



## **Chapter XII**

# **The Next Generation of E-Learning: Strategies for Media Rich Online Teaching and Engaged Learning**

Daniel Tiong Hok Tan,  
Nanyang Technological University, Singapore

Chye Seng Lee,  
Nanyang Technological University, Singapore

Wee Sen Goh,  
Nanyang Technological University, Singapore

## **Abstract**

---

*In a short span of three years, the Nanyang Technological University (NTU) in Singapore witnessed significant growth in the adoption of e-learning. With the use of professors-friendly e-learning applications, NTU has been able to achieve critical mass buy-in by the academic staff when the e-learning take-up rate achieved 85% of the existing NTU course curriculum. As NTU moves on to celebrate the third year of e-learning, measures were taken with the careful design considerations that aimed to “humanize” e-learning, (i.e., make e-learning interactive and engaging with active collaborations and student learning involvement). This includes the*

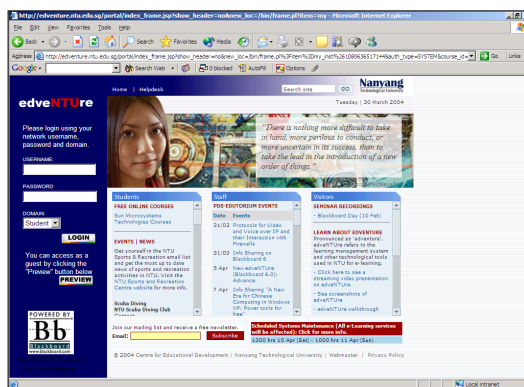
*proliferation in the use of the video talking head format synchronized with the lecture presentation, live audio-video delivery, text chat and document annotations of a lecture presentation and delivery. This chapter reviews the processes NTU adopted in adding the human touch to traditional e-learning projects and serves as a good case study for other institutions with a similar aim to achieve interactive and engaged online learning.*

## Introduction

Nanyang Technological University was established in 1970. It is one of two publicly funded universities in Singapore. Courses offered includes engineering, biological sciences, business, education, accountancy and communication studies. In NTU, the service unit Centre for Educational Development (CED) is responsible for spearheading and facilitating e-learning.

The innovative brand name edveNTure was created for her e-learning initiative in 2000: “e” represents everything electronic for the knowledge economy, and “ed” stands for education — the purpose of the platform for life-long learning. “Adventure” in a modified form depicts the concept of learning as an experience and journey to explore new frontiers of knowledge, much like a team collaborating synergistically together in new learning environments to discover new frontiers. With the university’s name “NTU” embedded, “edveNTure” symbolizes the e-learning initiative and aspiration for the university. Professors and students feel a sense of identity and affiliation as stakeholders in an environment where they share experiences, knowledge, and experimentations in a new learning paradigm and environment. edveNTure is accessible at <http://edventure.ntu.edu.sg> and the current home page is shown in Figure 1.

Figure 1. edveNTure home page



19 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/next-generation-learning/18754](http://www.igi-global.com/chapter/next-generation-learning/18754)

## Related Content

---

Dependency, Satisfaction, and Psycho-Social Characteristics as Correlates of Cell Phone Use by Library and Information Science Undergraduate Students: Dependency, Satisfaction, and Psycho-Social Characteristics as Correlates of Cell Phone Use

Adeyinka Tella (2021). *International Journal of Information and Communication Technology Education* (pp. 36-53).

[www.irma-international.org/article/dependency-satisfaction-and-psycho-social-characteristics-as-correlates-of-cell-phone-use-by-library-and-information-science-undergraduate-students/268772](http://www.irma-international.org/article/dependency-satisfaction-and-psycho-social-characteristics-as-correlates-of-cell-phone-use-by-library-and-information-science-undergraduate-students/268772)

Identifying Factors Influencing Pre-Service Teacher Readiness to Use Technology During Professional Practice

Chantyclaire Tibaand Janet Lesley Condy (2021). *International Journal of Information and Communication Technology Education* (pp. 149-161).

[www.irma-international.org/article/identifying-factors-influencing-pre-service-teacher-readiness-to-use-technology-during-professional-practice/261593](http://www.irma-international.org/article/identifying-factors-influencing-pre-service-teacher-readiness-to-use-technology-during-professional-practice/261593)

The Impact of an Online Homework Management System on Student Performance and Course Satisfaction in Introductory Financial Accounting

Victoria Fratto, Magda Gabriela Savaand Gregory J. Krivacek (2016). *International Journal of Information and Communication Technology Education* (pp. 76-87).

[www.irma-international.org/article/the-impact-of-an-online-homework-management-system-on-student-performance-and-course-satisfaction-in-introductory-financial-accounting/157411](http://www.irma-international.org/article/the-impact-of-an-online-homework-management-system-on-student-performance-and-course-satisfaction-in-introductory-financial-accounting/157411)

The Future of Curriculum Development in Distance Education

Figen Klc (2014). *Handbook of Research on Emerging Priorities and Trends in Distance Education: Communication, Pedagogy, and Technology* (pp. 261-275).

[www.irma-international.org/chapter/the-future-of-curriculum-development-in-distance-education/103606](http://www.irma-international.org/chapter/the-future-of-curriculum-development-in-distance-education/103606)

## Student-Centered Assessment Practices: An Integrated Approach With Project-Based Learning (PBL)

Sandra Fernandes, Anabela Carvalho Alves and André Uebe-Mansur (2021).

*Handbook of Research on Determining the Reliability of Online Assessment and Distance Learning* (pp. 213-243).

[www.irma-international.org/chapter/student-centered-assessment-practices/266550](http://www.irma-international.org/chapter/student-centered-assessment-practices/266550)