



**Asia-Pacific
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Advancing Free Trade
for Asia-Pacific **Prosperity**

APEC Workshop on Leveraging Digital Technology to Improve Education in Rural and Remote Areas

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Introduction

For several years, APEC has been addressing quality growth in the region, whereby the key word is 'inclusive'. One of the challenges for inclusive growth is to ensure that every person should have equal opportunity in the economy and social aspects. In that relation, human capital development is of paramount importance in achieving sustainable quality growth.

The high level of teacher absenteeism and lack of education infrastructure are obstacles to improving education service delivery and outcomes particularly in rural and remote areas. Various studies correlate teachers' absenteeism with student absence, drop-out rates, and poor learning outcomes yielding to rural areas to continue significantly lag behind urban areas in many development aspects. Thus, one of the way is the education service delivery may be improved in line towards a better education quality.

The rapid development of digital technology triggers may help the government to evaluate the education service delivery. Some efforts related to digital technology has been done to assist the problems. However, the education technology only limited to the higher level of education, for example online course (or degree), open university, and long-distance class. On the other hand, the primary (age 5-12) and mid-level (age 12-15) students still depend on the teachers, books, school buildings, especially those who live in remote areas.

When we are discussing about education in rural and remote areas, we should discuss comprehensively in a holistic manner covering primary and mid-level education. Studies has proven that education in primary and mid-level hold a great role on children growth. Nowadays, the utilization of digital technology has spread, including in remote and rural areas. The current is more people have more access to gadgets, internet, and software, including the youth and children. Thus, it is timely to leverage digital technology to improve education, especially the primary and mid-level education

By leveraging the digital technology, children in the remote areas do not have to rely on face-to-face teacher and physical books, yet they can enjoy their curriculum through internet. This digital technology should be maximized to improve the education of student in the remote areas. Better education systems may result in better job opportunities in the future. Human resources should be prepared well by

proper education, even though they are located in rural and remote areas. To be more well-prepared, it is better to prepare even the younger level of students.

Providing good education quality in rural and remote areas involves wide stakeholders including academics, empowering the community and policy makers to do the good regulatory practices to ensure the planning, practices, and evaluation fit the domestic's needs. Thus, structural reform on education policies is one of the key factors on whether the education services in rural and remote areas will meet its objective. Education policies may be customized to adapt to technology-based education as part of supplementary towards the primary education. As for the APEC region, sharing best practices among economies may provide sustainable knowledge to leverage the education quality in rural and remote areas.

Against above background, the two-day workshop aims to share best practices among APEC economies, especially on how to leverage and utilize the digital technology to improve education quality growth in remote areas. APEC economies are also expected to have collaborative actions to overcome the challenges identified in the project, and how technology may assist the education problems.

The main objectives of the workshop are:

- 1) Develop APEC recommendation on leveraging digital technology to improve education quality in rural and remote areas in digital era for the purpose to boosting economic competitiveness;
- 2) Increase and deepen knowledge about how best to educating people in rural and remote areas, to encourage APEC economies in cooperating to establish the right policy;
- 3) Create common understanding on the challenges in providing good education quality in rural and remote areas and the correlation with well-structured policy reform

The workshop is in line with the "APEC Agenda on Advancing Economic, Financial and Social Inclusion in the APEC Regional" agreed by the Leaders in 2017. Also, other initiatives included such as APEC Strategy for Strengthening Quality Growth, APEC Framework on Human Resources Development in Digital Age, and RAASR pillars

The workshop also supports the RAASR IAP plans for Indonesia and APEC Economies on improving competitiveness. As of 2017, Indonesia has implemented the *Indonesia Smart Card Program* to encourage school-age children to pursue basic

education. Thus, the project will give broader view on challenges faced on providing quality of education in rural and remote areas, and on how the lessons-learned may be shared among APEC members.

The workshop is also aligned with the EC's initiative to promote inclusive growth in structural reform by providing policy recommendations on how digital technology can improve quality of education in rural and remote areas. This activities also follows the Human Resources and Development Working Group (HRDWG)'s agenda on improving quality growth, with one of the work plan is through education and online learning.

12 presentations were delivered at the workshop. These presentations represented the variety of perspectives, approaches and the experiences from Government, Academics, Private Sectors and NGOs, from Indonesia. The workshop also invited Malaysia, APEC HRDWG Lead Shepperd and EdNet Coordinator to share their views on various aspects of best possible way to leverage technology to improve education in rural areas.

The workshop was attended by 80 participants from Indonesia and total of 13 delegates from Australia, Chile, China, Malaysia, Russia, Thailand, and Viet Nam.

This report summarises the main contributions made at the workshop. It is intended to provide a record of those contributions in furtherance of the objectives of the workshop.

Outcomes

Two-day workshop in Bali provided the participants a broad view on how digital technology may improve education quality. EC Representatives from Indonesia, Ms. Netty Muharni, Assistant Deputy Minister for Regional and Sub-Regional Economic Cooperation, Coordinating Ministry for Economic Affairs, welcomed the participants, especially those who come from APEC economies. Ms. Muharni highlighted the unique role of digital technology to assist students and teachers for obtaining the proper education.

Challenges and obstacles are real. The first session discussed on how the challenges and opportunities has been identified and in some way, has been tackled. Speakers were coming from the Ministry for National Planning and Development in Indonesia and Ministry of Education and Culture in Indonesia to represent the government, as well as the Sokola Rimba, the NGO specialized in tailor-made education system for indigenous people in Indonesian remote areas. The speakers

identified the problems, challenges, and obstacles and trying for evaluate the policies taken.

Even so, some best practices and experiences of digital education had successfully implemented. Mejakita.com CEO, shared us about digital platform to share notes and to discuss homework; SIERRA from SEAMOLEC (South East Asia's Ministry of Education Learning Online Center) shared about the device contain school material which enables people in remote areas access it; FROG from Malaysia also told about their practices on using digital technology to make learning easier.

On the next session, the speakers discuss about the future ideas and vision on education. Wang Yan as EdNet Coordinator shared about the education cooperation that has been implemented in APEC, meanwhile Dr. Park, the HRDWG Lead Shepherd gave us a broader view about the issue of human capital development in APEC. Najelaa Shihab, educator and co-founder of inibudi.org concluded that education must be accessible and inclusive to all children.

The last session especially brought by the team from public high school in Bali, named SMAN 1 Ubud, one of the first school that successfully implemented the online learning system. The teachers and the headmaster explained about how they mix the online learning and 'conventional' face-to-face learning may be very useful for the student to understand the learning.

Conclusion

In short, the outcomes of the workshop, as follows:

- Inclusive education as the main goal for structural reform and human capital development. As human capital development become important factor to face global challenges, education, subsequently, plays the biggest role. Education may prepare the younger generations to be ready in the battlefield. Thus, providing inclusive education is essential, especially for those living in rural and remote areas. Structural reform may be a proper tool to evolve the policies and regulations upon this issue.
- Disparity gaps among cities, urbans, and rural areas are real. Though government make effort to reach out through policies and aids, yet the gaps are still there.
- Tailoring the cultural-based education curriculum for indigenous people. It is proven that in some places with indigenous people, education may be seen to

harm their community. It is becoming a trend to have designated and special education system for each society with their own background.

- Engaging mothers in rural areas to encourage children. In rural and remote areas, mothers' role is very important because they are responsible for the whole householding, and sometimes they are the breadwinner. To engage mothers and to make them understand about children going to school are very important too. Mothers in rural and remote areas should be the very first person to encourage their children to go to school.
- Engaging the private companies as well as start-ups on education technology. In the era of globalization, the role of private companies and start-up can be very useful to develop the application, website, and software to improve education.
- Utilize proper technologies to meet the needs for education people in rural and remote areas. Each area has their own difficulties, so the technology may be tailored as their necessity. In example, for the remote areas which lack of internet connection, we may provide the device and/or software that do not need internet at all.
- Incorporating entrepreneurial mindset to the millennial generations. As start-up company nowadays has becoming the new trend to gear up the economic growth, children should be taught about becoming one.
- Invigorating all level of societies. To make society understand about the urgency of leveraging digital economy to improve education quality, all parties should be engaged and participated. Government may propose for policies, yet each part of society should be aware too.
- Ready for long-term goals for improving education quality. Improving education is not a one year task, yet it will be done for ten or twenty years, from generation to another generation. Education policies to make a better education system requires years and years, so that government should aim for long-term goals instead of short-term to make it sustainable.

Recommendations

Moving forward, to monitor the output, the workshop agreed to seek a joint agenda for discussing the issue of leveraging digital technology to improve education quality, especially in EC or HRDWG.

During the workshop, EdNet Coordinator and HRDWG Lead Shepherd has also agreed to continue the discussion of the issue and seeks to further collaborate with EC. The impacts may be evaluated as joint initiatives, joint working plans, or joint agendas in the future. The agenda may also engage PPWE to explore the role of women on this issue.