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# **ASEM MOOCs Initiative**

Partner-Countries
Best Practice Survey Results

PM2019-21

January 2019 (NILE, Seoul)





The Best Practice Survey took place as part of the result-oriented activity in ASEM MOOC Network Initiative. This is the case study on MOOC learning outcome recognition in ASEM partner-countries. The Best practice survey was conducted by National Lifelong Learning Education (NILE) Institution in order to explore best practices in the development, management, utilization of MOOCs. Targeted audience, specifically, were platform-operating institutions in ASEM MOOC Network partner-countries. The survey questionnaire was distributed and collected via e-mail between 27th of November 2018 and 18th of January 2019.

The implications of the best practice case study expected to lay a foundation for the ASEM partners to make policy efforts for social recognition and utilization of MOOC learning outcomes for various purposes including education and jobrelated activities. Furthermore, it will contribute to the realization of educational equity and the expansion of educational opportunities for disadvantaged groups by providing various opportunities to achieve educational and vocational qualifications.

There are ten ASEM MOOC Network partnering-countries involved in this case study: Malaysia, China, Philippines, Korea, Thailand, France, Japan, Germany, Brunei, and Belgium. Each partner-country manages the MOOC platform. Malaysia operates an "OpenLearning" MOOC platform supported by the Ministry of Higher Education of Malaysia which was launched in 2014. Currently, Malaysian MOOC "OpenLearning" (www.openlearning.com) provides 736 courses for 504,127 students. XuetangX is the biggest MOOC platform in China that also participated in this case study. XuetangX (www.xuetang.com) is built on open edX source in 2013 founded by Tsinghua University and operated by Beijing MOOC-CN Info. Philippines' official MOOC platform is the MODeL which stands for Massive Open Distance e-Learning operated and managed by the University of the Philippines - Open University. Korea's main MOOC platform is referred as K-MOOC (www. kmooc.kr). K-MOOC was established in 2015 by Korean Government and managed by National Institute of Lifelong Learning. There are 776,026 registered learners, 7,901,237 visitors, 510 available courses and 70 partnering institutions in K-MOOC. Thai MOOC was launched in 2017 by Thai government and operated by Thailand Cyber University. Nine regional universities hub provides more than 125 courses in Thai MOOC. France MOOC is referred to as FUN (France Digital University) (www. fun-mooc.fr) and was founded by the Ministry of Higher Education and Research. FUN was built on Open edX platform and offers over 330 courses. JMOOC (www. jmooc.jp) is Japanese non-profit main MOOC platform established in 20132013. JMOOC is offering currently 140 courses for more than 500,000 learners. The following are the best practices from the four partnering-countries out of ten involved in ASEM MOOCs Initiative.

# **ASEM MOOCs Initiative Partner-Countries Best Practices**

## MOOC – Malaysia



[Picture 1. Retrieved from Malaysia MOOC – OpenLearning: https://www.openlearning.com/malaysiamoocs]

Malaysia MOOC was represented by Dr. Adzhar Bin Kamaludin, the director of University Malaysia Pahang (UMP). UMP is operating Malaysia MOOC that was launched in 2018 by Government Public University. There are five in total staff members working in Malaysia MOOC. Major Service targets are a public university, private university, industry, k-12, and lifelong learning.

Malaysia MOOC's objectives indicated as follows:

- (a) to empower Malaysia MOOC as digital education for everyone (both formal and lifelong learning).
- (b) to be an education hub for a local and international role model. Currently, 20 public universities are registered as users. Previously there were more than 600 courses developed from 20 public universities.

#### There are six operational strategies for Malaysia MOOC:

- (a) MOOC as fully online learning course provider,
- (b) MOOC as industry skill training program,
- (c) International collaborative MOOC for branding and visibility,
- (d) Leaded by Ministry of Education and financial support from both Ministry, industry and membership subscription fees,
- (e) Credit Transfer MOOC as a part of income generation and sustainability initiative,
- (f) MOOC as blended learning course to be fully apply for formal education.

Malaysia MOOC is experiencing challenges that should be improved over time. Malaysia MOOC has been using an external platform that was causing collaboration constraints, therefore now it is migrating to own built system based on Outcome Based Education framework. Moreover, there is a difficulty in function development, especially on the online proctoring challenge. The last issue is the institutional development and usage due to a new platform.

The selection of the best course in Malaysia MOOC is based on the highest number of enrollment. There are no procedures to select best the MOOC. However, some of the award-winning MOOCs serve as role model for other institution development reference.

"Postgraduate Research Methodology" course operated in UPM was shared as a Best Practice of Malaysia MOOC.

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# XuetangX – China





[Picture 2. Retrivied from XuetangX: www.xuetangx.com and www.xuetnagx.com/global]

XuetangX was represented by its President and CEO Chao (Alex) Li. XuetangX is a state-owned enterprise that is established in 2014 and operated by MOOC-CN Information Technology (Beijing) Co., Ltd. with over 390 staffs. Major service targets and objectives are research and

application for MOE Research Center for Online Education. XuetangX was built based on open edX platform. Currently, there are 466 course-developing partners and 15.7 million registered users.

Operational strategies being applied are MOOC+model, MOOC+Degrees, MOOC+Minors and MOOC+Professional Certificates. XuetangX provides quality online courses from prestigious universities and is responsible for all the teaching service (online learning platform, learning behavior analysis, mobile learning apps, and TAs). Students finish the online courses via XuetangX, and then get degrees, certificates from corresponding Universities or institutions. Encountered challenges were not indicated.

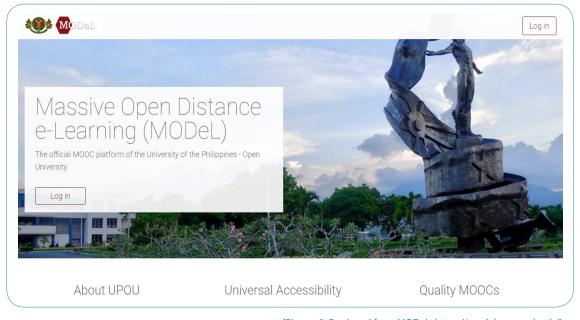
#### According to Dr. Chao Li, selection of the best course is based on the following features:

- 1. "High-order" knowledgeability and quality integration: training students' comprehensive ability and advanced thinking to solve complex problems;
- 2. Have "Innovative" course content that reflects frontier and contemporary knowledge. The teaching means reflects the advanced and interactive, and the learning results are exploratory and personalized.
- 3. Have to be "Challenge": somewhat difficult and requires students' efforts.

Formerly, there are 1,826 courses in total, among these 110 in art & design, 89 in humanities, 75 in social science, 130 in business & economics, 54 in education and teaching, and 159 in engineering, 65 in science, 60 in health and medicine, and 55 in language, 123 in computer science, and 24 in data science.

"Conversational English Skills; Art & Culture" course offered by Tsinghua University during Fall 2018 was represented as a best practice.

## **MODeL (Massive Distance eLearning) – Philippines**



[Picture 3. Retrieved from MODeL: https://model.upou.edu.ph/]

MODeL is the main MOOC platform in the Philippines is established in 2013 and managed by the University of the Philippines – Open University (UPOU). Dr. Melinda dela Peña Bandalaria is the Chancellor and President of the UPOU represented the MODeL MOOC of the Philippines. Major objectives of MODeL are to provide accessible and inclusive learning opportunities to different types of learners both the non-traditional (not part of the formal education system) and traditional learners (part of the formal educational system). MODeL incorporates 3,000 users and 73 course-developing partners.

#### There are three main operational strategies:

- (a) partnership with relevant industries and agencies,
- (b) developing MOOCs as continuing professional development program for different professions,
- (c) MOOCs as OERs wherein MOOCs are developed (using OERs) out of the courses credited for an award by students in higher education.

The MOOCs can serve as a training venue for teachers who are teaching the courses and as resources for the teaching by teachers and reference or learning materials by the students. Some challenges point out for a need of advocacy with the different stakeholders for the recognition of MOOC certificates of completion.

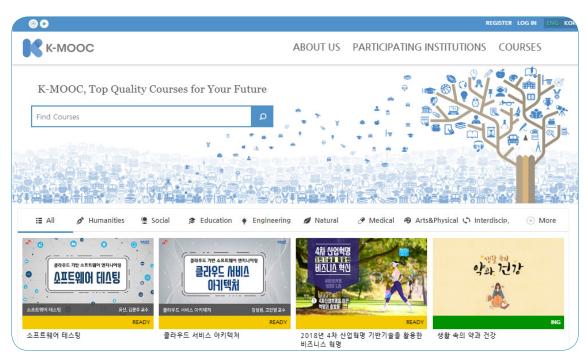
The best courses are selected according to two criteria:

- (a) expressed need by major industries, and
- (b) direct input for the completion of academic degrees.

There are 73 courses in total offered in MODeL and among these are 4 courses in art & design, 3 in social science, 1 in business and economics, 11 in education and teaching, 1 in language, 27 in data science, and 10 are series courses.

According to Dr. Bandalaria, all courses have more or less the same features which, at present, are considered as good practices. The specific course was not presented in particular, and only general information was given.

## K-MOOC – Republic of Korea



[Picture 3. Retrieved from KMOOC: http://www.kmooc.kr/]

K-MOOC is the main MOOC platform in Korea established by the support of the Korean Government in 2015. K-MOOC stands for Korean Massive Open Online Course and defined as "a free, online-based learning programme that is delivered to a large number of geographically dispersed learners via web". K-MOOC is operated by National Institute for Life-long Learning (NILE) and powered by open edX platform. There are 295,460 learners in total using K-MOOC platform and 70 institutions for developing of courses. There are 510 courses in total: 32 in Art & Design, 143 in Humanities, 121 in Social Science, 19 in Education and Teaching, 108 in Engineering, 58 in Science, and 29 in Health & Medicine.

KMOOC facilitates 5 target audience to reach its goals: life learners, professionals, college students, faculties and colleges. The aims of K-MOOC is to realize a balance of practical opportunities in higher education by offering all lectures free with the vision of "innovation of university education through an open higher education system" Ultimately, it will establish a lifelong learning foundation for higher education and contribute to national human resources development.

#### There are three main operational Strategies in K-MOOC:

- (a) With the partnership of various colleges and institutions KMOOC is developing teaching-learning strategies through learning data analysis.
- (b) With the support of Education Ministry and NILE, K-MOOC is building local and international cooperation with institutions to develop and exchange quality courses.
- (c) With the support of Education Ministry and NILE, K-MOOC organized ASEM MOOC Initiatives Network with ASEM partnering countries in order to find ways to sustain MOOCs and find new initiatives for MOOCs future development.

The current MOOC challenges are in finding ways how to decrease the dropout rates, concerns about long-term success and sustainability of MOOCs. Moreover, due to the limitations of open edX platform such as limited support for diversity of teaching and learning it is hard to control academic management. Therefore, due to the low reliability of the limited monitoring functions, it is had to process the credit recognition. There is a need for development of additional functions.

The best courses are selected according to the following criteria based on 2017 course evaluation (100-point scale):

- (1) Course operation management (40 points)
  - Operating organization: stable employment of practitioner, stable employment of teaching assistant (TA)
  - Course management: (1) new course notice of approval and action, observance of final inspection application of contents and other administrative actions, (2) existing course operation of course for more than 2 times, update of the course in case of reopening, and other administrative actions.
  - Course utilization: diversity and appropriateness of regular course and remaining courses performance in university, diversity and appropriateness of courses performance outside of university, credit recognition performance inside of university, credit recognition performance with other universities.
  - Course operation: diversity and appropriateness of learner interaction facilitation results, and diversity and appropriateness of course monitoring and flow performance.
  - -Course quality: diversity and appropriateness of self-quality control and copyright compliance/infringement prevention results.
- Course advertisement: diversity and appropriateness of course advertising results (inside and outside of institution)
- (2) Course operation accomplishments (60 points): number of enrollments, course participation rate, course participation compared to the final completion rates, course satisfaction.

There are 510 courses in total offered in K-MOOC and among these are 32 courses in Art & Design, 121 in Social Science, 19 in Education and Teaching, 143 in Humanities, 108 in Engineering, 58 in Science, and 29 in Health and Medicine.

In total of 5 courses are presented as a best practice in K-MOOC according to the evaluation criteria of 2017. The detailed information about following best practice courses: "Family and Health: Nursing Made Easy", "Family and Health: Psychiatry for a Happy Life 2", "Present and Future of Korean Industry: Dreaming about Korean Wave Industry (II)", "Present and Future of Korean Industry: Dreaming about Korean Wave Industry (I)", and "13 Windows to look into Russia" provided in the following section.

# ASEM MOOCs Initiative Partner-Countries Course Best Practices

Course Best Practices	Partner-country Platforms
Course: All courses have more or less the same features which, at present, are considered as good practices.  Strengths:  - Teaching-learning strategies, purpose for the development and offering of the MOOCs (e.g. MOOCs as OERs);  - Implementation of QA Framework for MOOCs; Integration of Universal Accessibility Features (e.g. multiple pathways to learning);  - Integration of the Distance Education Readiness module to orient the learners on how to use the LMS and how to be an online learner; use of OERs;  - Integration of the open badge system (this last item to be implemented	Philippines, MODeL
in 2019 for the Certification Programs)  Course: Postgraduate Research Methodology course.	
Objectives: Compulsory online learning course for all master and PhD study.  Operating institution: UMP  Course managed by: 13 teaching professors and 1 assistant  Course period: 1 year  Course URL: http://tagyard.com/academy/public/course/ N 0 F 4 U W k 2 V 3 B W Z 1 Z E K 3 g z e T c 1 T j h Q d z 0 9 http://tagyard.com/academy/public/course/VORsVWIUdSt uL2N4V2JjQVFkY2pFZz09  Number of applicants: 280  Number of completed students: 280  Strengths: - The postgraduate MOOC is created to make flexible education for postgraduate student which is distributed from different faculties and research center.	Malaysia MOOC

Course Best Practices	Partner-country Platforms
<ul> <li>The MOOC divided into 8 compulsory modules scopes from philosophy to conceptual paper and further focus into both engineering and technology approach.</li> <li>In order to ensure the delivery quality, each module is equipped with instructional videos, reference slides, additional learning material, self-directed assessment and a session of online face to face session.</li> <li>This course had been conducted for two years and currently has built up the online learning culture among postgraduate learners and support to the program outcome as a part of lifelong learning initiative</li> </ul>	Malaysia MOOC
Course: "Conversational English Skills; Art & Culture" Objectives: Learn how to effectively communicate in English and improve your conversational language skills. Operating institution: Tsinghua University Course managed by: 1 teaching professors and 1 assistant Course period: 10 weeks, 2018 Fall semester Course URL: http://www.xuetangx.com/courses/course-v1:TsinghuaX+30640014X+sp/about Number of applicants: 591,000 Number of completed students: 297,310 Strengths: (1) Teaching-learning strategies - Listen to dialogues and group discussions to better understand spoken English and cultural norms; - Engage in activities to help you better understand the meaning of conversations (2) Number of students in the course: 135,500 (3) Completion rate: ~50% (4) Practical benefits of the course: - Develop conversational English skills - Learn key words and expressions - Learn to initiate your own conversations in English on a variety of topics	China, XuetangX
5 best courses were selected based on evaluation criteria in 2017.  1 Course name: "Family and Health: Simple Nursing"  Objectives: to provide opportunities for health promotion of families.  The course consists of 7 themes covering major health issues in Korea and how to prevent and control common diseases we encounter in daily life. Students will learn about first aid, infection management, night work management, and health care for newborns and infants as well as how to prevent and manage elderly falls, hypertension, and dyslipidemia.	Korea, K-MOOC

Operating institution: Ulsan University Course managed by: 8 teaching professors and 2 teaching assistants Course period: 8 weeks, 2017 year Course URL: http://www.kmooc.kr/courses/course — v1:UOUk+ UOU201_01k+U2010_2_2018_T1/about Number of applicants: 829 Number of completed students: 159 Strengths: -Proving additional interesting video resources for learning and information to learners such as sleeping environment reenactment, nursing site stories and, etc. There are no additional study materials to be prepared for the class. Additional learning resources such as weekly infographics, photos, news, and journal articles are available at any timeAbout 50% were satisfied with the course, exams were held off-line which guaranteed more reliability of the course for credit recognition. The lecture was developed with topics and contents that are common in everyday life so that everyone, not just students, can learn, understand, and apply the lesson.  2 Course name: "Family and Health: Psychiatry for a Happy Life 2" Objectives: to explain a range of mental disorders suffered by contemporary people and their treatment and preventive measures and to promote the general mental health. The lectures cover mental disorders and sleep disorders common to contemporary people and various types of dementia including Alzheimer's disease.  Operating institution: Ulsan University Course eniod: 8 weeks, 2017 year Course URL: http://www.kmooc.kr/courses/course-v1:UOUk+ UOU203_02k+U203A_2_2018_T1/about Number of applicants: 782 Number of completed students: 117 Strengths: - Over 50% were satisfied with the course, exams were held off-line which guaranteed more reliability of the course for credit recognition. "Family and Health: Psychiatry for a Happy Life' is divided into 2 parts and offered sequentially. There are many symptoms that threaten mental health for many people who live in contemporary society. The purpose of this course is to correct misunderstandings about mental diseases: psychosis and neurosis. In Part 2, various m	Course Best Practices	Partner-country Platforms
mental disorders such as sieep disorders, dementia, crinidhood, and adolescent	Operating institution: Ulsan University Course managed by: 8 teaching professors and 2 teaching assistants Course period: 8 weeks, 2017 year Course URL: http://www.kmooc.kr/courses/course — v1:UOUk+	Korea,

Course Best Practices	Partner-country Platforms
3 Course name: "Present and Future of Korean Industry: Dreaming about Korean Wave Industry (II)"  Objectives: This course focuses on the current state and future development direction of Korea's major industries in a rapidly changing global business environment. Professor Cho and industry experts cover the automotive, electronics, shipbuilding, construction, petrochemical, and steel industries in their course. By the end of this course, you should have a broader and deeper understanding of Korea's six major industries.  Operating institution: Ulsan University  Course managed by: 5 teaching professors and 2 teaching assistants  Course period: 8 weeks, 2017 year  Course URL: http://www.kmooc.kr/courses/course-v1:UOUk+UOU101.02 k+U101A_3_2018_T1/about  Number of applicants: 508  Number of completed students: 76  Strengths:  - Additional learning resources such as weekly infographics, photos, news, and journal articles are available at any time.  - Over 60% of students were satisfied with the course, exams were held off-line which guaranteed more reliability of the course for credit recognition.  - Part II discusses the current status of Korean industry in the world, the crisis facing the Korean industry due to the changes in the global market economy, and the challenges for the future. Above all, field experts in the fields of shipbuilding, construction, steel, and the fourth industrial revolution take charge of the lecture. Learners get a lot of information about the current status and characteristics of each industry, recent issues, and have time to think about the possibility of future development together.	Korea, K-MOOC
4 Course name: "Present and Future of Korean Industry: Dreaming about Korean Wave Industry (I)"  Objectives: This course focuses on the current state and future development direction of Korea's major industries in a rapidly changing global business environment. Professor Cho and industry experts cover the automotive, electronics, shipbuilding, construction, petrochemical, and steel industries in their course. By the end of this course, you should have a broader and deeper understanding of Korea's six major industries.  Operating institution: Ulsan University  Course managed by: 4 teaching professors and 2 teaching assistants  Course period: 8 weeks, 2017 year  Course URL: http://www.kmooc.kr/courses/course-v1:UOUk+UOU101_	

Course Best Practices	Partner-country Platforms
Number of applicants: 596 Number of completed students: 96 Strengths: - Additional learning resources such as weekly infographics, photos, news, and journal articles are available at any time 60 to 70% of students were satisfied with the course, exams were held off-line which guaranteed more reliability of the course for credit recognition Part I discusses the current status of Korean industry in the world, the crisis facing the Korean industry due to the changes in the global market economy, and the challenges for the future. Above all, field experts from the automotive, electronics, and petrochemical industries teach the course directly. The learners get a lot of information about the current status and characteristics of each industry, recent issues, and have time to think about the possibility of future development together.	
University.  Objectives: Through a multilateral approach of this class, students will achieve a broad understanding of the history, culture, art, politics, and economy of Russia. Paintings of "The Peredvishniki" will be presented first at the start of class and used as a motif for further lecturing points.  Operating institution: Kyung Sung University  Course managed by: 1 teaching professor and 3 teaching assistants  Course period: 14 weeks, 2017 year  Course URL: http://www.kmooc.kr/courses/course-v1:KSUk+KSUk_02+2017_T2/about  Number of applicants: 584  Number of completed students: 46  Strengths:  - Over 70% of students were satisfied with the course and some events such as watching a movie were held off-line to catch more attention of learners.  - Thereare interesting clues to explain Russia's past and present are hidden in various ways in the realistic paintings of 'Moving Wave (Передвижники)', which was developed in the nineteenth century on the eve of the Russian Revolution. In order to encourage the students to engage in lectures, the paintings of the movement presented that implies the theme of each lecture which is used as a motif to explain the contents of the lesson. In the middle of the lecture, the image of the painting explained related to the contents and various means such as photos, videos, and music.	Korea, K-MOOC

# The Framework: The Best Practice Survey Questionnaire

#### 1. Person in charge

Affiliation	Job Title	
N.I.	Email	
Name	Telephone	

### 2. Institution and platform-operating MOOCs

	Name	
	Date of the establishment	
Institution	Type of institution Government-affiliated organization University-affiliated organization Non-profit institutions	
	Invested by Government (%) / University (%) / Private enterprise (%) / Others (%)	
	Name	
	Date of Launch	
	Total no. of staff	
	Major service targets and objectives	
	Platform to power courses	
	Total no. of Users	
Platform- operating	Total No. of course-developing partners	
MOOCs	Operational Strategy Examples that include 1) teaching and learning tools, 2) profit models, 3) international cooperation, collaborations with partnering institutions, 4) the ways to sustain the MOOCs initiatives etc.	
	Challenges	
	Selection of best course Criteria for selecting best courses, the ways to support them, etc.	

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#### 3. Course

	Total No. of Courses	
	Art & Design	
	Humanities	
	Social Science	
	Business & Economics	
Number of Courses	Education & Teaching	
in a Subject Area	Engineering	
	Science	
	Health & Medicine	
	Language	
	Computer Science	
	Data Science	
Total no. of series courses		

#### 4. Best practices for courses

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# **Partners Involved in the Projects**

The survey was conducted to determine role & responsibility of ASEM MOOCs network institutes (countries) on four MOOC projects. The result of the survey was shared as follows:

	Level of Engagement			
Component	Project Leader	Resource Provider	Observer	
Joint Development and Operation of ASEM MOOCs Contents	University of     Philippines     Open University     (Philippines)     NILE (ROK)	Flemish Community of Belgium (Belgium)     Universiti Brunei Darussalam (Brunei Darussalam)     FUN-MOOC Network (France)	DAAD(Germany)     Department of Higher Education (Myanmar)     French Embassy (France)     Commission on Higher Education (Philippines)     European Commission     XuetangX(China)	
Development of QA Guideline for ASEM MOOCs	·TCU (Thailand) · XuetangX (China)	Malaysian Qualification Agency (Malaysia)     Malaysia MOOC Working Committee (Malaysia)     Flemish Community of Belgium (Belgium)     Universiti Brunei Darussalam (Brunei Darussalam)     FUN-MOOC Network (France)	DAAD (Germany)     Department of Higher Education (Myanmar)     French Embassy     (France)     European Commission	
Publication of the Best Practices of Usage and Recognition of MOOCs		Malaysia MOOC Working     Committee (Malaysia)     Flemish Community of Belgium     (Belgium)	DAAD (Germany)     Department of Higher Education (Myanmar)     Universiti Brunei Darussalam (Brunei Darussalam)     French Embassy (France)     European Commission	
ASEM MOOC Stakeholders' Forum	· NILE (ROK)	Malaysian Qualification Agency (Malaysia)     Malaysia MOOC Working Committee (Malaysia)     Flemish Community of Belgium (Belgium)     Universiti Brunei Darussalam (Brunei Darussalam)	DAAD (Germany)     Department of Higher     Education (Myanmar)     French Embassy     (France)     European Commission	

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# Functions of ASEM MOOC Initiative Partner-countries

Partner-country	Functions
Project Leader	Project leaders are in charge of each project and communication matters managed directly with each project leader of the relevant project. Project leaders work closely with resource providers to implement the project.
Resource Provider	· Resource providers have MOOC platforms to provide data and relevant resources for the project implementation. Similarly, resource providers work closely with project leaders to implement the project.
Observer	Observers are mostly high-government level organizations that consult the process of the project and support monetarily. Observers perform a function of the bridge between project leaders and resource providers for the desired flow of the project.

The 'ASEM MOOCs Initiative Partner-Countries Best Practice Survey Results' was published under the responsibility of the National Institute for Life-long Education of the Republic of Korea.

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