



# BATANGAS STATE UNIVERSITY

## The National Engineering University

### LEARNING EXPRESS PROGRAM 2023 NARRATIVE REPORT BATANGAS STATE UNIVERSITY AND SINGAPORE POLYTECHNIC

#### Hosted by Batangas State University, The National Engineering University

Batangas State University, The National Engineering University remains truthful to its mandate of strengthening its engagement for global visibility. In this regard, the University having its strong partnership with Singapore Polytechnic conducted the Learning Express 2023 program.

Learning Express (LeX) 2023 intend to use Design Thinking to create a social innovation project and deliver an innovative solution that will benefit a local community. This will also help to establish an awareness of the challenges that the community faces in the context of their social, economic, and political culture. This will be an excellent opportunity to demonstrate empathy to the community and make a difference in the lives of others. This project was participated by 30 students and 3 facilitators from Singapore Polytechnic and 31 students from Batangas State University, 3 facilitators and 1 coordinator.

It was September 25, 2023 when the delegates from Singapore Polytechnic arrived at BatStateU – The NEU. Through the External Affairs – Central Administration, the implementation of LEX 2023 was successfully coordinated to concerned offices and officials. Prior to the Day 1, External Affairs arranged a LeX Workshop for the participating students of BatStateU. This is to equip the students in understanding the program and to discuss what to expect during the whole extension community project. The workshop was joined by the LEX facilitators of BatStateU held in the STEER HUB, Alangilan Campus.

#### Day 1: Arrival of SP Delegates | September 25, 2023

The delegates of Singapore Polytechnic composing of its three (3) facilitators and thirty (30) students arrived at Batangas State University premise around 6:30 p.m. The External Affairs director and staff entertained the delegates and accommodated them to the Lecture Room, 5th Floor, SSC Building II for a dinner. Afterwards, they were accompanied to RLR Traveler's Hotel for easier check-in process.

#### Day 2: Opening Ceremony of Learning Express Program 2023 | September 26, 2023

In the colour of developing students' innovative minds and empathy to its social responsibility, the Learning Express Program 2023 opening ceremony was officially conducted on September 26, 2023 in the 5th Floor Multi-purpose Hall, SSC Building II. In this vibrant ceremony, where students of BatStateU and SP finally get to see each other, the University President, Dr. Tirso A. Ronquillo showered his unwavering support and hospitality towards the participants through his welcome remarks. "In a nutshell, this is all about bringing university to the community and finding solutions to a potential problem or existing problem in that community, that is the very essence of a university," Dr. Ronquillo said in his opening remarks. In addition, Atty. Luzviminda C. Rosales, VP for Administration and Finance, Atty. Noel Alberto S. Omandap, VP for Development and External Affairs, Dr. Teodorica G. Ani, Director of External Affairs, Dr. Vanessa Castillo, Vice Chancellor for Development and External Affairs of BatStateU Lipa Campus, Dr. Rowell Hernandez, Head of External Affairs Alangilan Campus, Assoc. Dean John Kevin De Castro, Ms. Jaika Almira Agena and faculty members also graced the ceremony with their time and presence on the event.

This event formally introduced the LEX 2023 by defining its purpose and benefits not only to the students but to the chosen communities of the project as well in the application of design thinking approach. In light of the joyous ceremony, there were songs and dance performances from Ad Li Bitum and CABEIHM Circle of Talents.



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In the pursuit of proper implementation of LEX 2023, facilitators have started the second phase of the program to which all of the participating students will be grouping themselves based on the given groups.

As soon as each group have gathered its members, they were given time to get to know each other and to break the ice between the students, a Pinoy game called "Pahabaan" was initiated. The students surely had a blast during the interactive game.

With the warmth of shared friendship during the ceremony, the participants continued to extend their excitement in the following days of the program through a Filipino cuisine lunch prepared by the University. Hence, this concludes the first part of the ceremony.

On the second part of the program, Muhammad Esman, a facilitator from Singapore Polytechnic discussed the gist of Design Thinking Recap, Sense, Sensibility and Empathy. This gave students an infinite definition and expectation to what is design thinking approach really is and as to how it is to be used during the program. Students had a short activity afterwards, to which they are tasked to list all the topics and subtopics relevant to the design thinking.

With a whole-day event, students were given the chance to have a campus tour at BatStateU Alangilan Campus and SP delegates were accommodated to SM Batangas City to buy their personal goods and additional materials needed on the project.

Day 3: Empathy Study/Homestay | September 27 – 29, 2023

The participants of the program were gathered at exactly 8:00 a.m. in the morning as they depart for their Empathy Study/Homestay Day 1 in Lagadlarin Mangrove Forest of Brgy. Lagadlarin and Collapsible Solar Panel at Brgy. Sawang, Lobo, Batangas.

There are a total of six (6) groups and each group prepared questions to proceed with the empathy study to the chosen villages of the community. For Group 1A and 1B, Jennifer Ang and Ms. Jaika Almira Agena facilitated the conduct of interview to the community. In response to the need of community, Group 1A came up to a project called Wandering Juana which plays the role of a persona integrating the target beneficiaries of tourists and barangay officials. On the other hand, Group 1B was inspired by the hopeful community of the Lagadlarin Mangrove Forest Reserve despite the setbacks and shortcomings they are facing. So, the group have come up with Hopeful Helen project.

Meanwhile, the groups 2A and 2B delved into the intricacies of the mangrove seedlings, a primary source of income for the locals. The central aim of this initiative was to cultivate innovative solutions to genuine community challenges, a task we approached through the lens of design thinking. Group 2A, crafted a visionary solution – the "Nilad Nursery." This Sustainable Vertical Agricultural System for Tangal (Ceriops tagal) Mangrove Seedlings incorporated Smart Watering Technology. What made this solution particularly impactful was its reliance on locally available materials in Lobo: bamboo formed the sturdy framework, and wooden boxes or repurposed soft drink cases served as the containers for the seedlings. The Nilad Nursery not only addressed the identified challenges but also promised sustainability and ease of implementation.





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Group 3A and 3B, during the visit, was able to get to know the association of farmers that operates the farmland that has an existing solar irrigation system supplying a small portion of the land due to its limited coverage and water pressure. The Masagana Vegetable Produce Association, also known as MVPA were led by Pepito Rojo, as a large portion of land owner, formed their group to supply additional income and rich use of the land for the villagers. They produce at least a 150 kilos quota daily to be sold on the local market. The Group 3A were able to witness lapses inside the farm; income, the vacant dry lands, the weak water supply, the need for development of the solar irrigation system, the poor management of water flow on rice field canals and the government's National Irrigation System supply that has been already a 5 yearlong cut off. 3A were able to get to know of the village through observations about what they have already as a candidate for resolve; they have collapsible solar irrigation system, the farm, the crops, live stocks and the seasonal heavy rains.

In this regard, Group 3A have come up with an e-commerce solution in addressing the need of farmers' marketing strategy to fully engage a wider market. The group called it "e-farm.com". 3A, began the buildup of their persona titled "UNTIRING ANTENG". A figure that represents the farmers which proclaims all the feedbacks and assertions of the assessments done with the farmers in Sitio Masagana, Brgy. Sawang.

Day 6: Ideation | September 30, 2023

Ideation is all about sharing n of insights, generation of tools to develop design concept and finalization of prototype ideas. Therefore, all groups have successfully come up with a project or solution addressing the need of communities of Lobo, Batangas. Ideation day on the 6th day of LEX 2023 was the time of the students to formulate the prototype of their solutions. This prototype will represent their tangible solution of the existing problem and each group is tasked to promote this in their assigned community.



Group 1 Data Clustering



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Day 7: Concept Development and Prototyping | October 1, 2023

Each group gathered early in the morning as they have finalized their persona/prototype. In this regard, students had the time to brainstorm their prototype concept as well as the materials needed to accomplish the idea. So, with the guidance and assistance of each groups' facilitators, students were able to conceptualize their prototype considering the actual budget provided for each team. This has not only boosted the empathy of the young minds of students but also highlighted their creativeness in making their persona/project possible.

Day 8 and 9: Prototyping proper and Refining Prototype | October 2 & 3, 2023

As soon as each group finalized their concept, the assigned facilitators assisted their teams for the prototyping proper. This led the students to work together and accomplish their persona in the given period. Through the unwavering support of each facilitator, students were able to achieve their prototype. Though, time given was a little bit short for the preparation, each group still managed to produce an innovative and creative solution through design thinking approach.

Afterwards, each team headed to their assigned communities to present the created prototype to villagers of Brgy. Lagadlarin and Brgy. Sawang, Lobo Batangas. Group 1A carefully considered all the data gathered from the interviews. They came up with Wandering Juana for persona. This persona embodies the collective identities of the interviewees. It provides the perspective of an officer of a non-governmental company that annually conducts volunteer work. The aforementioned problems—specifically the lack of amenities and insufficient activities for tourists—identified at Lagadlarin Mangrove Forest urged group 1-A to propose a project that would potentially promote Ecotourism and foster adequate livelihood in the area, which is EcoBricks. Additionally, upon clustering until ideation, the researchers concluded that to attract more customers a user-experience program should be provided. In addition, the interview session with the barangay captain led to much clearer information regarding the real problem in the Lagadlarin Mangrove Forest, and possible and ongoing solutions are taken into consideration. One of which is that they already have sponsors to improve the quality of the place and in terms of the growth of its environment.





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The EcoBrick is a sustainable building block made by shredding Polyethylene Terephthalate (PET) plastic bottles and combining them with cement. It addresses plastic pollution, reduces construction costs, offers insulation benefits, and fosters community engagement. Eco bricks represent an eco-friendly and cost-effective solution to repurpose plastic waste for construction and environmental conservation.

The project aligns with Sustainable Cities and Communities Goal #11 and the Industry, Innovation, and Infrastructure Goal #9 of the World Health Organization (WHO). The group incorporates the environmental benefits of EcoBricks in improving the facilities and providing activities for the visitors of Lagadlarin Mangrove Forest.

The eco-bricks are made out of the usual composition of typical bricks, but rather than using sand, we incorporate the use of shredded Polyethylene Terephthalate (PET) plastics as its alternative. In terms of strength, it will still be the same for it has the same components as the typical bricks. The bricks will be used to build more facilities and amenities, particularly restrooms, wash areas, and function halls that can accommodate several groups of people at a time.

On the other hand, following the deliberations of Team 1B, a comprehensive approach was undertaken, which included the creation of a persona named "Hopeful Helen." This persona drew inspiration from President Maurine's experiences and perspectives. The team further engaged in the systematic clustering of data derived from interviews conducted with diverse stakeholders, including volunteers, vendors, and government officials. After extensive deliberations, Team 1B has put forth a program proposal named "Sustainable Opportunities for Learning and Achievements for Lagadlarin Mangrove Forest's

Conservation and Eco-tourism" (SOLACE). The overarching objectives of SOLACE encompass several crucial facets:

1. To empower the local community residing in the Lagadlarin Mangrove Forest area by equipping them with valuable skills and knowledge that can uplift their economic prospects and overall quality of life.
2. To preserve and celebrate local culture and traditional craftsmanship, particularly focusing on the production of bamboo handicraft souvenirs as a means of cultural preservation and economic sustainability.
3. To enrich the eco-tourism experience within the Lagadlarin Mangrove Forest by providing tourists with opportunities for meaningful engagement and contributions to the local economy.
4. To advocate for sustainable tourism practices that prioritize the conservation and protection of the natural environment within the mangrove forest while concurrently delivering economic benefits to the local community.
5. To facilitate greater accessibility to the Lagadlarin Mangrove Forest for tourists by revitalizing waterways and introducing innovative water systems, thereby ensuring safe and convenient access to key attractions within the mangrove area.

The first component of the SOLACE program centers on comprehensive training and workshops that are designed not only to enhance the tourist experience but also to address managerial aspects of the Lagadlarin Mangrove Forest.



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This project aims to create souvenirs that showcase the unique beauty and ecological significance of the Lagadlarin mangrove forest, raising awareness about the importance of its preservation. It emphasizes crafting these souvenirs using eco-friendly materials and sustainable techniques to align with conservation values. Moreover, it incorporates educational elements to enlighten visitors about the mangrove forest's role in coastal protection, biodiversity, and climate resilience. The souvenirs are designed to establish a deeper connection between tourists and the forest, and a diverse range of items will be offered to cater to different preferences and budgets. Quality assurance, customer satisfaction, and continuous adaptation to changing market preferences are integral to this endeavor.

Meanwhile, Group 2B envisioned the Lagadlarin Mangrove Forest to be the biggest mangrove sanctuaries in Batangas province. It is observed that the members of the community are wholeheartedly embracing this vision, understanding that it holds the key to securing the mangroves' future while benefiting their own lives. The mission to achieve this vision is equally compelling. The students are determined to increase the income of the Lagadlarin Mangrove Forest Community through a sustainable, integrated solution. They are not simply planting mangrove seedlings but are creating a comprehensive strategy that will lead to thriving ecosystems and a prosperous community. By nurturing and expanding the mangrove forest, the community will attract more tourists and ecotourism activities, offering new income opportunities to its residents. Simultaneously, the mangroves will serve as a haven for biodiversity, promoting ecological balance and enriching the surrounding environment. The mission is not just about economic gain; it is about the coexistence of nature and people, with both thriving in harmony.

Students find the Lagadlarin Mangrove Forest as a hidden treasure once, and is on the path to realizing a remarkable transformation. The vision and mission set forth by these passionate students are a testament to the potential of human dedication and innovation. With every mangrove seedling planted, they take one step closer to seeing their vision come to life, forging a future where nature flourishes, and the community prospers. This is the very reason to their proposed solution called, "HI-DROS - Hydroponic Integrated Design for Regeneration of Seedlings".

HI-DROS was designed to be a simplified hydroponic system, and its potential benefits were manifold. Firstly, it sought to maximize the usage of space, a critical factor in a mangrove environment. Space efficiency was crucial because it would allow the community to grow a larger number of seedlings within a limited area, thereby contributing significantly to the expansion of the Lagadlarin Mangrove Forest.

Furthermore, HI-DROS introduced a more efficient practice that drastically reduced the time and effort required to maintain the seedlings. By automating certain processes and providing optimal growing conditions, it alleviated the burden on the community members who had previously dedicated significant hours to nurturing seedlings. This newfound efficiency meant that the community could divert more time and energy to other aspects of their livelihoods.



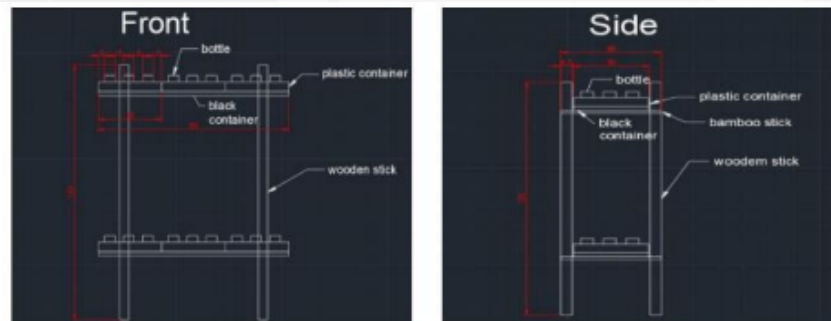


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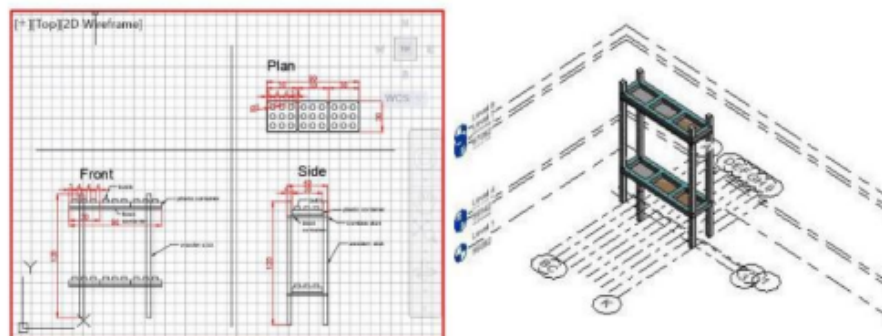
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Illustrations of Prototype Wireframe



As HI-DROS took shape through the prototype, the excitement among the students and the community was palpable. It was clear that this innovative solution had the potential to be a game-changer for the Lagadlarin Mangrove Forest. The integration of hydroponics in mangrove regeneration was not just a technical advancement; it was a symbol of the partnership between human ingenuity and nature's resilience. HIDROS aimed to accelerate the vision of the Lagadlarin Mangrove Forest becoming one of the largest sanctuaries in Batangas Province, while ensuring the community's economic and ecological well-being. With the prototype in hand, they were one step closer to achieving their mission.

On the other hand, Group 3A managed to propose a project called E-Farm.com and Rainwater Harvesting System. This team proposed this project which will serve as a digital platform designed to provide essential support to local farmers in the village of Brgy Sawang Sitio Masagana. Its primary objective is to assist these farmers in selling their crops directly to consumers or buyers, as opposed to the traditional method of selling in local markets. This shift to direct exchange through an online platform is expected to bring about several benefits for the farmers and their community. So, by connecting farmers directly with consumers or buyers, the e-farm website eliminates the need for middlemen or intermediaries. This means that farmers can potentially earn more for their produce, as they can set their own prices and negotiate directly with buyers. This increased income can significantly improve the financial well-being of the local farmers. The e-farm website provides local farmers with a broader market reach. They are not limited to selling their crops within their immediate vicinity but can now access



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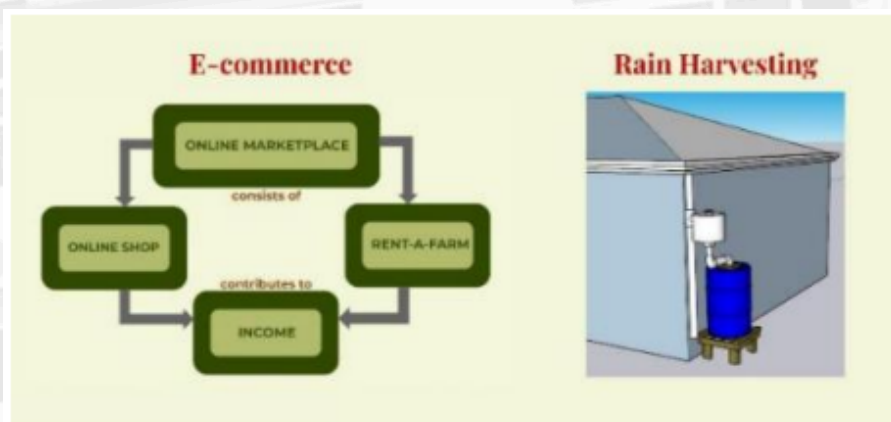
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buyers from a wider geographical area. This expanded market can result in higher sales volumes and better opportunities for revenue generation. Traditional market selling often involves transportation and storage costs, as well as fees to intermediaries. The e-farm website reduces these costs, allowing farmers to retain a larger portion of their earnings.

The income generated through the e-farm platform can be crucial in addressing existing problems in the community, such as the installation of a new water system. This additional income can be invested in infrastructure and resources that improve the quality of life in the village. The website empowers local farmers by giving them more control over their business and reducing their dependence on external factors. This can lead to increased confidence and a sense of ownership among the farmers.

Addressing the existing water problem in the community is critical for the sustainability of the "Rent-aFarm" concept and the successful cultivation of crops sold on the website. To tackle this challenge, a rainwater harvesting system will be implemented as a temporary solution while funds are generated for more comprehensive infrastructure development. Given the frequent heavy rains experienced by the village, often taking up to 3 days for floodwaters to subside, the rainwater harvesting system appears to be a well-suited solution. This system will be designed to capture and store rainwater efficiently, leveraging the abundant rainfall as a valuable resource. The setup involves equipping houses near the farm with rainwater harvesting infrastructure. Rainwater will be collected through gutters, channeling it into a filtration process that ensures the water's cleanliness and safety. The filtered rainwater will then be stored in portable water storage units, ensuring a reliable and accessible water source for the farming activities.



With the dedication of Group 3B, the team have come up to provide a solution to the identified problem of the community through imposing the idea called "Sustainable Seedling Incubator Sprinkler System (SSISS)". SSISS, firstly includes the construction of a greenhouse, the main function of it is to accommodate for the incubation of the seedlings. These incubators will help provide necessities for the growth of the seedlings such as proper warmth and ventilation. The problem that's related to growth of the seedlings was brought to our attention when a farmer stated how the local municipal provides 40% of the seeds, the rest of the seeds will have to paid through the farmer's own pocket. Additionally, a large portion of the seedlings that he receives from the local municipal rots attributing to either maintenance issues or the quality of seeds provided.





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A rainwater harvesting system will be implemented on the side of the roof of the greenhouse which will be the main water supply of the greenhouse. This harvesting system is being implemented as it will be self-sustaining when it comes to the water supply and will not require the groundwater that is already a scarce resource for the farmers. However, in the case where the rainwater collected is insufficient, access to the groundwater to supply for the water required for the operation of the greenhouse will be granted through a control valve installed.

The rainwater collected through the harvesting system will be stored in a main tank which is connected by a main pipe. This water tank includes more water supply for the village's/farm's usage with its main function being to supply the water for the sprinkler system in the greenhouse.

This group intend to implement this sprinkler system for the entire as not only does it reduce operation cost and the amount of water used, the manpower and labor required is also significantly reduced. This manpower issue was a common topic brought up during the countless interviews that were conducted as many of the locals are at the age where they aren't able to conduct laborious tasks. The sprinkler system that is implemented will include pipes that encompasses the entire farm and the greenhouse with linkages to plastic bottles which will act as sprinklers which is also where the origination of our project title is derived from.

The system will draw water directly from the solar pump which pumps out water from the ground and the uses the rainwater from the tank to supply the water needed for the operation of the system of the farm while the sprinkler system in the greenhouse utilizes the rainwater in the water tank as mentioned above.

These sprinklers are activated whenever the water content in the soil is below the threshold required for the continuous growth of the crop. Moisture and humidity sensors will be placed in the greenhouse and the entirety of the farm to assist the mobile application that we will be designing. The main function of this mobile application is to send a simple notification banner to their mobile devices which will alert them to run the sprinkler system in the case where the water content is low in the soil or treat and visit the crops when something is amiss.

The mobile application helps in continuous maintenance and overall caretaking of the farm to produce better quality crops as without this simple automated notification that will be sent out, there will be a greater need for manpower to do these simple, menial tasks of observation.

The group understand that due to the nature and age of the general farming population at Lobo, they will probably not be able to operate a complex application that requires more technical skills. Hence, that is why the notification banner that the application sends out will be simple for the farmers to understand and operate.

In conclusion, this entire idea that they proposed aims at tackling the lack of manpower to run and sustain the farm which will in turn adversely affect the quality of the crops that will be produced. Thus, through the proposal of this idea which addresses the aforementioned reasons, the marketability and the potential profit margins that were previously lost will be gained.



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##### Day 10: Gallery Walk and Closing Ceremony

This day highlighted the prototype of each group as they presented this to the students and guests on the closing ceremony of Learning EXpress 2023. BatStateU students in the campus eagerly showed their support and amaze in the derived solutions of each group in their designated communities. In the end, all of the groups received positive feedback from both the students and officials of the University.

As to the hard work of the students, the participants were given a Certificate of Participation as their official receipt completing the LEX 2023.

##### Day 11: Cultural Tour at Taal, Batangas

Singapore Polytechnic visited one of the proudest cultural heritages of Batangas which is Taal, Batangas. They were accommodated by BatStateU LEX facilitators, staff of External Affairs and tour guides of Taal, Batangas. The tour took six (6) hours and went back to the city for lunch. Indeed, the facilitators and students of SP had a blast during the tour, immersing more of the culture in Batangas.

##### Day 12: Departure of Singapore Polytechnic

The delegates of SP are scheduled to depart on this day back to Singapore. They were fetched by staff of External Affairs and other facilitators going to Ninoy Aquino International Airport. The Learning EXpress Program 2023 is a testament of continuous learning beyond borders initiated by Singapore Polytechnic and BatStateU – TNEU. This raised more than the prototype, but also the attitude of students to look and dig deeper in their communities and share their knowledge by providing solutions to these. The power of this program highlighted the significance of youth on its nation and the value of learning and cooperation between cross-cultural borders







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### BATSTATEU'S PARTICIPATION IN CROSS-SECTORAL DIALOGUE ABOUT THE SDGS



Batangas State University, The National Engineering University (BatStateU), organized a consultation meeting to actively engage stakeholders in the development of a 15-storey engineering hub and a contemporary 10-storey dormitory. The meeting served as a platform for collaboration among esteemed faculty members, student leaders, and administrators. It took place at the Science, Technology, Engineering and Environment Research (STEER) Hub, situated on BatStateU's Alangilan Campus on July 11.

Led by University President Dr. Tirso A. Ronquillo, with support from Vice President for Research, Development, and Extension Services (VPRDES) Engr. Albertson D. Amante and Director of Presidential Project Management Office (PrPMO) Engr. Antonio Gamboa, the meeting aimed to align the proposed facilities with the aspirations and requirements of the university community. BatStateU collaborated with architectural firm PALAFOX, ensuring an inclusive approach.

The consultation meeting began with a comprehensive presentation of site information and analysis, including assessments of the potential environmental impact. Stakeholders actively evaluated sun diagrams, wind diagrams, and view corridor diagrams. The emphasis

throughout the discussions was on sustainable resource utilization.

Schematic diagrams showcasing the iterative design development were shared, inviting valuable feedback from stakeholders. Their insights focused on optimizing functionality and enhancing the engineering hub and dormitory's aesthetic appeal. The collaboration between academia and stakeholders played a crucial role in shaping the project.

Representatives from various engineering departments contributed significantly to discussions on spatial layout and interior elements. Detailed floor plans were unveiled, capturing the essence of the proposed facilities. Stakeholders' observations helped refine the spatial arrangement, ensuring efficient resource utilization and optimal activities flow within the buildings.

The consultation meeting with stakeholders demonstrated BatStateU's commitment to delivering high-quality facilities and enriching its academic environment. Hence, the development of the engineering hub and dormitory will drive the overall advancement of the BatStateU community.







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### BATSTATEU'S PARTICIPATION IN CROSS-SECTORAL DIALOGUE ABOUT THE SDGS



#### BatStateU co-hosts 2023 MSPC Annual Convention advancing sustainable development through mathematics

The recently concluded 2023 MSPC Annual Convention and General Assembly, a collaborative effort between the Mathematical Society of the Philippines CALABARZON Chapter (MSPC) and Batangas State University, The National Engineering University (BatStateU) Pablo Borbon Campus, marked a significant gathering of more than 180 mathematics educators, researchers, and students from various educational institutions across and beyond the CALABARZON Region. This event, held on July 18, at BatStateU's Multi-Purpose Hall, aimed to bolster the role of mathematics in contributing to sustainable development and aligning with the United Nations Sustainable Development Goals (UNSDGs).

The opening program commenced with Dr. Ariel L. Bablerra, President of MSPC, expressing his gratitude and excitement for the convention's culmination of ideas and collaborative efforts through his Opening Remarks while Dr. Expedito V. Acorda, Chancellor of BatStateU Pablo Borbon Campus, extended a warm welcome message to all participants, emphasizing the University's commitment to fostering academic excellence and promoting meaningful engagement in mathematics.

Subsequently, BatStateU President, Dr. Tirso A. Ronquillo, delivered an insightful keynote address emphasizing the pivotal role of mathematics in our nation's journey. He highlighted its contribution to scientific advancements, technological progress, economic growth, infrastructure development, education, and research, showcasing its crucial impact on shaping our society.

In his speech, Dr. Ronquillo made a thought-provoking analogy, stating, "Policy without action is a mathematical formula without variables; it provides

a general solution but lacks specific values for evaluation, thereby failing to yield tangible results." His address harmonized with the convention's theme, aligning with the University's dedication to advancing sustainable development initiatives in line with the UNSDGs.

One of the event's highlights was the research session, which featured several student poster presentations and parallel talks. This segment provided a platform for young mathematicians to showcase their innovative research and contribute to the ongoing discourse on mathematics and its significance in various fields.

The event also featured two compelling plenary talks that explored the vital role of mathematics in sustainable development. First, Prof. Marlon Pareja, Associate Professor from De La Salle University - Dasmariñas, shared insights on the "Role of Mathematics in Sustainable Development." He highlighted mathematics as a powerful tool in addressing sustainable challenges and steering us towards a fairer and more resilient future. Following that, Dr. Victoria May P. Mendoza, Associate Professor from the University of the Philippines Dilliman, discussed "Understanding Disease Dynamics." Her presentation delved into how mathematics plays an important role in understanding disease patterns, crucial for public health and global well-being.

The attendees of the MSPC Annual Convention and General Assembly departed with a sense of inspiration about the potential of mathematics to drive sustainable development and create positive change. The collaborative efforts of MSPC and BatStateU highlighted the significance of partnership in promoting the mathematics agenda and working towards a brighter and more sustainable future for the CALABARZON Region and beyond.

