

Transforming University Mass Lectures Using Students' Smartphones 1: How To Energize Your Mass Lectures

Prof. Yumi Kubota, College of Bioresource Sciences, Nihon University, has used a combination of students' own smartphones and LoiLoNote School to overhaul her mass lectures by making them more interactive and streamlined - all without purchasing tablets.

Outline of the Problem

Prof. Kubota experienced a number of common problems faced by lectures of mass lectures at university level, namely:

- 1) Distribution of lesson handouts and materials eats up valuable lesson time, and handouts often run out prematurely or take a long time to reach all students in large lecture halls.
- 2) Lectures tend to be unilateral and students are reactive or passive
- 3) Insufficient time for student comments and questions or teacher comments and feedback



In an attempt to alleviate these problems, Prof. Kubota experimented with a variety of solutions, but none of them was completely successful. Then she heard about LNS on TV and it caught her interest. She wondered if it could be adapted for information-sharing purposes among a large number of people, such as in a university lecture hall, and decided to try it out.

LoiLoNote School's Application

By introducing LNS, Prof. Kubota managed to resolve the three problems outlined above by:

- 1) distributing lesson materials and handouts more efficiently, 2) enabling active learning through group discussion, etc., and 3) making lectures more interactive and reciprocal.

1) Distributing Lesson Materials

At the start of class, Prof. Kubota uses LNS to instantaneously distribute class handouts and lesson materials. Students can view the handouts on their smartphone in a format they find comfortable and easy to use, using the swipe function to look back at previous notes, and enlarging detailed information such as charts, graphs and statistics to see the details more clearly. Many students prefer to take photos of the whiteboard for their records as well as making notes by hand.



2) Collecting Students' Comments

During class, Prof. Kubota's main use of LNS is to collect Cards containing students' reactions and comments. Each time, she allocates about 60 minutes for an "interactive lecture", and in the remaining 30 minutes, she has all students write and submit a short essay of their questions, thoughts and opinions regarding the lecture content.

Previously, students would write their essays on paper, but now it is all done electronically. Since today's students are often more used to writing on their smartphones than on paper or even computer or tablets, many find it quicker and easier to input text into their phones than to write or type by hand. This lowers the barrier to self-expression and enables students to write more freely.

Recently, among phone users in Japan there is a culture of writing long messages and even serial novels on phones using popular instant messaging services. As a result, some students have been inspired to submit lengthy, in-depth answers. Once students have written their essays, they submit them to a central “pot” where they can be viewed by Prof. Kubota and their fellow students.

3) Encouraging Mutual Feedback and Interaction

Using LNS’s feedback tools, students are able to view, copy, and edit other students’ Cards by underlining, circling, and writing comments before returning them to their author. Thus, students are able to teach and learn from each other as well as the lecture. Many students say they find it refreshing and motivating to read other students’ opinions and feedback on what they wrote, a precious opportunity which is not often available in large lecture-style courses.

In such courses it is often difficult to find time at the end to hand around the microphone and hear students’ opinions, and even if lectures make the effort to do so it is frequently the same outspoken or confident students who give opinions every time, while shy or less confident students remain silent.

Using a combination of students’ smartphone and LNS, students can view and respond to their classmates’ comments in text form both during and after the lesson. This significantly lowers the obstacles to student interaction and self-expression, and has contributed to making Prof. Kubota’s lectures more interesting and interactive, thereby raising student morale, motivation and participation rates.

Voices From the Classroom

The following are some comments from Prof. Kubota’s students after using the app.

Student A

It was convenient that the handouts were all gathered together in one place where you could see them.

Student B

It was good because my own opinion was reflected in the lecture, and I could also find out what other students were thinking.

Student C

I think it’s good that you can check other students’ answers to the lecturer’s questions immediately, and it’s interesting to be able to see other students’ answers and compare their opinions to your own.

Student D

I feel like I’m actually actively participating in the lesson. I also think it’s good that students can also find out about other students’ thoughts and opinions.

Student E

I started looking at the lesson materials more, which I think is better than just passively listening to the lecture. It’s much more interesting [getting involved] than just sitting there listening to the lecturer talk on and on!

