Education

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Engineering the future

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HEN YOU THINK of engineers, the image which comes to mind most frequently is of men in hard hats. But engineering can be a fulfilling vocation for women too – and some foundations want to promote that.

To foster interest in the engineering industry and attract new talent, non-profit charity Junior Achievement and engineering consulting firm Arup organized a series of career talks in secondary schools recently.

The lecture series was held at schools in different regions and covered a wide range of topics – including transportation infrastructure, digital transformation for green cities, overall design of art and cultural hubs, as well as green building and low-carbon planning to address climate change.

To provide students with a deeper understanding of the career development of engineers, young and outstanding engineering teams from the industry were invited as guest speakers to share their personal experiences and professional journeys.

Kicking off the event, Ho Lap College welcomed two young engineers from Arup: Melody Wong and Kelly Chu.

"I majored in environmental science in university. Learning about global warming sparked my desire to create a sustainable environment," Wong said. "This led me to develop a strong interest in engineering and I eventually pursued engineering qualifications."

In her eight years of experience, Wong has played a part in designing numerous green

infrastructure projects. Notable among them are Airside, Taikoo Place 1 and The Henderson.

Having obtained her bachelor's degree in science from the University of Hong Kong, she went on to pick up two master's: one in engineering from the Hong Kong University

of Science and Technology and another in electrical engineering from The Hong Kong Polytechnic University.

"I studied in an all-girls school," Chu said. "Some of my classmates chose a career in nursing to heal people while I became an engineer to heal society and the environment."

Similar to other professions, engineers are problem-solvers that address societal issues and shape a more sustainable future.

"As long as humanity exists, and as long as we rely on carbon, electricity, and water, the demand for engineers will persist," said Wong, emphasizing the enduring need for engineering expertise.

In recent years, there has been an increase in the number of women entering the engineering workforce.

Wong and Chu talked about navigating the traditionally male-dominated field.

"I may come across as polite and soft-spoken, but I have learned to be tougher at the construction site to adapt to the environment and facilitate the progress of the project," said Chu.

The graduate engineer at Arup has been involved in several major railway infrastructure projects, including the Northern Link and the East Kowloon Line.

"In instances where construction workers



may not initially value my input, I view it as an opportunity for growth," she said.

"I strive to demonstrate that we can collaborate effectively and contribute to the success of the project."

Flexibility and open communication are key in overcoming gender biases in the engineering workforce.

"Sometimes, we are familiar only with the syllabus covered in university, leaving us with limited knowledge about the real-life situations and job responsibilities in the industry," said Christina Lee, a student who is interested in engineering.

Another student named Jessie Ho added that direct engagement with engineers enables them to gain a broader understanding of the practical aspects of being an engineer.

Ho Lap College principal Lai Lok-ki, highlighted the school's efforts in organizing various workshops and summer programs for students interested in STEM education. These initiatives have become popular in recent years due to the growing demand for STEM degrees.

The two engineers offered advice on choosing a career in engineering.

"Curiosity is crucial when it comes to being a good engineer," said Wong. "It also helps a lot if you like to communicate with people." greta.ng@singtaonewscorp.com



