线上教学
ការបង្រៀនតាមប្រព័ន្ធអនឡាញ
Pengajaran atas talian
Online Teaching

Guide

for Rural Teachers Online with Little to No Specialized Online Teaching Software Access

Prepared by

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To the Respected Reader:

March 20, 2021

This is the first time UNHREP joins forces with the non-UN academic professionals and a National Government policymaking entity to come up with a How-to Guide. UNHREP is no stranger to trail-brazing, however: we are used to creating brand-new approaches and solutions where there were none. Moreover, we intend to do just this all the way into the future...

In February 2020 I got a call from a former co-worker who suggested, in passing, that there seemed to be a need to write up something on the online teaching matters at the time of the COVID-19 epidemic in China. I remember I was very busy, well, teaching online in China, but the idea stuck. Two months later I noticed that, as the educators gradually moved online due to the rising COVID-19 infections globally, a number of educational institutions began issuing proprietary in-house Online Teaching gudelines and instructions. That was already good; yet a rural teacher could hardly benefit from the said guidelines as they were geared towards a specific Education Institution's proprietary in-house online teaching software or a for-profit web-based teaching site.

And so arose the need to write some kind of an online guide that would explain, in clear language, and with pictures, how to mount a free strong Online Course using whatever free online software you have on your phone. And yes, you do have to improvise. And yes, generic videoconferencing software is not all that great when it comes to online teaching. And you most probably will have to use some sort of a freeware combination, not just a single software package, to arrive at the solid Knowledge Acquisition effect. I know I had to figure that out for myself -- on-the-fly and real fast -- as five large classes of China university students were waiting for me, the Teacher, to bring them back to the state of normalcy, take their mind off the awful and stressful epidemic experience and have them learning again, albeit remotely...

These Authors hope that disadvantaged teachers globally will find these materials useful. We look forward to your comments and suggestions.

Kind Regards,

Igor Doubenko-Lazarev,
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Complaints, Comments and Suggestions

are welcome

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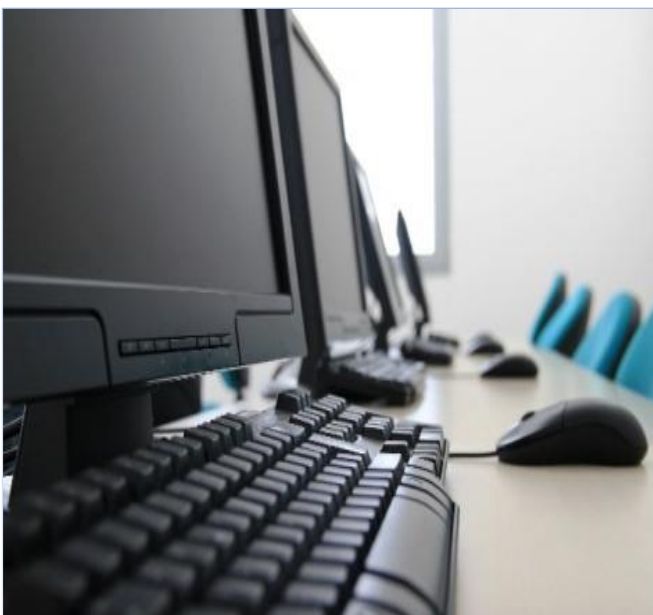
Quotes Wall

Virtue blossoms with independent thought and degenerates with blind adherence to tradition.
Han Yu, a China writer and philosopher of Tang Dynasty (901 A.D.)[1]

...the future of education is here. We have a generational opportunity to reimagine education. [...] To achieve this, we need investment in digital literacy and infrastructure, an evolution towards learning how to learn, a rejuvenation of life-long learning and strengthened links between formal and non-formal education.
António Guterres, Secretary-General, *United Nations*[2]

We'd be remiss, if not negligent, if we come out of all this believing it won't happen again. [...] Online learning may not be the perfect solution, but it is better than no learning at all. For now, we must be ready to make the most of it. For the future, we must ensure that all our children have what they need to succeed, face-to-face and online.
Dr James Diamond, Head, Digital Age Learning and Educational Technology (DALET), School of Education, *The Johns Hopkins University*

Let me be blunt: teaching university students in China you have to understand that you're dealing with a highly-sophisticated fully-digital generation with an uninterruptible 24x7 High-Speed Internet on their phones. They don't watch TV and the idea of radio is rigiculous to them...You bore them in class with whatever it is you're mumbling in your corner there, and you've lost them. They've just tuned you out and are now playing "Sleeping Dogs," chatting with the boyfriend in a classroom next door or watching selfie videos on Weibo...So it's like this, really: it's either you get on the same page with them in terms of your Knowledge Delivery practices, or you're a dinosaur relic about to die out...Sad but true...
Georg von Lobeltitz, *RayEnergy Corporation*

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[1] As quoted in Han Zhen, W*isdom and Belief of the East*, Foreign Languages Press Co. Ltd., Beijing, China, 2019, p. 149
[2] Secretary-General video message to launch *Policy Brief on Education and COVID-19*, 4 August 2020, Unted Nations

Publication Information

UNHREP Guides are published on the just-in-time basis in response to the fast-emerging demands of the increasingly-changing and volatile situation around the world.

UNHREP Guides aim to highlight a need, offer a fast workable solution and <u>initiate and stimulate further research</u> in the specific need areas in question. In that respect, the Guides are <u>not</u> to be percieved as finialized manuals, nor do they seek to be any such.

I. INTRODUCTION

The Covid-19 pandemic has disrupted the educational sphere in unprecedented ways. Traditional norms of teaching in physical classrooms had to be swiftly replaced with remote teaching and learning, mediated by information and communication technologies (ICTs), as a corollary of the forced lockdown in many parts of the world. Towards the end of April 2020, about 78.3% of enrolled learners were affected by the implementation of nationwide school closures by 186 countries (UNESCO, 2020). With unplanned school closures being imposed in many educational settings, educators had to rely on the use of technology in carrying out their lessons.   As ICTs plays a critical role in ensuring that education can continue to be provided to students in these challenging times, it is important that educators are not only equipped with the knowledge and skills of how to use technology but also on how to deliver instruction using technology in ways that promote student engagement.

Globally, 214 million students from pre-primary to upper secondary education in 23 countries have missed at least three-quarters of classroom instruction time at the pre-primary to upper secondary level since March 2020.

Source: COVID-19 and School Closures. One Year of Education Disruption. UNICEF Report, March 2021

The rapid shift from face-to-face teaching to online mode, however, has proven to be challenging for both teachers and students due to numerous factors. Depending on the context of teaching, issues such as access to technology, technical support, and competencies in using technologies are among some of the longstanding issues that have been made more prominent in the light of this pandemic. Addressing these issues is not a straightforward matter. They require a careful examination if solutions are to be proposed.

1. Higher education responses to the pandemic

In the context of higher education, ICTs already make up part of the teaching and learning ecosystem in the form of transmissive face-to face delivery, blended learning or flipped classrooms (see a review by Pinto & Leite, 2020). In Malaysia for instance, the universities are generally equipped with online teaching platforms in the form of customised learning management systems. The scenario involving e-learning and online pedagogy in Universiti Malaya, a leading public university in Malaysia, is described in detail by Mohd Jan et al. (2020). In sum, the paper illustrates innovative practices involving technologies that are part of regular university teaching. The COVID-19 pandemic, however, has brought about new and unexpected challenges. Higher education institutions (HEIs) around the world face an uphill task in ensuring that students are able continue their education via remote teaching and learning despite the disruptions caused by the pandemic. As highlighted by UNESCO (2020), students are affected in many ways by the pandemic due to closures of schools. Unequal access to technology, and social isolation among others, are cited as the main obstacles that can lead to adverse effects on students. These include lack of access to critical course content and being deprived of opportunities for social communication with their peers and faculty members. Apart from that, it is highlighted that prolonged interrupted schooling can result in obstructed personal development and growth.

Exhibit 1. The UNICEF unveils 'pandemic classroom' at the United Nations headquarters in New York, U.S., March 2, 2021. The model classroom has 168 sets of empty desks and chairs, with each seat representing one million children living in countries where schools have been almost entirely closed since the start of COVID-19 lockdowns/CFP

Given the challenges faced by HEIs around the world, it is more important than ever to begin a dialogue that allows a collective examination of the practices adopted by HEIs as a way of knowledge exchange. Such dialogue ideally should be placed within the background of the recent responses to the Covid-19 pandemic.   We have seen educational authorities and institutions around the world, and international organizations galvanising efforts to come up with new directives, policies, and guidelines in response to this novel situation. There is much to gained from a scrutiny of these efforts as it would help us to better understand what works and what does not work in situations of emergency and crisis. For example, Crawford et al.'s (2020) analysis of the first wave of responses of HEIs in 20 countries towards the pandemic found that these responses were varied.   They ranged from a lack of response through to a redesigning of existing curriculums to fit the requirements of purely online teaching and learning. Their analysis revealed that these are attributed to the differing resources available to the institutions and the student cohorts enrolled in the universities. They found that Latin American universities, for instance, differed in their responses, with some universities remaining open and others transitioning to e-learning. In other contexts, such as the United Arab Emirates, there is a more noticeable shift to e-learning with the adoption of technologies such as Adobe Connect and learning management systems such as Blackboard as emergency measures. In Singapore, the use of web-conferencing tools such as Zoom and Panapto, in part as emergency measures and in part incorporated into existing learning management systems, is a more common immediate response, contributing at the same time to a significant increase in EdTech uses. For some universities in Jordan, low tech alternatives involving the use of freeware such as Google Classroom, Moodle, and Skype were adopted to facilitate online teaching and learning. These are just among some of the measures taken by universities, as cited by Crawford et al. (2020), in ensuring minimal disruption to teaching and learning.

It is also asserted that universities have now shifted from their initial emphasis of migrating to online environments, to focusing on improving online pedagogy (Crawford et al., 2020). Technology, as indicated earlier, has been part of the university's teaching and learning ecology, even before the onset of the pandemic. And technology continues to play an important role in digitizing teaching and learning in many universities across the world in ensuring that quality education can continue to be provided during the pandemic. The emergency responses to technology highlighted earlier demonstrates that universities are in a unique position to accelerate the shift to massive technology adoption by communities and in shaping the way teaching and learning are implemented digitally.

Nevertheless, we also note that the adoption of technology is not at a similar rate across the world. There are contexts where access to cutting-edge technology is not available and that low-tech solutions will need to be resorted to in instructional delivery. This calls for a more focused efforts in documenting the pedagogical strategies adopted in such educational settings.

As pointed out earlier, a dialogue that emphasises on knowledge exchange of best practices are crucial in times of emergency. Critical in ensuring the continuity of this dialogue is strategic dissemination of knowledge and current practices in response to the pandemic. The current publication is timely as it aims to contribute to this dialogue with a special focus on instructional delivery in the context of higher education in eastern countries, namely, China and Cambodia. It aims to provide guidelines on pedagogical strategies in rural contexts where sophisticated technology is not readily available to teachers and students.

2. Online education in rural contexts

Unlike their urban counterparts, students from rural areas are impacted by the pandemic in more severe ways. The lack of internet connectivity and access to technology are among some of the reasons that affected their education. This issue of urban-rural digital divide is certainly not new. The speedy rate at which information and communication technologies continue to progress, with improved hardware and software being announced all the time making it impossible to keep up with, is simply not proportional to the slow rate of technology penetration in rural settings.

> For hundreds of millions of people in rural parts of the developing world, the digital age has not even started. In 2016, an estimated 46% of the global population was able to access the internet from home (Internet live stats). In India the proportion was only 35%, in spite of that country's urban tech hubs and impressive digital infrastructure. Throughout Africa, broadband hardly exists beyond urban hotspots.
>
> (Hill & Lawton, 2018, p. 603)

Clearly, with the lack of access and internet connectivity, providing online education to rural settings will remain a complex undertaking. The pandemic appears to exacerbate this problem further. Given this scenario, the detailed guidelines, as provided by this publication, aim to contribute to the conversation on how teaching and learning can be implemented in the context of low-tech settings. To adopt the pedagogical strategies described in this document, however, would require an understanding of the issues surrounding the adoption of technology in rural settings.

To begin with, perhaps it is important to ask a basic question: What kind of technology is available to the teachers and students? As emphasised earlier, technology plays a key role in the delivery of instruction in these challenging times. The type of hardware available to the student in the rural context will determine the type of online pedagogy that teachers implement. The next question of concern is equally important: Are teachers able to use the available technology in student-centred ways? It is easy to view the problem of educational technology implementation in rural contexts as a matter of providing better access to technology and increasing internet connectivity. However, although the problem of access can seem to be easily eliminated by way of increasing funding, purchasing the required hardware and ensuring connectivity is available, there are other important issues that merit consideration and should be the focus of any discussion of overcoming the digital divide.

3. Overcoming the digital divide

In discourses of digital divide in education, the tendency to perceive it as being caused by learners' socioeconomic background is prevalent. It is often the case that digital divide is attributed to students' lack of physical access to technology. Without doubt, providing access to technology is a critical first step in ensuring that lessons can be conducted online during these challenging times and that students have equitable access to quality education. Such a solution, unfortunately, may not necessarily bring the desired results as it overlooks other pertinent issues that require addressing.

More recently, there has been a call for a reassessment of the concept. The literature has suggested that the concept of digital divide predicated on the dichotomy of those who have access to technology and those who do not have access is no longer viable (Rowsell, Morrell & Alvermann, 2017). Perhaps an examination of the digital divide from the recent perspectives of the concept, can shed light on this matter. For example, Ritzhaupt, Liu, Dawson and Barron (2013) have categorised digital divide according to 1) access to physical technology such as hardware and software, technical support in schools and connectivity to the internet   2) the frequency of technology use by teachers and students and 3)

students' knowledge on how to use   technology in ways that are empowering for them. This categorisation is a step forward from the dichotomous view of digital divide, highlighting the importance of students' knowledge of technology.

Recent discussion on the notion of digital divide has also highlighted its complex nature, by linking it to the notion of stratification. For instance, Warschauer (2011) suggests that digital divide is "social stratification due to unequal ability to access, adapt and create knowledge via use of information and communication technologies" (p. 5). Others such as Radovanović, Hogan and Lalić (2015), have offered a reconceptualization of the concept of digital divide from the perspective of Weber's theory of stratification. Their study found that technology adoption in the Serbian higher education context, is affected by stratification that manifested not only in the form of access, but also in the form of status, politics, and motivation. It is also found that educators' resistance towards the adoption of new technology was due to their perceived threat of technology towards their credibility. This is also not helped by the fact that the students were more technologically savvy but were not very critical in utilising online materials for their learning.

This view of digital divide has implications on our current understanding of teaching and learning in the rural settings. Firstly, teachers' attitudes towards technology and their skills in using technology clearly matter if technology is to be successfully adopted. Without a positive attitude and without an understanding of the potential uses of technology, teachers are unlikely to be able to use it in ways that can benefit students. Studies on barriers on technology adoption have also highlighted the issues of teacher attitudes and skills (see, for example, Rogers, 2000). However, the pandemic is a cause of great fear (Lemke & Silverman, 2020) and fear, according to Al-Maroof et al. (2020) is assumed to affect teachers' attitudes towards technology adoption during the pandemic. Nevertheless, Al-Maroof's et al.'s (2020) study has also demonstrated that with the right technology, technology adoption can be a positive experience for students' and teachers. In the case of teachers from the rural settings, it is important that they are guided in the selecting the type of technology that they use with their learners.

Secondly, while students today can be said to be more digitally competent compared to previous generations, it cannot be assumed that they are all knowledgeable in using them for productive literacy practices. Not all learners have access to assistance at home to support them in their learning (Warschauer, 2011). This view of the home environment support in technology use is closely aligned to Talaee and Noroozi's (2019) conceptualisation of digital divide. In the context of primary school children, Talaee and Noroozi (2019), suggest that the concept of digital divide is multi-layered and can be examined from the lens of technology adoption such as 1) access 2) effective use and) the "social envelope".

They propose that the final level (the core level), which involves ensuring that safe and secure environment is provided for children when using computers at home, is one of the key components that can be affected by the economic, social and cultural factor of the children's background. Although our current concern is higher education students, the framework proposed by Talaee and Noroozi (2019) is still relevant to the discussion. The pandemic has arguably forced students to be at home for long periods of time with the closure of universities. Students' home environments, however, are not similar due to their varying backgrounds. A safe home environment, added with assistance in developing key digital literacies, is therefore still critical for higher education students to thrive in online learning, especially for students from rural settings.

Although teachers may not have much control of the students' home environment, it is important that the online teaching strategies adopted by teachers take into consideration of students' emotional well-being. The current publication will illustrate examples of how teachers may adopt strategies that facilitate students' learning in a safe and secure environment.

4.   Digital literacies and online pedagogy

An understanding of the critical digital literacy skills needed in these challenging times should also be a primary concern of educators. With the availability of smartphones and tablets today, young people can easily have access to the internet and social media compared to the older generations. These tools have the potential to promote the development of digital literacies. This involves learners being able to navigate across different forms of media, texts and genres, as among the key skills needed for 21st century learning, which is in line with the academic literacies model proposed by Lea and Street (2006). These practices are essential for students to excel in their learning of subject content. Researchers have pointed out, however, that in some parts of the world, the use of low-tech mobile phones for literacy practices is more common than the use of advance smartphones and tablets (Prinsloo & Rowsell, 2012). Furthermore, the ubiquitous use of mobile phones among young people today, does not immediately imply that they are also able to use them effectively as learning tools or for more sophisticated literacy practices. This implies that any guidelines for online pedagogy should also include the development of effective digital literacy practices among students as one of its aims. For students from the rural environment, it is important for educators to know what their existing digital literacy practices are, especially if mobile phones are predominantly being used to support their online learning. This will allow educators to design lessons that take account of their existing knowledge of literacy practices in delivering online instruction.

It has been argued that online distance learning has the potential to bridge the digital divide gap and the pedagogy involves:

> …breaking lectures into much shorter video clips, inserting interactive exercises throughout, and facilitating interactions between students at almost any time. This can be exceedingly well done technically but it tends to reinforce the point that great teaching requires a co-creation of knowledge between great teachers and engaged students. (Hill & Lawton, 2018)

From the excerpt above, we can conclude that teachers' ability to design interactive lessons that promotes collaboration and creation of knowledge is a hallmark of effective online pedagogy. Although access to cutting edge technology maybe limited, this should not prevent teachers from rural settings from developing interactive online lessons. Hall et al. (2020) outlines 21 design principles for innovative uses of mobile technology in education to address the digital use divide. These principles cover important areas including adaptive, authentic, collaboration, mobility, and student choice. The current guidelines aim to illustrate how some of these principles are enacted in actual online teaching context.

5.   Learning from China and Cambodia

The case studies from China and Cambodia in this publication present an opportunity to showcase some of the actual practices in online education in rural settings. Promoting teachers' technology adoption in ways that would enable learner engagement is not an easy endeavour in rural situations given the issues highlighted earlier. Increasing access to technology is no guarantee that teachers would adopt technology in ways that prioritises students' needs. As indicated earlier, issues related to teachers' attitudes and technology skills, and students' digital literacies are among some of the important aspects that would need to be considered in efforts to reduce the digital divide gap. Teachers would clearly benefit from more training on how technology can be used to provide quality education within an interactive learning environment, taking into consideration of the above issues. This publication represents an effort towards teachers' professional development in this area with the hope of reducing inequality in online education.

II. RAISON D'ETRE

1. Post- Pandemic Academic Teaching and Learing (ATL): Is "Face-to-Face" Alive or Dead? Is Online Teaching Alive Yet or Still Dead?

COVID-19 has forced drastic unprecedented changes on all global institutions of Higher Learning. The venerable Cambridge University in the UK, for an example, will give all its lectures online until the Autumn of 2021.[3] What does that feel like? Jacob Page, a Cambridge University geography undergraduate, puts it in a perspective: "Personally, it's not that bad. It means no more early mornings because you can catch up on lectures whenever you want and they [Cambridge] are going to keep their small-scale two-on-one teaching, which they pride themselves on. All the good bits of this term have been removed, all the socializing aspects. But then all the academic stuff has stayed, so it's pretty hard to motivate yourself."[4]

Cambrige is one of many universities globally that made a decition to move all their teaching online for the forceeable future. There is a number of universities that have elected to use a combination of online and classroom teaching, however. And there seem to be still those that prefer to classroom-teach or close down.

It is, therefore, reasonable to suggest that three Knowledge Delivery paradigms co-exist in the current world environment:

1. Traditional Classroom Teaching Paradigm (TCTP);
2. Blended Teaching Paradigm (BTP);
3. Online Knowledge Delivery Paradigm (OKDP)

"Is TCTP dead or alive?" you may ask.

It is alive, yet one cannot use it as much as before, it seems.

"Is OKDP alive yet or still dead?" some may wonder.

It is fast coming to life and moving out right to the Higher Education fore-front, having been regarded in the recent past as something only a second-rate scam-prone "Online PhD" programs would use to further their shady schemes.

"What is BTP then?" one would rightfully ask. Allow me to quote an authority on this one, Mr. Phil Baty, Chief Knowledge Officer, Time Higher Education (UK): "So

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[3] The New Normal: Education, by Andy Murray, CGTN Europe News, 30 May 2020, https://newseu.cgtn.com/news/2020-05-30/The-New-Normal-Education-QI9j7HfIkw/index.html
[4] The New Normal: Education, by Andy Murray, CGTN Europe News, 30 May 2020, https://newseu.cgtn.com/news/2020-05-30/The-New-Normal-Education-QI9j7HfIkw/index.html

there's a really powerful maybe to a permanent shift I think, to what we'd call Blended Learning. Where we still have small groups and hopefully face-to-face contact that's vital in terms of students ablity to interact and learn from one another. But we put more material online and we use technology to really support learning. So I think probably university teaching has changed for good. Changed forever. And changed very significantly."[5]

Assistant Professor James Diamond, Head, Digital Age Learning and Educational Technology (DALET) program, Johns Hopkins University, considers the future of online learning in the wake of the COVID-19 pandemic:

"Diamond believes the world can likely expect to face future challenges like the massive migration from school to home due to COVID-19. Our school systems and policy makers must, therefore, be prepared to triumph over these sorts of instantaneous, wide-ranging shutdowns by planning for the implementation of high-quality digital and blended learning environments.

'This is probably our future, and this is probably our model for how to deal with eventual disruptions,' he says.

In the short term, Diamond says that we must simply strive to get through until the COVID-19 stay-at-home orders are lifted and kids and teachers can return to some semblance of normal, face-to-face education. This will require quick planning with readily pressing, near-term goals.

The first goal concerns access to technologies. School systems need to make sure that all kids have access to the equipment and materials they need to succeed. For learning in digital environments, that means working laptops, tablets, and smartphones with good, high-speed internet connections. This will be a hardship for many districts, but it is a necessity for schools to accomplish their mission of an equitable education.

The purposes and forms of schooling in the U.S. have always been debated, Diamond says, but the idea of a public, or "common," primary or secondary school has long included a safe space that is open and free to all kids and that has the people and materials necessary for learning to occur. That idea and those resources will have to extend into the home if equitable formal schooling is going to happen there, at least part of the time.

Diamond's second short-term goal is about establishing routines. Just as in a traditional school setting, having predictable schedules and routines is key to achieving normalcy. This will beget a number of practical questions that many school districts have not necessarily dealt with before. For example, will there be

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[5] Higher Education and the Pandemic, World Insight with Tian Wei, China Global Television Network, July 2020, Beijing, People's Republic of China

real-time, teacher-led lectures? Will whole classes meet online for discussions? Will teachers offer "office hours" to meet with students individually? How will assignments be made, turned in, and graded?

His third near-term goal is simple: Teachers and administrators must communicate frequently among themselves, with students, and with students' families. In a period of upheaval like this, no one expects anyone to have all the answers, he says. The key is for administrators and educators to find ways to be in regular contact and to reinforce that they care about their students' well-being, despite the difficult circumstances. Digital technologies are probably the only avenue for those communications during social isolation."[6]

2. Exposé: An Online Knowledge Delivery Paradigm (OKDP)

Traditional Classroom Teaching Paradigm (TCTP) utilized in the so-called "Western" countries was designed in the second half of the XIX Century. It is firmly set in the traditions of the Enlightenment and, prior to that, the Renaissance; it's roots are in the first *universitas* of Bologna and Paris.

The matter of Masonic origins of some of the North American and late XIX century European universities is beyond the scope of this paper; suffice it to say that such influence is clearly apparent in the modern-day Academia terminology: "Mortar Cap," "Bachelor," "Master's Degree." The US/UK graduation apparel sets are masonic in nature. The Bachelor's graduate "Mortar Cap" is purely functional in shape and form and was initially designed to facilitate the newly-minted "Bachelor" masons to carry mortar up the ladders to the "Masters," who were laying bricks. A little-known fact: In year 1200, University of Paris, one of the two first universiries in the world, "was organized like other guilds into masters; bachelors, who were similar to journeymen in other trades; and students who were analagous to apprentices."[7]

Noteworthy: there was no such thing as a PhD degree throughout almost the entire history of Higher Education: "Some PhD/DPhil degrees have existed for hundreds of years, such as the PhD/DPhil in Canon Law. Other PhD/DPhil degrees were developed in the 1970s and 1980s, such as the PhD/DPhil in Computer Science."[8]

Under TCTP, the bulk of Knowledge Delivery (KD) is done verbally by a teacher who is standing and talking in front of a group of students. Depending on the university, the students then go home and, supposedly, ponder on what they

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[6] From classroom to quarantine, the future of online learning, by Andrew Myers, School of Education, Johns Hopkins University, May 6, 2020, https://education.jhu.edu/2020/05/the-future-of-online-learning/

[7] Kishlansky M., Geary P., O'Brien P., A Brief History of Western Civilization: The Unfinished Legacy, 5th edition, Pearson Education Asia Ltd. And China Renmin University Press, 2008, p. 84

[8] Doctor of Philosophy, Simple Wikipedia, https://simple.wikipedia.org/wiki/Doctor_of_Philosophy

heard in class from the teacher and prepare home assignments that are normally spot-checked by the teacher in the course of their next class session. The buildings are in place; the teachers are hired and the students – selected and admitted to the univeristy. It works. Many an Academia professional were trained like that as students, myself included. But here we have a question that is nothing short of revolutionary: is it still feasible for us in the Global Academia to fully-utilize this tried-and-true TCTP, considering the COVID-19 Pandemic?

COVID-19 is nothing like the viruses we've been dealing with in the past: "The virus is a systemic infection that affects all the organs of the body, not, as was previously thought, just a respiratory disease."[9] Furthermore, it seems that if you've survived COVID-19 and are now virus-free, that does not guarantee you any COVID-19 immunity in the future, sadly:

"A pair of studies published this week is shedding light on the duration of immunity following COVID-19, showing patients lose their IgG antibodies—the virus-specific, slower-forming antibodies associated with long-term immunity—within weeks or months after recovery."[10] "Akiko Iwasaki, MD, a viral immunologist at Yale University, told The Times. 'We cannot rely on natural infection to achieve herd immunity.' "[11]

Considering such news, this author argues that it becomes imperative for all Higher Education institutions globally to commence a justifiably fast-paced process of switching to the new Post-Pandemic teaching paradigm. Just what this new paradigm is right now? I believe all of us teachers will now have to figure that out together. We're now having an exciting opportunity to collectively shape up that new paradigm. This is exactly why we are writing this: to get the ball rolling on defining the parameters of, designing and putting into practice the XXI century KD standards that are safe and viable in the Post-Pandemic world.

This author would further postulate that there's no need to discard the key traditional classroom teaching approaches and assignment types. Most of these can well be re-used under the new online teaching paradigm, as this current Paper undertakes to unambiguously demonstrate.

George Mason University ESL researchers, Joan Kang Shin and Jered Borup, are proposing one possible online teaching paradigm that successfully incorporates several standard TCTP principles while, at the same time, offering an exciting set

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[9] Coronavirus warning from Italy: Effects of COVID-19 could be worse than first thought, Sky News, 13 July 2020, https://uk.news.yahoo.com/coronavirus-warning-italy-effects-covid-19-could-worse-023000887.html
[10] Studies Report Rapid Loss of COVID-19 Antibodies, Amanda Height, The Scientist, June 19, 2020, https://www.the-scientist.com/news-opinion/studies-report-rapid-loss-of-covid-19-antibodies-67650
[11] Your Immunity to Coronavirus Might Only Last This Long, Study Says, Zachary Mack, 6/23/2020, https://www.msn.com/en-us/health/medical/your-immunity-to-coronavirus-might-only-last-this-long-study-says/ar-BB15QEOS

of the new ones – all in one bundle – for all of us to be able to engage the learners and give them the knowledge necessary.   Dr. Shin was kind enough to allow me to reproduce it here:

Exhibit 2. "A Dozen Tips For Engaging Students In Online Language Learning"[12]

Remember: these are just tips...I'll deliberatly stay away from making comments here and will just let you, the respected reader, make your own decision on whether these are usable in your particular situation. You may well decide to add to -- or remove -- some of these, as needed, to make this work in your specific situation.

3. The Post-Pandemic Ultimate Academic Need: Uninterruptible Knowledge Delivery (UKD)

"How're the universities coping with the medical disaster?" people often ask me. After all, the ultimate academic need – and the existential Raison d'etre of any Higher Education institution is to provide UKD to its students, come rain or shine.

Well, the short answer is: it depends on the university. Here's what Mr. Baty says on the subject:

"...some universities are making that change wonderfully. Others—less so. And others are perhaps just reproducing traditional lectures of Zoom or other formats.

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12 Shin J.K, Borup J. "Breaking Through the Screen" Webinars, *National Geographic Learning*, March 18, 2020

And that's a worry, because I think that's a less high-quality and inferior experience."[13]

It's worth adding that to each teacher, "Teaching Online" seem to mean different things. A student of mine told me in secret that during the pandemic some teachers would send students lecture videos they pre-recorded at home, while others would just send them PowerPoint slides. Is that "Teaching Online"? That's not teaching at all; that's providing your students with an inferior educational experience. Students notice that and make their own conclusions, whether the said teachers are aware of that or not...

4. Pandemic and Post-Pandemic Teaching as Mental Aid: Helping Students Get Out of – and Over – the Pandemic and Post-Pandemic Stress and Mental Fear

At the time of global disasters students experience deep psychological discomfort. The 2019 Pandemic is no exception: it ushered in extreme uncertainty for all social strata globally.

Seeking to ease the profound sense of anxiety, students looked to their parents for comfort or consolation. Yet us, their teachers, played a paramount role in helping them to relax and calm down. We were there for them at the exact same time of the week to bring a structure into the chaos, serving as a sign, of sorts, of the soon-to-come-back normalcy and, yes, to pressure them to focus and learn – which would then take their mind off the spiralling pandemic. Unexpectedly, we served as psychiatrists or Mental Relief workers of sorts. In that respect, we all provided – whether we realized that or not -- the following Mental Relief aid to the students:

1. Putting the usual predictable structure into the children's day.
   We were there for them on the same day of the week at the same time;
2. We pushed them to learn and focus, taking their mind off the surrounding disaster beyond their control;
3. By asking them to work in pairs and groups, we gave them a chance to call classmates and work together on a foreign language assignment, providing them with relief, entertainment and a friendly shoulder to lean on;
4. We answered questions;
5. We joked and laughed;
6. In my case, I welcomed their family members and talked to their parents, siblings, baby nieces, grandmas et al., online – in a language most of them don't understand, BUT always with a friendly smile.

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[13] Higher Education and the Pandemic, World Insight with Tian Wei, China Global Television Network, July 2020, Beijing, People's Republic of China

This wasn't easy considering I was in the same stressful position as them, and my own family had to face the same Pandemic situation, except in the far-away Eastern Europe -- all of which made me as stressed out as the students. Yet, interestingly enough, those same online classes provided ME with the same kind of psychological relief the students were getting from me, as teaching them online took my mind off the pandemic worries by the same token.

Providing Mental Relief during the Pandemic was just a part of the overall Mental Aid we, teachers, offered during the trials and tribulations of the Spring 2020 online semester: as People's Republic of China was gradually getting the COVID-19 situation under control, the country was relaxing its epidemiological restrictions and people vere facing a new set of fears:

1. Fear to take off the face mask;
2. Fear to get out of the house;
3. Fear to get on the public transportation and into the public places;
4. Fear to talk to or approach anyone in the street.

Us, online teachers, were the "first line of defence" for the students in terms of these new anxieties. For an example, seeing my face without a mask online, students started to get accustomed to the idea that it's OK to encounter people without masks in real world instead of being mortally afraid of them as just two weeks before.

On a personal note, what helped me survive unscathed the Spring 2020 "Pandemic Semester," was a survival formula offered to me by my Grandfather, Nikolai Gorbenko, a Soviet Marine during World War II, who told me when I was a small boy: "This is what they tell us Marines: Adapt, Improvise and Overcome." Also, I followed the advice of my alma mater, The Johns Hopkins University, on how to provide Mental Relief to students under the Pandemic conditions: "When disruptions occur, students will look to course instructors for a sense of normalcy. Planning and clear communication are paramount to ease student anxiety."[14]

English Speech, Classes ENG (I&T) 2018-1 and ENG (I&T) 2018-2

Overall, over the first half of the course, the students of both classes showed a strong desire and sufficient motivation to learn.   In the course of the first week of classes, I made sure there was time allotted to just talking with students -- joking and otherwise putting them at ease -- so as to to balance out the anxiety of the virus pandemic. By the second week of classes the students were mentally relaxed and fully-comfortable with learning online.

Exibit 3. An excerpt from my Mid-Term Evaluation, submitted to College of Foreign Languages, SDUST, on what we've achieved in the course of the Spring 2020 online "Epidemic Semester."

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[14] The Johns Hopkins University, Keep Teaching@JHU, https://keepteaching.jhu.edu;

As I analyze global news, it seems that my own Spring 2020 online experience mirrors that of the people's outside China, i.e., in other countries globally: "Without these online courses [...] it would have been really hard to stay in quarantine, it would have been more depressive," says Nilufer Comak, a student at Bogazici (Bosphorus) University in Istanbul, Turkey.[15]

5. The Unprecedented Student Learning Effect (SLE). An Unexpected Pandemic Side-Effect?

Phil Baty:

"I had a conversation with Qiu Yong, the president of Tsingua University just last week. And they have transitioned to delivering their courses online through the Internet exceptionaly well. And, funny enough, he said the interactions with students have improved. Students engagement levels are higher because the technologies and tools have allowed them to interact and learn more effectively than the traditional classroom environment."[16]
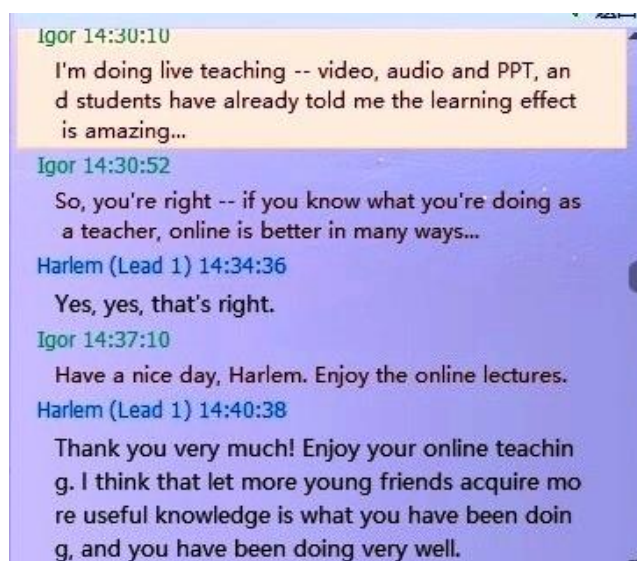
1. Students Feedback on the Online SLE.

Exhibit 4. Students feedback on the Online SLE via QQ International software

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[15] Online education during COVID-19: challenging but rewarding, Michal Bardavid, 20 April 2020, CGTN, https://news.cgtn.com/news/2020-04-20/Online-education-during-COVID-19-challenging-but-rewarding--PQ8FZpXr68/index.html

[16] Higher Education and the Pandemic, World Insight with Tian Wei, China Global Television Network, July 2020, Beijing, People's Republic of China

III. BACKGROUND

1. Online Teaching Pre-Conditions in People's Republic of China

A. *Cultural Excurse: Collectivist Approach as a Key Feature of the P.R. China' National Character*

People's Republic of China succeeded in achieving something that other nations are only now being forced to consider under the extreme pressures of COVID-19 pandemic and other XXI century challenges: China is a collectivist country, having been set up as one from its inception in 1949. That basically means that you, as a human being, are never one-on-one with your current problems no matter how big or small. As a foreigner I was not sure what that really meant until I myself experienced the collectivist and socialist problem-solving approach. Basically, there exists a social safety net, which begins with your family, extends through your household on to your neighborhood and then all the way up to the higher echelon of political powers. It works and it does make one feel safer in China than in many of the so-called "Western" countries. Simply put, when you have a problem, people will help. If your neighbors can't, the local government may, if not, the Central Government will most probably find a suitable solution.

B. *Cultural Excurse: The Role of Education in China People's Life*

1. "Achieving by Applying Yourself" Learning Principle.

The Confucian ethics of becoming successful in life via working hard and doing a good job still very much applies to P.R. China, creating a powerful stimulus for achievement—social or academic: "The spirit of being pioneering, enterprising, pragmatic and responsible is what it takes to accomplish great undertakings. It is what has been driving China along the way all the way anyway."[17]

2. University Education as a Rite of Passage to Success in Life.

Higher Education is not a right in P.R. China. It is a high privilege, that enables one to access a certain set of important social lifts.

3. The Highly-Competitive "Gaokao" (College Entrance Exam).

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[17] Chen Jin, A Brave Journey, The Past and Present of The Communist Party of China, Foreign Languages Press Co. Ltd, Beijing, China, 2019

Since Higher Education is not a right, but rather a high privilege, millions of young Chinese find themselves competing every year to gain admission to a university. Considering the sheer size of the PRC population, the competition is often very intense.

In order to be admitted to a university, a PRC national has to take a highly-competitive, if not to say "plain difficult," College Entrance Exam. Based on the Exam score, a student is given a number of choices, such as what universities they will be allowed to join and what academic majors they are fit for. The higher your score, the better university will take you. The better university you graduate from, the better-educated you will be in life. The more reputable your university is, the more social lifts will be accessible to you in life. The enrire model is based of the good old Common Sence. Needless to say, College Entrance Exam is a major watershed in teenagers' life; it isn't unusual for high school graduates to spend an entire year taking preparatory courses in order to get a high passing score on the big Exam.

C. China: Ubiquitous All-Included Telecom Service Bundles

1. Deliberately-affordable Telecom Bundle Prices

Telecom Companies are State-owned Enterprises (SOE); they deliberately keep Internet prices low for ALL citizens, rich and poor alike, so that everybody could enjoy the uninterrutible, always-on Internet access. Such approach coupled with the Chinese hard work ethics truly does wonders in terms of the P.R. China rural poverty alleviation.

Here're just a few examples:

  "a Uighur villager, Muhaibati Memaiti, in the Kashgar region of Xinjiang, learned to take an e-commerce express to sell potatoes. In 2018, his potato boasts harvest while he timely caught up with the online marketing of the local e-commerce service center. During the marketing event, his potatoes worth skyrocketed, rising from 4 yuan per kilogram to 12 yuan. He said, 'I've been a farmer for many years but I have never seen potatoes so valuable.' "[18]

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[18] Internet plus mode helps Xinjiang Uyghur Muslim farmers get rich, April 15, 2020, Independent News Pakistan, https://www.inp.net.pk/internet-plus-mode-helps-xinjiang-uyghur-muslim-farmers-get-rich/

Exhibit 5. A livestreamer promotes local products in Urumqi, capital of Northwest China's Xinjiang Uygur autonomous region on June 20, 2020[19]

A COVID-19 Example, June 2020: Xinjiang Farmers are able to weather the economic disruption well: they are able to market and sell their wheat and honey online due to the always-on and very cheap High-Speed Internet connection. "Heiliqimu Niaz, an apricot farmer in Luntai County, northwest China's Xinjiang Uygur Autonomous Region, is no longer worried about selling his fresh produce during this year's harvest season. At around 6 every morning, Niaz and other fruit farmers would take their freshly picked apricots to a processing center and the selected produce would be sent via cold chains to warehouses of Freshhema, e-commerce giant Alibaba's retail platform, all over the country."[20]

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[19] Advertising Industry Body Seeks to Rein In E-Commerce Livestreaming, by Qian Tong and Isabelle Li, Caixin Media, July 1, 2020
https://www.caixinglobal.com/2020-07-01/advertising-industry-body-seeks-to-rein-in-e-commerce-livestreaming-101574421.html
[20] Across China: E-commerce bears fruits in Xinjiang, 23 June 2020, Xinhuanet,
http://www.xinhuanet.com/english/2020-06/23/c_139161362.htm

Exhibit 6. Apricot picker, Luntai County, Xinjiang Uygur Autonomous Region, People's Republic of China, May 2020[21]

"The internet economy has become an important driving force for the recovery of market activities in northwest China's Xinjiang Uygur autonomous region as the epidemic wanes, with online sales continuing to expand rapidly this year. In the first quarter, online retail sales in Xinjiang rose by 11 percent year-on-year to 9.17 billion yuan ($1.3 billion)."[22]

Exhibit 7. A saleswoman promotes local dry fruits via livestream at the Grand Bazaar Pedestrian Mall in Urumqi, capital of Xinjiang Uygur autonomous region, on April 12. [Photo/Sipa][23]

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[21] Live: How do apricots help alleviate poverty in Xinjiang? CGTN News, 30 May 2020, https://news.cgtn.com/news/2020-05-30/Live-How-do-apricots-help-alleviate-poverty-in-Xinjiang--QVapIK20fK/index.html
[22] E-commerce continues to boom in China's Xinjiang, June 12, 2020, China Daily, http://www.chinadaily.com.cn/a/202006/12/WS5ee34468a310834817252ba1.html
[23] E-commerce continues to boom in China's Xinjiang, June 12, 2020, China Daily, http://www.chinadaily.com.cn/a/202006/12/WS5ee34468a310834817252ba1.html

D. Comparative Background

1. Online Classes Feasibility in P.R. China vs Countries of Africa

Quote 1: "For e-learning to fulfil its true potential, especially in rural areas, there are challenges that still need to be overcome. The lack of electricity outside of major cities is a key issue, with almost 620 million Africans still lacking access to power.

Although both are on the rise, smartphone and internet penetration is still low compared to elsewhere in the world, while many teachers are not trained to use technological solutions even if these are available to them."[24]

Quote 2: "There're two key online learning enablers: 1) Power; 2) Access. They are often still lacking in Africa" Nivi Sharma, Co-Founder, eLimu, Kenya.[25]

2. Online Classes Feasibility in P.R.China vs the US

In People's Repubic of China, "Digital Divide" is nonger an issue, since China's Internet providers, most of which are State-owned Enterprises (SOEs) , keep their high-speed Internet prices artificially low, so that all citizens could work, do business or study online regardles of their income status. Speaking from experience: in my 6 years of teaching in P.R.China I've never encountered a single China student who would not have a high-speed always-on Internet on the smart phone. So much so, that I had no problem asking students to do impromptu Internet research assignments on-the-fly, right in the classroom.

As a sidenote: all foreign students studying in P.R.China have that as well. And so do I, a Foreign Expert.

Almost all China university students are skilled in everything digital, from a simple chat software to the MS Office apps to film footage editing software to software I probably don't even know exists. And that's just my English Language majors...When I taught Computer Science (CS) majors at University of Jinan (UJN), P.R.China, several years ago, it wasn't unusual for my CS graduate students to virtually "knock on my door" at a chat room and we would then go out and spend the warm Jinan spring evenings analysing computer program hooks in compilers software, with most of us physically sitting by the UJN campus lake next to an ancient Taoist hill, and others joining in remotely from Korea or Austria.

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[24] Jackson T., Africa's Digital Learning Revolution, 8 Feb 2017,
http://www.brainstormmag.co.za/innovation/12773-africa-s-digital-learning-revolution
[25] eLimu (Kenya), "Who We Are," https://e-limu.org/about-us/who-we-are/

On weekends we'd do something more fun, such as creating our own self in a Virtual Reality game software. The said manipulations are all data- and processing power-hungry, yet never even once did we experience a network failure, not to mention power outages. It never got much worse then the standard network operating systems errors and the sluggish wire-line University network performance at the time of exams or after dinner, due to students coming online en mass to write and research (and, well, to have fun ☺).

A few words on the data and communication infrastructure in P.R.China: overall, it is not only sufficient for the lightning-speed communication regardless of where you are in China – remote mountain regions included. It's common knowledge that China telecom giants are now ahead of the rest of the world in some of the XXI century communication technologies, such as 5G, satellite communication and space vehicles, quantum data transmission and storage, to name a few. I've never had a "No Network" error anywhere in P.R. ChIna, as the Cell Tower penetration and the Cell Tower-to-Sattelite-to-Cell Tower transmission stopped being even a minor issue in P.R. China around year 2010...

The current "Digital Divide" situation in the US and Canada provides some food for thought, however. Here's what Angela Siefer, Executive Director, National Digital Inclusion Alliance (US) says on the subject: "We do have a broadband infrastructure problem in the United States, where it is NOT in rural areas. But we also have in urban areas where the infrastructure may be available and even rural areas where the infrastructure is available but people don't subscribe. Why are they not subscribing? For the most part because it's expensive."[26] To be fair, teachers in North America do their utmost to get their students connected on a local case-by-case basis so students could attend online classes. To quote Gregory Molloy, a teacher from the State of New York, "We ordered 60 Verizon hotspots, actually they just got delivered yesterday, and we're preparing to deploy those to families, and there're still obstacles with that. We have students that don't have cellular signal that reaches their house so we're identifying places near their houses where they can actually access."[27]

On the other hand, the Pandemic forces some US families into a situation where parents have to work from home remotely while their children have to study online. That creates a PC time-sharing pressuries within a family in cases where there's only one PC per household.

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[26] (Video) Digital divide in U.S. hampers online teaching, Giles Gibson, 22 April 2020, China Global Network Television, https://newsus.cgtn.com/news/2020-04-22/Digital-divide-in-U-S-hampers-online-teaching-PSQLI1NXlS/index.html
[27] Video) Digital divide in U.S. hampers online teaching, Giles Gibson, 22 April 2020, China Global Network Television, https://newsus.cgtn.com/news/2020-04-22/Digital-divide-in-U-S-hampers-online-teaching-PSQLI1NXlS/index.html

The situation is even more dire in cases where both parents are working full-time and have to leave the house, while their children have to online-study. In such cases, parents sometimes feel uncomfortable with the idea or their child learning online without a parent supervision. In such cases families often turn to the so-called "Microschooling." Darcy Alkus-Barrow, a mother of two, and her husband work full-time. "'I need a few hours each day when I can work,' said Barrow on why her family is turning to microschooling. 'And my daughter is maxed out on Zoom school. That type of learning isn't so great for her.' "[28]

"Microschooling" is a type of North American "Homeschooling." "The way it works is that microschools can employ an accredited teacher, or parents can even rotate as a teacher in more of a co-op mode. By staying with the social pod or COVID-19 cluster idea, it also minimizes exposure between families, creates social stimulation for kids and provides some relief for parents."

Microschooling may well provide some relief for parents, but one could argue that, as a type of North American "Homeschooling," it brings back the entire never-ending "Homeschooling: is it good or bad for your kids?" discussion. As I see it, Microschooling and online learning could work better together in a Blended Learning mode.

But where do we currently stand on the Supply Side of the North American online learning? Are Higher Learning institutions doing anything to prevent being caught off-guard again by the possible future COVID-19 waves – or, for that matter, by any other novel epidemiological or climate change disasters, should those take place? Will they be able to provide the earlier-mentioned Uninterruptible Knowledge Delivery, meeting, as it were, the Post-Pandemic ultimate academic need?

The answer is "Yes," in some cases: the best US Universities are working hard to improve their online instruction facilities so as to be able to offer their students a far superior online learning experience then ever before. Take, for an example, my alma mater, The Jonhs Hopkins University: "This fall, faculty and students participating in virtual coursework can expect a vastly improved learning experience thanks to 35 newly created learning studios dedicated to enhancing online instruction. Located in buildings across the Homewood campus, each of the teaching hubs will allow instructors to broadcast their classes using state-of-the-art equipment, including document cameras, screen sharing, whiteboard cameras, and big-screen TV monitors that display a near life-size Zoom-style grid of students."[29]

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[28] Microschooling: The new way parents are getting creative about school for the fall, Good Morning America, July 13, 2020, https://www.yahoo.com/gma/microschooling-way-parents-getting-creative-school-fall-120500114--abc-news-topstories.html

[29] Information for Faculty+Researchers, Coronavirus Information Portal, The Johns Hopkins University, Accessed: July 15, 2020, https://covidinfo.jhu.edu/information-for-faculty-researchers/

IV. GENERAL APPROACHES TO KNOWLEDGE DELIVERY ONLINE (KDO), P.R. CHINA, SPRING 2020.

1. IT and Systems

A. Hardware Utilized

Teacher's Side:
1. A 2008 standard ASUS (P.R. China) laptop with an MS Office Suite (Chinese version) over an MS Windows 10 operating system (Chinese version) with an enhanced RAM and a hard-disk memory expansion;
2. An off-the-shelf 2017 Meizu M3s (P.R. China) Smartphone.

Student's Side:
1. A wide variety of student-specific iPads, PCs and laptops available to students at their home residence;
2. A wide variety of student-specific Smartphones, mostly China-made.

B. Software Utilized

1. to hold online classes and for the students and class management:

    a) Tencent Meeting International (P.R. China)

2. to upload the class e-instructions and e-manuals:

    a) Wechat International (P.R. China);
    b) QQ International (P.R. China).

3. to share full movie files:

    a) QQ International (P.R. China).

4. to view music videos:

    a) Students' smartphones default video players.

5. for Film Scene analysis:

    a) Students' smartphones default video players.

6. for Film Script exercises:

> a) Students' smartphones default video players.

7. for Sound Track analysis:

> a) Students' smartphones default mp3 players.

8. for Final Multimedia deliverables' video files creation and editing:

> a) Jianying and Yin Xiang freeware (P.R. China).

9. for Final Multimedia deliverables sound multitracking and editing:

> a) Jianying and Yin Xiang freeware (P.R. China).

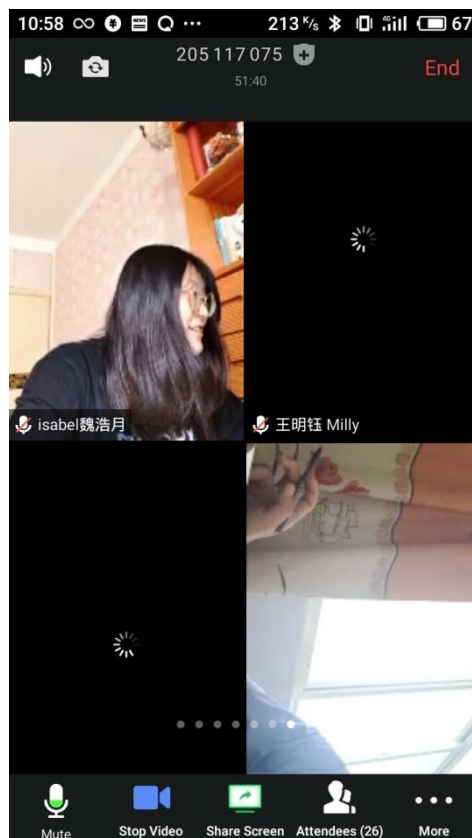## C. IT Problems Encountered

1. Network Lag

Exhibit 8. Network Lag, English Speech, English Majors, June 4, 2020

2. Students Unable to Attend a Class due to the Infrastructure Repairs, Network Maintenance and Other Outages at the Students Hometown Locations
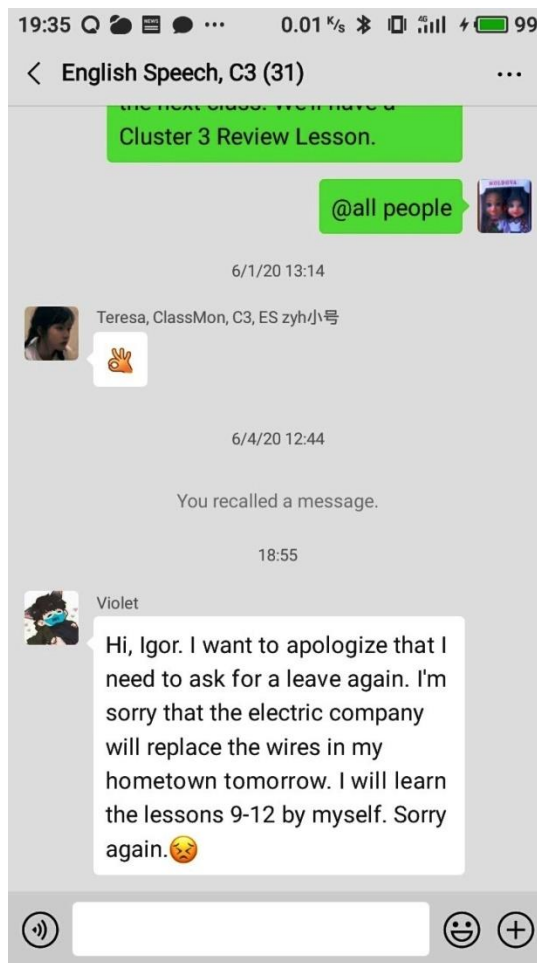

Exhibit 9. A student is unable to come to an online class due to the electrical cable replacements in her hometown, English Speech, June 7, 2020

D. A Pressing Need for a Free Specialized English Language Teaching Software for Online Use

At the time of this writing, most of the countries of the World have already pin-pointed a viable inexpensive combination of hardware, software and network connectivity, that allows universities and secondary schools provide some form of a passable education online.

However, if you are not working for a university or a high school and are an independent teacher in a so-called "developing country," your choices are few.

2. Knowledge Absorbtion Assessment (KAA)

Online KAA, while being similar to the in-class KAA, is nevertheless, different. It's not as easy to do a due diligence on the online written tasks correction: the teacher cannot physically come up to a student to have a quick check of a written assignment on a fly, for an example. Yet, it is not impossible to acheive the due-diligence KAA which all of us classroom teachers find so useful. However, for the most part, teachers have to improvise and devise their own new ways to arrive at the due-diligence KAA online:

A. Oral Assignment Checks

It is much easier to check and assess Oral Assignments then written ones. If the software audio functions well, the students are able to deliver their Oral Assignments online exactly like they would in class:

1. Individual Assignments

The students deliver their Individual Assignments one by one as and when the teacher calls their name. The teacher and all the students hear the presenting student and correct the mistakes together in the usual classrooom manner.

2. Listening Assignments

For the students to be able to absorb the knowledge well online, the teacher HAS TO KNOW HOW TO present and deliver the audio files to the students located far away from their virtual classroom. Unlike a real classroom where the teacher simply plays the audio assignment file off of a thumb drive plugged into the classroom' master PC connected to the classroom Sound System, it is not that simple   . The teacher has to improvise and experiment so as to find a way to provide the students with an online way to hear the audio assignment clearly and without distortions. It took this author a lot of experimenting online TOGETHER WITH THE STUDENTS before a good audio delivery way was finally found.

The following audio assignment files delivery formula worked out well:

    a) Set up a WeChat group for your class. Make sure you add ALL the class participants to the Group;
    b) Prepare the Listening Assignment instructions in MS Word;
    c) Upload your Listening Assignment files to the class WeChat group;
    d) Post a quick message explaining to the students what files

you just uploades and what to do with them. Alternatively, you can do this orally;

e) Make sure the students understand how much time they have for the Listening Assignment and how many times they're allowed to play the Assignment audio;

f) It will be NOISY when the students start playing the Assignment audio all at the same time; Tencent Meeting allows you, as the Session Administrator, to mute all the meeting participants' microphones. Use the "Mute All" button to cut off the noise. That will allow each student to listen to the assignment Audio in full-volume without bothering anyone.

g) When the listening time is up, simply post a "Come back now" message on the Tencent Meeting chat wall.

h) That tells the students to unmute their mikes (you've muted everybody before their listening session, remember?). You can then use the Tencent Meeting "Unmute All" button, just to be make sure everybody's mikes are on now.
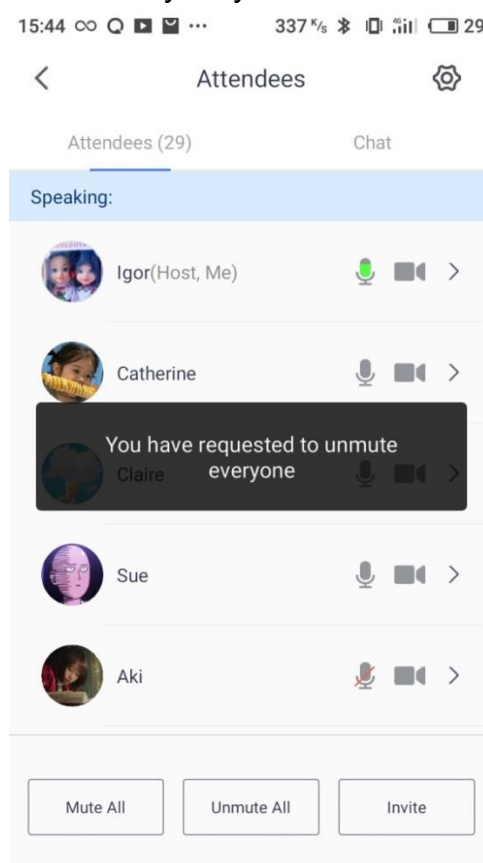

Exhibit 10. English Speech, C4, June 9 2020, 2pm -- Unmuting Everyone in Tencent Meeting after an onilne Pair Work exercise.

Now for the KAA itself: once you've mastered the Listening Assignment audio files delivery, you will discover an exciting thing: since you've just given the students a full access to the Listening Assignment digital audio file, they are now able to play

it online themselves, which means the audio is played to them with a crisp and clear sound quality and as loud as they need. As a result, you will discover, they learn much easier and with a much broader knowledge retention. Besides, the resulting overall learning effect is better than the in-class one -- to the point of unprecendented. Incidentally, it's not just my opinion. The students told me that themselves, based on their own post-class self-KAA.

3. Pair Work

Speaking from experience: when learning English, China students enjoy Pair Work. I watched them have fun with that over and over again when I taught in class; online classes are no different: having spent months in the COVID-induced self-isolation, students enjoy chatting with a classmate in a foreign language. Pair Work and Group Work, as I discovered, are powerful mental pressure relief tools which us teachers can (and probably should) use for the purposes of students' Post-Pandemic stress alleviation.

Exhibit 11. Pair Work, English Speech, English Majors, June 4, 2020

4. Group Work

Group Work is as powerful a Post-Pandemic mental pressure relief tool as Pair Work, if not better. I split students into several groups with 5-6 persons per group. Then I give them a Group Assignment and quietly watch them work. They laugh and converse happily in English. Sometimes they'd cheat and switch to Chinese, thinking I couldn't hear them (which I could ☺). The Group Work KAA in my classes was no different than in a real classroom: during the time allotted, each group would discuss a topic or an issue, collect the group members' input and write a Group Answer. The Group Leader would then present the Group Answer to the entire class online as they would in the real classroom. I would then be taking notes as the Group Leader speaks – again, like I would in the real classrooom. There was one major difference, though: since the sound quality online is crystal-clear and much better then in the real classroom, the Group Work students find the Learning Effect to be much higher online then in-class...

5. Virtual Class Walk-arounds.

Those are a bit tricky. You have to figure out a way to talk online to a pair of students without disrupting everybody else's work. See Section V for details.

6. Impromptu Teacher-Student Dialogs "About Nothing"

Teaching English Speech, it is sometimes necessary to put students on the spot by asking them simple questions "about nothing," such as "Did you have breakfast?" and "What color is your bicycle?"

The purpose of these questions is three-fold:

> a) Take students mind off the virus situation in the country and help them relax;
> b) Warm them up and prepare them for a more engaging speaking assignments to come;
> c) KAA.

Speaking from experience: China university students are able to use relatively complex English language structures; their speaking vocabulary is also sufficiently broad. Yet somehow they are often unable to answer the most simple questions correctly. Case in point: the utterance "Nice to see you" versus "Nice to meet you." Just a few of my students were cognisant of when to use one or the other, so, I, therefore, had to explain to them the usage difference and engage them in Impromptu Dialogs so as to train them when to say which. I normally hold these

Dialogs at the very beginning of the class or during the Attendance Roll Call. For the KAA purposes, I always make sure my "Impromptu" questions are on the material covered in class the week before.

B. Written Tasks Checks

1. Interactive Individial Written Assignments Correction Online
   a) Individual Assignments Checks by the Entire Class ("Do We Agree?")
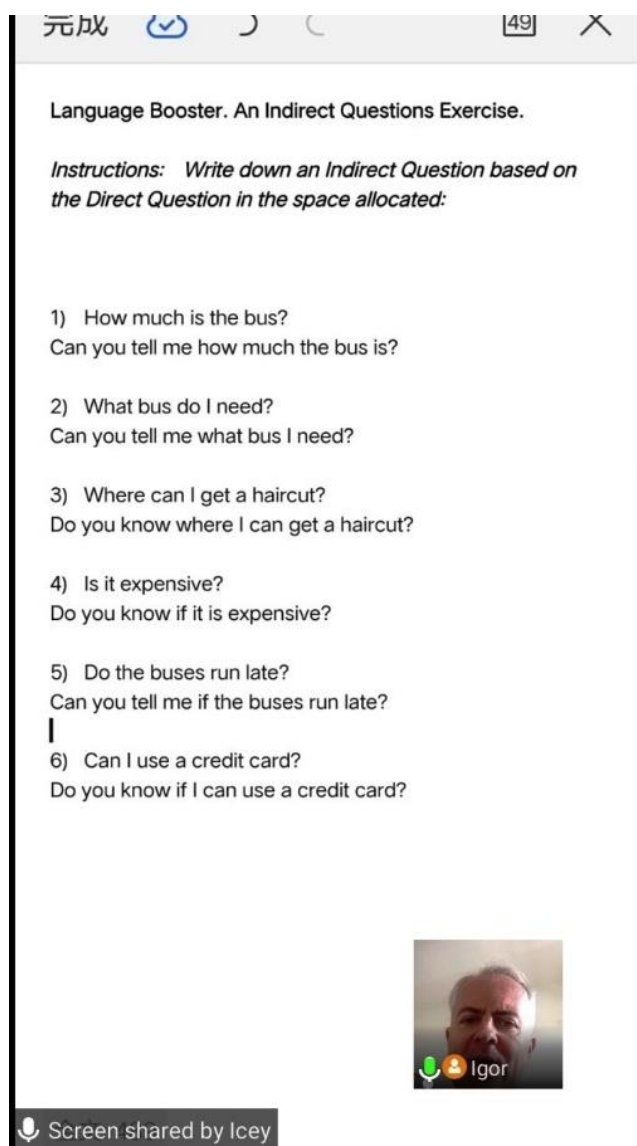

Exhibit 12. A written exercise being checked live by the entire class using the Tencent Meeting "Share Screen" feature, English Speech, May 11, 2020

1. **"English Speech" Course.**

   (English Translation & Interpretation Majors; English Majors).

   ### A. Knowledge Delivery, Absorbtion and Absorbtion Control
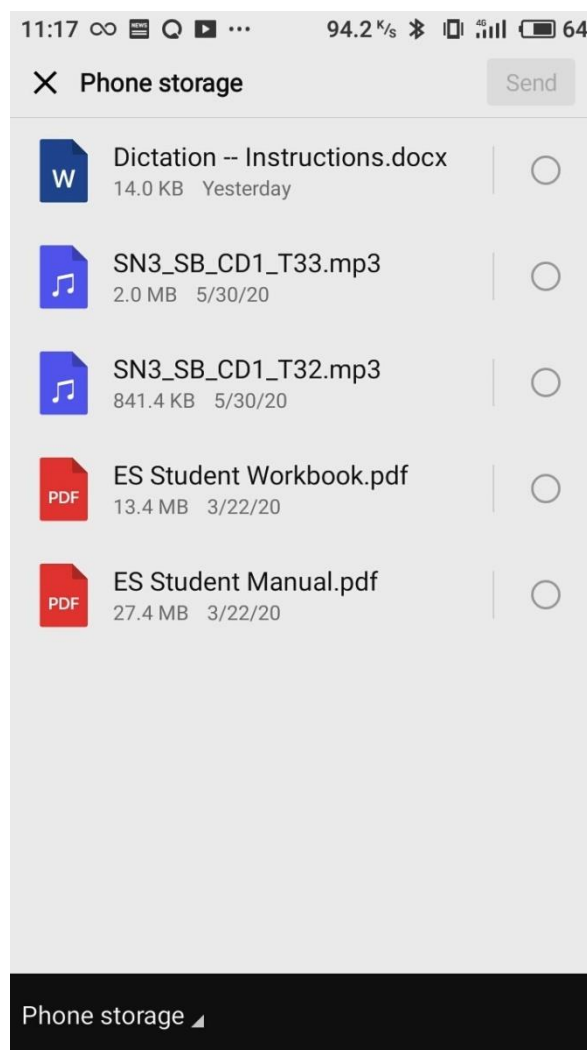
   1. Dictations Online

Exhibit 13. Dictation Instructions ready to be Wechat-posted, English Speech, English Translation & Interpreting Majors, June 2, 2020
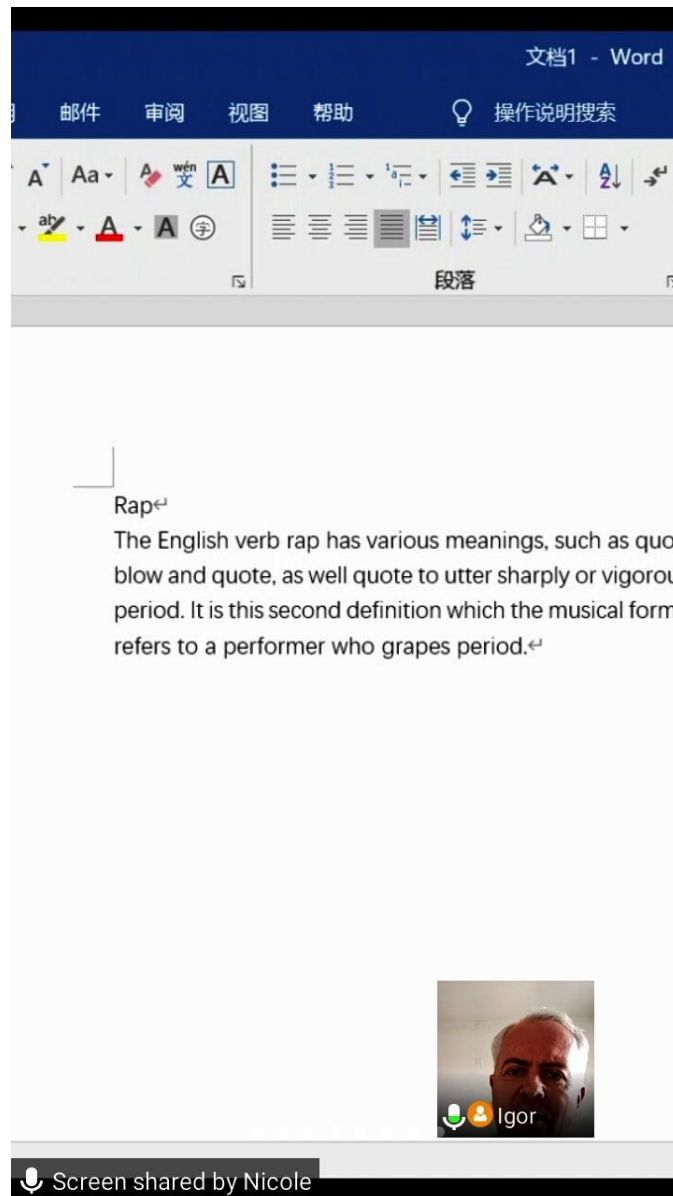
Exhibit 14. The entire class is correcting an individual dictation results, English Speech, English Translation & Interpreting Majors, June 2, 2020

2.   "Virtual Class" Assignments

I tried to re-create online the usual in-class Knowledge Delivery practices. I called that "Virtual Class Assignments," for the lack of a better term. Here's what I was able to come up with:

a)   "Virtual Pair" Work

Split the class into pairs and give them a speaking assignment. Then tell everybody to mute their microphones. Someone will inevitably forget to do that, so just force-mute all the microphones (you can do that from your console, since you're the Meeting Host).

This is one of the two most popular exercises in my online classes (the second being Group Work), since the students get to talk with their Pair Partners in a foreign language, laugh, and joke. Since some of them are suffering from the post-epidemic mental distress, confusion and anxiety, and coming out of the epidemic-enduced lock-downs and the resulting loneliness, the benefits of this type of social interaction are hard to overestimate.

Exhibit 15. "Virtual Pair" Work In Progress, May 2020

b) "Virtual Group" Work

Split the class into several Groups (no more then 6-8 students per Group). Give them a Group Assignment. That normally is a research or an issue analysis that requires a group discussion and a Group Answer.

Groups are not much different from Pair Work, except there's a Group Leader that normally delivers the Group Answer at the end of a Group Assignment. Group Leaders are the best students in a Group, so they're normally having a good grip on what to do and say and how...

Exhibit 16. "Virtual Group" Work In Progress, May 7, 2020

Group Assignments are as popular as Pair Work since students get to talk with several classmates, laugh and joke. The resulting post-epidemic mental relief is hard to overestimate. Software-wise Group Work is a bit tricky to mount. As mentioned, Tencent Meeting is not designed for small groups working in parallel in the course of same meeting session. This is where students and I had to improvise. The students Group Leaders set up individual groups on QQ International. A QQ group allows all the group members to conference-communicate in real time amongst themselves. So, for the Group Work, your students mute their microhpones and leave Tencent Meeting. They then open QQ, go to their QQ group, do the Group Assignment, come up with the Group Answer, which is written down by the Group Leader, and come back to Tencent Meeting. Then they unmute their mikes after which their Group Leader delivers the Group Answer to the entire class.

c) "Virtual Class Walk-arounds"

These are useful for doing individual evaluations. Make sure you praise the best and encourage the rest.

This is how it works for me: First I give the entire class an assignment. This is normally some sort of a Pair Work, where the entire class is split into pairs. Each pair has a speaking assignment. As they work, I "stop by" virtually and listen in. This is not easy to execute considering Tencent Meeting does NOT have enough granularity for the meeting Host (the teacher) to listen to just two persons out of a total of, say, thirty-six meeting participants. I had to improvise on this one. What I normally do is post a Tencent Meeting chat message telling everybody to disconnect their audio. Then I post a chat message asking a certain pair of students to connect their audio. And voila...You can hear the two as they work through their speech exercise. The rest of the class can't hear them. Don't forget to tell the class to re-connect their audio once you're done with that specific pair...
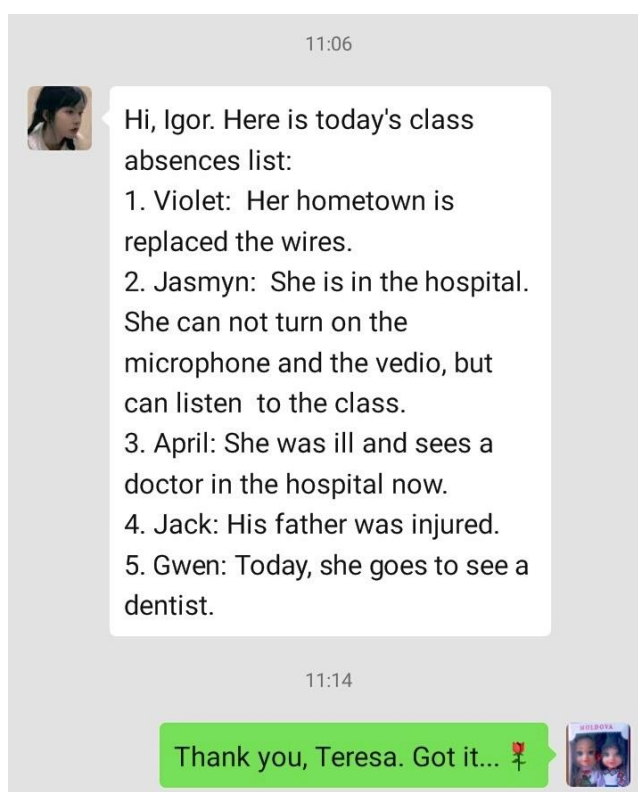
3. Class Control

11:06

Hi, Igor. Here is today's class absences list:
1. Violet: Her hometown is replaced the wires.
2. Jasmyn: She is in the hospital. She can not turn on the microphone and the vedio, but can listen to the class.
3. April: She was ill and sees a doctor in the hospital now.
4. Jack: His father was injured.
5. Gwen: Today, she goes to see a dentist.

11:14

Thank you, Teresa. Got it... 🌹

Exibit 17. A Class Monitor's Absence List submission via Wechat, English Majors, June 9, 2020

a) Key Problems:

i. *Attention Deficit*

a. After-the-Lunch Classes

Simple: kids have lunch; then they come to your class. Then they sleep in your class since they have high fat content in their blood stream after they had lunch...

Deal with that. One fine way to do so is to wake them up and turn the whole situation into a joke...

b.   Family Pets Interference

You're not in a real class, remember? Your students are strewn all over different parts of China. They have their family – and their family PETS around. You're far away and have no bearing over their surroundings. Deal with that...Say "Thank you for having your dog with us today," or "It was nice to meet your cat this morning," but do not disparage the pets: your students and their parents won't like that...

ii.   *Playing with the software*

Ahh, the fun of software...All sorts of options. Switch this to that. Switch that to this. Who can resist the temptation? Well, your students must, thank you: if you notice weird software configurations, just accost the perpetrator. "Why? What for? Did you do that ?" These are all good questions to throw at your experimenting students. They'll normally stop fooling with the software options in the middle of the class if you confront them.

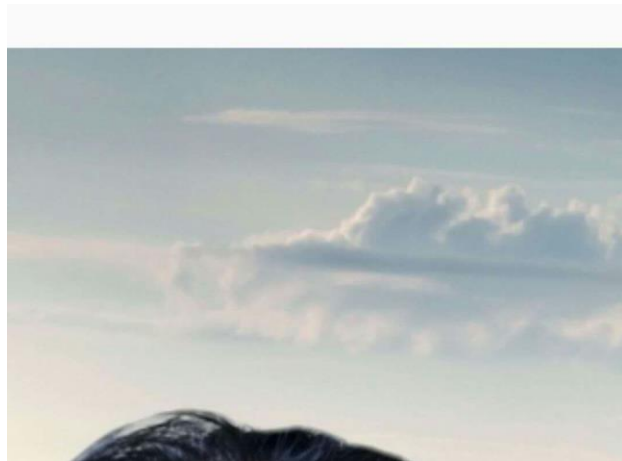### a.   Tencent Meeting Virtual Background

Exhibit 18. Virtual Background fun (changing it back and forth), English Majors, June 9, 2020

iii.   *Tardiness*

Tardiness can be a problem when teaching in-class. It is harder to deal with it online. If you're using the generic videoconfenrencing software on top of some sort of a generic chat messenger, you don't really have a way to prevent people from being late. Some people apologize for being late; others don't. I made it a rule for myself to do the usual Attendance Roll Call AND also check every attendee against my Student Roster list in the middle/at the end of each class session.

There is no way to prevent people from being late online if you're using a videoconferencing freeware. I call that "Digital Tardiness." It's ovbious who's in class when you actually teach in a real classroom, but online teaching doesn't offer you the tardiness control tools. A student can tell you he's here during the Attendance Roll Call, then leave for 10 minutes to do some household chore and re-join the class without you ever noticing...

iv.   Leaving Class at Will

This normally happens in the middle of the class session. Somehow students think that once their name is checked during the Attendance Roll Call, the teacher won't notice their off-and-on absences throughout the rest of the class. Check frequently and speak up once you've noticed the absenteeism...

v.   Turning the Video or Sound Off at Will

Exhibit 19. A Student's Video Off

Kids will be kids. No matter the country. If they have to go get the laundry right now since Dad asked them to, they'll just have to do that. The best way to hide that fact from you, the online Teacher, is, in their mind, to turn their video/sound off and sneak out quietly for 20 minutes ☺. I normally set up a rule whereby they just ask me to leave if they have to do something like that, and then go and come back when they're done (letting me know once they're back).

vi.   Chatting with Outsiders;

This could be annoying. You try to do your very best getting important information accross to your students yet some of them are talking to someone off-screen. And you can actually see them doing that, because, well, they're in your class at the

moment. Interestingly enough, this occurs more often when your students are on campus and IN THEIR DORM room then when they're actually at their homes: when they're home, Mom and Dad make sure their child comes to online classes and studies hard, while once your students are at their dorm, their room-mates become a distraction and a nuisance. I've seen my students' room-mates listening in on the class -- just for the lack of anything else to do -- and chatting with the students right in the middle of the online class.

Exhibit 20. Room-mates Distraction

Other outsiders that can be a distraction:

Parents. These normally don't stick around for long. They take a peep, smile and let their kid study.

Siblings. The younger ones tend to stick around longer than the elder ones. Still: they are normally just curious and go away in a few minutes.

vii. Chatting with Classmates

This sometimes happens when your students get too excited or carried away after a Pair- or a Group-Exercise. It usually dies out once you've started a new exercise.

viii. LOL, Poker and Sleeping Dogs

Many of young adults enjoy playing computer games, so it's not a major surprise when your students start playing those in class – particularly considering that it's an online class and you cannot see what they're actually doing on their laptops/phones at any given moment. However, it's easy to spot a gamer: they don't respond to questions and tend to turn off their camera. I've only had one

person who tried that: China students normally know better then playing games during a university class.

ix. Lying on the Couch

It is very tempting to relax and let yourself go when your online course is good and entertaining, and your teacher is actually some place far away and cannot really control your actions. As a result, I've seen situations when students got too comfortable and lay on a couch during my online class. I'd say disallow that outright, otherwise the next thing you know – they're sleeping on you ☺.

x. Dressing Down

Disallow that. Your students are home and in a familiar, non-threatening and informal environment, which makes it easy for them to feel too comfortable for any kind of meaningful studies. If you don't set your Dress Code rules up front, what you will get is kids in all kinds of t-shirts and with messed-up hair, looking like they just got up. I normally write a 5-10 bullet points Class Rules and post them to the Class Group.

One of the points has to do with being neatly-dressed, well-kempt, and sitting straight – just like they would in a real classroom. Once you let everybody know the rules, students normally respect the Dress Code.

xi. Class Crashing

This is a major unnecessary disctraction, really: you teach hard and then you notice an unfamiliar name among the attendees. That stops you cold right in the middle of the teaching process. You then fumble around to get to the visitor's profile and see who they are. Then you start asking them directly who they are and why you see them in your class...And this drags on and on. My advice is to PUT something UP FRONT on the Class Rules List stating "No Visitors" right around Week 1 of the course.

a. Uninvited Guests

In P.R. China this happens a lot even in your real classrooms. In your online classes you're likely to see the following uninvited guests:

01. Ghost Students

Students talk with their friends about all kinds of things, as we all do. Some of your students' friends might well decide they want to quietly join your course "because you're so good". They then quietly get an invitation to join your class group. The

bottomline: Check who's in your class and when, otherwise you just may get a few "Ghost Students" from who knows where...

02. Listeners-In

These are normally your students' room-mates, siblings or house neighbors. Since you can't control who sees and hears you online, there isn't much you can do about that. Unless you see (in your video) the listeners-in sitting right next to your legitimate students (which actually happened!).

03. Family Pets "Fun"

Dogs, cats, goats, chicken – I've seen them all online in class ☺. When they pop into your video once, that's a lot of fun. The entire class gets a good laugh. But when that happens all the time or several times, it's distracting. If the "pet owner" students don't see that, you may want to simply post a "Please no pets" message to your class group. And a brief explanation as to why not.

04. "Unofficial Auditors"

Auditors are always welcome in my classes. They're a powerful stimulus for me to improve my teaching skills and innovate. Since you cannot really control who your students invite to your online class sessions, assume you'll have unannounced auditors. Which is not a problem, unless you don't teach well...

Alternatively, once all of your students joined the group, you could adjust the software configuration to disallow new persons joining the group.

b. Students Family' Stop-bys (Can be a good thing!);

Don't tell anybody: I love it when this happens. It's fascinating to get to meet your students Mom or Dad or other family members, albeit remotely and online. It's always fun to say "Hello" to your students family. I make sure I wave at them and say something nice. Having said that, you have a class to teach, so don't waste everybody's class time; just greeet the family and move on with the class. Sometimes it's the student's family that actually wants to talk to you some more. In this case improvise and find a way to end the conversation fast yet in a nice and RESPECTFUL manner.

Exhibit 21. Getting to meet Carol's niece! English Speech 3, April 27, 2020

xiii.   Oral Exam Issues

a.   Room-mate Whisperers

Students are amazing: somehow they are under the impression that us, online teachers, will never notice their room-mates whispering answers to them live from the off-screen...A simple "Who's that whispering next to you?" question normally settles the issue...

b.   No Control of What's On/Under the Student's Table or In Front of Their Eyes

Unlike the real classroom, you don't see your students desktops online...And, frankly, that does bother me...But, there isn't much we can do, can we? One possible solution: have software developers to work on this particular issue and design a freeware that would allow some kind of a 360 degree or a 3D view into the student's immediate surroundings. Just a thought...

xiv.   Truancy

This can be unintentional or intentional. Some of your students just like missing classes, period. In other cases, circumstances make them do so...I suggest a respectful case-by-case approach to this one.
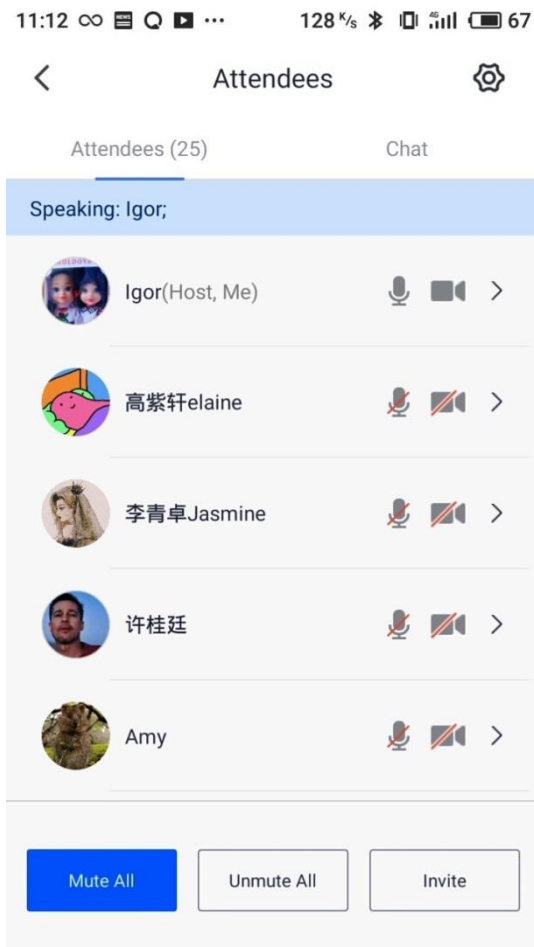
Exhibit 22. Attendees List in "Tencent Meeting," English Speech, English Translation & Interpreting Majors, June 2, 2020

a. Made-up Leave Reasons

These are no different from the ones you sometimes get during your usual in-class teaching. Except, when teaching online, you have no tools whatsoever to verify these claims. It also seems impractical to even try to verify those, as your students are physically located in cities and villages of all types and sizes all over a vast country...

b. Unexpected Real Reasons

01. Caused by Students Family' interference

Students' families are diverse. It is fun to meet them, but over the time these became annoying, sorry: you have a course to teach after all ...

A) Mandatory Chores

Your Mom told you to go do something now. Can you decline? Not really: What your Mom says, goes...Which means you, the Teacher, are getting the thin end of the stick: you're an authority figure, yet you're far away and Mom is physically present right here.
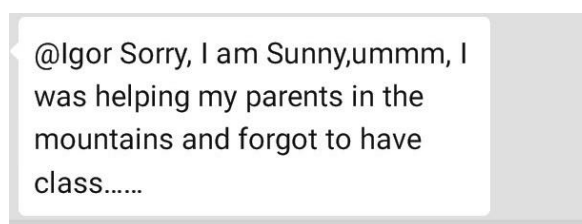
B) Siblings and Parents' "Pull-away"

@Igor Sorry, I am Sunny,ummm, I was helping my parents in the mountains and forgot to have class......

Figure 23. A Student Missed a Class Due to a Family Engagement

02. Involuntary "Hi-Tech Truancy"

A) Can't Attend Class Due to the Network Problems

Since your students are spread out all around a very large country, it's no surprise that they sometimes are unable to attend your online class due to some sort of a computer network problem. I've encountered that several times in the course of my online classes.

B) Sound-Only Participation (No Video)

Once the epidemic was over, we had an unusual situation: the University allowed the students to come back to the campus in the middle of the Semester. Which meant they had online classes to attend, yet, at the same time, they had to also travel from their home locations to the University.

Given the situation, some students had to just miss the online class due to being in transit. Others were able to participate "audio-only" (so as not to miss the class session completely). Some of these latter ones could hear and respond to my questions; yet others were only able to listen in passively, since it was too noisy on the bus.

03. Software Crashes

Be prepared: these do happen often when you use freeware to teach data-heavy

multimedia courses. Tencent Meeting software crashed in the middle of my Film class sessions (and English Speech class sessions) often, for whatever reason.

A) Reboot and Re-sign in

In such cases you reboot your phone, re-launch your Tencent Meeting application and start a brand-new Meeting Session (you will have to re-invite your students to this new session).

B) Class Time Lost

You do waste some class time as you reboot/re-sign in, but there's no way around that, sadly...

04. Poor Sound/Sound Lag

This one has to do with the network performance and is not really a major problem on the P.R. China territory. Speaking from experience: students normally get their sound back once they leave the Meeting and then re-join it.
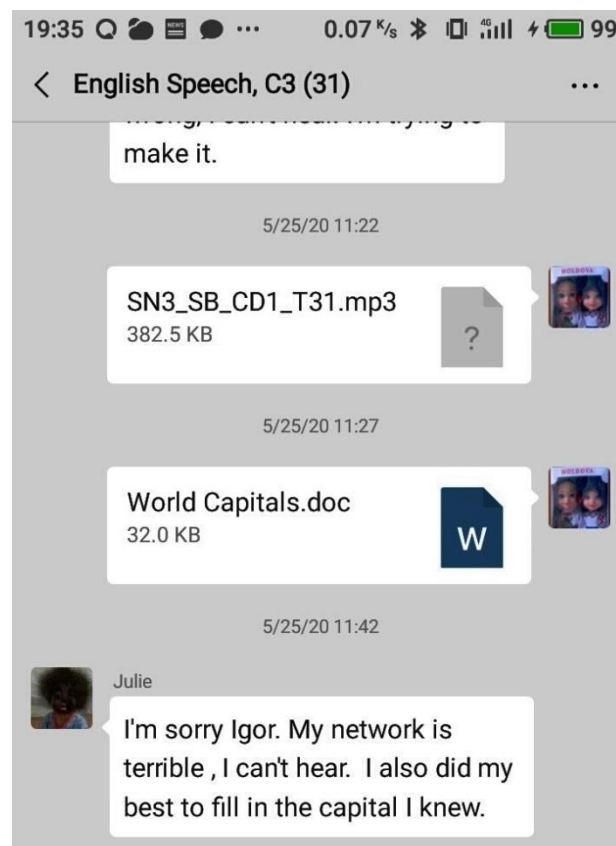

Exhibit 24. Poor sound during the World Capitals written exercise, May 25, 2020

B. Class Improvement

As teachers we work for students. Since that is the case, the best way to improve your classes is to get your students' feedback and then work upon it.

1. Students' Feedback

I normally keep all the communication channels open for students. When you do that in P.R. China, the sheer volume of student messages can easily overwhelm even the most student-friendly teacher: P.R. China population is very large, and, consequently, public universities often have very large classes as far as the student numbers. So what do you do? Wherever possible, I try to work through the Student Class Monitor. In P.R. China, every university class has a student who serves as a University-appointed class monitor. This person is, in a way, like a University representative that is there to smooth out any class-related minor problems. In some situations, Class Monitors could be life-savers – particularly if you're a Foreign Expert, like myself. They're very helpful. But, needless to say, I also always talk to students whenever they have questions or wish to feedback.

a) Class Monitor-compiled Lists

These are the Class Improvement lists compiled by the Class Monitors. In case of very large classes (which is often the case in P.R. China), this is almost the only way for a teacher to get the students' feedback in an organized manner, without being completely swamped by the students individual messages.
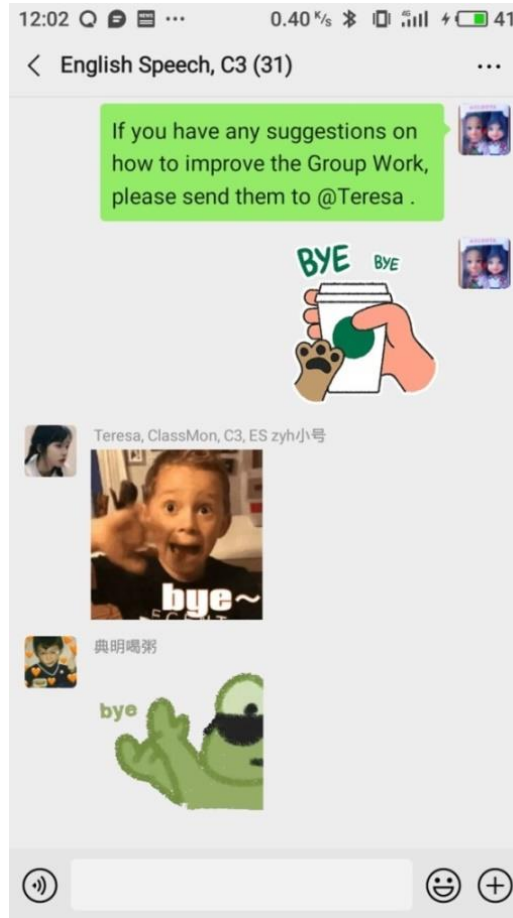
Exhibit 25. Request for the Class Improvement suggestions to be sent to the Class Monitor, June 1, 2020, English Speech (Wechat software)

2. "English Film Appreciation" Course.
(English Translation & Interpretation Majors; English Majors)

A. A Film Course at the Time of a Global Medical Disaster

A Film-Making Certificate I studied for back in the early 2000s and the recent experience of mingling with singers and movie stars came in handy when I was assigned to teach a Spring 2020 Film Appreciation course. Little did I know that I'd have to teach that online, not in a class, due to the P.R. China COVID-19 epidemic. The course turned out to be very popular for the following reasons:

1. Escape from Reality

Movies do provide a way to escape the drab and frightening pandemic reality, particularly in the middle of a lockdown. I would venture to guess that taking a movie course, where you get to "travel" to far-away imaginary worlds or countries would probably be the next best thing to actually being able to physically leave your house and travel someplace nice...

2. Psychological Relief

Surprisingly, watching movies for a class grade does wonders in terms of stress and anxiety relief. In many ways this works better than an actual visit to a psychiatrist, as one is able to share opinions on certain films, hear the 32 fellow class-mates express theirs in real-time online AND with the teacher standing ready to comment and encourage a further research. One is also required to do various written exercises and report the answers online for the entire class to analyze.

3. Entertainment Value

I used both Hollywood and indie films in the course. University students like to watch brainy movies. Thankfully, there're quite a few of those around now and, fortunately, they are of good quality and are successfully competing with the standard Hollywood entertainment no-brainers. Comedies, Romantic Comedies, Fantasy and the Marvel-type films seem to do the best job in terms of providing light-hearted and non-intrusive entertainment at the time of a pandemic.

4. Personal Touch

I'm fortunate to have extensive experience in the world of Show Business, having worked with a number of prominent singers and music bands in the USSR, Russia and South Korea. My very first job in life was as a Sound Engineer for an extremely-popular USSR/Russia hard rock band. The job lead me to a number of short-term Audio Engineer positions and, ultimately, I served as an Assistant Producer, Rod Steward "Camouflage" Tour.
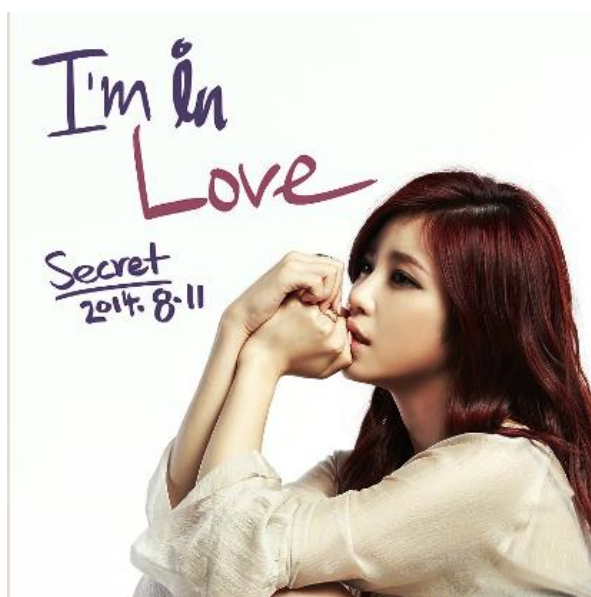
Exhibit 26. Jun Hyo Seong Autographed Fan Art, Seul, South Korea, 2014

The experience allowed me to meet and become friends with some of the world's most famous music performers of the time, with Carlos Santana and C.C. Catch among them.

As I was pursuing a graduate degree in the US, I lived several doors down from Mr. Larry King, the most engaging and brainy TV talk show host in the recent US history. Being neighbours, we had long and profound converstations, both with him and his wife, on existensial and philosophical matters. I was it touch with Mr. King up until he passed away earlier this year, and was, therefore, able to share that experience with the Class.

Exhibit 27. Autographed Photo of Mr. Larry King, September 1993, Arlington, Virginia.

5. Mingling Aspect

This is a Stress Relief Mechanism. This is where you indirectly say to your students: "Just relax. Life is goining on. Your group- and pair-mates are your friends."

6. "Encore!" Cries

a) Sequel Course Justification (by the Students)

This course was popular among students; I was somewhat surprised by a large number of "Encore!" requests. The students that took this particular course would like to come back for more and are asking for a sequel. The University teachers that listened in on this course wish to now take it. Such is the nature of the Film. It captivates. It entertains. It relaxes. It makes you think and feel...

7. University-wide Film Festival Idea

Upon the course completion, I even got requests for a University-wide Film Festival. Any why not? We do have Speech Contests and Film Dubbing Competitions. The Film Festival will be way more popular than those, no doubt. I passed the request to the University management. We'll see...

B. Online Film Teaching Delivery Paradigm (OFTDP)

1. Multimedia Use

a) Assignment Instructions Sharing (Wechat)

Wechat software (China) makes it very easy for a teacher to share any type of instructions with the class by simply posting those as a Word, Excel or PowerPoint file to a Class Group. You have to create your Class Group in Wechat first (just make sure you add EVERY student to it, otherwise some students won't be able to get your posts...)

b) Music Videos Sharing (QQ International)

QQ International (China) is a great "chat+" software that is, for some reason, better then Wechat (China) when it comes to very large file handling. Music Videos vary in size, from about 17Mb (a 1980s Whitesnake clip) to 98Mb (a 2019 Whitesnake clip). Wechat normally "thinks" a notch too long for my liking before eeventually posting the latter to a Class Group. No such delay noticed with QQ, thankfully.

c) Movie Magazines Sharing (QQ International)

QQ International uploads most of the digital magazine files without a delay. A digital magazine file could weigh anywhere from 13Mb (*The Economist*) up to 244Mb (*House & Garden UK*, loaded with the high-rez full-page photos). Movie magazines are roughly in the lower middle of this scale, ranging from 27Mb for a simple *The Hollywood Reporter* (mostly text) to over 100Mb for a specialty movie-editing how-to magazine loaded with movie frame pictures.
No specific QQ upload delays to report here.

d) Student Stills Analysis (Wechat)

Camera Layout and Mise-en-scène Analysis assignments ask students to take video- or movie-screenshots, save them and then post them to the Class Group telling everybody in English what it is they believe they found, or analyze the Shot

Type and the Actors Performance. These screenshots are normally light in size and, in my experience, China students manipulate and post them easily without a problem. Wechat works well in this respect, but I would use QQ for all the multimedia assignments: it just handles them better, somehow.

e) Film Sound Analysis (Smartphone Default Sound Players)

Sound Analysis Assignments are one of the most liked ones, as this is what students have LESS knowledge about and they normally enjoy learing the theory of it all and having an immediate chance to actually apply what they just learned to a real-movie Soundtrack segment from a favorite movie.

China smart phones come with several Default Sound Players pre-installed. Just click on the icon and see what opens...Mp3 audio players are so wide-spread now that this is not even a minor issue. If you need the students to analyze just a select segment of a Soundtrack, yet do not have a Sound Editing software to cut out that particular segment, just tell them the exact minutes on the track (you will see those down at the bottom of your Sound Player). Something like "from 10:23 to 12:38." They'll immediately know what track piece to play...

f) Student Final Deliverables Submission (QQ International, QQ Mail)

Anybody who has ever tried to teach a Film Appreciation course faces, at some point, a question: "What's the best way to assess the students Knowledge Absorbtion?" With Interactive Gaming, User-input Movies and Virtual and Augmented Reality gaining popularity world-wide – particularly amoung the technology-savvy Asia students -- and with previously non-existant brand-new cutting-edge gizmo-intensive hi-tech phenomena, like Automated and Wearable Journalism, disrupting news delivery and, well, putting major pubilshing and broadcasting corporations out of business world-wide as we speak, it is imperative for us modern-day multimedia course teachers to understand what KAA tools are available for us now. My personal experience shows that it's no longer enough to just give theory to the students and then proudly issue some sort of a proverbial Final Grade to students: these are not the 1990s any more ☺.

The new digital technologies and New Media are inherently user input-driven, and, therefore, anyone studying the said technologies HAS TO receive some sort of a hands-on traning in class. In my multimedia classes we always have two parts: Part 1, Theory (a standard lecture), and Part 2, Practice (hands on "technology exercies" on the theory).
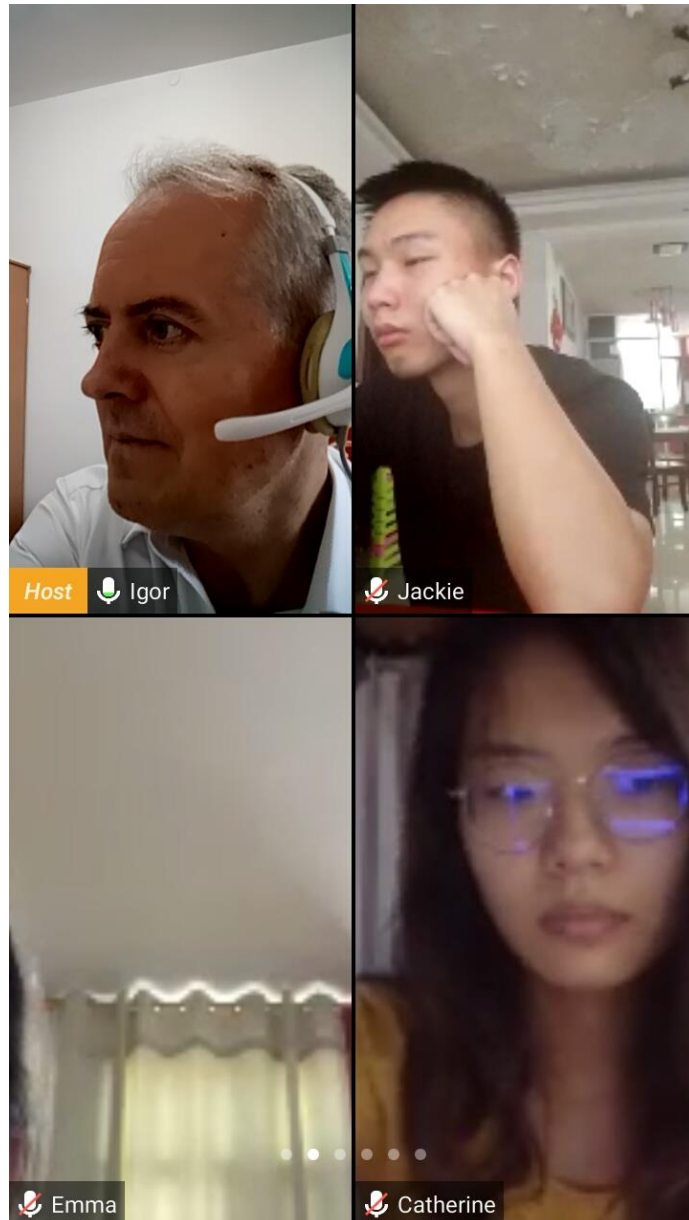
Exhibit 28. Movie Script Writing Exercise, *Thor* (2011). Watching a *Thor* Movie Excerpt.

At the end of the course I ask students to submit a Final Deliverables package. For the Film Appreciation course that includes:

1) A self-made short film, showing me the basic Cinematography, Mise-en-scène and Shot Framing design skills mastery, as well as the practical Lighting and Post-Production basics usage (they were taught all that in class).

2) A short text in MS Word
    a) describing what thieir film is about, the hardware and software they used to make the film and in what city they filmed;

Exhibit 29. Some of the locations you see in the students' films are fascinating..., July 7, 2020

    b) providing the details on the background music track(s) used in their film (singer name, song title, release year, genre, etc.);

    c) providing whatever other comments on their Final Deliverables;

    d) listing what, in their opinion, was good of bad about the Course and giving their course improvement suggestions.

3) Final Report. Students choose a favorite movie and write a concise film analysis from a Movie Critic and a Film-maker point of view. This is where you are often surprised as to how sophisticated some of the students' Reports are...

      2. Class Controls

        a) Class Controls via Chat (Tencent Meeting)

Chat is a powerful means of Class Control – no matter which software. If something is not to your liking, just post them a message...In China, students are

normally well-balanced and self-controlling enough for the teacher not to worry about them ever becoming non-compliant. The Confucian notion of the "Teacher," as a figure of benign authority, is very much alive and functioning in the modern-day PRC, which means students trust you to enlighten them with the knowledge that you, the Teacher, possess. They do want to learn and are eager to learn from you, since the University Management gave you its seal of approval by having hired you as their Teacher in the first place. That alone makes you wish to constantly upgrade your own knowledge and deliver the best knowledge you can possibly muster. In my opinion, as long as this stays the case, P.R. China universities will continue to churn out the absolute top-notch professionals.

Going back to Class Controls via Chat: Tencent Meeting offers you an option to live-chat with your class session participants. Just click "Chat" and post away...Everybody will see your messages in real time.
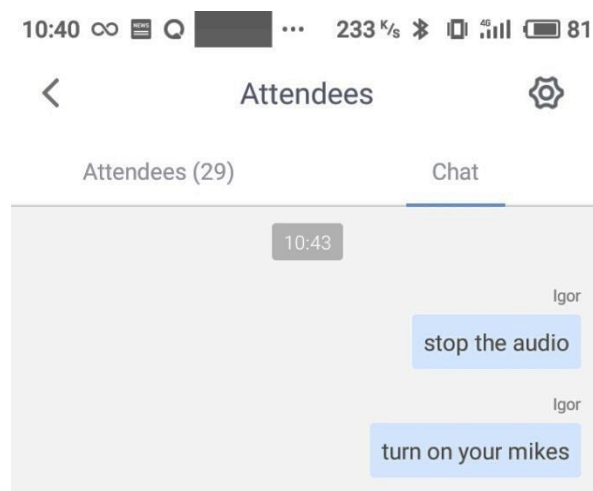
Figure 30. Live Class Control via Chat, Tencent Meeting Software (PRC), June 1, 2020

b) Class Controls via Class Group (QQ International)

It's a good idea to set up a QQ Class Group prior to the first class session. That way you'll be able to class-control via the Class Group. This is not as real-time as the Tencent Meeting Chat option, but is still extremely useful: you can post all sorts of not-so-urgent Class Control messages to the entire class directly. Why QQ and not Wechat? As often mentioned earlier here, QQ is much better than Wechat at large files uploads/sharing and re-posting.

Figure 31. Understanding your students. Asking students who their favorite basketball players are.
May 10, 2020. Software: QQ International

3. Student-Teacher Dialog (Feedback, Questions, Advice, etc.)

Students have to be able to get in touch with their teacher any time (within reason). And here comes the novel notion of the Online Office Hours: I tell students from when to when I'm on the chat, so they could say something to me if they need to.

a) In-Class Live Chat (Tencent Meeting)

I've already mentioned this under "2. Class Controls": Tencent Meeting has a nice little feature called "Chat." That allows both the students and the teacher to stay in touch throughout the entire class. No matter what happens at any given class moment, if someone posts a chat message, you get a little notice in your screen' right-hand corner. I use that all the time to class-control, among other things. Students use that all the time to, say, tell me they're late for class and have just came in, or they answered my question yet I didn't hear them, or whatever else...

b) Class Group posts (Wechat/QQ)

This is available 24x7 and is very convenient. If I feel like working after hours and need to say something to the students, I can. The students are probably asleep at that time, but that doesn't matter: they get the message in the morning as they wake up—at their own convenience. The same goes for the weekends: everyone takes a rest on the weekends, so I don't expect an immediate reaction from the students to something I posted on, say, Friday evening. It's upto the students to decide WHEN to read -- and respond to -- my Saturday message, on a weekend or Monday morning. Contents-wise: class group posts can and should be used for all kinds of useful messages, from class control to info-messages to file-sharing downloads, to those Chinese New Year best-wishes messages, etc.

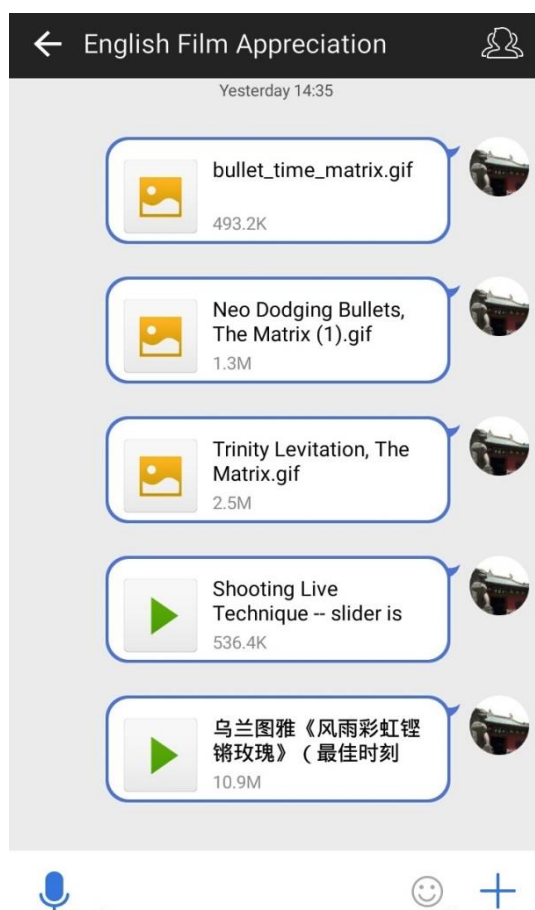Exhibit 32. *The Matrix* (1999) "Camera Arrays" Filming Method, Slider Live Shooting Technique and a Wulan Tuya Music Video for students to analyze, June 4, 2020

c) Off-Line Teacher-Student Q&A (QQ Instant Messaging)

QQ Instant Messaging is probably the best software choice for the aforementioned "Online Office Hours." You can easily swap large files back and forth, in case you help a student to, say, edit a video footage.

4. Class Planning Principles

a) No Uninterrubtible Long Viewings

You don't want to play long movie segments, not to mention full movies, in class: you'll have a sleeping ward on your hands. The kids get comfortable and doze off. Keep your students engaged. Puncture the film – if you have to show a full film in class – with meaningful comments, bite-size lecture segments and hard skills exercises. They'll thank you once they graduate, as multimedia hard skills are hard to come by; and in today's world knowing how to evaluate a movie and, more importantly, how to actually write a movie script, will probably help students get well-paying stable jobs (and keep them).

b) Short Lectures (or Lecture Segments)

A well-known fact: a human being' attention span is 60 minutes. I'll venture to say that with the modern-day generation it's probably more like 45...

And so it's very simple: if you lecture for 45 minutes, noone listens to you at the end of it...Split your long lecture into segments. Make each segment 15 minutes or less. Improvise and diversify, otherwise your class will tune you out and doze off.

c) Music Videos Use for Cinematography Concepts Teaching

Music videos are great. They're, in essence, very short movies – short yet complete. Which makes them an ideal tool for teaching cinematograpy and filming. I use them all the time to teach

    a. Shot Framing;
    b. Script Writing;
    c. General Cinimatography;
    d. Camera Layout;
    e. Mise-en-scène Design;
    f. Acting Evaluation;
    g. Film Appreciation;
    h. Film Criticism;
    i. other Movie-making aspects.

My experience shows that it helps to use a wide variety of music videos from different countries of the World, as China students are acutely curious about other countries World-wide and truly enjoy seeing (and analysing) music videos from various countries and in different languages.

d) Video Analysis Exercises

Music videos work well for these...But feel free to use the real movie excerpts too. You'll be surprised as to the China students' massive and, at times, overwhelming, response. They love to learn to write Movie Scripts, Computer Game Scripts and even the old-fashioned Theater Screenplays. Video Analysis Exercises in any of these areas will be enjoyed. I've seen the eyes of the normally reserved 19-year-old guys light up when you give them a piece of *League of Legend (LOL)* video game replay to analyze, compare and contrast with, say, a *PlayerUnknown's Battlegrounds (PUBG)* one. Give it a try and just stand back ☺...

e) Video Post-Production Analysis Exercises

These are fun, no question. Post-Production in Film-Making refers to the filmed footage editing. There're many ways to join, split, cut and merge several video footage lines into one. Students love to analyze that, as they have an opportunity to understand how many footage lines were filmed and then cut together and how. They also enjoy pin-pointing various Cut-In and Cut-Out methods that were used to stitch several footage lines together to make a final Video Product.

Exhibit 33. A Still Frame, Music Video Post-Production Analysis Exercise, *Roméo et Juliette, de la haine à l'amour* (France, 2001). Hands-down the best-choreographed, -produced and -staged Musical in the past several decades, really...

ABBREVIATIONS

ATL, Academic Teaching and Learing;
BTP, Blended Teaching Paradigm;
KAA, Knowledge Absorbtion Assessment;
KD, Knowledge Delivery;
KDO, Knowledge Delivery Online;
OES, Online Exam Supervision;
OKDP, Online Knowledge Delivery Paradigm;
OTS, Online Teaching Software;
SLE, Student Learning Effect;
STP, Standard Teaching Paradigm;
TCL, Traditional Classroom Learning;
TCTP, Traditional Classroom Teaching Paradigm;
UKD, Uninterrubtible Knowledge Delivery;

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VI. ONLINE TEACHING FOR RURAL TEACHERS DURING COVID-19 IN CAMBODIA

[EDITOR'S NOTE: This Cambodia Case Study is provided here unedited, as received from the submitting party. The Reason: to preserve the original submission feel and style.]

1. Cambodia's education system

Shifting agriculture-based economy towards industrialization and modern industry, Cambodia with approximate 16 million people is located in the southern portion of the Indochina Peninsula in South-East Asia, covering a total land area of 181,035 square kilometers. Cambodia shares a border with Thailand and Laos to the north, with Vietnam to the east and southeast and, to the west, with Thailand and the Gulf of Thailand. After the Khmer Rouge regime, it took Cambodia decades to re-build its own human resources [Figure 1].

The Mekong River, originated in China, stretches across the country from the north to the south offering a great source for irrigation and agricultural production such as farming and fishing; therefore, the living conditions for the people residing in the low and fertile land are better off than that for in the mountainous and remote to the main rivers areas. However, the labor engaged in the agriculture, forestry and fishing had declined substantially from 72.3 percent in 2008 to 54.7 percent in 2019 due to the national economic structural reform from agriculture-driven economy to industry.

The Cambodian education and training system can be systematized in three streams: 1) General education, including the sub-sectors from early childhood education to upper secondary education, 2) Higher education, and 3) TVET, including secondary and tertiary TVET. The figure provides an overview of the education system of Cambodia as defined by the Education Law from 2007 [Figure 2]. General education and higher education are under the jurisdiction of the Ministry of Education, Youth and Sport, while TVET is under the jurisdiction of the Ministry of Labour and Vocational Training (MLVT).

Figure 1. Location of Cambodia sharing a border with the neighbouring countries.

Cambodia Key Facts (2019):

o   South East Asian Country
o   Border with Laos, Thailand & Vietnam
o   Capital city: **Phnom Penh**
o   Population: **15.552.211 million**
o   Official language: **Khmer**
o   GDP per Capita: **$1,158**
o   GDP Growth: **7.0%**
o   Life expectancy: **75.5** years
o   Literacy: **87.7%**
o   School enrolment: **98%**
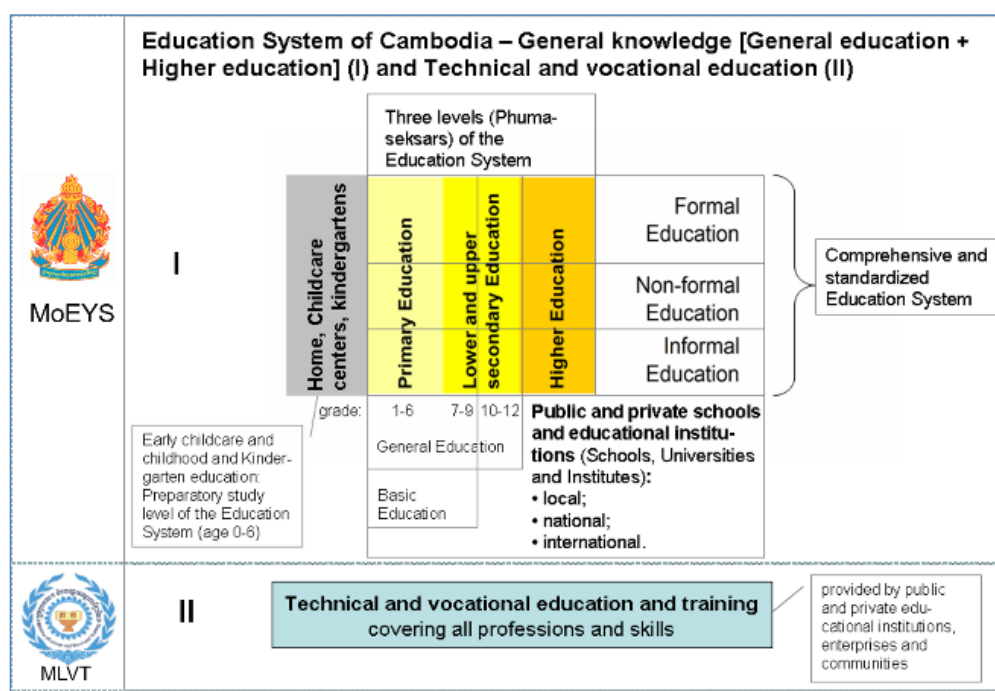
Time zone: **(UTC+7)**

Figure 2. An overview of the education system of Cambodia

Table 1. Percentage currently attending school/educational institution
by age group and sex

Age Group	Male (%)	Female (%)	Total in average (%)
06-11	90.1	91.1	90.6
12-14	90.4	92.8	91.6
15-17	66.2	69.1	67.6
18-24	22.1	19.3	20.7
25+	0.8	0.6	0.7

At the national level, the 2019 Census results show that 29.1 percent of those who ever attended school or educational institution had completed primary education, 21.8 percent had completed lower secondary education, 2.9 percent had received the secondary/ diploma and 2.8 percent had completed education beyond secondary level. About 42.3 percent reported did not complete primary school, while a small proportion of the literate population (1.1 percent) had become literate without any formal education. Table 1 shows the students attending the schools categorized by different age group and sex.

In the age group 15-19, individuals have normally completed lower secondary level of education. However, the data shows that 16.7 percent reported that they cannot complete primary school. It is possible that this reflects late admission,

repeating or dropping out of school. In the same 15-19 age group, 40.8 percent and 39.9 percent of persons had completed primary school and lower secondary, respectively, while 2.4 percent of the population in this age group attained a secondary/diploma-level education.

The accessibility to internet network is the backbone to ensure both rural and urban students being able to continue their learning online. However, the unequal access between rural and urban to internet network in Cambodia remains a challenge [Table 2].

Table 2: Percentage of rural and urban households' accessibility to internet facility

Accessibility to internet	Rural	Urban	Total
No access	57.5	37.3	50
Accessed internet	42.5	62.7	50
Accessed at home	38.8	56.4	45.4
Accessed outside home	21.2	39.9	28.2
Accessed at home and outside home	17.6	33.7	23.6

2. The challenge of ICT knowledge in Cambodia

Basically, the knowledge of ICT skill of rural teachers and students is one of the main issues for distance learning and E-learning because most of them have never experienced in using ICT tools in learning and teaching previously. To maintain in continuous learning as a response to the Covid-19 education crisis, the teachers and students are encouraged to purchase a smart phone to support their learning and teaching at their local. Because of family and community support, the increasing number of teachers and students using smart phone has created an online learning to become more popular. Presently, they are more knowledgeable and adaptable in digital education. According to the interview with grade 12 rural students, they said "before Covid-19 crisis, we did not have personal smart phones to use, but did our parents. Our parents are not happy when we play their phones because they thought that we take their phone to play game or surf social media network spending a lot of credit and wasting a lot of time, and then eventually negatively impact on our study. Since the government instructed all students to learn online, our parents are well-supported to buy us a smart phone for learning. Now we know how to access to the internet and do online learning via a variety of learning platform such as ministry's Facebook page, E-School, Youtube, Microsoft team, Telegram, Zoom, and messenger. Our teachers can monitor and assign homework to us via telegram and messenger. Previously, we do not know we can use smart phone as a tool to learning." From this point of

view, it can be inferred that teachers and students are becoming more familiar using ICT technology to support their learning and teaching. However, for those students whose parents cannot afford to purchase smart phone, the teachers need to go to visit their home or village to support their students' learning according to the particular timetable. In this case, the class has to be performed with fewer than 10 students. Based on our interview with the official of district office of education, youth and sport, they said some teachers used to have a road accident because they need to drive a motorbike far away from their home to support the students' learning. We are also so much concerned for their road and personal safety but we have no way better than this.

To cope with this challenge, meanwhile developing a wide variety of distance learning sources, the ministry is also committing to provide an ongoing training workshop on ICT capacity building for the teachers and school headmasters. For example, the department of information technology of the ministry is planning to provide both online and offline training to   1250 teachers and school management committee members from fifty resources schools and eighty seven network schools nationwide tempting to improve ICT capacity on using Google Classroom, Google Suite App, Video conference, the creation of video clip for distance learning via technology tools, and the utilization of existing ICT materials in school [MOEYS, 2021a]; the planning, supported by ADB project, will be completed in the early 2021. In addition, to enhance the distance learning sources accessibility for students, the ministry has developed a video clip of guiding instruction using smart phones hosted in ministry's official Facebook page [MOEYS, 2021b]. It is noted there are numerous developed teaching videos uploaded in the Youtube network of the ministry [MOEYS, 2021c].

3.   Post-Covid-19 pandemic teaching paradigm

In March, 2020, the ministry of education, youth and sport (MOEYS) has ordered a nationwide school closure in responding to the Covid-19 pandemic. The transition has created another new platform of knowledge delivery through shifting the traditional classroom teaching to a partially modernized online teaching paradigm. This is a huge challenge for education, particularly, for rural teachers and students as Cambodia has not yet well-prepared to cope with such impacts of the Covid-19 crisis on education. The minister of education, youth and sport stressed "Cambodia's digital education needs to be developed 10 years ahead, but because of Covid-19, we need to run to digital education era as fast as we can now."   A prompt and unexpected closure of nationwide schools due to Covid-19 pandemic badly affected two million students in rural Cambodia after the government adopted a digital education technology, including E-Learning and

distance learning program, as a new mechanism for knowledge delivery. To assist the uninterrupted knowledge delivery to all urban and rural students, the ministry immediately initiated an idea of distance learning and E-learning and simultaneously incorporated with the development partners such as Japan International Cooperation Agency (JICA), Korean International Cooperation Agency (KOICA), United Nations International Children's Emergency Fund (UNICEF), Global Partnership for Education (GPE), and Asian Development Bank (ADB)… and other business enterprises involving in information and communication technology (ICT) to develop a variety of learning platforms such as ministry's official Facebook page, Youtube, television and radio broadcast, and so on, while also to provide ICT skill training in order to boost learning accessibility and knowledge delivery efficiency. Initially, it is very difficult and complicated, particularly, rural students when the students are requested to do distance learning and E-learning because both teachers and students lack of technology knowledge and skills, internet accessibility, electricity, and E-learning and teaching materials especially computer, smart phone, and television. Assessing students and maintaining students' active engagement and teacher-student interactions are also the significant challenges of the adoption of online teaching in Cambodia.

Therefore, to create a good learning atmosphere for those students or families who do not have learning materials, the ministry encourages them to follow the educational programs at their neighbor's houses with a number of fewer than 10 students and practice hygiene measures [New Straits Times, 2020], while for those who can access to the internet via computer or smart phone, they can enjoy their learning individually or in group. Yet, the issues pertaining to learning's quality are not addressed. The issues include insufficient online resources for students and teachers, the lack of effective assessment mechanism of online learning and learning loss due to the school closure and effective online teaching methods. It is against this backdrop that the government allows the automatic pass of all Grade 12 students in the 2019-2020 academic years. For the long run, the ministry creates the digital education centre to develop a higher quality of digital learning programmes and platforms in Cambodia.

In the current context of Cambodian education, the ministry has implemented a notable reform, which is so-called "school-based management," through empowering more autonomy at the school level in decision-making, school strategic development planning, and leadership and management, to improve the quality of teaching and learning performance. The ministry directly instructs the school to choose their own way of knowledge delivery owing to their local context; however, it has to align with the re-opening school basic ministerial regulation,

stressing on the standard operating procedure (SOP). If any school fails to abide the SOP regulation, the school operation will be terminated immediately.

As the teachers and students are becoming more mature in using ICT in teaching and learning, blended teaching paradigm is the most popularity employing in school. Teachers can use smart phone or computer to teach, assign homework, monitor and assess the overall learning performance of their students, while students can use smart phone to learn online via social media networks [Figure 3]. Classroom teaching is basically provided regularly, while students can do online self-learning after class. Based on the interview, the students mentioned, "previously, we have no ideas how benefits the smart phone is in helping learning; we like using smart phone to play game, surf Facebook, chat with friends, and make phone call. Since Covid-19 pandemic started to occur in Cambodia, the students learn to use smart phone as a tool to search learning document and teaching video watching via various sources, including mobile app., social media network, and other websites. The students spend between four and eight dollars per month in average for internet fees via smart phones." However, for any remote area where students cannot access to the technology especially primary grade, the school needs to provide the students a regular class and ask to support from their parents at home learning.

Figure 3. The illustration of uploaded online teaching video in grade 11
and its link via social media network

4. The collaboration with the development partners and others

A complete shutdown of 13,300 schools across the country since March 16, 2020, triggered the government to find an alternative way in delivering continuous learning for all children regardless gender, belief, ability, socio-economic, or ethnic background. Development partnership (DPs), non-government organizations and private business enterprises, including UNICEF, JICA, KOICA, the Government of Sweden, and the Global Partnership for Education, ADB, Care, Children's Fund, and E-School Cambodia and so on, have enormously contributed to maintain a continuous learning for all children despite Covid-19 spreading in Cambodia. They are one of the key contributors in the hard time of education crisis; we really appreciate for their kind assistance and cooperation.

DPs and others have closely worked with the ministry to support continuous learning activities from early childhood to primary, lower, and upper secondary school. The ultimate goal of the ministry is to broadcast all the developed teaching video and E-learning lesson to reach every family in Cambodia through exploiting every possible mechanism, including television and radio, social media, teacher's home visit, and others. In a keynote speech mainly inferring to the rural areas which are difficult to access the technology, the minister stressed, "I would like to appeal to all parents, guardians, and students to follow the radio broadcasting program and facilitate continuous, full learning for your children." Currently, there were availably diverse and inclusive distance learning materials, ranging from kindergarten to high school grade, produced by DPs, aiming to reach all vulnerable students such as an ethnic minority group and disable group [Chan, 2020]. Meanwhile, ADB also provides the capacity development training on ICT, school building construction, and supporting distance learning materials, including computer, LCD projector, tablets on wheel, laboratory equipment, to nationwide secondary resource schools. This is a concrete input to ensure that all school children can benefit from the technology resources to improve their mental development and learning. Moreover, JICA also worked very closely and friendly with the ministry to enlarge the distance learning opportunities to the children ranging of 4 to 12 years of ages. Think!Think! is one of the great E-learning sources that is free-of-charge E-learning platform, aiming to develop children to have an ability of critical thinking and motivation in their learning [Figure 4].

Figure 4. An illustration of Think!Think! E-learning platform developed by JICA

5. Cambodia: Conclusion

The Covid-19 pandemic impacts education system in Cambodia. Unstable internet connection and infrastructure, lack of the facility, and ICT knowledge impede the effective delivery of distance learning. However, the pandemic has pushed schools to bring about innovation by integrating new educational technologies in learning and teaching, and supporting teachers to acquire new knowledge and skills. Blended learning model shall be an option for distance learning. More works needed to be done for effective delivery of distance learning among which the improvement of internet connectivity through large-scale investment in telecommunication infrastructure in rural areas.

VII. CONCLUSION

Limited Internet connectivity and lack of access to advance technology, may be some of the common characteristics that define the rural parts of the world. However, despite these limitations, as these case studies have shown, there are strategies that can be adopted to ensure effective delivery of lessons in rural contexts. Although some of the experiences described in these case studies may be unique to the locations described, there are lessons that can be drawn from them and their application may be wide ranging. Mobile technologies appear to feature predominantly in these case studies. While the China case study provides us with descriptions of how remote teaching can be done at the micro level, detailing how lessons and tasks can be carried out using mobile technologies in lessons, the Cambodian case study presents the application of remote teaching at the meso and macro levels in terms of the implementation of policies and the management of ICT resources and learning at the school and the national levels.

1. Lessons from China

Based on the Chinese context, there are concepts advanced by the case study that can be considered by the instructor. The concept of 'Knowledge Absorption Assessment', for example, emphasizes the importance of the alignment of teaching and assessment in the context of remote teaching. Through this concept, the instructor may consider the myriad of ways to ensure students' successful 'absorption' of the materials presented in an online lesson. In other words, to gauge students' understanding of the subject matter presented in a course, the instructor does not have to rely on formal assessments alone. The instructor can offer communications channels that allow students to discuss in groups or consult the instructor on any aspects of learning during online lessons, or even during offline hours. Most of these can be easily implemented using mobile technologies.

> **...to gauge students' understanding of the subject matter presented in a course, the instructor does not have to rely on formal assessments alone. The instructor can offer communications channels that allow students to discuss in groups or consult the instructor on any aspects of learning during online lessons, or even during offline hours. Most of these can be easily implemented using mobile technologies.**

Being comfortable in using mobile technologies for the purpose of creating these channels is clearly important for the instructor. As highlighted in this case study, technology enables the instructor to create various communications channels to ensure that learners can achieve the learning outcomes of a course. There are certain applications described in this case study that are popularly used in China such as QQ international and WeChat. Although these applications may not be commonly used in other parts of the world, this should not deter the instructor from utilizing the outlined strategies. Depending on the context, the instructor may replicate the strategies described in this case study using other social messaging tools that are commonly used in their own context such as WhatsApp or Telegram among others.

Using digital communication tools to provide support to students' learning in class and out of class is an essential aspect of students' learning. Remote teaching means that students will not be able to have a face-to-face interaction with the instructor to discuss any queries that they may have about a lesson or the assignment given. However, as demonstrated by the China case study, digital technologies have enabled easy access to instructors. Students can easily send an email or a text message to the instructor for further clarification. Furthermore, apart from providing support in terms of learning outcomes, students can also be supported in terms of their mental health and well-being. As the pandemic is a cause of much anxiety and fear, it is essential that these communications channels are also available for students to discuss topics other than their coursework. However, guidelines are also needed to ensure that these can be facilitated effectively.

It is noted that one of the difficulties that the instructor may face in conducting online teaching is to ensure that students are engaged in lessons. As the China case study has demonstrated, student engagement can be achieved in many ways. However, an important aspect that an instructor should first consider is classroom management. Unlike in a physical classroom, managing the classroom remotely can be rather challenging. Classroom management in the context of online teaching may require a slightly different approach to ensure that classes run smoothly during video conferencing. Being in their home environments, or in their university hostels, students can get easily get distracted by factors ranging from relatives wishing to see what is happening while an online class is taking place to having pets joining a class. These may appear like minor issues, but an awareness of how these can be tackled can help the instructor to proceed with their lesson with minor interruptions. In addition, an understanding of the need to impose some rules and guidelines during an online class would ensure that the class can be conducted with minimal disruptions.

Another aspect to be considered in encouraging active student engagement include the pedagogical strategies adopted by instructor. In delivering online

lectures, knowledge of how to use a suitable software is central to effective delivery. The commonly used software in China is Tencent Meeting. For other contexts, although different video conferencing software used may be used, the guidelines offered by this case study may be applicable. For instance, delivering bite-sized lectures is found to be effective and is highly encouraged to ensure active student participation. In addition, traditional pair work and group work can also be adapted to the virtual environment and to suit the applications used by the instructor. For example, in the English Speech course, students were asked to move from Tencent Meeting, which is apt for large group meetings, to QQ international, where learners can have their own chat sessions in pairs or groups for task discussion. A similar approach can be taken with other suitable digital platforms if the instructor would like to assign pair work or group work following a whole-class online lecture.

Hall et al. (2020) proposed that mobile technologies may be used in creative ways to support online teaching and learning in response to the pandemic crisis. They proposed principles such as authenticity, collaboration, student choice, mobility, and adaptation. Some of the principles described by Hall et al. (2020) are evident in the strategies applied in the China case study. For example, the Online Film Teaching Delivery Paradigm (OFTDP) appears to apply the principles of authenticity and collaboration, among others. Authenticity in the form of artefact construction and using real world tools and applying real world processes are seen in the examples provided by the China case study when students were asked to take on the role of filmmakers and produce a short film as a group task and as part of the assessment for the course on English Film Appreciation. The students were also working within an authentic environment, as they were required to film the short movie in their city.

Collaboration activities are also apparent in the tasks assigned in the English Film Appreciation course. Data sharing constitutes an important component of the course. We note the importance of the sharing of digital artefacts in the form of multimedia (e.g. videos, digital magazines, and photos) for students' learning. Allowing students to be involved in the co-construction of a film is also reflective of the principle of collaboration. Students' knowledge absorption is enhanced with the innovative use of mobile technologies for collaborative authoring.

2. Lessons from Cambodia

In Cambodia, the pandemic has triggered a further need to reduce the digital divide especially given that there are rural parts of Cambodia that do not have access to ICT facilities, internet connectivity or even electricity. In addition, teachers' limited ICT skills and students' lack of access to digital tools serve as a barrier to the successful implementation of remote teaching and learning. The Cambodian experience demonstrates a resilience in battling these challenges.

The case study describes how the Cambodian Ministry of Education (MOE) has made concerted efforts to ensure that all students can have access to education despite the disruptions caused by the pandemic.

These efforts appear to have paid off. We note that the response to the pandemic has brought about significant changes in the teaching and learning processes. Mobile phones represent the key digital device for carrying out online lessons. Being in remote locations, the learners who live in rural areas can now access online learning by using mobile phones and by paying a minimal amount for mobile credit that can give them internet connectivity.   The use of mobile phones presents opportunities not only for learning but also for developing their digital skills. Students reported that that they have enhanced their digital skills not only in terms of using mobile phones for social use, but also for educational purposes. It is noted, however, that students' home environment is also important in ensuring that learners are well-supported in their learning and that parents play a role in providing the necessities, and a safe and supportive environment for a positive mobile learning experience. This is related to the notion of "social envelope" as proposed by Talaee and Noroozi (2019).

We also note the importance of strategic planning involving the local community in ensuring students' continued access to education. Teacher attitudes and community support is important for the success of promoting online learning. Teachers should be willing to adapt to the changes caused by the pandemic and be prepared to work with the community to support students' learning online and offline. In unavoidable situations where mobile technologies are not available, other arrangements would need to be made so that students could continue their learning. This includes teachers going to remote locations to deliver instruction to groups of learners.   Others include planning for students to view TV education programmes purposefully developed by the MOE in small groups at a convenient location such as a neighbour's house. Clearly, communication and collaboration between stakeholders is crucial for the continuity of students' learning.

> **We [...] note the importance of strategic planning involving the local community in ensuring students' continued access to education. Teacher attitudes and community support is important for the success of promoting online learning.**

Collaboration with development partners is also critical for the establishment of distance education and E-learning at all educational levels. Working together with

the Cambodian MOE, a range of educational programmes for different platforms were produced by development partners to ensure a rapid transition to digital learning. Development partners are also critical in helping to build the ICT knowledge and skills of teachers. The process, nevertheless, is not without challenges. In the face of these challenges, it is important to remain steadfast in trying to accomplish the vision of transitioning to digital education through strategic partnerships.

Another outcome noted from the case study is related to school management. Schools are given a degree of autonomy to make decisions related to the management of schools, and teaching and learning procedures taking the local context into consideration. This is a welcome change that allows schools to operate based on an understanding of its locality and its students.

3. The way forward

The case studies described in this document have shown how teaching and learning have been transformed as a consequence of the pandemic. Reducing the urban-rural digital divide, is not impossible as shown in these case studies although requiring an enormous effort by the parties involved. A question of interest would be the direction taken by universities and schools post-pandemic with regards to e-learning. With the arrival of vaccines, and the gradual reopening of educational institutions, it is also a time to consider the role of digital technologies and E- learning. Will the contingency measures involving E-learning adopted by universities and schools during the pandemic be adapted and be made part of regular teaching and learning practice, or will universities and schools revert to what they were used to doing post-pandemic? Posing these questions is necessary as it will help the direction of future educational policies. It is foreseeable that a hybrid model of learning will be implemented, and that further educational innovations may be expected to take place in the future. How this will play out exactly, nevertheless, will also depend on whether the vision of reducing the digital divide remains an agenda of the post-pandemic education.

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