

Dr. Yeban thanked everyone for their suggestions and comments, expressing enthusiasm about addressing them, and mentioned that while they already have data on public and private HEIs, it was not included in the map this time due to the large amount of data.

### **SYNTHESIS**

Atty. Estrada discussed how artificial intelligence (AI) can transform education by helping under-resourced teachers through AI training in professional development programs. He also stressed the need for sustainable funding in higher education, urging stakeholders to invest in initiatives that improve quality and ensure equal access to tertiary education for all. Furthermore, he pointed out that CHED's regulatory framework needs to be improved to promote inclusivity, diversity, and better alignment with societal and educational goals.

### **CLOSING REMARKS**

Dr. Roman reflected on the meaningful and stimulating discussions during the session, expressing gratitude to the UP PEJA fellows. She acknowledged the challenge of ensuring the findings reach EDCOM and eventually influence legislation, emphasizing the collective effort needed to improve the country's education system.

# Government and Finance

### **PRESENTATIONS**

Systems Analysis Of The Philippine Basic Education System: The Role Of School Leadership

Maria Assunta C. Cuyegkeng, Dr.rer.nat

Dr. Maria Assunta C. Cuyegkeng's study employs a systems analysis approach to examine the Philippine Basic Education System, emphasizing the critical role of school leadership. Through a comprehensive review of policy documents, focus group discussions (FGDs), and interviews with educators across various administrative levels, the study identifies systemic challenges such as hierarchical rigidity, inconsistent policies, political influences, and a lack of continuity in reforms. The research highlights four system archetypes to diagnose common patterns of organizational behavior and their impact on student performance, teacher engagement, and policy implementation. These archetypes are (1) shifting the burden, (2) eroding goals, (3) fixes that fail, and (4) the attractiveness principle. Dr. Cuyegkeng argues for leveraging feedback-guided analysis to identify reinforcing and balancing loops within the educational ecosystem, enabling targeted interventions that foster innovation, enhance leadership effectiveness, and mitigate unintended consequences. Best practices in school leadership, including building trust, simplifying communication, and consistent decision-making, are identified as pivotal to driving systemic improvements. The study underscores the need for pragmatic, long-term strategies aligned with the realities of political cycles to sustain meaningful reforms.

## Innovations and their Enablers and Barriers in Philippine Basic Education: Policy Governance Implications

Maria Regina M. Hechanova-Alampay, PhD

Dr. Maria Regina M. Hechanova-Alampay's study explored the innovations in Philippine basic education governance, identifying key initiatives, barriers, and enablers, and providing policy recommendations. Drawing insights from a participatory action research workshop involving DepEd officials from 10 regions, the study highlighted notable innovations such as localized learning programs, digitized education resources, farm-based feeding initiatives, and streamlined administrative processes. Enablers included visionary leadership, resource availability, and partnerships, while barriers ranged from centralized decision-making, political appointments, and a compliance-driven culture to resource deficits and overlapping policies. Dr. Hechanova-Alampay advocated for evidence-based, aligned policies, decentralization of resources, and support for grassroots innovation, emphasizing the need to empower local implementers and scale up successful programs for systemic impact.

### Can Decentralization Improve Philippine Education? Lessons from Global Experience

Elizabeth King, PhD

Elizabeth King, PhD, presented her study "Can Decentralization Improve Philippine Education? Lessons from Global Experience," which distills insights from the global experience of decentralization in education and other sectors to assess its potential applicability to the Philippines. Drawing on a comprehensive review of case studies, theoretical perspectives, and empirical evidence, her analysis identifies both opportunities and challenges in decentralizing education systems. Dr. King emphasized the importance of a phased, iterative approach to reform, prioritizing the strategic roles of central government while defining clear and differentiated responsibilities for subnational levels. She highlighted the critical need for vertical fiscal balance, capacity-building, and a readiness index to ensure effective implementation. With the Philippine context in focus—marked by vast regional disparities, diverse linguistic and cultural landscapes, and uneven governance capacities—she proposed deliberate reform design and robust monitoring mechanisms to evaluate outcomes. The study underscores that

decentralization's success hinges on tailored approaches, careful preparation, and continuous assessment to address systemic challenges and foster innovation at local levels.

## Aiming for Seamless and Integrated Lifelong Learning Delivery in the Philippines

Dina Ocampo, PhD

Dina Ocampo, PhD, presented her initial study titled Aiming for Seamless and Integrated Lifelong Learning Delivery in the Philippines, emphasizing the need for a lifelong learning framework that integrates formal, nonformal, and informal education. Her work explores ways to enhance educational governance, ensuring equitable access to learning opportunities for Filipinos of all ages, from birth to adulthood. Dr. Ocampo highlighted the importance of leveraging micro-credentialing, mapping competencies across modalities, and fostering personalized and inclusive learning pathways to address diverse needs. Drawing comparisons with countries like Vietnam, Thailand, and Finland, she underscored gaps in the Philippines' qualifications frameworks and lifelong learning systems, particularly in adult education and community-level programs. The study calls for shifting mindsets toward lifelong education as a lifestyle choice and prioritizing reforms to create integrated learning ecosystems, enhance program accessibility, and establish clear pathways for learner mobility and credentialing.

## Kakayanin Natin: Empowering Citizens to Participate in Improving Education Governance in the Philippines

Kenneth Isaiah Ibasco Abante, MA, and Riz Supreme Balgos Comia, LPT

Kenneth Isaiah Abante and Riz Supreme Balgos Comia's study, "Kakayanin Natin: Empowering Citizens to Participate in Improving Education Governance in the Philippines," highlights the gaps and opportunities in education governance participation. Through mapping 29 mechanisms for public engagement and conducting interviews with education stakeholders, their research identifies critical themes: the disconnect between policy and practice, the overburdened roles of school leaders, and the lack of accessible education data. Despite challenges, public school leaders exhibit resilience and

a "kakayanin" mindset in addressing learners' needs. The study recommends a learner-first referral network to alleviate the administrative load on teachers, hiring school-based social workers, and making education data more open and accessible. Their work underscores the collective responsibility for education and the potential for systemic transformation through community collaboration.

## Governance Cultures, Perspectives & Practices in Philippine Basic Education Settings: Focus on Teacher-in-Service Training and Development

Ma. Glenda Lopez Wui, PhD and Enrique Niño P. Leviste, PhD

Ma. Glenda Lopez Wui, PhD, and Enrique Niño P. Leviste, PhD, presented their study "Governance Cultures, Perspectives & Practices in Philippine Basic Education Settings: Focus on Teacher In-Service Training and Development," which examines the intersection of school culture and teacher professional development in Philippine basic education. The research, encompassing eight elementary schools across Luzon, Visayas, and Metro Manila, explores the perceptions of school leaders and teachers regarding governance practices, professional development, and workload management. Findings highlight shared governance cultures rooted in compliance with DepEd standards, yet showcase variability in leadership strategies. Key challenges identified include teacher workload, inadequate infrastructure, and low teacher morale, while opportunities lie in fostering mentorship, enhancing support for professional development, and addressing stressors through policy reforms. Despite these challenges, a generally positive organizational climate and collaborative school culture were reported, though improvements in inclusivity, digital preparedness, and teacher compensation are deemed essential for systemic advancement.

### **OPEN FORUM**

### PART 1

(Presentations of Dr. Elizabeth King)

The open forum was facilitated by Dr. JC Punongbayan, co-convenor of the UP CIDS Higher Education Research and Policy Reform Program and an assistant professor of UP School of Economics.

Mr. Uy raised a key question: Should functional decentralization be combined with fiscal decentralization in education? He suggested considering a localized approach to teacher hiring and payment, as well as expanding maintenance and other operating expenses (MOOE) management to all public schools, not just 7,000 out of 46,000. He cited evidence from the Bautista, Bernardo, and Ocampo (2012) study on the challenges of sustaining gains in decentralized reforms once donor funding ends.

Dr. Milwida highlighted the difficulty of convincing the central government to "let go" due to a "denial mentality" that decentralization might worsen governance. She suggested exploring strategies or incentives to encourage the central government to relinquish some control. And mentioned corruption (e.g., commissions in school building projects) as a barrier to devolving functions like infrastructure development.

Dr. Yee requested elaboration on the phased and selective decentralization approach mentioned in the presentation. He specifically asked how phases were determined and how the selection of areas or sectors for decentralization varied across countries. Suggested juxtaposing RA No. 9155's framework for defining central, regional, and divisional responsibilities with LGU roles in education governance.

Dr. Paqueo strongly supported Dr. King's recommendation for a phased approach to decentralization, emphasizing the impracticality of a "Big Bang" approach. Questioned whether decentralization could work effectively in the Philippine context, given weak political incentives and the prevalence of dynastic politics. Asked whether decentralization should be accompanied by reforms aimed at enhancing political accountability and incentives for better performance.

Dr. King emphasized the need for a phased and selective approach to decentralization, starting with regions demonstrating readiness through strong leadership, civil society, and financial capacity, while testing and refining management tools. She stressed that decentralization models must adapt to the Philippines' diverse contexts, balancing centralized quality oversight with local autonomy to empower communities and parents. Success requires flexibility, political will, and collaboration with civil society to create tailored solutions that prioritize children's education.

#### PART 2

(Presentation of Ma. Glenda Lopez Wui, PhD, and Enrique Niño P. Leviste, PhD)

Mr. Garma asked whether teachers and school leaders share similar perspectives on school culture and governance, noting its importance for continuity in leadership practices. He highlighted that only about half of teachers see teaching as their first career choice, suggesting dissatisfaction may impact performance and advocating for a possible reduction in retirement age.

Mr. Garilao's question draws from the difference between positive perception and poor outcomes. He asked how governance and teaching culture can be positively viewed while producing low performance outcomes, probing whether these perceptions reflect all education outcomes.

Dr. Yee sought clarification on participant selection, the dominance of Edukasyon sa Pagpapakatao teachers, and whether the sample was representative of all levels of teachers. He questioned findings that assumed administrative workload reduction, noting the policy was not fully implemented. He suggested that this impacts data reliability.

Regarding compliance and positive culture, Dr. Hall asked why compliance with DepEd rules is seen as positive despite reflecting a hierarchical decision-making process that may undermine school-level leadership.

Dr. Wui and Dr. Leviste addressed the concerns by explaining that while teacher workload has reportedly improved due to administrative reforms, the perception of positive school culture does not always align with student outcomes. They highlighted that low parental involvement and socioeconomic factors could significantly impact student performance, despite efforts by schools. Additionally, they noted that compliance with rules is often viewed positively, but it can sometimes limit innovation and vary depending on the priorities and transitions of individual school leaders.

#### PART 3

(Presentation of Dr. Maria Regina M. Hechanova-Alampay, PhD)

Mr. Uy highlighted the limitations of the Special Education Fund (SEF), noting that it exacerbates inequities as smaller LGUs cannot generate sufficient resources. He emphasized focusing innovation on instructional leadership to address gaps in teaching and learning outcomes instead of marginal improvements in governance. He suggested leveraging private book publishing to maintain diversity in educational materials.

Mr. Garma critiqued the tendency to equate innovations with more programs, often dictated by higher levels of governance, leading to a culture of compliance rather than genuine school empowerment. Highlighted the lack of resources to implement these mandated programs, which undermines decentralization.

Mr. Garilao stressed that any reforms or innovations must prioritize their contribution to improved learning outcomes. Criticized the shift of responsibility for poor outcomes to parents instead of addressing systemic school-level issues. He also suggested that decentralization and governance innovations are directly tied to measurable improvements in student learning.

Dr. Hechanova-Alampay acknowledged the valid points raised and emphasized that while learning outcomes may not have been the primary focus of all innovations observed, programs like catch-up initiatives clearly aim to address these. She highlighted the critical need for accurate data and metrics to inform strategic innovations, identifying gaps in information infrastructure and leadership training as systemic issues. Moving forward, she stressed that innovation policies must include clear parameters to ensure initiatives contribute meaningfully to education outcomes.

#### PART 4

(Presentation of Dr. Maria Assunta C. Cuyegkeng, Dr.rer.nat)

Mr. Uy asked how educators can optimize the current education system's outcomes under existing constraints. He suggested focusing on evolving systemic constraints over time while addressing suboptimal results and improving equity, quality, and learning outcomes.

Mr. Garilao commented that reform agendas must be pragmatic and aligned with political realities. He suggested that to strengthen school leadership by providing resources and capacity-building support to ensure schools can innovate and survive in challenging environments.

Prof. Confesor said that DepEd often focuses on compliance and short-term reforms, lacking a shared transformative vision. He also suggested looking into adopting a systems approach to establish consensus on a future education agenda, identify reinforcing loops, and engage diverse stakeholders, especially at the community and barangay levels.

Dr. Cuyegkeng emphasized that the delay in policy implementation is not addressed in the current system archetypes, highlighting the need for better management. She discussed the importance of transformation in the education system, pointing to the principal as a key agent of change, with creative strategies allowing some to thrive despite challenges. She stressed the need for better training for school leaders, as many principals are not adequately prepared for the role, and suggested that in-service training should focus on developing essential competencies like management, risk-taking, and agility.

#### PART 5

(Presentation of Dr. Dina Ocampo)

Dr. Paqueo inquired about the coordination mechanisms needed for reforming the education system to optimize resource allocation across different components of lifelong learning. He emphasized the need for clear leadership in interagency coordination and questioned the effectiveness of existing councils.

Mr. Uy compared the Philippines' education outcomes with Vietnam's, suggesting more investment in early childhood care and development (ECCD) and questioning whether the Philippines has focused on the wrong educational priorities in the past.

Dr. Yee raised concerns about the PQF and lateralization, noting the difficulty of negotiating industry participation in training design and certification. He also asked how various governance structures (e.g., DepED, CHED, TESDA) could be aligned effectively. He emphasized the need for a clear mechanism and legislation for governance and coordination.

Dr. Ocampo emphasized the importance of making existing interagency governance structures work by ensuring that key agencies like CHED, TESDA, and DepEd engage with each other effectively, potentially through a circular or directive. She also advocated for the recognition of micro-credentials, stressing that they should be portable and integrated into higher education curricula, with a clear, accountable body overseeing credentialing.

#### PART 6

(Presentation of Kenneth Isaiah Ibasco Abante, MA, and Riz Supreme Balgos Comia, LPT)

Mr. Garma acknowledged the group's efforts but raised concerns about the dynamics within existing mechanisms like the Parent-Teacher Association (PTA) and School Governing Council. Specifically, he questioned if these structures truly reflect the community's needs, given how middle-income families may dominate the PTA, prioritizing fundraising over educational goals. He also asked for a comparison of PTA dynamics in urban versus remote schools to understand regional disparities.

Dr. Guevara recommended using the "ladders of empowerment" to benchmark whether parents and community members are truly empowered in school activities. She highlighted that there are six steps in this framework, from simply being informed to full participation, which could help measure community involvement.

Dr. Yee proposed that the study on the 29 DEPED policies should be compared to the framework the group is proposing. She asked the team to identify

gaps in the policies and offer specific recommendations for improvement, encouraging them to be bold in presenting these suggestions.

The duo responded by sharing examples of PTA dynamics, emphasizing how parents in low-income areas, despite challenges, stepped up during the pandemic to support learning. They also highlighted the need for better local staffing, such as school-based social workers, and called for more proactive data disclosure by DEPED to empower stakeholders and improve decision-making. Additionally, they pointed out the lack of dedicated education officers in many LGUs and suggested that national government support is crucial to address this gap and improve local governance in education.

## **SYNTHESIS**

Kaye Anunuevo highlighted that EDCOM's focus for Year 2 is on addressing the barriers impeding the success of the education system, with an emphasis on improving coordination within and between agencies. She acknowledged the value of the studies presented, which support ongoing work on governance, finance, decentralization, and school-home engagement, as well as the importance of leadership culture in shaping effective education practices. She emphasized the need for more actionable insights on leadership and culture and expressed excitement about using the presented research to enhance consultations for policy development. Finally, she previewed next week's discussions on lifelong learning, micro-credentialing, and creating an inclusive education system.

## **CLOSING REMARKS**

Dr. Nene Guevara expressed frustration due to recent challenges but found renewed hope in the discussions and ideas presented, particularly from the principals in Iloilo, who reminded her of the importance of transforming education. She emphasized that transformation is a disruptive process that requires persistence, collaboration, and innovation, and thanked the researchers for their valuable contributions. She closed by acknowledging the importance of continuing the work for the learners and invited everyone to the next session, which is focused on tech-voc issues.

## Technical and Vocational Education and Training and Lifelong Learning

### **PRESENTATIONS**

Navigating/Negotiating the Lifelong Learning Terrain in the Philippines: Path of Optimism and Caution

Carolyn Medel-Añonuevo, MA

Ms. Añonuevo's presentation explored the concept of lifelong learning, tracing its journey from early ideas of adult education to its role in today's global development goals, like UN Sustainable Development Goal 4 (Quality Education). She discussed how approaches have shifted, contrasting UNESCO's focus on holistic, human development with the economy-driven strategies of organizations like the Organisation for Economic Co-operation and Development (OECD) and the World Bank. Using case studies from South Korea and Singapore, she highlighted practical ways to implement lifelong learning, such as South Korea's Lifelong Learning Centers and credit banking systems. For the Philippines, she examined programs like ALS and ETEEAP, as well as the challenges in linking lifelong learning to national development goals, which tend to prioritize labor and economic mobility over broader educational reform. She further emphasized the need to complement technical frameworks like the Philippine Qualifications Framework with a learner-focused approach, acknowledging the messy nature of real learning pathways, especially in a context shaped by our country's background.

## Understanding Labor Market Outcomes of Graduates in the Informal Economy

Lisa Grace Bersales, PhD

Dr. Bersales showed her research on where senior high school, technical-vocational education and training (TVET), and college graduates end up in the labor market. Her discussion focused on informal employment, which involves jobs that lack social protections like SSS or GSIS. She highlighted that being in the informal economy, while still contributing to economic growth, leaves individuals vulnerable as they age, especially with the Philippines moving toward an aging population. Her findings show that TVET graduates struggle with high underemployment, senior high school graduates face challenges finding jobs, and women, older workers, and those with less education are more likely to end up in informal work. Postgraduate degree holders, on the other hand, are the least affected. Dr. Bersales emphasized the importance of preparing for the demographic shift through better policies and lifelong learning opportunities, particularly to support older workers and improve job quality across sectors.

## Centering Youth Aspirations in Education Reform: Gen Z Perspectives on the Future of Education, Work, and Life

Joel Paulin Mendoza, LPT, MA

Mr. Mendoza's presentation focused on Gen Z's labor force participation, particularly their aspirations, challenges, and experiences related to education and work. His study highlighted that Gen Zs, especially those aged 15–24, are increasingly engaged in multiple jobs and the gig economy, with significant barriers such as a lack of self-motivation, access to devices, financial constraints, and struggles with understanding lessons. He noted gender and community-based disparities, such as higher academic performance among female Gen Zs and their preference for working abroad, and earlier entry into the workforce for male Gen Zs and those from rural areas. Mendoza emphasized the need for gender-responsive policies and targeted interventions, especially for first-generation college students, to address these unique challenges and improve their educational and work outcomes.

## Centering Youth Aspirations in Education Reform: Gen Z Perspectives on the Future of Education, Work, and Life

Cleve V. Arguelles, MA

Mr. Arguelles presented his research on how youth aspirations should be at the center of education reform, highlighting their crucial impact on young Filipinos' educational, career, and social decisions. Using data from the 2021 YAFS survey, he found that most youth aim to finish college, with some aspiring for postgraduate degrees, but many out-of-school youth have no plans to return. Career aspirations leaned toward working overseas, with differences shaped by urban exposure, age, and socioeconomic factors. On social aspirations, most young people want to marry and have children later in life, although many face gaps between their goals and reality. Mr. Arguelles stressed that aspirations are shaped by family, role models, community, and access to opportunities, and that these gaps, where goals and circumstances don't align, need to be addressed. The presenter called for education reforms that go beyond resources, focusing on building self-efficacy and the ability to choose, while their next steps include combining datasets to provide deeper insights and actionable recommendations for policymakers.

### **OPEN FORUM**

#### PART 1

(Presentation of Carolyn Medel-Añonuevo)

Comm. Valenzuela shared insights into the Philippines' journey in advancing lifelong learning, including the creation of the Center for Lifelong Learning for Sustainable Development in 2009, which had achieved UNESCO Category 2 Institute status but was later discontinued due to funding and sustainability challenges. She emphasized the importance of developing a clear framework, ongoing efforts by CHED to map and enhance lifelong learning programs, and the shift toward digitalization, micro-credentials, and lifelong learning cities to address current needs. She also highlighted the lessons learned from past achievements and setbacks, stressing the need for consistent support to sustain such initiatives.

TESDA Director Isaac emphasized the cultural shift needed from the traditional notion of *makatapos* (finishing education) to *patuloy na matuto* (continuous learning), aligning with lifelong learning principles. She highlighted TESDA's competency-based education system, established in 1994, which is modular, flexible, and geared toward employability through microcredentials and curriculum tied to industry standards. She also stressed the importance of collaboration between CHED, TESDA, and other stakeholders on pathways, equivalencies, and credit transfer to strengthen TVET as a cornerstone of lifelong learning.

Dr. Bautista highlighted the evolution of lifelong learning from its roots in adult and technical education to its current integration with higher education, despite initial resistance. She emphasized the need to connect various elements like the Philippine Qualifications Framework (PQF), pathways, equivalencies, and learning outcomes across educational stages, underscoring the value of a unified framework. Reflecting on the challenges faced by past initiatives, she stressed the importance of stability, sustained leadership, and institutional support to ensure progress in lifelong learning efforts.

Dr. Yee emphasized the urgency of addressing lifelong learning within the limited timeframe of EDCOM's remaining 1.5 years. He highlighted challenges such as governance issues, cultural barriers, fragmented implementation, and insufficient institutional capacity within agencies like CHED and TESDA. Stressing the importance of a cohesive roadmap, he urged for actionable, strategic steps that EDCOM could prioritize to build a strong foundation for lifelong learning while advocating for structural reforms and coordinated efforts to ensure sustainability and meaningful progress.

ED Justimbaste stated that TVET inherently embodies lifelong learning due to its flexible, short-duration courses and its role in continuous upskilling and reskilling of the workforce. She highlighted TESDA's strategic focus on integrating TVET into senior high school curricula, enabling credit transfers, and aligning qualifications with industry demands while devolving lower-level programs to the community level. She also stressed that the PQF is a vital unifying structure to achieve a seamless, lifelong learning system that bridges education and workforce needs.

Ms. Añonuevo pointed out that lifelong learning must be both lifelong—spanning all stages from early childhood to adult education—and life-wide,

recognizing learning in diverse settings such as prisons, community centers, and informal spaces. She underlined the need for a coordinated effort among government agencies to address fragmented approaches, prioritize inclusivity for disadvantaged groups, and balance economy-driven skills development with cultural, environmental, and civic learning goals. Ma'am Añonuevo also stressed the importance of institutional frameworks and policies that transcend temporary initiatives, ensuring seamless pathways and equitable access for all learners.

#### PART 2

(Presentation of Dr. Lisa Bersales)

Dr. Punongbayan posed two questions. He asked if the treatment of non-wage workers as a proxy for informality aligns with global definitions and whether international frameworks could guide its formalization. He also looked for Dr. Bersales' insights on potential drivers of informal work pending deeper causal research.

Dr. Yee raised several points. He clarified the labor force participation rate for senior high school graduates and suggested exploring deeper distinctions for TVET graduates based on NC levels and industry. He also recommended disaggregating data on elementary and high school completions, analyzing job quality in terms of occupation and sector, and comparing trends across different years for better insights. Additionally, he questioned the counterintuitive trend of male college dropouts being in the informal sector despite higher educational attainment, suggesting that examining returns data might help clarify this anomaly.

Ma'am Zarsadias admitted to the challenges of working with TVET graduate data from the LFS, especially regarding its representation. She suggested utilizing results from the annual tracer study on TVET graduates and highlighted that additional data on the characteristics of female graduates could offer insights into their labor force participation. She also recommended considering proxies for the "why" behind the data to improve the understanding of the issue.

Dr. Bersales confirmed to Dr. Punongbayan that the proxy for informality used in the study aligns with international standards set by the ILO, which other countries also follow. She explained the operational definitions

used for senior high school graduates in the labor force, clarified plans to disaggregate elementary and high school data, and discussed the importance of incorporating trends from previous years and additional data from the family income survey. Dr. Bersales also mentioned the valuable insights from her past tracer study on female TVET graduates and the impact of unpaid care work on their labor force participation.

Atty. Estrada noted the lack of social legislation supporting the informal economy, particularly for the self-employed, as most policies are tailored toward formal employment. He pointed out that government programs like the SSS are not appealing to self-employed individuals due to the unattractiveness of the contributions system and the lack of social protection. He questioned whether improving support for informal sector workers through better social policies could enhance labor market outcomes for graduates entering self-employment. He also highlighted the complexity surrounding retirement pay for part-time teachers, especially those with long service in multiple institutions. Despite being entitled to retirement benefits according to a recent Supreme Court ruling, the lack of a clear formula for calculating their pay based on years of service adds confusion and difficulty, especially since part-timers cannot achieve regular status unless they have a license. He suggested that this gap might influence their decisions to continue working in teaching, even as the country's needs for teachers are severe.

Comm. Valenzuela praised the study and suggested adding a deeper analysis of why certain individuals are employed, specifically looking into the profiling of competencies that drive employability, such as communication skills and emotional intelligence, across industries like agriculture and services. She also pointed out the need to investigate the role of TVET courses in the employment of college graduates, particularly those who take additional certifications, and why these graduates seem to be similarly employed as those with direct TVET qualifications.

Dr. Yee emphasized the interconnectedness of various studies of the UP PEJA Fellows, pointing out that one aims to identify economic sectors offering superior labor market outcomes, while another explores the pathways available for graduates in both formal and informal economies. He highlighted the importance of understanding the desires of the youth and the gaps in education and workforce opportunities to align education system reforms with both national needs and student aspirations. Dr. Yee encouraged fellows to incorporate these connections when drafting policy

recommendations and urged them to consider how their findings contribute to a broader, unified picture.

#### PART 3

#### (Presentation of Cleve V. Arguelles & Joel Paulin Mendoza)

Sec. Isaac discussed the complexity of educational aspirations, especially for those in TVET, where the focus is on upskilling and individualized learning paths rather than traditional education blocks. She used the example of women weavers in "Basil," who have elevated their craft into exportable goods, to illustrate how aspirations shift within the informal economy. Sec. Isaac proposed the need for a system that better tracks and addresses the aspirations of informal economy workers, suggesting that this could inform the development of targeted upskilling programs and micro-credentials. She also proposed that Comm. Valenzuela and CHED look into learner aspirations in the several sectors so HEIs can create better learning plans for them.

Dr. Karol Mark Yee highlighted the potential of integrating the insights from the YAFS survey to better understand the characteristics of those who wish to return to education versus those who don't. He emphasized the importance of exploring mental health, access to technologies, and how factors like fertility and contraception might influence educational aspirations. Additionally, he pointed out the need to study the profile of individuals aiming for graduate degrees, noting that the Philippines has one of the lowest participation rates in graduate studies in ASEAN and suggesting that understanding the motivations and barriers could help create policies that encourage further academic pursuit.

Engr. Elepaño raised concerns about the reasons behind individuals' decisions to go abroad, questioning whether it's driven by economic factors or immigration motives, particularly in industries like construction, where the competition is global. He also pointed out the absence of TVET options in the survey. He suggested that microcredentialing could address gaps in employable skills for certain sectors. Lastly, he humorously asked whether the survey considered whether people prefer having pets over children, given the rising trend of pet ownership.

Dr. Bautista highlighted concerns about the low growth mindset among Filipino youth, particularly in the context of the PISA results, suggesting

that many marginalized students may have aspirations but are too cynical to express them. She emphasized the importance of addressing this mindset to help children see their aspirations as achievable. Additionally, she discussed the desire of Filipino students, even those at UP, to work abroad—not only for economic reasons but also for the broader life experiences that living abroad can provide.

ED Justimbaste emphasized the importance of understanding the aspirations and profiles of TVET graduates, particularly those aged 15–24, to better tailor program delivery. She suggested that there is a need to promote the concept of lifelong learning and position TVET as a valid career choice, rather than just a stepping stone to higher education. She also noted that while TVET's role is recognized, more awareness is needed to show youth that TVET offers long-term career potential.

Ms. Zarsadias underpinned the need to incorporate inclusivity, particularly addressing gender inequality and other demographic factors, into the analysis of educational reform. They suggested that these aspects are crucial for understanding how programs are delivered and aligning them with the preferences of individuals regarding their future work. She also pointed out the importance of considering these factors to ensure a more comprehensive and effective approach to program development.

Dr. Hall showed her concerns about the significant dropout rates among Gen Z, especially males who feel compelled to work and support their families, which often leads to them not wanting to return to education. She questioned whether current policies and mechanisms are effectively addressing this issue and attracting out-of-school youth (OSY) back into the educational system.

Comm. Valenzuela flagged the low motivation and lack of national pride among Filipino youth, as reflected in their preference for working abroad rather than pursuing opportunities locally. She emphasized the need for national policies and educational interventions that foster a sense of patriotism and encourage young people to contribute to the country's development, similar to the strong sense of nationalism seen in countries like Malaysia and Thailand.

Dr. Yee inquired about the historical context of Filipino youth's aspirations and nationalism, questioning whether the current trends of low motivation and a preference for working abroad are a new phenomenon or have always

been present in the country's history. He sought insight from Dr. Bautista, as an expert social scientist, to understand whether these patterns have evolved.

Dr. Banzon-Bautista reflected on how aspirations in previous generations were tied to upward mobility, where education was seen as a path to becoming professionals, especially among farmers. She highlighted the complex issue of nationalism and identity, noting that while it's difficult to cultivate love for the country amid political challenges, there's a need to address this cultural issue beyond the education system, emphasizing the importance of historical roots and broader societal factors. She further showed the importance of the dual challenges of fostering love for the country while addressing the global orientation of the younger generation, shaped by social media and migration. She suggested instilling a sense of mission in overseas Filipinos, inspired by examples like Vietnam's deeply rooted nationalism, to encourage their eventual return and contribution to national development efforts.

Prof. Confesor accentuates the importance of studying the aspirations of various segments, particularly in the context of lifelong learning, as education systems must adapt to the evolving needs of different groups. She pointed out the shift from "exporting labor" to migration due to globalization, noting that education has opened up opportunities for people, especially women, to seek work abroad not solely for economic reasons but for broader experiences, urging for a deeper, more intimate understanding of Gen Z's aspirations.

Reminded everyone of the looming challenge of an aging global population and how countries like Japan and South Korea will increasingly rely on migration to sustain their economies, potentially attracting top talent from the Philippines. She stressed that while education focuses on skills, there's also a critical need to instill love for the country and a sense of citizenship to ensure the Philippines can retain its best workers despite global migration trends.

Mr. Arguelles answered that the aspirations of young Filipinos to migrate are shaped by exposure to global opportunities, a phenomenon not unique to the Philippines as even nations like Singapore face challenges in retaining top talent. He further showed the need for deeper studies on youth motivations, including insights from ongoing surveys, and proposed examining factors like self-esteem and civic engagement, which may influence their sense of empowerment and aspirations. Additionally, he encouraged exploring

collaborations for future surveys to further understand these trends and their implications on education and workforce development.

Mr. Joel Mendoza noted that their study includes questions addressing individuals' beliefs in their ability to succeed, touching on growth mindset concepts, though these were not explicitly presented earlier. He also acknowledged challenges in fully representing the spectrum of gender identities within the data but expressed openness to describing relational differences where possible, albeit with limitations.

Ms. Añonuevo acknowledged the impact of migration on aspirations, noting how children of overseas workers, particularly in countries like Spain, may prioritize practical skills over higher education due to available employment opportunities abroad. She also emphasized the importance of cross-referencing youth and aging population data to prepare for future trends, such as lifelong learning programs tailored for older age groups, as seen in Korea.

## **SYNTHESIS**

Ms. Anunuevo underscored the importance of aligning education with employment while addressing the diverse needs and aspirations of learners, particularly the marginalized. She called for a broader embrace of lifelong learning, emphasizing its potential to empower individuals beyond formal education. Additionally, she stressed the need for inclusive policies and a shift in focus from purely economic gains to fostering equity, social protection, and a stronger sense of national identity.

## **CLOSING REMARKS**

Comm. Valenzuela thanked the fellows, experts, and participants for the lively and insightful discussions, which she said were crucial in sharpening the research and shaping meaningful policy recommendations for EDCOM II. She stressed the importance of tackling urgent issues like the struggles of out-of-school youth and finding ways to inspire Gen Z to see a future here in the Philippines. She wrapped up by sharing her excitement for the final research output and expressed deep appreciation for everyone's hard work and collaboration.

# CENTER FOR INTEGRATIVE AND DEVELOPMENT STUDIES

Established in 1985 by University of the Philippines (UP) President Edgardo J. Angara, the UP Center for Integrative and Development Studies (UP CIDS) is the policy research unit of the University that connects disciplines and scholars across the several units of the UP System. It is mandated to encourage collaborative and rigorous research addressing issues of national significance by supporting scholars and securing funding, enabling them to produce outputs and recommendations for public policy.

The UP CIDS currently has twelve research programs that are clustered under the areas of education and capacity building, development, and social, political, and cultural studies. It publishes policy briefs, monographs, webinar/conference/ forum proceedings, and the Philippine Journal for Public Policy, all of which can be downloaded free from the UP CIDS website.

## THE PROGRAM

The **Program on Higher Education Research and Policy Reform (HERPRP)** aims to chart a research agenda, systematically build an evidence base for policy analysis, and create a network of experts and researchers doing work in this sector. HERPRP also serves as a convening body seeking to build partnerships and working collaborative networks among stakeholders.

#### **EDITORIAL BOARD**

Rosalie Arcala Hall EDITOR-IN-CHIEF

Honeylet L. Alerta
DEPUTY EDITOR-IN-CHIEF

#### PROGRAM EDITORS

## ■ EDUCATION AND CAPACITY BUILDING CLUSTER

Dina S. Ocampo Lorina Y. Calingasan EDUCATION RESEARCH PROGRAM

Rosalie B. Arcala Hall PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

Romylyn Metila Marlene Ferido ASSESSMENT, CURRICULUM, AND TECHNOLOGY RESEARCH PROGRAM

Ebinezer R. Florano
PROGRAM ON DATA SCIENCE FOR
PUBLIC POLICY

## ■ SOCIAL, POLITICAL, AND CULTURAL STUDIES CLUSTER

Rogelio Alicor L. Panao PROGRAM ON SOCIAL AND POLITICAL CHANGE

Darwin J. Absari
ISLAMIC STUDIES PROGRAM

Herman Joseph S. Kraft Francis Rico C. Domingo STRATEGIC STUDIES PROGRAM

Marie Aubrey J. Villaceran Frances Antoinette C. Cruz DECOLONIAL STUDIES PROGRAM

#### ■ DEVELOPMENT CLUSTER

Annette O. Balaoing-Pelkmans
PROGRAM ON ESCAPING THE
MIDDLE-INCOME TRAP: CHAINS FOR CHANGE

Antoinette R. Raquiza
Julius Lustro
POLITICAL ECONOMY PROGRAM

Eduardo C. Tadem
Maria Dulce Natividad
PROGRAM ON
ALTERNATIVE DEVELOPMENT

Iris Thiele Isip-Tan
PROGRAM ON HEALTH
SYSTEMS DEVELOPMENT

#### ■ NEW PROGRAMS

Maria Angeles O. Catelo FOOD SECURITY PROGRAM

Weena S. Gera
URBAN STUDIES PROGRAM

Benjamin M. Vallejo, Jr.
CONSERVATION AND BIODIVERSITY

Rosalie B. Arcala Hall LOCAL AND REGIONAL STUDIES NETWORK

#### **EDITORIAL STAFF**

Jheimeel P. Valencia
COPYEDITOR

Alexa Samantha R. Hernandez EDITORIAL ASSISTANT

Jessie Feniquito Mikaela Anna Cheska D. Orlino LAYOUT ARTISTS



## UNIVERSITY OF THE PHILIPPINES CENTER FOR INTEGRATIVE AND DEVELOPMENT STUDIES

Lower Ground Floor, Ang Bahay ng Alumni, Magsaysay Avenue University of the Philippines Diliman, Quezon City 1101

**Telephone** (02) 8981-8500 loc. 4266 to 4268 (02) 8426-0955

Email cids@up.edu.ph cidspublications@up.edu.r

Website cids.up.edu.ph