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Proceedings of the 19th University of the East Research Forum with the Theme: UE at 79: Discover the UEverse

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The 19th University of the East Research Forum was held on October 1, 2025 at the Briefing Room of UE Manila. It was attended by 167 participants; 50 of whom are faculty and employees of UE and 79 students from morning session and 38 students from afternoon session. Ten presentations were made in four sessions.

The forum started at 8:30 with President Battad's opening message where he professed his strong support for research. Before becoming an administrator, he was a researcher at the Philippine Carabao Center where he studied Bulgarian buffalos particularly for their milk and semen which were preserved in liquid nitrogen. He was glad that there were a lot of senior high school students in the audience since students should be started young in research. At UE, Pres. Battad first proposed the policy on incentives for research which included the 18 hours of deloading, the incentives for publication in journals and grants for Types 1, 2, and 3 research. He encouraged students to engage in research together with the faculty. He stressed that research is not just about discovery but about partnership or collaboration with people of the same interest. The challenges that are being faced today such as climate change and environmental sustainability among others require collaboration. Responsible use of AI and smarter solutions can help build healthier and better life. Academic achievements should not only contribute to society but empower communities as well.

Dr. Leonardo thanked the deans and heads of offices who graced the forum. She commended the presenters for their efforts in preparing their presentations and their guts in sharing their findings for scrutiny in a scientific forum. She promised to follow up

on the presenters so their results can see print in the coming issues of the UERJ.

Session 1

The first presenters were Prof. Ronnie M. Gillego and Prof. Evelyn P. Dizon who discussed in Filipino their research findings on Frontliners na tagapamahala ng kapayapaan at kaayusan sa mga piling barangay sa lungsod ng Malabon at Valenzuela: mga kuwento ng buhay sa panahon ng pandemic. Prof. Gillego and Prof. Dizon presented the challenges experienced by the frontliners in Malabon and Valenzuela in preventing the spread of COVID-19. The frontliners included barangay tanod and key people in the barangay who were recommended by the barangay captain and the ex-o who are in charge of the barangay tanod. Some of the frontliners contracted COVID-19 but were not discouraged from continuing their work. The support provided by the local government units were essential in controlling the spread of the disease. The presenters recommended that increased and sustained support be provided to the frontliners to enable them to work more efficiently.

The second presentation was made by Dr. Allan C. Orate of CAS, UE Manila on The humanist and postmodern philosophy of General Education in the Philippines: interdisciplinary approach and phenomenology of the GE core courses. He stated that humanist ideal of liberal education and the postmodern paradigm for learning were interpreted as a form of interdisciplinarity towards knowledge integration applied to Philippine educational setting, through the expositions of the CHED's memorandum orders pertinent to GE, and through the analysis of the contents of textbooks and modules proposed to be used for teaching the GE core courses at UE. He showed how the eight GE core courses interacted with one other in harmonious ways, and, as these courses freely share their respective knowledge, they created integrated truths which approximate the reality. He recounted his experience as GE professor for many years using a reflexive-existential phenomenological analysis.

The third presentation was made by Dr. Peter R. Go-Monilla of the Department of Social Sciences of the College of Arts and Sciences – UE Caloocan on Impact Evaluation of the New General Education (GE) Program. Since 2013, the Commission on Higher Education (CHED) has attempted to increase quality assurance and

coordinates with higher education institutions in implementing the new GE program. The idea is to attain standards comparable to national, regional, and international higher education. He stressed that although regular monitoring is conducted in the University of the East in terms of accreditation, there has been no impact evaluation conducted on the new general education program in the University. The main objective of this study is to understand and assess the impact of the new GE program in terms of educational experience of students and student's learning outcomes in the GE core courses. Results showed satisfactory assessment of students of the GE courses and their experience with these courses in terms of the curriculum; Instruction; Analytical skills; Communication skills; Social skills; and Personal growth. The respondents also agreed the significant contribution of the GE program to the students learning outcomes in terms of Intellectual competencies; Personal and civic responsibilities; and Practical skills.

The open forum for the first session raised the following questions. For the first presentation, the presenters shared their plan to return to the barangays included in the study and ask the barangay residents who received assistance from the frontliners to ask them about how they benefited from their assistance and how could this be improved to better manage future emergencies like the past pandemic. The presenters recommended more intensive training and including younger frontliners and increased incentives for frontliners. It was suggested that themes be gathered from the interviews of the respondents so the common experience and issues that were brought up could be raised and more lessons can be learned from the pandemic experience of the frontliners.

For the second presentation, Dr. Orate shared his thoughts about the Senate's proposal to include three GE courses namely Art Appreciation, Ethics and Logic and Contemporary World in the SHS curriculum. Students need certain degree of maturity to better appreciate these three courses. SHS students are not ready for these courses. As to the Senate proposal to shorten college education to three years which would entail integrating GE courses into professional courses, Dr. Orate said that GE courses like Ethics and Logic will be diluted or watered down when mixed with professional courses like those in business, dentistry, engineering or others. Ethics as philosophical course deals with the general principles of morality which a utilitarian and pragmatic ethics integrated with professional courses will fail to achieve. Ethics can only be taught

properly and effectively by professors with background in ethics and not just by anyone. Ethics principles are universal, and students should learn how to integrate them in real life situations.

UE Caloocan CAS Dean Michelle Concepcion said that CHED has assigned UE to be the training institution for the GE curriculum. GE faculty in UE have been trained as trainers to conduct nationwide training of new teachers assigned to handle GE courses.

Session 2

The first presenter for the second session was Prof. Kathleen M. Dimaano of the College of Engineering, UE Caloocan who talked about Automated Essay Evaluator (AEE)Using BERT Algorithm and Semantic Analysis. The system integrates multiple Natural Language Processing models to assess grammar, structure, semantic relevance, and originality with a high degree of accuracy through the use of a developmental descriptive research design guided by the CRISP-DM process. The AEE is developed to be used in educational institutions by integrating advanced NLP models such as BERT-based-uncased, all-MiniLM-L6-v2, spelling-correction-english-base, chatgpt-detector-roberta, and ms-macro-MiniLM-L6-v2 to enable it to assess grammar, structure, semantic relevance, and originality. The system's capability to do wide-ranging evaluation includes detection of semantic relationships between essays, grammatical errors, checks for plagiarism and detection if the content is AI generated. The result demonstrates high accuracy when it comes to plagiarism and AI generated detection with a score of 94%. ISO/IEC 25010 quality metrics was utilized getting high ratings where Safety scoring received the highest average weighted mean of 4.86. Flexibility, adaptability and user-friendliness were achieved through the feedback from educators, students, and IT professionals. By combining pedagogical relevance with technical robustness, the AEE demonstrates its potential as a reliable, consistent, and efficient assessment tool that supports learning outcomes while safeguarding academic integrity.

The second presentation in Session 2 was made by Prof. Jherold John Valdoz of UE Caloocan College of Engineering on Electronic Gadget Recommender System Using Generative Artificial Intelligence With Data Analytics. The objective of the study is to

develop a recommender system capable of providing useful details of gadget to users. The study focused on buyers of electronic gadgets who are currently in the process of gathering reviews and details. Buyers do research and reviews about the gadgets they are interested in may lead to information overload on gadget selection, price and store locations. The recommender system is capable of providing useful details of gadget to users. It was developed using LSTM, Decision Tree and K-means Clustering for providing recommendation, while Generative AI (Google Gemini) is utilized to provide significant detail of gadget and stores. CRISP-DM was used for system development because it can analyze datasets. ISO/IEC 25010 was utilized for evaluation of the system. The system's capability for data visualization and data analysis provides useful recommendation for users which is significant in purchasing gadget. The system is capable of processing and delivering informative details using Generative AI and machine model by analyzing dataset containing reviews and rating from different gadget owners and users.

The third presentation was on the UE Research Management System delivered by Prof. John Ryan E. Celis and Prof. Erwinaldgeriko F. Lagda of the College of Engineering, UE Caloocan. The study developed and evaluated a data-driven Research Management System (RMS) for the University of the East (UE) to address inefficiencies and inconsistent documentation caused by the absence of a centralized research reporting platform. The system was designed to streamline submission of research proposals, workflows for review and approval, integration of external research profiles, and reporting functions.

A quantitative research design was employed, with the system developed through a user-centered, iterative prototyping approach and evaluated using user acceptance testing based on the ISO/IEC 25010 quality model. Fifty respondents—including faculty, department chairs, deans, and administrators—assessed six quality characteristics of the system namely functional suitability, usability, performance efficiency, reliability, security, and overall satisfaction.

The system achieved an overall mean rating of 4.62 (Strongly Agree), broken down as follows: performance efficiency (4.70), usability (4.64), and reliability (4.62) rated highest. Responses to open-ended questions highlighted the need for clearer input

validation, UI/UX improvements, added support features (e.g., chat assistance, password recovery), and enhanced functions such as dashboards and search tools.

Overall, the UE RMS proved to be an efficient, secure, and user-friendly platform that improves transparency, accountability, and research productivity. Its positive evaluation confirms strong alignment with ISO/IEC 25010 standards and its potential as a sustainable digital solution for management of research information.

Open Forum

In the open forum, questions on the essay evaluator included accuracy of the evaluation in terms of detecting plagiarism when essays of similar subject are submitted within a year. Reflection essays from GE courses could benefit from this evaluator system. The system could also be used to evaluate manuscripts submitted for possible publication in a journal. Prof. Valdoz mentioned that he added several innovations to the currently used recommender to address some concerns of buyers. Prof. Lagda and Engr. Celis said that the software developed from their study will be turned over to the ORC which will be the end-user of the system. It was suggested that the current version 1 of the system be improved to process more information such as research collaborations of faculty researchers, external funding support, researches currently being undertaken, and publications of faculty among others.

Session 3

The first session in the afternoon included two presentations with the first by Engr. Jesus A. Abelilla, MBA on Glass recycling practices of selected hospitality companies: basis for developing business model which looked into the sustainable glass recycling practices of selected hospitality companies in the Philippines, with the aim of developing a business model that integrates recycling into operational strategy. Glass can be a waste or material of value. Compared to plastic which takes 450 years to degrade, glass takes a million years to degrade. The country imports over 84,000 kg of cullet in 2023 to support local glass manufacturing but a significant portion of locally consumed glass ends up in landfills, particularly from the hospitality sector. The study focused on hotels, bars, and restaurants which are known key contributors to glass waste due to

their operational nature and lack of organized recovery systems. Hospitality industry generates 289,000 tons of solid wastes every year since hotels, bars and restaurants most likely use bottled products.

Guided by the Resource-Based View Theory, the study explored internal resources and strategic alignment opportunities between recyclers and hospitality businesses. The concern at present is how to motivate stakeholders to put up a facility that could store cullets that are intended for recycling. The study could also contribute to the improvement of solid waste management and energy conservation since with recycling, much fuel can be saved in the glass industry. Using survey and interview data, the study examined respondent demographics, company profiles, and organizational support for recycling across five variables: leadership, financial support, infrastructure, policy, and competence. These variables were used as basis to develop a collaborative business model that enhances glass recovery, supports environmental management standards, and promotes sustainable and rewarding recycling practices within the hospitality industry. San Miguel Corporation for instance is searching intensively for sustainable source of cullets. In foreign countries, recycling of glass is a law. In other countries like Finland, a significant driver for recycling is legislation and not the financial rewards. It is important to determine what variables can contribute to a business model for sustainable recycling of glass. Variables could include financial reward and penalty. Competency and literacy on glass recycling could be another variable in addition to policy, financial support, infrastructure, logistics and leadership.

Dr. Edelresa S. Juachon of the Basic Education Department - Senior High School University of the East, Caloocan Campus talked about Digital learning solution: effects on student's academic performance. The educational system has undertaken a remarkable transformation, spurred by the evolving landscape of technology. Digital learning solutions are no longer optional for educational institutions, but have now become an essential tool for enhancing learning experiences, streamlining operations, and fostering a competitive edge. With digital technologies showing a range of tools selected to include formalized learning environments in teaching, more fruitful and successful learning is now possible since digital solutions have already created a paradigm shift in the entire education system. Aside from being a knowledge provider digital technology is also a co-creator of information, a mentor, and an

assessor. Technological improvements in education have made life easier for students. To meet the international goal of having a sustainable development for high-quality education, integrating technology into education will provide students with an engaging learning experience, allowing them to remain more interested in the subject without being distracted. The study looked into the perception of students in the use of Labster as digital learning solutions and its effect on their academics. Labster is used in UE digital learning platform virtual lab where students can conduct their experiments.

Labster was used more by students in STEM since this offered online experiments which could not be conducted during the pandemic. Learning was more convenient and no longer limited to the four walls of the classroom. There were challenges however that include self-discipline of students being compromised; low energy noted in the participation of the students; absence of social interaction with their classmates; compromise of self-honesty and poor time management. Most of the users of Labster admitted that students got more concerned with the scores that they will obtain more than the other aspects of Labster. The impact in the use of Labster include helping students better understand science concepts; more fun and engaging activities; digital learning solutions noted to be highly useful especially in personalized learning. It was concluded that there is a need for continued support for this application especially for STEM students who benefit mostly from the platform.

Open Forum

The usefulness of Labster was reiterated especially for STEM students as reflected in the convenience it offers and the reduced expense since there is no need to buy materials for experiments. The new applications for Science and Math are also impressive. The correlation of the use of Labster with improvement of student performance however still must be established.

The deficiency of incentive for glass recycling was noted. There were attempts by the San Miguel Corporation to manage a dumpsite company that will retrieve cullets from the landfill. The attempt however failed to prove to be financially rewarding. The problem of contamination such as removal of labels from the cullets was also significant. There were several suggestions to address the problem

of upscaling glass recycling. A feasibility study to be conducted by UE can identify sources of cullets that are disposed as trash and their volumes from these sources. The College of Engineering can be commissioned to develop or invent a machine that could sort and crush the cullets that could eventually be supplied to companies like the SMC. Collaborative research between the academe, the LGU and the industry could be undertaken to investigate the entrepreneurial aspect, the political aspect, environmental and economic aspect of the glass recycling technology.

Session 4

The last session in the afternoon included the following presentations: Experiences of Students in Out-of-field (OOF) Science Teaching: A Multi-Case Study by Mary Jean A. Dela Cruz of the Basic Education Department – SHS of the University of the East, Caloocan Campus. The second was Reading Comprehension and Academic Performance Among Accountancy Students of the University of the East developed by student proponents Ag Valerie Concepcion, Mariel Cura, Nikka Dela Peña , Andrea Nicole Santos and Nikholette Valenzuela as supervised by Prof. Ken Elexander Cabinian of UE Caloocan.

The presentation of Ms. Dela Cruz was about the experiences of students in an out-of-field Science teaching in Senior High School. The multi-case study explored the practice of out-of-field Science teaching and how it affects the students. A total of 5 OOF cases were analyzed, where a total of 13 students and 5 OOF teachers participated in the study. Triangulation from various data such as interviews, survey, and documents were done to establish reliability. Three themes emerged from the analysis of data namely (1) Learning activities, (2) Learning experiences, and (3) Basis for professional development. Findings suggest that classroom routine and student-centered activities help in attention and retention of concepts which also allowed students to be more engaged thus enhancing student learning. Students however experience challenges in having an OOF science teacher which include student motivation and initiative, instructional and content misalignment, and barriers to learning and classroom effectiveness. Despite these challenges, students had positive learning opportunities such as supportive and approachable teaching practices, and engaging instructional strategies that foster deeper learning. OOF Science teachers have been shown to adapt in teaching science subjects by

developing ways to cope with the struggle of teaching an unknown subject. The study recommends policy actions from school institutions to include peer mentoring, professional development and subject-aligned placements.

The second presentation recognized reading comprehension as a foundational skill that significantly influences academic performance, particularly in demanding fields such as Accountancy, where students are required to interpret complex texts, apply theoretical knowledge, and engage in analytical reasoning. While existing literature affirms the positive link between reading comprehension and academic performance, there is a notable lack of localized research focusing specifically on Accountancy students in the Philippine context. This proposal aims to examine the correlation between reading comprehension and academic performance among Bachelor of Science in Accountancy (BSA) students at the University of the East - Caloocan. Anchored in the Revised Bloom's Taxonomy, the proposal aims to assess reading comprehension across five cognitive levels, namely Remembering, Understanding, Applying, Analyzing, and Evaluating, with a particular emphasis on the three higher-level domains of Applying, Analyzing, and Evaluating. Academic performance will be measured using students' General Weighted Average (GWA) from the preceding semester. Using a quantitative descriptive-correlational design, the proposal will collect primary data through a standardized comprehension test and analyze the results using Pearson's correlation coefficient to determine the strength and direction of the relationship. To provide a more nuanced analysis, the correlation will also be examined across subgroups categorized by gender and year level. The proposal is expected to reveal a significant correlation between reading comprehension and academic performance, offering empirical insights that can inform evidence-based strategies for improving reading instruction and supporting student achievement in the Accountancy program.

Open Forum

During the open forum, it was revealed that the out of field teaching is being practiced not only in public schools but in private schools as well. There was reference to a presentation in the last UE Research Forum where challenges were presented in the teaching of MAPEH by faculty who are not trained in the discipline. The

important recommendation made in the study is the creation of a program that will address the problems faced by out of field teaching and the way forward for this.

Reading comprehension especially during licensure exams may be contributory to the success or failure of examinees. There was a suggestion to check how performance in pure English and pure Filipino exams would differ. The possibility of using Taglish questions was also raised.

Chancellor Macam gave the closing remarks where he thanked all the presenters, majority of whom are from UE Caloocan. He expressed hope that the proceedings of the current forum will be uploaded in the UE website so it could be accessed by more UE constituents and other stakeholders. Aside from sharing the results of their studies, researchers should take advantage of the questions and comments they receive to improve their research. He also encouraged the presenters to publish their results in reputable journals especially the Scopus-indexed ones.