

EXPLAINER

# Blended Learning and e-Learning, Explained



*How technology is used in and outside the classroom to improve access to education*

## Introduction

The widespread use of the internet and the revolution in information and communication technology (ICT) have led to new methods in teaching and learning, such as blended learning and e-learning.

There are about 3.4 billion internet users in the world, close to half of the world's population. They access the internet through personal computers, tablets, and around 1.4 billion smartphones.

Research estimates that 200 million people will use online learning in 2018, compared to 60 million in 2013. Benefits seem strongest when online learning is coupled with (not replacing) face-to-face learning, with blended learning perceived to be more effective than face-to-face learning for problem solving skills (20%) and for recalling facts (13%).

# How can blended and e-learning transform education?

Blended and e-learning can broaden teaching and learning by providing additional tools to explain complex issues or retain student attention. These also expand access to quality education by allowing students to learn anywhere and anytime as well as learn from experts from any part of the world. Online learning can also work as an equalizer, giving people in remote schools, colleges, and universities access to the top teachers and top resources not normally available to them.

Blended learning replaces some traditional classroom time with online interactive content to reduce costs paid for instruction when curricula are more standardized. It has grown strongly in developed countries, and is now gaining traction in developing countries.

## Please provide examples of blended and e-learning.

### Udemy

Udemy uses a marketplace model for learning and teaching online. It has more than 13 million students who can choose from a library of 40,000 courses taught by experts in 80 different languages.

Students and teachers come from 190 countries, many of whom are professionals looking to upgrade their skills or wanting to share their expertise. Richard Qiu, Udemy vice-president for business development, notes that skills and knowledge from college are no longer enough to reach career success. "We need additional skills to keep our job or get a new job. We need to take our skills to the new level."

As a marketplace, Udemy also provides experts a way to become instructors. They can teach anything they like and create their own online courses using Udemy's free-to-use course design tools. It also offers Udemy for Business which offers subscription access to a collection of business-relevant courses and a platform to host and distribute proprietary content.

### IndonesiaX

IndonesiaX is a nonprofit organization that offers massive open online courses, also known as MOOCs. It focuses on developing online education, expanding wider access to high quality education, and providing life skills. Its learning management system—designed specifically for the people of Indonesia and presented in Bahasa Indonesia—supports the vision of the government of Indonesia to improve public access to certified training and educational excellence.

Patterned after EdX, the concept allows anyone to learn whenever and wherever from the best instructors from universities. But IndonesiaX added another dimension by tapping companies and institutions in Indonesia and abroad to conduct online lectures. It has signed partnerships with institutions such as the Bank of Indonesia, Institute of Technology Bandung, Indonesia Stock Exchange, and Indonesia Financial Services Authority.

IndonesiaX develops its own curriculum with the help of its partners and advisors.

## MathCloud

In Bhutan, the Asian Development Bank (ADB) is supporting an innovative approach to blended learning for math education. MathCloud, a Korean-developed system is uniquely adapted for each learner, and provides individually paced exercises. The exercises in MathCloud have been adapted and reordered to relate to the specific aspects taught week by week in the national math curriculum.

The system is being piloted in eight secondary schools for Year 8 students. Whereas in other schools the students have five classes a week in traditional mode, in the eight pilot schools the students have three "traditional" classes and two "individual with MathCloud" classes. The pilot also highlights the technical, administrative and capacity issues involved in introducing blended learning into a developing country context.

## Level Training in the University of South Pacific

The University of the South Pacific is using new technologies to improve access to university level training. ADB is providing funds to upgrade the systems necessary to provide technology for distance education delivery. This will improve access to post-secondary training programs to students from remote outer islands, and is an example of the equalizing potential of e-learning. It will also improve students' skills in information technology and familiarize students with communication technologies and tools that are used in the workplace.

## Samoa Schoolnet

At the school level, the Government of Samoa is committed to increasing the ICT capacity across schools, for administrative as well as for e-learning. Supported by ADB, the initiative identifies and develops ICT competencies and best practices for using e-learning resources in classroom teaching and learning processes. This will enhance the quality of education and cost-effectively improve student learning outcomes in six academic subjects aligned with government priorities in mathematics and science. The project will also encourage, via Internet, communication among schools domestically and internationally.

# Resources

B. S. Bell and J.E. Federman. 2013. E-learning in postsecondary education. *The Future of Children*, 23(1), 165-185. Princeton-Brookings.

Innovations in e-Learning and Blended Learning. Marito Garcia, PhD. 2016 ADB International Skills Forum. Manila.

Digital in 2016. We Are Social comprehensive study of digital, social and mobile usage around the world.

J. Bichsel. 2013. The State of E-Learning in Higher Education: An Eye toward Growth and Increased Access (Research Report). Louisville, CO: EDUCAUSE Center for Analysis and Research.

Udemy. Richard Qiu. 2016 ADB International Skills Forum. Manila.

The Case of IndonesiaX. Lucy Mangoendipoero Pandjaitan. 2016 ADB International Skills Forum. Manila.

## Related links

Explainer: Get On My Cloud - Explaining the MathCloud System of Learning

## Meet the expert



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Karina Veal provides strategic and technical advice across ADB's growing education sector operations to assist developing countries meet their education priorities. She focuses on innovative solutions to emerging issues such as 'blended' learning, effective industry engagement, and public-private sharing of educational facilities. Before joining ADB in 2012, she operated an independent consultancy practice in education for development, working with UN and bilateral agencies. Prior to that, she held a variety of public policy leadership and advisory roles.

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