Study of Teaching International Students Offline and Online at Shanghai Dianji University

Yuan Ren, Shunru Ji

School of Electronics and Information, Shanghai Dianji University, Shanghai 201203, China

Abstract

Since Covid-19 pandemic began in 2020, most international students abroad cannot enter China to study, while many international students have been staying in China all the time. This paper explores how to teach a class of international students both online and offline at Shanghai Dianji University(SDJU). This paper aims to find a balanced way to teach both groups of students effectively without raising the burden of teachers who otherwise have to teach the same contents online and offline twice. More importantly, students living in relatively poor regions are able to follow the same learning process under the simple software and hardware requirements proposed in this paper. Finally, a hybrid exam pattern is designed to fairly evaluate all students.

Keywords

Covid-19; International Student; Online Teaching; Wechat; Cloud Storage; SDJU.

1. Introduction

The outbreak of Covid-19 in 2020 has been making everyone's life, work and study uncomfortable and inconvenient. For international students abroad who were studying or were going to study in China, their situations are even difficult because most of them have not been allowed to enter Chinese territory. At Shanghai Dianji University, there are quite a few classes of international students only. In each class, some of the students are in China and therefore are able to take part in face-to-face teaching, while others are outside China and as a result can only attend online lectures. Teachers will be under enormous pressure if they have to teach offline students and online students separately. Moreover, it is difficult to keep consistent even for the same teacher to teach the same lesson in two totally different ways, and therefore it will be hardly possible to test all students in the same exam which is the only fair way of evaluation. In this paper, we propose a method of teaching a course both online and offline without significantly increasing the burdens of teachers and students. Many researchers have focus on

significantly increasing the burdens of teachers and students. Many researchers have focus on the studies of online teaching such as [1-4]. Many literature have discussed teaching strategies during the Covid-19 pandemic when most students are remotely learning at home[5-8].

2. Offline Teaching

For international students who are currently in China, the best choice is of course face-to-face teaching in the classroom. Students can participate in all classroom activities and interact with their teacher. Offline learning is believed to bring the highest efficiency and effectiveness of all types of teaching. A key to carry out online teaching is live broadcasting to the remote watcher or recording the class activities and then sharing the videos with those learners who cannot keep pace with others due to time differences or other reasons.

In order to record as complete activities as possible, teachers should use internal computer network as much as possible in a computer lab to present slides. When necessary, the teachers could write on applications such as word processing or painting instead of with chalk on the blackboard. This allows the teachers to capture almost everything happening in class using

video recorder software and video cameras attached to the teachers' computers, including their voices, the conversations between teachers and students, and their demonstrations.

3. Online Teaching

Some students abroad can participate in their courses in real-time online conferences, so they can also actively interact with their teachers and achieve favorable learning effect. While others, due to time differences, hardware availabilities, internet accesses, or personal reasons, can hardly attend live class. If a teacher does not provide their students with playback videos, the students will have to either drop the course or struggle to follow the teacher's schedule in a very uncomfortable manner, which will definitely lower the learning quality and the overall evaluation and experience of the course. The more ways of learning the students have access to during the pandemic or lockdown, the more satisfied the motivated they will be, and the more likely they are to achieve the same learning outcome as with offline learning. A question often considered by teachers is how should courseware be shared with students abroad? So far, there are a great many learning websites that allow teachers to create their own online courses or directly use other well-designed courses.

Take Chaoxing as an example. It is a very popular online learning platform in Chinese mainland, and has been widely used especially since the Covid-19 pandemic. Teachers upload their courseware to the website, and then their students can take the courses on their computes or even cell phones anywhere at any time. This seems an almost perfect solution to online teaching. However, international students may face difficulties if they are required to use Chaoxing. First, they must have a Chinese cell phone number in order to active their accounts, but most of them who have never been to China before do not have our local cell phone numbers. Second, the website is completely in Chinese, making it hard to use for most international students who are beginners of Chinese. Third, Chaoxing app for cell phones may be even unavailable in the app store outside China. So, utilizing these online websites are perfect for domestic learners, but may not be the best idea for international students especially for those abroad.

So, what might a better choice? According to our experiences in the past two years, simple tools bring the best results. After international students are admitted to a Chinese university like SDJU, they will all be required to create Tencent WeChat accounts in order to communicate with their universities and guidance counselors, and they all have email accounts too. WeChat is a very powerful tool that allows not only instant messaging but also signing up for many other apps without having to register new accounts. As far as we are concerned, we upload everything including slides, videos, textbooks, review questions, etc. to Tencent Weiyun which is a popular cloud storage service, and share with the students by sending a single link to all the selected files. The students can simply open the link on their computers or phones, log in with their WeChat accounts, and then download the files for free. The while process is quite simple, although in Chinese, and therefore the students hardly have any difficulties. Submissions of assignments are simply done with emails. Beside Weiyun, Baidu Wangpan is also a wonderful choice and is very popular in China.

4. Hybrid Final Exams

Students who take the same class should be given the same final exam for fairness and effectiveness. As we are teaching the course both online and offline, an online final exam of in open-book form is therefore inevitable. At SDJU, an ordinary exam usually last two hours. Because students can search the internet for answers, when proposing the questions, the teachers should avoid using exiting questions to which direct answers are available online. We prefer the type of questions that students can find a lot of references about but must spend a lot of time and do much work on their own to come up with solutions successful. However, such

an ideal question can hardly be solved within two hours. What's more, a good exam should not be comprised of only one question. There should be enough questions to cover all important knowledge and skills of the course. That is why a hybrid final exam is employed to resolve these contradictions.

A hybrid final exam is designed to test all students fair and square. Simply speaking, a hybrid exam is a combination of a normal online and an extended offline exam that takes place "at home". The final exam paper consists of four capstone projects. Three out of four projects are assigned a week before the final exam time, and the last project is assigned at the beginning of the exam. The final exam is scheduled at a time that most people feel comfortable with, for example, 16:00-18:00 Beijing time. Submissions of exam papers are also accomplished with emails. Because Gmail is not stable in China, students are reminded not to use Gmail for submissions of any coursework. So far, no students have failed in our courses due to technical accidents.

5. Conclusion

The Covid-19 pandemic has been seriously disturbing everyone's life, study and work in all aspects across the global. This paper explores how we can teach international students in an effective way. The primary difficulty is that some of them are still stuck outside China and therefore cannot attend face-to-face classes. If all abroad students are forced to participate live classroom teaching through online meeting applications, they may have to stay awake in midnight due to time difference, or even miss classes due to accessible in case that they do not have access to computers and high-speed internet at all times. On the contrary, if teachers must teach online courses again after finishing classroom teaching, they will be under pressure and burden of repetitive work.

This paper proposes a method of teaching online and offline without increasing the workload of teachers. Not only live broadcast of classroom teaching but also playback videos are provided to students through cloud storage such as Weiyun so that all students are able to take the course in the way that they are most comfortable with. A hybrid exam patter is also designed to effectively test all students in a fair way online. In the future, focus will be on how to improve the interactions between online students and their teachers.

References

- [1] Magana, Alejandra J.; Karabiyik, Tugba; Thomas, Paul; Jaiswal, Aparajita; Perera, Viranga; Dworkin, James: Teamwork facilitation and conflict resolution training in a HyFlex course during the COVID-19 pandemic, Journal of Engineering Education, Vol. 111(2022), No. 2, p. 446-473.
- [2] He, Wu; Zha, Shenghua; Watson, Silvana; He, Yuming: Teaching Tip Promoting Inclusive Online Learning for Students with Disabilities in Information Systems Courses, Journal of Information Systems Education, Vol. 33(2022), No. 1, p, 7-14.
- [3] Minnes, Mia: Designing TA Training for Computer Science Graduate Students: Remote and Self-paced Options for A Supported Introduction to Reflective Teaching, SIGCSE 2022 Proceedings of the 53rd ACM Technical Symposium on Computer Science Education, Vol. 1, p. 752-758.
- [4] Adrion, W. Richards; Bevan, Katie; Foster, Paul; Matuszczak, Denise; Miller, Rachel; Rita, Laura; Sullivan, Florence R.; Veeragoudar, Sneha; Wohlers, Scott; Zeitz, Melissa: How a Research-Practice Partnership Refined its Strategy for Integrating CS/CT into K-5 Curricula, Proceedings of the 53rd ACM Technical Symposium on Computer Science Education, Vol. 1(2022), p. 592-598.
- [5] Zhang, Ling; Carter, Richard Allen; Qian, Xueqin; Yang, Sohyun; Rujimora, James; Wen, Shuman: Academia's responses to crisis: A bibliometric analysis of literature on online learning in higher education during COVID-19, British Journal of Educational Technology, Vol. 53(2022), No. 3, p. 620-646.

- [6] Conrad, Colin; Deng, Qi; Caron, Isabelle; Shkurska, Oksana; Skerrett, Paulette; Sundararajan, Binod: How student perceptions about online learning difficulty influenced their satisfaction during Canada's Covid-19 response, British Journal of Educational Technology, Vol. 53(2022), No. 3, p. 534-557.
- [7] Dick, Geoffrey: Teaching in a Time of Uncertainty A Practical Guide, Communications in Computer and Information Science, Vol. 1461(2022), p. 43-50.
- [8] Dodson, Elizabeth M; Blinn, Charles R: How Will COVID-19 Change Forestry Education? A Study of US Forest Operations Instructors, Journal of Forestry, Vol. 120, No. 2, p. 145-155.