

2021

# Trend Report of & Higher Education e-Learning of ASEAN

 **INDONESIA**



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# Open University in Indonesia

Keywords #open\_university #Universitas\_Terbuka #Indonesia\_Cyber\_Education\_Institute

Ms. Doyun Lee/Dongguk University (Political Science)

Universitas Terbuka, the only open university in Indonesia, has provided a high-quality education and has attempted to expand opportunities for online learning by collaborating with other universities.

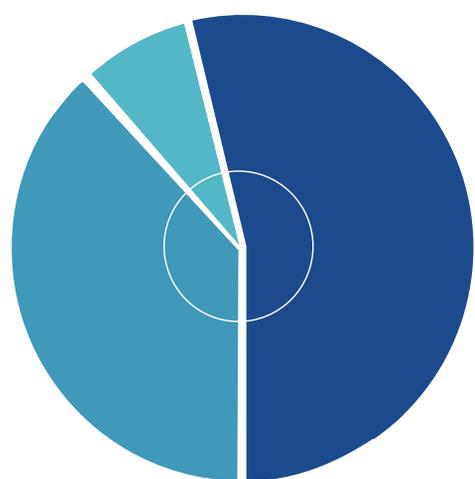
## 01

### Can open universities provide high-quality education?



Universitas Terbuka, the only open university established in Indonesia, was inaugurated in 1984 upon Presidential Decree No. 41. UT has enlarged opportunities for learning by incorporating a distance learning system into conventional face-to-face learning. As an open university, UT claims to provide higher education to Indonesians and foreigners who are eager to learn but unable to attend face-to-face lectures.

[1] UT has not constrained students' learning methods, age, year of graduation, period of study, and such. Although most students of UT are aged under 25 (126,267 students out of total of 310,974 students), 30% of total students of UT are aged over 30, and 10% of total students of UT are aged over 40. [2] The only thing that UT requires is applicants' high school diplomas. [3]



- Students of UT aged under 25
- 30% of total students of UT are aged over 30
- 10% of total students of UT are aged over 40



UT has four faculties (economy, mathematics and natural science, education and teacher training, social and political sciences) and offers 29 undergraduate programs, 9 graduate programs, 1257 courses including 856 courses with online examination. [4] UT offers not only full online lectures, but also online lectures blended with face-to-face lectures and full face-to-face lectures. [5] That is, all students of UT are able to select their learning materials such as audio or video programs, radio or television broadcasts, internet materials, face-to-face lectures, and so on. [6] UT also provides 24 MOOC (Massive, Open, Online Courses) programs. MOOC of UT was reported to have the 4th largest users (293,000 in total) among Indonesian online learning sites, following by RuangGuru, Zenius, KelasKita. [7] In 2019, UT became the first university in Indonesia which adopted distance learning to Ph.D. programs (Management Science and Public Administration).

[8] Additionally, UT was acknowledged by UNESCO as the provider of Open Educational Resources (OER). According to UNESCO, UT released educational materials with an open license, which provided significant opportunities for learning not only to Terbuka students but also to other universities and institutions in Indonesia. [9]

However, some people ask the question that whether open universities can provide high-quality education because people assume that distance learning is not an appropriate instrument for conveying profound information and evaluating students. Therefore, UT has adopted the quality assessment system provided by the Asian Association of Open Universities and has been reviewed under the International Council for Open and Distance Education, the National Accreditation Board for Higher Education, and the Ministry of Education and Culture of Indonesia. The good news is that UT has continuously abided by the criteria of quality assessment and has attempted to meet international standards for high-quality education. However, it still needs to be improved in terms of adopting new technologies, staff training, accommodating more students, providing more courses, and such. [10]

### Implications

As an open university, Universitas Terbuka has evolved into a high-quality education institution via distance learning.



## 02

# Universitas Terbuka contributed to opening opportunities for distance learning



In 2021, UT more extended the opportunities for learning by establishing Indonesia Cyber Education Institute (ICE) in collaboration with various universities in Indonesia. The partner universities will offer 10 college courses free of charge for three years via the ICE Institution platform. [11] A total of 24 institutions has participated in the ICE Institution, such as Universitas Indonesia, Universitas Bina Nusantara, Universitas Brawijaya, and such. The courses provided include mathematics, sociology, political science, anthropology, and so on. [12] The tables below are the participant institutions and courses.

**<Table 1. Institutions participated in ICE Institute> [13]**

Universitas Indonesia	Universitas Samudra
Universitas Muhammadiyah Makassar	Universitas Pelita Harapan
Universitas Diponegoro	Lembaga Uji Coba Tim ICE
Universitas Terbuka	Universitas Katolik Indonesia Atma Jaya
Universitas Bina Nusantara	Riska Julianti
Universitas Brawijaya	Udemy University
Creativepreneur Institute	Universitas Pancasila
Universitas Budi Luhur	Universitas Halu Oleo
Universitas Pendidikan Indonesia	Universitas Hasanuddin
Rahmat Adi	Universitas Airlangga
Universitas Andalas	Universitas Padjadjaran
Universitas Sumatera Utara	Universitas Sriwijaya

**<Table 2. Courses provided by ICE Institute> [14]**

Design and Media	Pedagogy
Mathematics and Natural Science	Agriculture
Veterinary Science	Medical Science
Public Health	Technical Science
Linguistics	Economics
Sociology	Religion and Philosophy
Art	



ICE Institution is expected to broaden opportunities for learning by gradually removing education obstacles. It should be noted that UT, the open university, highly contributed to establishing such a prospective institution. However, although Indonesia claims that the number of internet users is rapidly increasing, the country is still faced with inferior environments for online learning. According to the World Development Indicators, only 47.7% of Indonesians used the internet in 2019. [15] The Jakarta Post also reported that ‘the internet connectivity is highly concentrated in Java,’ which implies a serious digital divide in the country. [16] It indicates that in order to provide higher education to many Indonesians who willing to learn, not only distance learning programs but also the overall digital environment in Indonesia should be improved.

A light blue map of Indonesia is shown in the background. Overlaid on the map is the following text:

**According to the World Development Indicators,  
only 47.7% of Indonesians used the internet in 2019.**

### Implications

UT and its partner universities in Indonesia established the Indonesia Cyber Education Institute to extend opportunities for online learning to other Indonesian citizens.

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# Indonesian Education for COVID-19

Keywords #Merdeka\_Belajar #Kampus\_Merdeka #portal\_Rumah\_Belajar

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Ms. Doyun Lee/Dongguk University (Political Science)

Since schools have shut down due to the pandemic, the Ministry of Education and Culture has tried to overcome obstacles by independent learning policies and distance learning platforms.

## 01

### Independent Learning and Independent Campus

At the end of 2019, the Ministry of Education and Culture initiated the ‘Merdeka Belajar (Independent Learning).’ The policy allows teachers to redesign curriculums to enhance students’ capabilities and interests. According to Nadiem Makarim, the Minister of Education and Culture of Indonesia, teachers will be able to “treat the curriculum like a menu as opposed to a set course meal.” Because the Covid-19 made it nearly impossible for schools to teach the normal curriculum, the Ministry has been eager to proceed with the policy. Since most schools have shut down due to the pandemic, the best option for schools is to select the most necessary courses to enhance academic and working competency for students.

To embody this ambitious movement, the Ministry suggested four programs as follows. First, schools will be allowed to replace the National School Standard Examination (Ujian Sekolah Berstandar Nasional) with an examination authorized by each school. Second, the National Examination (Ujian Nasional) will be abolished and will be substituted with the Minimum Competency Assessment (Assesmen Kompetensi Minimum). Third, the Lesson Plan (Rencana Pelaksanaan Pembelajaran) will be simplified into 1 sheet because it has been criticized to be a waste of time. Fourth, the Ministry will relax the Zoning Regulations for New Student Acceptance (Peraturan Penerimaan Peserta Didik Baru).

Adjusting Merduka Belajar to universities, the Ministry initiated the other education policy ‘Kampus Merdeka (Independent Campus).’ The policy aims to link education and industry and encourages students to learn outside the campus. As universities have shut down during the pandemic, higher education should not depend on the on-campus only but throughout the off-campus. In this regard, the Kampus Merdeka is expected to significantly extend the opportunity for education during the pandemic.

The Kampus Merdeka includes four programs as follows. First, the policy allows state universities and private universities to devise new study programs, only when the universities “have A and B accreditation or have collaborated with universities included in QS Top 100 World Universities”. Second, universities that are well prepared will be automatically re-accredited. Third, PTN (i.e., state university) Public Service Agencies and Work Units will be easily transferred to PTN Legal Entity as the requirements will be relaxed. Fourth, students will enable to study off-campus for two semesters, and to earn 40 credits outside the campus by internship, community volunteering, and such. Companies that earned the Internship Acceleration and Ecosystem Development Grant by the Ministry can recruit students.

As most schools have closed during the pandemic, both teachers and students have had problems over following uniform curriculums. The Merdeka Belajar and the Kampus Merdeka enable to overcome these problems by granting schools more flexibility to design curriculums adjusted to students. There are still many mountains to climb as these policies are in the early stage. However, we can expect that the new trials can contribute to extending the opportunity for the education of Indonesian students. extending the opportunity for the education of Indonesian students.



## Implications

During the pandemic, the Merdeka Belajar and the Kampus Merdeka will improve the quality of education by giving schools more flexibility to design curriculums. riculums.

## 02 . . . . .

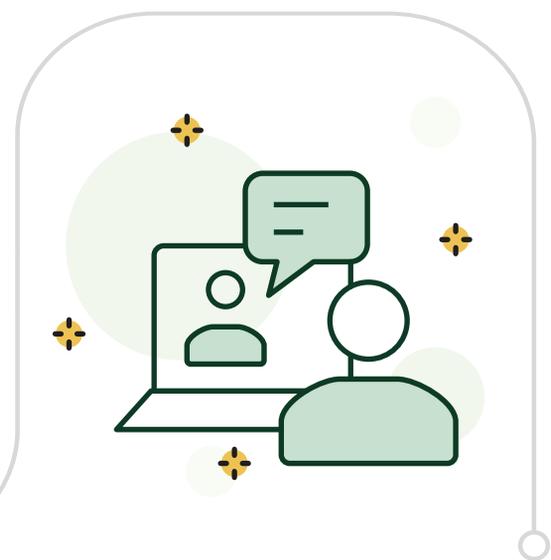
### Platforms for Distance Learning

The Ministry of Education and Culture developed distance learning applications ‘portal Rumah Belajar.’ Although the application was produced before Covid-19, it has contributed to shifting the Indonesian education system from offline courses to online courses during the pandemic. Since the Covid-19 made it nearly impossible for students to attend offline classes, students have taken online lectures via a distance learning system. The members of the Rumah Belajar have significantly increased since the outbreak of the pandemic, from 3-4 million people to 17 million people.

Rumah Belajar provides with teachers and students “learning resources, digital classes, virtual laboratories, and question banks.” The learning resources are designed in the form of images, videos, animation, and games. The question banks are helpful for teachers to evaluate their students. The virtual laboratories help students to learn by simulation processes. The learning services are available for students and teachers of early age (Pendidikan Anak Usia Dini), of elementary schools (Sekolah Dasar), of middle schools (Sekolah Menengah Pertama), of high schools (Sekolah Menengah Atas/Kejuruan) and free for anyone.

Meanwhile, in the face of the pandemic, the Ministry announced that it would affiliate with seven online learning platforms: Kelas Pintar, Ruangguru, Sekolah.mu, Zenius, Quipper, Google Indonesia, and Microsoft. Ruangguru is the most popular one. The company has served more than 22 million students and 300,000 teachers. It also launched various online programs as well as the free online school (Sekolah Online Gratis) during the pandemic. The Covid-19 was such an opportunity for the Ruangguru as it earned significant revenue and investment throughout 2020. Also, Zenius is one of the popular learning platforms, being proud of more than 11 million members. Although it provided most services for free during the first half of 2020, it is reported that “the revenues increased over 70% in the second half of the year compared to the same period in 2019.”

Various distance learning platforms such as Rumah Belajar, Ruangguru, Zenius make it possible for students to keep learning during the pandemic. However, not all Indonesian students are accessible to distance learning because it requires service fees, electronic devices, and internet services. Hence, to improve the effect of distance learning platforms, the Ministry should consider the opportunity for using the learning services along with advanced technologies.



## Implications

In the face of the pandemic, distance learning platforms provided by the Ministry and private companies will enhance students' learning capability.

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# Emerging Nanodegree in Indonesia

Keywords #Nanodegree #Udacity #Google

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In Indonesia where Nanodegree has been largely unpopular, Udacity introduced the program to nurture Android mobile application developers.

## 01

### The attempt to develop Nanodegree in Indonesia

Nanodegree is a short-term training program for specific technologies, not a regular degree program. Because the purpose of the program is to train a skilled workforce who is highly capable of cutting-edge technology, Nanodegree affiliates with numerous companies and provides lectures that are specialized to their requirements. This is the most distinctive characteristic of Nanodegree. The program has several advantages as follows. The training period of Nanodegree is relatively short (6 months – 1 year on average) and its tuition fees are cheaper than regular degree programs. As most Nanodegree programs are online, students can take classes whenever and wherever they want. It also provides students who satisfy a series of requirements with credentials affirming their achievement. Thanks to the benefits of Nanodegree, more students of the world have paid significant attention to the program.

On the contrary to the global trend, Nanodegree is relatively less prominent in Indonesia. Up to date, Udacity seems to be the sole Nanodegree provider in the country. It is the American education company founded in 2011 and offers the most well-known Nanodegree programs. Udacity provides both free and paid courses and the paid ones are called Nanodegree. The participants of Nanodegree can receive feedback from project reviewers and be advised by mentors. Udacity established a partnership with Google, Facebook, AT&T, Salesforce, GitHub and provides ‘beginner-to-career-track programs.’ <Table 1> indicates that Udacity offers seven subjects and various Nanodegree programs for each subject.

<Table 1. Subjects and Programs of Udacity >

Subjects	Nanodegree Programs
Artificial Intelligence	Machine Learning Engineer for Microsoft Azure, AI for Healthcare, AI Product Manager, Deep Learning, Data Structures and Algorithms.
Autonomous Systems	Self-Driving Car Engineer, Robotics Software Engineer, Flying Car and Autonomous Flight Engineer.
Business	SQL, Data Project Manager, Agile Software Development.
Cloud Computing	Hybrid Cloud Engineer, Cloud Developer, AWS Cloud Architect.
Cybersecurity	Introduction to Cyber Security, Security Engineer, Security Analyst, Ethical Hacker
Data Science	Data Architect, Data Product Manager, Data Analyst.
Programming and Development	e.g., Intermediate Python, RPA Developer with UiPath, Java Web Developer, Front End Web Developer, Full Stack Web Developer.

In addition to the common Nanodegree programs, Udacity has provided special training courses by forming a partnership with Google. After the President of Indonesia met with Google's CEO in 2016, Udacity and Google announced to grant scholarships for five hundred prospective Indonesian developers. They also suggested a plan to train 100,000 Indonesian mobile (Android) developers by 2020. Therefore, Udacity has offered Nanodegree program to help Indonesian developers prepare for the Associate Android Developer Certification Exam, even though they cannot be automatically hired to Google soon after they completed the program. That is, the program is designed to help the developers pass the exam. Not only intermediate developers but also inexperienced ones have the opportunity to improve their skills because the program distinguishes beginner level and advanced level. For example, Android for Beginners and Intermediate Android Development are for amateur developers. Additionally, advanced developers can take programs such as Android Fundamentals, Gradle, Material Design, Android Wear, Play Services, and Advanced Android.

Moreover, Google has supported the Udacity Nanodegree by hosting Indonesia Android Kejar (IAK). IAK is the offline training program for mobile application developers. The IAK participants communicate with facilitators who are the Android programming experts. The facilitators become a mentor of the participants and guide them to improve skills to develop mobile applications. That is, by joining this offline training program, Indonesian developers can enhance capability and network with other prospective developers. IAK was recently held in 10 cities of Indonesia in 2019 and it appears to be suspended due to the pandemic: Jabodetabek, Bandung, Yogyakarta, Semarang, Surabaya, Batam, Denpasar, Medan, Malang, Makassar.

By looking at the achievement, it seems clear that Udacity has contributed to the development of Nanodegree in Indonesia. However, it is difficult to find further attempts to develop Nanodegree in Indonesia except for Udacity. Additionally, it is still in question whether Udacity has formed another partnership with local IT companies in Indonesia and whether Indonesian engineers have participated in other Udacity programs such as Autonomous Systems, Cloud Computing, and such. Therefore, there is still a lot of room to develop Nanodegree in Indonesia.

In 2017, hundreds of Indonesian developers opened more than 900 classes for mobile applications. More than 70% of participants achieved in developing new mobile applications, 20% of them created communities for developers, and 11% of them initiated their own classes to share knowledge. It implies that if Nanodegree becomes more popular in Indonesia, more prospective Indonesian developers like them could get the opportunity to improve their skills. Their advanced skills will spread to the community and the economy and technology of Indonesia will be much more improved. To generate a more positive effect on the Indonesian economy and technology, more various Nanodegree programs should be developed, and Nanodegree providers should form partnerships with numerous local IT companies.



## 🌐 Implications

Nanodegree is relatively less popular in Indonesia. Nanodegree providers who consider Indonesia as an emerging market should design more various programs and seek more partnerships with local companies.

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# Open Educational Resources (OER) in Indonesia

Keywords #OER #I-OER #SUAKA-UT

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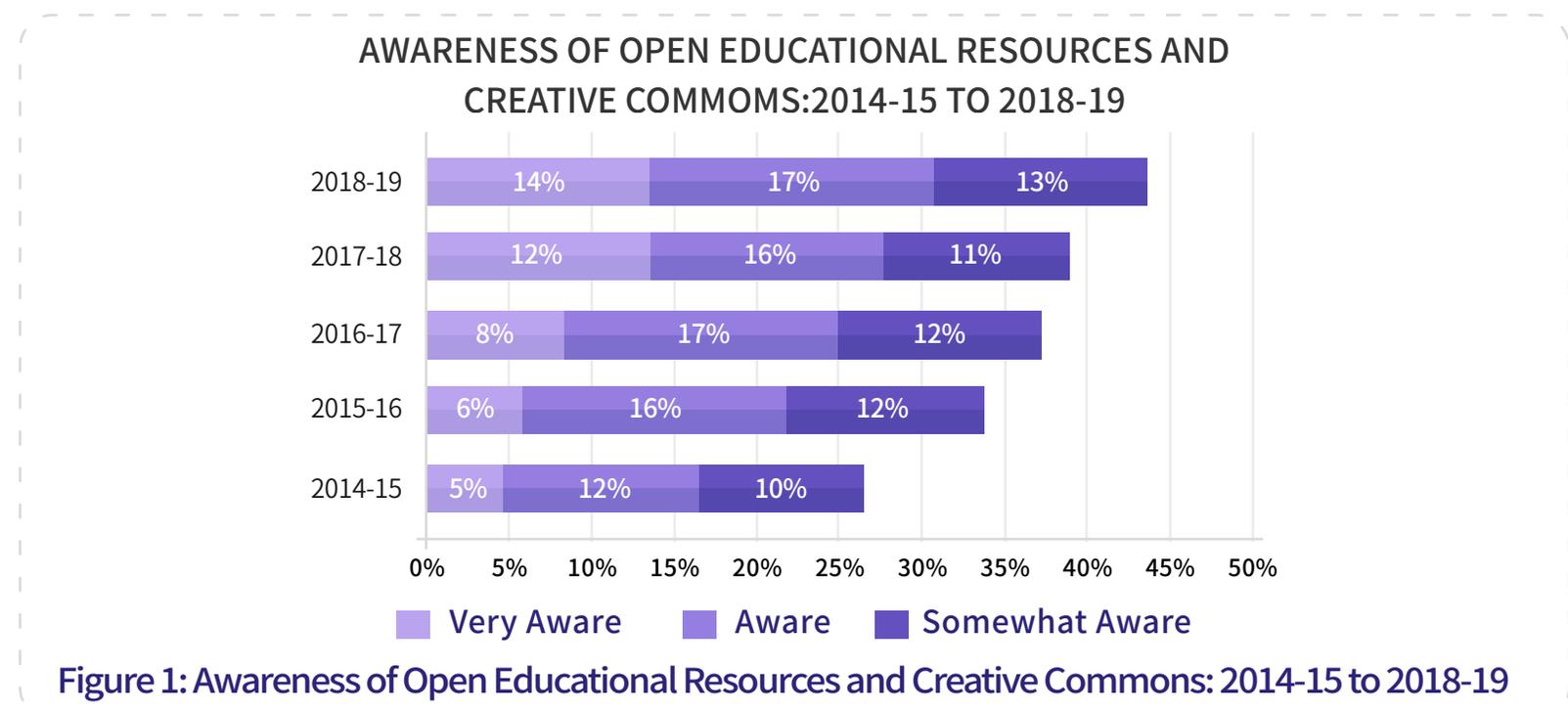
OER in Indonesia needs more learning materials and more teachers who are capable of using them.

## 01

### Basic information on OER

Open Educational Resources (OER) are “teaching, learning and research materials in any medium that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions.” Paris OER Declaration (2012) defines that OER aim to widen the opportunity of education by providing cost-efficient and quality materials for teaching and learning. To level the playing field of education, OER have developed into various models such as open courseware, open contents, open journal, open learning, open library, and such.

Although OER have not yet been prominent in the global world, more teachers and schools are likely to adopt OER in the future. According to the report “The Impact of OER Initiatives on Faculty Selection of Classroom Materials (Bay View Analytics 2020),” the awareness of OER among teachers in the US has steadily increased from 2014 to 2019 (see Figure 1). The adoption of OER to higher education has emerged in the US. The Association of American Colleges & Universities (AAC&U) launched the 2021-2022 Institute on Open Educational Resources to improve quality and equality for advanced education. Additionally, Framingham State University in the US will create free textbooks by adapting existing open educational resources. It is an attempt to guarantee equal opportunity for education by reducing the costs of learning. This case implies that OER are useful not only for lower education but also for higher education.



## Implications

OER aim to level the playing field of education by providing open license learning materials. Although OER are still relatively unknown to the global world, some countries like the US have attempted to adopt OER to higher education.

## 02

### OER in Indonesia

There are three representative OER services in Indonesia: Rumar Belajar, Indonesia Open Educational Resources (I-OER), Sumber pembelajaran terbuka-Universitas Terbuka (SUAKA-UT). While Rumar Belajar was made by government, I-OER and SUAKA-UT were both established by university. In this report, I focus on I-OER and SUAKA-UT, the university-made and relatively unknown OER services.

I-OER was initiated by the University of Indonesia with the collaboration of 50 universities. It provides three services to satisfy learning needs: Open Content, Open Courseware, Open Education. First, Open Content refers to free educational content that allows registered users to download, upload, and share content with other users. Second, Open Courseware indicates that users can access lecture materials from leading institutions in Indonesia without register. For example, users can study lecture materials for Human-Computer Interaction, Computer Networking, Web Application Services, Public Health Fundamentals, and Introduction to Economics. Third, Open Education refers to online lectures, specifically, general programs, certification programs, and special programs. General programs are for users who are not willing to acquire licenses. Certification programs are for those who need certification for a specific area, and special programs are for those who need a bachelor's degree or master's degree. Online lectures include Human-Computer Interaction, Data Science, and Computer Networking.

- SUAKA-UT was established by Universitas Terbuka, the Open University of Indonesia. It distinguishes courses as follows: Faculty of Education, Faculty of Natural Science and Mathematics, Faculty of Social Science and Political Science, Faculty of Economy. SUAKA-UT provides courses not only for students but also for teachers. Teachers who are interested in improving the quality of teaching can participate in numerous debates, webinars, and certification programs through Guru Pintar Online (GPO). The GPO is highly valuable because the improvement of teachers' capacity significantly influences the learning process.

However, it is difficult to judge whether the OER services in Indonesia are effective in improving the quality and equality of education. Fitriansyah, Fatinah, and Syahril (2019) suggested that only 1% of the total teachers and students in Indonesia have used Rumah Belajar, and only 1% of the total universities in Indonesia have participated in I-OER. We do not even know how many people use SUAKA-UT. Additionally, learning materials from I-OER and SUAKA-UT are highly limited. It implies that the development of OER in Indonesia is still at the nascent stage.

Then, how do we develop OER in Indonesia? First, we need to complement learning materials. Various education institutions should cooperate to expand lectures, lecture materials, and quality educational content. Second, we need to educate teachers to more adapt to digital technologies. One of the reasons for poor education in Indonesia is that teachers lack the knowledge and pedagogical skills to teach students. It is hard for the teachers to supplement the learning materials and utilize OER to teach students. Therefore, we need to develop programs for teachers that aim to use OER.

## Implications

Rumar Belajar, I-OER, and SUAKA-UT are three representative OER services in Indonesia. In order to develop these services, we need to complement learning materials and educate teachers to acquire new pedagogical skills to use OER.

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# ICT education in Indonesia

Keywords #ICT\_education

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It is difficult to say that most high schools and universities in Indonesia have actively utilized ICT in learning and teaching. The inferior technology development in rural areas and lack of ICT training for lecturers have been a barrier to promote ICT in higher education.



## 01

### Basic information on ICT education in Indonesia

Information and Communication Technology (ICT) includes any devices, applications, and services related with information and communication technology. Recently, ICT has been widely used for educational purposes because it can “facilitate universal access to education, bridge learning divides, support the development of teachers, and enhance the quality and relevance of learning.” E-learning, blended learning, and distance learning are all included in the use of ICT for education.

To promote the application of ICT to elementary and secondary education, the Indonesian government launched three curriculums in 2004, 2006, and 2013. The 2004 Curriculum (Kurikulum Berbasis Kompetensi, Competency-based curriculum) designated ICT as a mandatory subject for junior and senior students. The 2006 curriculum (Kurikulum Tingkat Satuan Pendidikan, Education Unit Level Curriculum) emphasized the importance of ICT education. Yet the content was limited to basic technical skills such as how to use computers and electronic devices. The 2013 Curriculum (Kurikulum 2013) removed the ICT subjects and integrated ICT into all subjects as learning tools. However, the elimination of ICT subjects revealed that numerous teachers had insufficient skills and knowledge to utilize ICT in teaching students, and brought confusion to schools. As a result, many elementary and junior students in Indonesia have received relatively poor quality of ICT education.

The Indonesian government also launched initiatives to integrate ICT into higher education, such as the Higher Education Long Term Strategy in 2003. The Directorate General of Higher Education (DGHE) of Indonesia stated that the country would improve the quality of teaching and learning in higher education by integrating ICT into education. A few scholars have suggested that high school students and college students in Indonesia have a moderate level of ICT literacy. For example, Perbawaningsih (2013) found that the students at Communication Studies University of Atma Jaya Yogyakarta have sufficient skills to utilize ICT. However, it is difficult to generalize the case of a single university into all universities of Indonesia. Furthermore, numerous studies have argued that ICT education in Indonesia has two main obstacles to development. I will elaborate on these challenges in the next section.

## Implications

The level of ICT literacy and ICT usage of high school and college students in Indonesia is unclear.

## 02

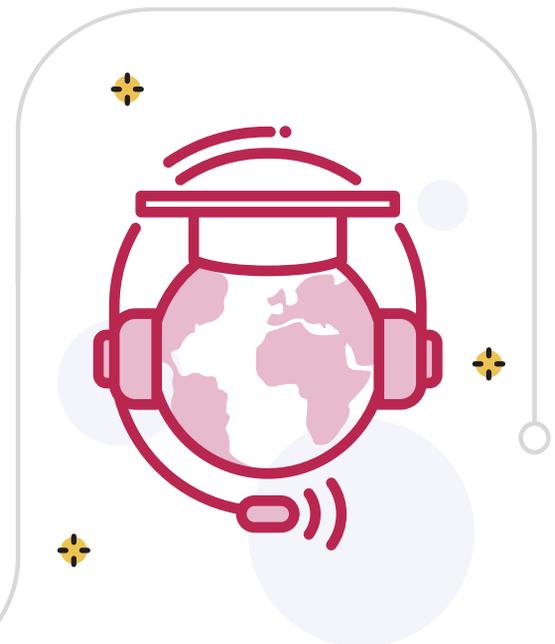
### Challenges of ICT education in Indonesia

In the previous section, I briefly introduced the governmental initiatives to promote ICT education in Indonesia and the level of ICT literacy of Indonesian students. It is unclear whether most high school students and college students in Indonesia have actively utilized ICT in learning because of two main obstacles.

First, the geographical characteristic of Indonesia has impeded the development of ICT education. Indonesia is well known for its numerous rural areas, islands, and villages. Although people who live in urban areas such as Java, Jakarta, and Yogyakarta enjoy the technology development, those who live in rural areas have little opportunity to utilize high technologies. For example, while the number of internet users increased by 53% in urban areas, it increased by 31% in rural areas. The unequal opportunity of technology use leads to the unequal opportunity of ICT education. Students living in rural areas cannot receive the same quality of ICT education as students living in urban areas. In urban areas, internet connections are unstable, and computer facilities at schools are easily broken due to severe floods. Although Perbawaningsih (2013) suggested that most students at Communication Studies University of Atma Jaya Yogyakarta have personal computers connected to the internet, the research argued that college students living in rural areas face poor situations.

Second, lecturers who have fewer abilities to use ICT have hampered the spread of ICT education. To promote ICT education, lecturers should actively use computers in teaching and analyzing learning outcomes of students. However, numerous scholars have argued that lecturers are not well trained to utilize ICT. According to the questionnaire by Mahdum, Hadriana, and Safriyanti, the majority of the Indonesian teachers in rural areas never or rarely use certain types of ICT in teaching. Although they agree that ICT usage can make the learning process more effective, they never or rarely use computer/language laboratory and online quiz. Rahayu (2019) also found that the computer illiteracy of lecturers is a barrier to adopt ICT to higher education. Although lecturers of Universitas Muhammadiyah Yogyakarta have a strong willingness to use ICT in teaching, they have experienced insufficient training to improve ICT knowledge.

Then, how to improve ICT education in Indonesia? The answer is somewhat simple. The country needs to invest more resources in developing rural areas and training lecturers. To provide more opportunities for ICT education to students living in rural areas, the government should establish technology infrastructure in rural areas. Additionally, the Indonesian government should provide more opportunities for ICT training to lecturers. Because many lecturers in Indonesia have a powerful motivation to adopt ICT in teaching, they will actively utilize ICT in teaching if they are well trained. Cooperation with the private sector is one way to offer high-quality training. For example, the Directorate General of Vocational Education collaborated with Huawei Indonesia and provided the program to increase teachers' ICT knowledge. It implies that the country can promote the use of ICT in higher education by training lecturers.



## Implications

Poor technological development in rural areas and lack of ICT training for lecturers have impeded the broader use of ICT in higher education. The Indonesian government should seek ways to develop rural areas and provide quality training programs to lecturers.

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# Teacher Professional Development programs in Indonesia

Keywords #TPD #PKB

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In order to improve teachers' pedagogical skills, the Indonesian government should advance TPD to be a more attractive and accessible program.

## 01

### The evolution of Teacher Professional Development program

What enhances the quality of education? Equal opportunities to learn, governmental initiatives to provide a favorable environment for learning, students' high willingness to learn may compose the higher quality of education. Among other things, professional teachers with high pedagogical skills may improve the quality of education by effectively teaching students. In line with the idea, most governments in the world have implemented various education policies to develop teachers' teaching capacity. Indonesia is no exception. The Indonesian government has implemented Teacher Professional Development programs (TPD) since the 1970s, which have evolved so far. This report focuses on the latest TPD initiative, Pengembangan Keprofesian Berkelanjutan (PKB). I illustrate the content of the PKB and whether the initiative was effective in improving teachers' capacity. Then I introduce several ways to make PKB more effective, including the use of online platforms.

Before articulating the PKB, I briefly introduce the past development process of TPD initiatives in Indonesia. As primary schools had rapidly established in the country, schools needed more qualified teachers. The primary initiative for the TPD was to train new teachers who only had rudimentary teaching skills.<sup>1</sup> About 600,000 Indonesian teachers participated in the workshop for three weeks with new textbooks for primary school students.<sup>2</sup> After the initial TPD program, the Indonesian government initiated the Permantapan Kerja Guru (PKG) in 1980, meaning 'Strengthening the Work of Teachers. It was to promote 'student-centered teaching methods' suggested in the 1975 education curriculum.<sup>3</sup> The workshop was composed of in-service training and on-the-job training. The in-service training included planning lectures, designing student worksheets, taking lectures on subject knowledge, and such. The on-the-job training was to visit actual classrooms and discuss the teaching process in the classrooms.<sup>4</sup> The next initiative was the Kelompok Kerja Guru (KKG) in 1993, meaning 'Teacher Working Group.' It was a cluster-based model that produces teacher (school) organizations and encourages the development of teaching methods by communicating with other teachers.<sup>5</sup>

In 2007, the Pendidikan dan Latihan Profesi Guru (PLPG) was implemented to connect TPD with the Teacher Certification program. Teachers who participated in workshops or lectures were certified, awarded more salaries. However, there was little significant improvement in the teaching capacity of Indonesian teachers. World Bank (2015) argued that the initiative was ineffective in advancing teaching skills and students' learning outcomes.<sup>6</sup> Therefore, the Indonesian government launched new the TPD initiative, Pengembangan Keprofesian Berkelanjutan (PKB). I illustrate its purpose and effect on teachers' capacity in the next section.

## Implications

Well-trained teachers are the crucial components of high quality of education. Although the Indonesian government launched several initiatives for Teacher Professional Development, the policy failed to generate a significant effect on teachers' capacity.

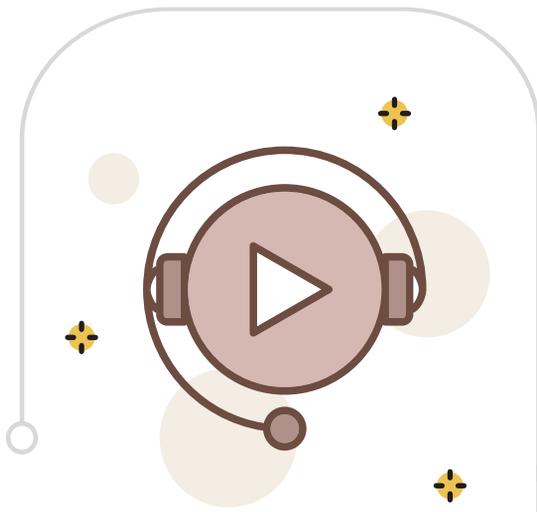


## 02

### The effect and future of PKB

The PKB was first implemented in 2013. The initiative has widened the learning opportunities for teachers by providing more various learning activities such as in-service training, on-the-job training, collaboration with participants, and research. Additionally, the PKB is connected to the Uji Kompetensi Guru (UKG), the examination for teachers to measure their basic competencies about subject knowledge and pedagogical skills. Teachers who earn a low score on UKG should complete PKB programs and take tests to measure their improvements in teaching. This is the most notable difference between the PKB and previous TPD initiatives<sup>7</sup>.

However, Revina et al. (2020) argued that the PKB has been insufficient to improve teachers' capabilities. Many teachers still do not take the PKB program because they do not perceive that improved teaching skills will advance their careers. Teachers who completed the PKB programs revert to previous teaching practices because school principals hardly monitor their teaching performances. Therefore, the government should provide teachers with strong incentives to develop their capacity by strictly connecting individual teachers' teaching performances to their careers or financial support to schools. Additionally, TPD program should more focus on training subject-matter knowledge, and the government must select the best students as teachers by limiting the number of students entering the college of education.



- Another way to improve teaching skills is to utilize online platforms. Because Indonesia is an archipelago, islands remote from cities cannot hold workshops as much as teachers in the islands want. Teachers who want to participate in workshops but live in rural areas need to visit distant cities, which is challenging and exhausting. An online learning community is adequate in providing virtual workshops. Open Educational Resources, the learning and teaching materials released under an open license is an example. For instance, Sumber pembelajaran terbuka-Universitas Terbuka (SUAKA-UT) provides open courses for teachers such as webinars and certification programs. It indicates that various online courses designed by the government and universities can facilitate training for teachers.

## Implications

PKB was found to be ineffective in improving teaching capacity. The future TPD should develop virtual workshops via online platforms and provide teachers with incentives to develop their teaching skills.

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