

NYCU President on AI and the Role of Human Interaction in Innovation

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This summary, translated in parts and concluded by Haydn Chen, Chief Strategy Officer of National Yang Ming Chiao Tung University (NYCU), is based on an article featured in **CommonWealth Magazine** (天下雜誌), Issue **810**, published on **October 29, 2024**. Originally authored by Dr. Lin Chi-Hung, the article explores the perspectives of NYCU on the indispensable role of face-to-face interactions in fostering innovation, even as advancements in AI and digital technology reshape the educational landscape.



President Lin Chi-Hung of National Yang Ming Chiao Tung University

Emphasizing the Power of Face-to-Face Interaction in the Digital Age

As AI technologies advance, President Lin Chi-Hung underscores the continued importance of **in-person human interactions** in driving innovation, creativity, and collaboration. Reflecting on the historical development of higher education, Dr. Lin notes that social spaces, such as Oxford University's traditional inclusion of taverns, were designed to promote informal, personal exchanges that often inspire groundbreaking ideas.

According to Dr. Lin, **in-person communication** conveys nuanced meanings and fosters rapport in ways that virtual interactions cannot fully replicate. This viewpoint is reinforced by NYCU's experiences in collaborative research partnerships with **Purdue University** and **University of Illinois Urbana-Champaign (UIUC)**. When faculty from these institutions met in person, their exchanges became more substantive and accelerated advancements in key areas such as neuroscience, cardiovascular medicine, and oncology. As a testament to the strength of these collaborations, NYCU was recently invited to join the upcoming **Global Consortium of Innovation and Engineering in Medicine**.



In-person interaction amongst students and faculty conveys subtleties and builds rapport

The Challenges of Remote Work for Innovation

Dr. Lin also draws attention to the limitations of remote work on organizational cohesion and innovation. He highlights the example of a leading semiconductor company that struggled to maintain performance and innovation after the pandemic prompted a significant shift toward remote work. With office spaces largely unoccupied, opportunities for spontaneous brainstorming and collaboration diminished, negatively impacting the company's team dynamics and market value. This example serves as a cautionary tale of how remote work can disrupt essential, organic interactions that fuel innovation.

The Importance of Cross-Disciplinary Collaboration in the AI Era

Dr. Lin further emphasizes that **interdisciplinary collaboration** is crucial in AI-driven fields such as systems biology, where expertise in areas like protein synthesis and cell simulation converges to create artificial cells. Such cross-disciplinary work has proven instrumental in shortening research timelines and optimizing resources, as seen during the development of COVID-19 treatments.

In closing, Dr. Lin encourages students, regardless of their fields of study, to develop deep expertise while embracing **AI tools** and actively collaborating across disciplines. Through this cross-pollination of knowledge and skills, students can broaden their perspectives and effectively connect diverse insights, driving meaningful innovation in their respective fields.

Concluding Remarks by Haydn Chen

As technology evolves, Dr. Lin's insights remind us that the most transformative innovations often emerge from the interplay of human connection, interdisciplinary collaboration, and thoughtful integration of advanced tools. In balancing the digital and the personal, universities and industries alike can harness the best of both worlds, fostering environments where innovation flourishes through spontaneous interactions, diverse expertise, and a shared commitment to meaningful progress. Dr. Lin's vision

of future-oriented yet grounded collaboration is an inspiring model for how educational institutions can thrive amidst the rapid shifts of the AI era.