# **Blackboard**

# Future-Ready, Innovative and Contextually Driven



# Challenge



Nanyang Polytechnic (NYP) needed to engage and motivate their learners to be more active in the learning process across over 100 programs that include industry-focused internships.

# Solution



Across its seven schools, NYP used Blackboard Learn<sup>™</sup> and Blackboard Collaborate to play a critical role in integrating innovative eLearning strategies.



- > Established in April 1992
- > 17,000 students and 1,300 staff members
- 7 schools offering more than 100 full-time and part-time programmes
- > Blackboard client since 2012

Nanyang Polytechnic (NYP) envisions itself as a nexus of future-ready learners, professionals and industry. Branding itself as The Innovative Polytechnic, the institution provides quality education and training to prepare young and mature students for work and life, equipping them to be lifelong learners and to contribute to the technological, economic and social development of Singapore. Combining its resources, expertise and creativity, the institution supports the development of professionals, business, and industry needed for Singapore's critical role in the global economy.

Established in April 1992, NYP enrolled its pioneer batch of students in its School of Health Sciences and School of Business Management in July on the same year. It set up the School of Engineering and School of Infomation Technology in July 1993, followed by the School of Design and School of Chemical & Life Sciences in November 2000. The School of Interactive & Digital Media was then established in November 2006.

As of 2018, NYP has 7 schools offering more than 100 full-time and parttime formally certified programmes, and has 17,000 students and 1,300 staff members.



"The value of NYP's Contextual
Teaching & Learning approach is
that it synthesises the power of
Learning Experience Design and
Constructive Alignment so that
blended learning is meaningful,
engaging and effective.
Blackboard is a platform where
we are able to advance staff
capabilities in, to enhance the
design and delivery of such
blended learning."

Mr Chan Yew Meng
Deputy Principal (Academic)

"Features in Blackboard Learn allow lecturers the flexibility to use the system as part of their pedagogy and the convenience of making their course materials available online, thus providing students with a convenient and valuable resource that is accessible any day, any time."

Ms Kwek Siew Wee Senior Manager, School of Engineering

# **Contextual Learning approach throughout the Schools**

Contextual Teaching & Learning (CTL) forms the fundamental basis for NYP's teaching and learning (T&L) approach. The CTL approach uses active learning techniques which are learner- and learning-centric that incorporate real world context and meaning. This means that the teaching and learning practices are adapted to the specific context of the content to be delivered and supported by contextually relevant environment that make learning meaningful for learners.

It incorporates T&L strategies that provide experiential learning both in and outside the classroom, to make learning experiences both effective and engaging. Across its seven schools, e-learning strategies are used to complement face-to-face instruction in a blended approach, with Blackboard's technology playing a critical role.

# **School of Engineering**

NYP's School of Engineering is the largest school in NYP. Besides running its 11 diplomas and 3 common entry programmes, it conceives, designs, implements and operates engineering systems and solutions with industry partners. For instance, there have been over 1,000 learner projects featuring engineering solutions and simulations. Such projects have been archived and shared as accessible content for the teaching and learning community throughout the Polytechnic.

Delivering such touchstones through Blackboard Learn, in place of an overreliance on textbooks, has created an authentic collective learning experience. In turn, the staff have recognized the need for heightened interdisciplinary collaboration.



100% of instructors use a 70/30 Blended Learning Model



"Our students have been using Bb extensively for collaborating, sharing and integrating new knowledge. We often use small quizzes on Bb as a form of formative assessment, allowing students to track their own performance and set their own pace of study. With the integration of Turnitin, it helps our students improve their written assignments before submission."

**Glen Hsieh** Lecturer, School of Health & Social Sciences

#### School of Chemical & Life Sciences

The School of Chemical and Life Sciences has several partnerships with industry centers such as the Centre for Functional Food & Human Nutrition, Food Safety Centre, HALAL Authentication Centre, Centre for Sustainable Nanotechnology, and Secondary Pharmaceutical Technology Centre.

These laboratories provide practical application of skills and project-based learning. E-Learning apps such as Articulate Storyline and EdPuzzle, made accessible through Blackboard, provide narrative and practice opportunities to reinforce laboratory experiences.

#### School of Health & Social Sciences

The School of Health Sciences continually expands its e-learning curriculum to promote self-directed and self-paced learning. Currently, learners have access to more than 40 web-based integrated e-learning packages. These provide learning experiences that help learners acquire skills and knowledge in procedures such emergency resuscitation, transfusion of blood, and administration of medication. These integrated e-learning packages also provide students with the opportunity to learn anytime and anywhere.

# **School of Business Management**

The School of Business Management utilizes a distinctive pedagogy called the Teaching Enterprise Project (TEP). These are centers which simulate real business environments within campus. Such centers focus on industries in the arena of business with a focus on media; customer service and analytics; fitness and sports industries; the restaurant industry and finance and banking. For instance, there is a retail store that allows students to test and deploy innovative technology solutions such as cashier-less check outs, and equips them with the knowledge and skills to run all aspects of the business including managing inventory, accounting and logistics.

TEP positions industry projects as vehicles for learners to apply their knowledge and deepen their skills through a learn-apply-learn-apply cycle. How is Blackboard related to TEP?

"Blackboard has been used by the NYP training restaurant – L'Rez to help contextualise teaching and engage students in learning beyond the practices at the teaching center. To illustrate, Blackboard is used to guide and update students on service practices in the industry through online videos. Through this, students have used Blackboard to discuss 'best practices' to emulate and adopt, which has led to many innovative approaches for enhancing the service experience at L'Rez," explains Dr. Denis Ang, (then) Manager at the School of Business Management.

# **WorldSkills Champions 2017**

Since 1997, Nanyang Polytechnic has earned over 50 medals.

In the fall of 2017, after battling competitors from Russia, South Korea and China, School of Interactive and Media Design student Ng Jun Xuan earned a Gold Medal in 3D Digital Game Art, as well as a Best of Nation award. Competing NYP students, Fazira Zulkifli and Li Kangli earned Bronze Medals in Health and Social Care, and the IT Network Systems Administration categories respectively.

(Worldskills International has been described as the Olympics of Skills. It promotes the skills movement nationally, regionally and globally through shared research, education and advocacy objectives with the aim to fortify ambition and opportunity. Competing members come from 78 countries around the globe and compete yearly.)

# School of Interactive and Digital Media

Nanyang Polytechnic's School of Interactive and Digital Media provides a dynamic mix of creativity, applied arts, interactive and digital media design and technology. Learners embark on real-life industry projects, professional internships and overseas exchange programs.

Lecturer Jacques Deschambeault deploys Blackboard's tools, rubrics, blogs, journals, forums and groups to enable and manage peer feedback and evaluation. This peer evaluation helps reduce over-dependency on the lecturer. Learners feel more confident to take on more challenging story boarding, camera calibration and motion-capture techniques as trust between peers develops.

**DID YOU KNOW?** The School of Interactive and Digital Media is the first school in Singapore to offer diploma courses in Animation, Games (both Game Art & Design, and Game Development & Technology), Motion Graphics & Broadcast Design, Digital Visual Effects and Interactive Design.

# **School of Information Technology**

The School of Information Technology's commitment to a dynamic approach in Teaching and Learning helps resolve real-world problems. The school's teaching and learning process inspires reflection for more holistic learning outcomes. NYP's Centre for IT Innovation provides third year students with professional relationships with companies. As learners embrace industry challenges, this interaction fosters a global mindset. Latter sessions accentuate self-directed demonstrations of a prototype's function and usability.

"We know there is so much tech knowledge online. We are concerned with the learner's tacit knowledge as well as experiential knowledge they can transfer to another student or to the next project. We use Blackboards tools and assessments to provide a spectrum of guidance," says Leow Zhen Zhen, Deputy Manager at the School of Information Technology.

Design thinking has become a globally popular go-to process that practitioners across disciplines and industry draw upon to develop projects. The Contextual Inquiry and Design pilot has matured the design iteration process and provided further levels of participatory fieldwork for cohorts of design students. The School of Information Technology also has interpreted Standford's Design Thinking to create a learning framework.



"We believe in harnessing Learning Experience to create meaningful, motivational and memorable engagements with our learners."

**Shirlyn Goh**Blackboard Administrator and Senior
Lecturer, School of Design

93% of the school's courses are on Blackboard Learn

4000 out of 4284 courses (as at 2018-Semester 1)

# **School of Design**

The School of Design provides three-year programmes where polytechnic students and adult learners create innovative solutions that improve people's lives. Drawing upon their imagination and talents, learners engage in real-life industry projects, including completing extensive internships either locally or overseas. In this vibrant environment, teachers and learners often use the Design Thinking Process - understand; empathize; define; ideate; prototype and test - as a primary method in quest of innovating sustainable architecture, furniture and objects for the 21st century consumer.

Recently, Blackboard administrator and Senior Lecturer from the School of Design, Shirlyn Goh has enabled a contextual design pilot project for cohorts of design students using Blackboard Collaborate. Shirlyn had already witnessed the successful use of journals and blogs that capture and share learner's ideas throughout various stages. The pilot functions to further empower learners to gather empathetic perspective from consumers of objects and furniture. Students record user behavior and their immediate observations during live fieldwork sessions throughout Singapore. Subsequent Collaborate Sessions feature the use of specific tools that help in the communication and discovery practices relevant to each stage of the design process. Latter sessions accentuate self-directed demonstrations of a prototype's function and usability.

By implementing its contextual learning approach, supported by the technology of Blackboard, Nanyang Polytechnic has invigorated its programming. Today its learners play a more active role as they build their future.

#### LEARN MORE AT BLACKBOARD.COM

Copyright © 2018. Blackboard Inc. All rights reserved. Blackboard, the Blackboard logo, Blackboard Web Community Manager, Blackboard Mobile Communications App, Blackboard Mass Notifications, Blackboard Social Media Manager, Blackboard Collaborate are trademarks or registered trademarks of Blackboard Inc. or its subsidiaries in the United States and/or other countries. Blackboard products and services may be covered by one or more of the following U.S. Patents: 8,265,968, 7,493,396; 7,558,853; 6,816,878; 8,150,925